

**BEFORE THE HONBLE NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE AT CHENNAI**

APPEAL NO.80 of 2022

IN THE MATTER OF :

Anaithu Vivasaykalin Kanimavala
Neervalu, Sutrusoolal Padhukappu Sangam

... Applicant

Versus

The Secretary,
Government of India,
Ministry of Environment, Forests and Climate Change,
And Ors.

... Respondents

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DATED AT CHENNAI ON THIS THE 11th MAY OF 2023


COUNSEL FOR 4th RESPONDENT



GOVERNMENT OF TAMIL NADU

ABSTRACT

Mines and Quarries - Minor Minerals - Tamil Nadu Minor Mineral Concession Rules, 1959 - Introduction of Rule - 38 A Amendment to Tamil Nadu Minor Mineral Concession Rules, 1959 - Notification - Issued.

INDUSTRIES (MMC1) DEPARTMENT

G.O.Ms.No. 95
DATED:1.10.2003

Read:

G.O. 2(D) No.46, Industries Department dated 25.9.2002

ORDER:

Taking cognizance of the indiscriminate quarrying in the river systems of Tamil Nadu in a public interest litigation, the Hon'ble High Court in their order dated 26.7.2002 had directed the State Government to constitute an Expert Committee consisting of geologist, environmentalist and scientists to study the river and river beds in the State with reference to the impact of sand quarrying. Accordingly the Government in the G.O. read above constituted a six member High Level Committee. The Committee after extensive touring of the State has submitted its report to the Government. A copy of the report has been furnished to the Hon'ble High Court. The High Court had while ordering the Government to constitute the High Level Committee also directed :-

“ The Government on receipt of the report from the Committee shall act in conformity with the Guidelines and take all necessary further steps to arrest the exploitation and to protect and improve the situation and restore status quo-ante. The Government shall pass suitable regulatory legislation in this regard. The action on the part of the Government after the receipt should not brook any delay, it should act fast.”

2. The High Level Committee in its report has pointed out that illicit and haphazard sand mining has led to deepening of the river beds, widening of the rivers, damage to civil structures, depletion of groundwater table, degradation of groundwater quality, sea water intrusion in coastal areas, damages to the river systems and reduction in biodiversity. Moreover sewage and other effluents let into the rivers cause health hazards and environmental degradation.

3. Some of the major observations of the High Level Committee are

- (a) In all the areas, mining of river sand has been done in a haphazard, irregular and unscientific manner, causing environmental degradation.
- (b) Sand quarrying has created pools of water stagnation in the river bed, impairing the water flow down stream, which in turn will have grave consequences on agricultural production.
- (c) The usage of machinery like poelain for removal of sand has caused river bed erosion, collapse of banks, damages to infrastructure like bridges and transmission power lines, drinking water systems.
- (d) The lessees have generally exceeded the area of grant and quarried more than the permissible depth.
- (e) There is no responsibility of a single department in respect of sand mining. Three departments that are involved are Geology and Mining, Revenue and Public Works Department

4. The High Level Committee has concluded that

- 1. (a) illicit and haphazard sand mining has led to deepening of the river beds, widening of the rivers, damage to civil structures, depletion of groundwater table, degradation of groundwater quality, sea water intrusion in coastal areas, damages to the river systems and reduction in biodiversity. Moreover sewage and other effluents let into the rivers cause health hazards and environmental degradation. Tamil Nadu has several river basins with good potential of sand. Proper scientific approach of exploitation and utilization are needed to remove this resource. This will not only ensure good revenue to the Government, but will also be in harmony with nature.
- 2. (b) even though several rules on sand mining exist, illegal quarrying of sand is out of control. Authority for regulating sand mining is vested with different organizations such as, State Geology and Mining Department, Revenue Department and Public Works Department. Hence implementation and monitoring of rules and regulations regarding sand quarrying are not effective. This important task of sand mining therefore should be entrusted to a SINGLE AGENCY.

5. The observations and conclusions of the High Level Committee clearly indicate the emergent need for a framework for regulation of mining in the State in Public interest.

6. Hence, detailed discussions were held by a Government at various levels. After taking cognizance of the pernicious practice of unsustainable overexploitation of sand in the State it was decided in Public interest that the quarrying of sand in Government poramboke lands and private patta lands by private agencies will cease to be effective with immediate effect and sand quarrying henceforth will be undertaken only by the Government. In order to meet the above requirements, suitable amendment to the Tamil Nadu Minor Mineral Concession Rules, 1959 is necessary.

7. In accordance with the directions of the Hon'ble High Court and the recommendations of the High Level Committee constituted in pursuance of the directions of the Hon'ble High Court, Government has taken these initiatives in public interest to ensure

(a) elimination of indiscriminate and unscientific sand quarrying.

(b) uninterrupted availability and supply of sand in a regular and orderly manner to the common public.

(c) availability of the sand at affordable prices to common public thereby effecting reduction in the cost of construction.

(d) augmentation of the revenue of the State Government.

8. The Notification appended to this order will be published in the Tamil Nadu Government Gazette and in the District Gazettes. The Works Manager, Government Central Press, Chennai-79 is requested to publish the Notification in the Tamil Nadu Government Gazette and supply 75 copies of the Notification to this Department and Commissioner of Geology and Mining, Chennai-32 and to all District Collectors.

9. The Director, Tamil Development and Culture and Religious Endowments (Translation) Department is requested to send the Tamil translation of the Notification appended to this order to the Works Manager, Government Central Press, Chennai-79 for publishing in the Tamil Nadu Government Gazette and to the Collectors of all Districts for publishing it in the District Gazettes immediately.

(BY ORDER OF THE GOVERNOR)

D. RAJENDRAN,
SECRETARY TO GOVERNMENT (in-charge)

To

The Works Manager, Govt. Central Press, Chennai-79.

The Director, Tamil Development and Culture and Religious Endowments (Translation) Department, Chennai-9.

The Commissioner of Geology and Mining, Chennai-32.

The Chairman and Managing Director, TAMIN, Chennai-5.

All District Collectors.

All District Forest Officers through the Principal Chief Conservator of Forests, Chennai-6.

The Accountant General, Chennai-18.

Copy to:

The Public (SC) Department, Chennai 9.

The Chief Minister's Secretariat, Chennai 9.

The Law Department, Chennai-9.

The Finance Department, Chennai-9.

All Sections in Mining Wing, Industries Department, Chennai-9.

The Industries (OP.II) Department, Chennai-9.

Sf/Sc.

/FORWARDED/BY ORDER/

SECTION OFFICER.



GOVERNMENT OF TAMIL NADU

ABSTRACT

Mines and Quarries - Minor Minerals - Tamil Nadu Minor Mineral Concession Rules, 1959 - Use of machinery for quarrying of sand in river beds - Further amendments to Rule 36-A of Tamil Nadu Minor Mineral Concession Rules, 1959 - Issued.

INDUSTRIES (MMC 1) DEPARTMENT

G.O.MS.NO. 19
DATED: 19.04.2004

READ:

1. G.O.Ms.No.327, Industries Dept., dated 1.12.1997
2. G.O.Ms.No. 95, Industries Dept., dated 1.10.2003

ORDER:

In the Government Order first read above orders were issued by introducing Sub Rule (6) to Rule 36-A of Tamil Nadu Minor Mineral Concession Rules, 1959 to the effect that no machinery shall be used for quarrying sand from river beds. The above sub rule was introduced for the reason that private parties operating quarries were all non technical people and do not possess the knowledge of theoretical bed level and bed fall of the river and if they are allowed to use the machineries, the quarrying work will be done in an uncontrolled manner and more than the allowable depth with profit motive.

2. In the Government Order second read above, orders have been issued to the effect that all existing leases for quarrying sand in Government land and permissions / leases granted in ryotwari lands shall cease to be effective on and from 2.10.2003 and that the right to exploit sand shall vest with the State Government to the exclusion of others. As per the above orders Public Works Department has been entrusted with the task of operating the sand quarries in the State. Public Works Department is maintaining the irrigation sectors, regulating flood routing in river basin and will carry out the operations scientifically by understanding the implications and the impact of quarrying with respect to the location and function of the structures in the nearby vicinity of the location. Therefore, in view of the demand from the public and also to cater to the need of fullest demands of end users on time, the Government

have decided to amend the rule relating to use of machinery for quarrying of sand in river beds, with some conditions.

3. The appended Notification will be published in the Tamil Nadu Government Gazette Extraordinary dated 19.4.2004 and in the District Gazette. The Works Manager, Government Central Press, Chennai -79, is requested to publish the Notification in the Tamil Nadu Government Gazette Extraordinary dated 19.4.2004 and supply 50 copies of the Notification to this Department and Commissioner of Geology and Mining, Chennai 32 and all District Collectors.

4. The Director, Tamil Development and Culture (Translation) Department is requested to send the Tamil translation of the Notification appended to this order to the Works Manager, Government Central Press, Chennai 79, for publishing it in the Tamil Nadu Government Gazette and to the Collectors of Districts for publishing it in the District Gazette immediately.

(BY ORDER OF THE GOVERNOR)

**ARUN RAMANATHAN,
SECRETARY TO GOVERNMENT.**

To

The Works Manager, Government, Central Press, Chennai-79.

The Director, Tamil Development and Culture and Religious Endowments through the Principal Chief Conservator of Forests, Chennai-6.

The Accountant General, Chennai-18.

Copy to:

The Chief Minister's Secretariat, Chennai 9.

All Sections in Mining Wing, Industries Department, Chennai-9.

The Industries (OP.II) Department, Chennai-9.

SF/SCs

/FORWARDED/BY ORDER/

SECTION OFFICER.

NOTIFICATION

In exercise of the powers conferred by sub-sections(1) and (1-A) of section 15 of the Mines and Minerals (Development and Regulation) Act, 1957 (Central Act 67 of 1957), the Governor of Tamil Nadu hereby makes the following amendment to the Tamil Nadu Minor Mineral Concession Rules, 1959.

2. The amendment hereby made shall come into force on the 19th April, 2004

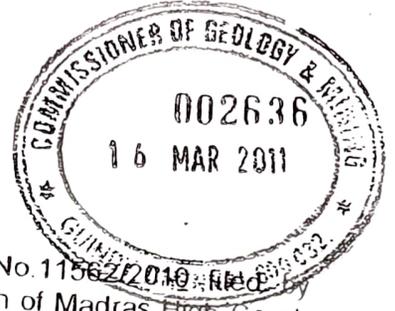
AMENDMENT

In the said Rules, in rule 36-A, for sub-rule (6), the following sub-rule shall be substituted, namely:-

"(6) No machinery shall be used for quarrying sand from river beds, except with the permission of the Secretary to Government, Industries Department or any other authority or Officer, as may be authorized by him in this behalf, who may grant such permission if use of such machinery will not be detrimental to ecology".

**ARUN RAMANATHAN,
SECRETARY TO GOVERNMENT**

/TRUE COPY/



ABSTRACT

W.P. (MD) No.11562/2010 – M.P.No.1 of 2011 in W.P. (MD)No.11562/2010 – Interim order passed by Madras High Court, dated 02.12.2010 – Interim order passed by Madras High Court on 10.1.2011 – Permission granted to District Collectors for use of machinery for Sand quarry in the State (other than Palar and Thamiraparani) until further orders by the Hon'ble High Court of Madras – Order of the High Court, Madras, dated 15.02.2011 – Extended upto one year – Orders issued.

INDUSTRIES (MMC – 1) DEPARTMENT

G.O. (D) No.67

Dated: 11.03.2011.

Read:

- 1) Order of the Madurai bench of Madras High Court, dated 02.12.2010 in W.P.11182/2010 etc. (batch cases)
- 2) Order of the Madras High Court in M.P.No.1 of 2011 in W.P. (MD) No.11562/2010, dated 10.01.2011.
- 3) Government Letter No.13141/MMC-1/2008, dated 07.01.2011.
- 4) G.O.(D) No.7, Industries (MMC.1)Department, Dated 11.1.2011.
- 5) G.O.(D) No.19, Industries (MMC.1)Department, Dated 18.1.2011.
- 6) Order of the Madras High Court in M.P.No.1 of 2011 in W.P.(MD) No.11562/2010, dated 20.01.2011.
- 7) G.O.(D) No.33, Industries (MMC.1)Department, Dated 20.1.2011
- 8) Order of the Madras High Court, dated 01.02.2011.
- 9) G.O.(D) No.39, Industries (MMC.1)Department, Dated 01.02.2011.
- 10) Order of the Madras High Court, dated 15.02.2011 in review application No.15 of 2011 in W.P.(MD)No.11562 of 2011

ORDER:

The Madurai bench of the Madras High Court in its order dated 02.12.2010 has ordered in para 86(f) of the judgement that no 'Poclaim' or other heavy machinery shall be used in sand quarrying. It has also ordered to constitute a monitoring committee under the chairmanship of a retired High Court judge for the purpose of monitoring the adherence of the directions issued in its order dated 02.12.2010.

2. In the interim order second read above, the High Court has permitted the Secretary to Government, Industries Department or its delegates to grant permission for use of minimum poclains not more than 2 poclains in each of the quarry. The poclains shall not be used after 7 P.M. and before 6 A.M. The competent authority as to pass an order in writing permitting the use of poclains and indicating the number to be used and the same shall not be used after 7 p.m and before 6 AM. In the High Court order 8th read above, the use of machineries is extended until further orders. In compliance of the High Court order 8th read above, orders were issued in the Government Order ninth read above for use of poclaim machineries in sand quarries is extended until further orders.

11211

3 In the High Court order 10th read above, the High Court has ordered that

"(f) In compliance with Rule 36-A sub rule (6), no machinery shall be used for quarrying sand from river beds except with the permission of the Secretary to Government, Industries Department or any other authority or officer as may be authorized by him in this behalf, who may grant such permission, if use of such machinery will not be detrimental to ecology. It is further directed that not more than two poclains could be used for each quarry site for sand quarrying and loading and Poclains shall not be used after 7.00 P.M and before 6.00 A.M. The Secretary to Government, Industries Department or any other authority or Officer authorised by him, preferably the District Collector, has to pass a specific order in writing permitting the use of poclains indicating the number to be used not exceeding two per quarry site. As directed in Paragraph No.3(iii) of Government Order (D) No.7, Industries (MMC 1) Department, dated 11.01.2011, the District Collector should consolidate the report and send the consolidated weekly report to the Government, Industries and Public Works Department every week for monitoring. As and when the State Level Monitoring Committee is constituted, the consolidated report has to be sent to the State level Monitoring Committee also."

4. The Government in compliance of the above order and powers vested in rule 36-A of Tamil Nadu Minor Mineral Concession Rules, 1959 permits the District Collectors for restricted and judicious use of minimum number of poclains and not more than 2 poclains in each of the quarry sites in the State (other than from Palar and Thamiraparani rivers) subject to the conditions specified in Government Order 4th read above for a further period of one year from the date of issue of the High Court Order dated 15.02.2011. The District level task force and Taluk level task force as constituted vide Government Order No.135, Industries (MMA.1) Department, dated 13.11.2009 comprising of officials from Forest, Police, Local Administration Departments should organize frequent surprise raids and joint raids with all enforcing authorities of Revenue, Mines and Police Department and monitor the sand quarries and daily report should be sent to District Collector. The District Collector should consolidate the report and send the consolidation weekly report to the Government, Industries and Public Works Department every week for monitoring. As and when the State Level Monitoring Committee is constituted, the consolidated report has to be sent to the State Level Monitoring Committee also.

The receipt of the Government Order may be acknowledged.

(BY ORDER OF THE GOVERNOR)

RAJEEV RANJAN
PRINCIPAL SECRETARY TO GOVERNMENT

To :

The All District Collectors,

The Secretary to Government,
Public Works Department, Chennai -9.

H3U

✓ The Commissioner of Geology and Mining,
Gundy,
Chennai -600 032.

The Chief Engineer, W.R.O.,
Public Works Department,
Chepauk, Chennai-600 005

Copy to
The Registrar,
High Court of Madras,
Chennai-104

The Industries (OPII) Department,
Chennai 9

SF/SC's

//Forwarded By Order//

V. Rajinikanth 11/2/2011
Section Officer

No. L-11011/47/2011-IA.II(M)
Government of India
Ministry of Environment & Forests

Paryavaran Bhavan,
C.G.O. Complex, Lodi Road,
New Delhi-110003.
Telefax: 24362434

Dated the 18th May, 2012

OFFICE MEMORANDUM

Sub: Order of Hon'ble Supreme Court dated 27.2.2012 in I.A. no. 12-13 of 2011 in SLP (C) no. 19628-19629 of 2009 in the matter of Deepak Kumar etc. Vs State of Haryana and Ors. – Implementation thereof - Regarding.

Reference is invited to the above mentioned order of the Hon'ble Supreme Court directing inter-alia as under:

"We in the meanwhile, order that leases of minor mineral including their renewal for an area of less than 5 ha be granted by the States / UTs only after getting environmental clearance from the MoEF."

2. The Environment Impact Assessment (EIA) Notification, 2006, as amended, requires mining projects (new projects, expansion or modernization of existing projects as also at the stage of renewal of mine lease) with lease area of 5 ha and above, irrespective of the mineral (major or minor) to obtain prior environment clearance under the provisions thereof. Mining projects with lease area of 5 ha and above and less than 50 ha are categorized as category 'B' whereas projects with lease area of 50 ha and above are categorized as category 'A'. The category 'A' projects are considered at the central level in the Ministry of Environment & Forests while category 'B' projects are considered by the respective State/UT Level Environment Impact Assessment Authority, notified by MoEF under the EIA Notification, 2006.

3. In order to ensure compliance of the above referred order of the Hon'ble Supreme Court dated 27.2.2012, it has now been decided that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior environment clearance. Mining projects with lease area up to less than 50 ha including projects of minor mineral with lease area less than 5 ha would be treated as category 'B' as defined in the EIA Notification, 2006 and will be considered by the respective SEIAAs notified by MoEF and following the procedure prescribed under EIA Notification, 2006.

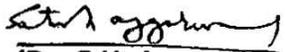
4. Further, the Hon'ble Supreme Court in its order dated 16.4.2012 in the above mentioned matter and the linked applications has observed as under:

"All the same, liberty is granted to the applicants before us to approach the Ministry of Environment and Forests for permission to carry on mining below five hectares and in the event of which Ministry will dispose of all the applications within ten days from the date of receipt of the applications in accordance with law."

-2-

Accordingly, the respective SEIAAs in dealing with the applications of the applicants referred to in the above mentioned order shall ensure that the directions of the Hon'ble Supreme Court are effectively complied with and the applications of such applicants are disposed of within the time limit prescribed by the Hon'ble Court in accordance with law.

This issues with the approval of the Competent Authority.


(Dr. S.K. Aggarwal)
Director

To

1. The Secretary, Ministry of Mines, Shastri Bhawan, New Delhi.
2. The Chief Secretaries of all the States / UTs
3. Chairpersons / Member Secretaries of all the SEIAAs/SEACs
4. Chairman, CPCB
5. Chairpersons / Member Secretaries of all SPCBs / UTPCCs

Copy to:-

1. PS to MEF
2. PPS to Secretary (E&F)
3. PPS to JS(RG)
4. All the Officers of IA Division
5. Website, MoEF
6. Guard File

-TRUE COPY-

No. J-13012/12/2013-IA-II (I)
Government of India
Ministry of Environment and Forests

Paryavaran Bhawan
CGO Complex, Lodhi Road
New Delhi – 110 003

Dated 24th December, 2013

OFFICE MEMORANDUM

Subject: Guidelines for consideration of proposals for grant of environmental clearance Environmental Impact Assessment (EIA) Notification, 2006 and its amendments – regarding categorization of Category ‘B’ projects/activities into Category ‘B1’ & ‘B2’.

The EIA Notification, 2006 mandates prior Environmental Clearance (EC) for new projects or activities including expansion, or modernization of existing projects listed in its Schedule. The Category ‘A’ projects shall obtain EC from the Central Government and Category ‘B’ projects from the concerned State Level Environment Impact Assessment Authority (SEIAA)/Union Territory Environment Impact Assessment Authority (UTEIAA). The EIA Notification, 2006 prescribes that Category ‘B’ projects, will be further categorized as category ‘B1’ and ‘B2’ (except for Township and Area Development Projects) for which the Ministry of Environment & Forests (MoEF) shall issue appropriate guidelines from time to time - provisions under ‘7.1 Stage(1)-Screening’ of the Notification refer. The projects categorized as B1 will require EIA Report for appraisal and to undergo public consultation process (as applicable). Projects categorized as ‘B2’ will be appraised based on the application in Form-I accompanied with the Pre-feasibility Report and any other documents.

2. In compliance with such a requirement under the EIA Notification and to examine other issues, the MoEF had constituted vide O.M No. J-11013/12/2013-IA-II(I) dated 30.01.2013, an Expert Committee, under the Chairmanship of Director, NEERI, Nagpur. The Committee has since submitted its report. The recommendations of the Committee have been examined by MOEF and the following has been decided w.r.t. categorization of Category ‘B’ projects/activities into Category ‘B1’ & ‘B2’ listed in the Schedule of EIA Notification, 2006 and its amendments:

I. Mining of Minerals

Mining of minor minerals

As of now, mining projects of minor minerals with less than 50 ha of mining lease area are categorized as Category ‘B’ as per Notification S.O.2731(E) dated 9th September, 2013. Also vide OM No.L-11011/47/2011-IA.II(M) dated 24.06.2013, guidelines have been issued regarding categorization of mining projects of ‘brick earth’ and ‘ordinary earth’ having lease area less than 5 ha as category ‘B2’ subject to stipulations stated therein.

In the above backdrop, the projects of mining of minor minerals, categorized as Category ‘B’ are hereby categorized as ‘B2’ as per the following:

- (i) 'Brick earth' / 'Ordinary earth' mining projects having lease area less than 5 ha will be considered for granting EC as per the aforesaid guidelines issued by MOEF on 24.6.2013.
- (ii) 'Brick earth' / 'Ordinary earth' mining projects with mining lease area \geq 5 ha but < 25 ha and all other minor mineral mining projects with mining lease area <25 ha, except for river sand mining projects will be appraised as Category 'B2' projects. These projects will be appraised based on following documents:
 - (a) Form -1 as per Appendix-I under EIA Notification, 2006
 - (b) Pre-feasibility report of the project
 - (c) Mining plan approved by the authorized agency of the concerned State Government

Provided, in case the mining lease area is likely to result into a cluster situation, i.e., if the periphery of one lease area is less than 500 m from the periphery of another lease area and the total lease area equals or exceeds 25 ha, the activity shall become Category 'B1' Project under the EIA Notification, 2006. In such a case, mining operations in any of the mine lease areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

- (iii) No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC. The river sand mining projects with mining lease area \geq 5 ha but < 25 ha will be categorized as 'B2'. In addition to the requirement of documents, as brought out above under sub-para (ii) above for appraisal, such projects will be considered subject to the following stipulations:
 - (a) The mining activity shall be done manually.
 - (b) The depth of mining shall be restricted to 3m/water level, whichever is less.
 - (c) For carrying out mining in proximity to any bridge and/or embankment, appropriate safety zone shall be worked out on case to case basis to the satisfaction of SEAC/SEIAA, taking into account the structural parameters, locational aspects, flow rate, etc., and no mining shall be carried out in the safety zone so worked out.
 - (d) No in stream mining shall be allowed
 - (e) The mining plan approved by the authorized agency of the State Government shall inter-alia include study to show that the annual replenishment of sand in the mining lease area is sufficient to sustain the mining operations at levels prescribed in the mining plan and that the transport infrastructure is adequate to transport the mines material. In case of transportation by road, the transport vehicles will be covered with tarpauline to minimize dust/sand particle emissions.
 - (f) EC will be valid for mine lease period subject to a ceiling of 5 years.

Provided, in case the mining lease area is likely to result into a cluster situation i.e. if the periphery of one lease area is less than 1 km from the periphery of another lease area and total lease area equals or exceeds 25 ha, the activity shall become Category 'B1' Project under the EIA Notification, 2006. In such a case, mining operations in any of the mine lease areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

II. Other projects or activities

The guidelines for categorizing some of the other category of projects or activities into 'B1' or 'B2' out of the category 'B' projects listed in schedule to EIA Notification, 2006, as amended from time to time, are as follows. These projects will be appraised based on Form-1 as per Appendix-I under EIA Notification, 2006, as amended and pre-feasibility report of the project.

S. N. of Schedule	Activities	Category B2	Category B1
1 (d)	Thermal Power Plants	Thermal power plants based on coal/lignite/naphtha and gas of capacity \leq 5 MW.	Thermal power plants based on coal/lignite/ naphtha and gas of capacity $>$ 5 MW and $<$ 500 MW.
2 (b)	Mineral Beneficiation	The mineral beneficiation activity listed in the Schedule as Category 'B', with throughput \leq 20,000 TPA, involving only physical beneficiation.	All other mineral beneficiation activity falling in the Schedule as Category 'B'.
3 (a)	Metallurgical Industries (ferrous & non-ferrous)	All non toxic secondary metallurgical processing industries involving operation of furnaces only, such as induction and electric arc furnaces, submerged arc furnaces, and cupola with capacity $>$ 30,000 TPA but $<$ 60,000 TPA provided that such projects are located within the notified Industrial Estates.	All other non toxic secondary metallurgical processing industries falling in the Schedule as Category 'B'.
3 (b)	Cement Plants	All stand-alone grinding units listed in the Schedule as Category 'B' subject to the condition that transportation of raw material and finished products shall be primarily* through Railways.	All stand-alone grinding units listed in the Schedule as Category 'B' where the transportation of raw material and finished products is not primarily through Railways.
4 (d)	Chlor Alkali Industry	All Chlor Alkali plants with production capacity $<$ 300 TPD (located within notified industrial area) listed in the Schedule as Category 'B'.	All Chlor Alkali plants with production capacity $<$ 300 TPD (located outside notified industrial area) listed in the Schedule as Category 'B'.
4 (f)	Leather/Skin/Hide Processing Industry	All new or expansion projects of leather production without tanning, located within a notified industrial area/estate, listed in the Schedule as Category 'B'.	All others projects listed in the Schedule as Category 'B'.

5 (a)	Chemical Fertilizers	Single Super Phosphate (SSP) plants involving only the activity of granulation of SSP powder.	All other Single Super Phosphate (SSP) plants listed in the Schedule as Category 'B'.
5 (d)	Manmade Fibres Manufacturing	All manmade fibre manufacturing units producing fibres from granules or chips.	All other manmade fibre manufacturing units listed in the Schedule as Category 'B'
7 (g)	Aerial Ropeways	All Aerial Ropeway projects, listed in the Schedule as Category 'B', should be categorized as Category B2.	

* transportation by railways should not be less than 90% of the traffic (inward and outward put together)

3. The guidelines for categorization of Category 'B' projects/activities into Category 'B1' & 'B2' are applicable only to those projects/activities mentioned above. All the other Category 'B' projects/activities listed under the Schedule of EIA Notification, 2006 and its amendments shall be considered as Category 'B1' projects and appraised as per the procedure prescribed in the EIA Notification.

4. The information filled in Form-1 by the project proponent inter-alia relates to land, water and energy requirement, use of hazardous substances, disposal of hazardous waste, emissions from combustion of fossil fuels, emissions from production process, handling and disposal of hazardous waste, etc. In case the concerned SEAC, based on the information provided by the project proponent in Form-1, comes to the conclusion that a project though falling in Category 'B2' as per these guidelines needs to be appraised as 'B1' Category project, it will accordingly be appraised as 'B1' category project notwithstanding the provisions under these guidelines.

This issues with the approval of the Competent Authority.



(Dr. P.B. Rastogi)
Director
Telefax : 24342436

To,

1. All the Officers of I.A Division
2. Chairpersons/Member Secretaries of all the SEIAAs/SEACs
3. Chairman, CPCB
4. Chairpersons/Member Secretaries of all the SPCBs/UTPCCs

Copy to:

1. PS to MEF
2. PPS to Secretary (E&F)
3. PPS to ADG (F)
4. PPS to ADG (WL)
5. PPS to JS (AT)
6. PPS to IG (FC)
7. Website, MoEF
8. Guard File

**BEFORE THE PRINCIPAL BENCH
NATIONAL GREEN TRIBUNAL
NEW DELHI
CIRCUIT BENCH AT SHIMLA**

**Application No. 343 of 2013
M.A. No. 1093/2013
And
Application No. 279 of 2013
M.A. No. 1120/2013**

IN THE MATTER OF :

**Ranbir Singh Vs. State of H.P. & Ors.
And
Promila Devi Vs. State &Ors.**

**CORAM: HON'BLE MR. JUSTICE SWATANTER KUMAR, CHAIRPERSON
HON'BLE MR. JUSTICE DR. P. JYOTHIMANI, JUDICIAL MEMBER
HON'BLE DR. D.K. AGRAWAL, EXPERT MEMBER
HON'BLE DR. G.K. PANDEY, EXPERT MEMBER**

**Present: Petitioner/Applicant: Mr. Deepak Kaushal
State of HP: Mr. Sandeep Sharma, ASGI**

Date and Remarks	Orders of the Tribunal
<p>Supplementary Item No. 5 & 6 March 28, 2014</p>	<p>We have heard learned Counsel appearing for the parties.</p> <p>The Ministry of Environment & Forest (MoEF) has not been able to explain as to how the Office Memorandum dated 24th December, 2013 is in conformity with the order of the Hon'ble Supreme Court in Deepak Kumar's case, order of the NGT and the Notification dated 9th September, 2013 issued by the MoEF itself. We do not think that the MoEF could have issued such memorandum.</p> <p>The Notification issued by the MoEF is an act of subordinate legislation and was issued in exercise of statutory powers. The Office Memorandum is an administrative order and cannot frustrate the legislative act. In fact, it falls beyond the scope of administrative powers. Consequently, we stay the operation and effect of the order of Office Memorandum dated 24th December, 2013. In</p>

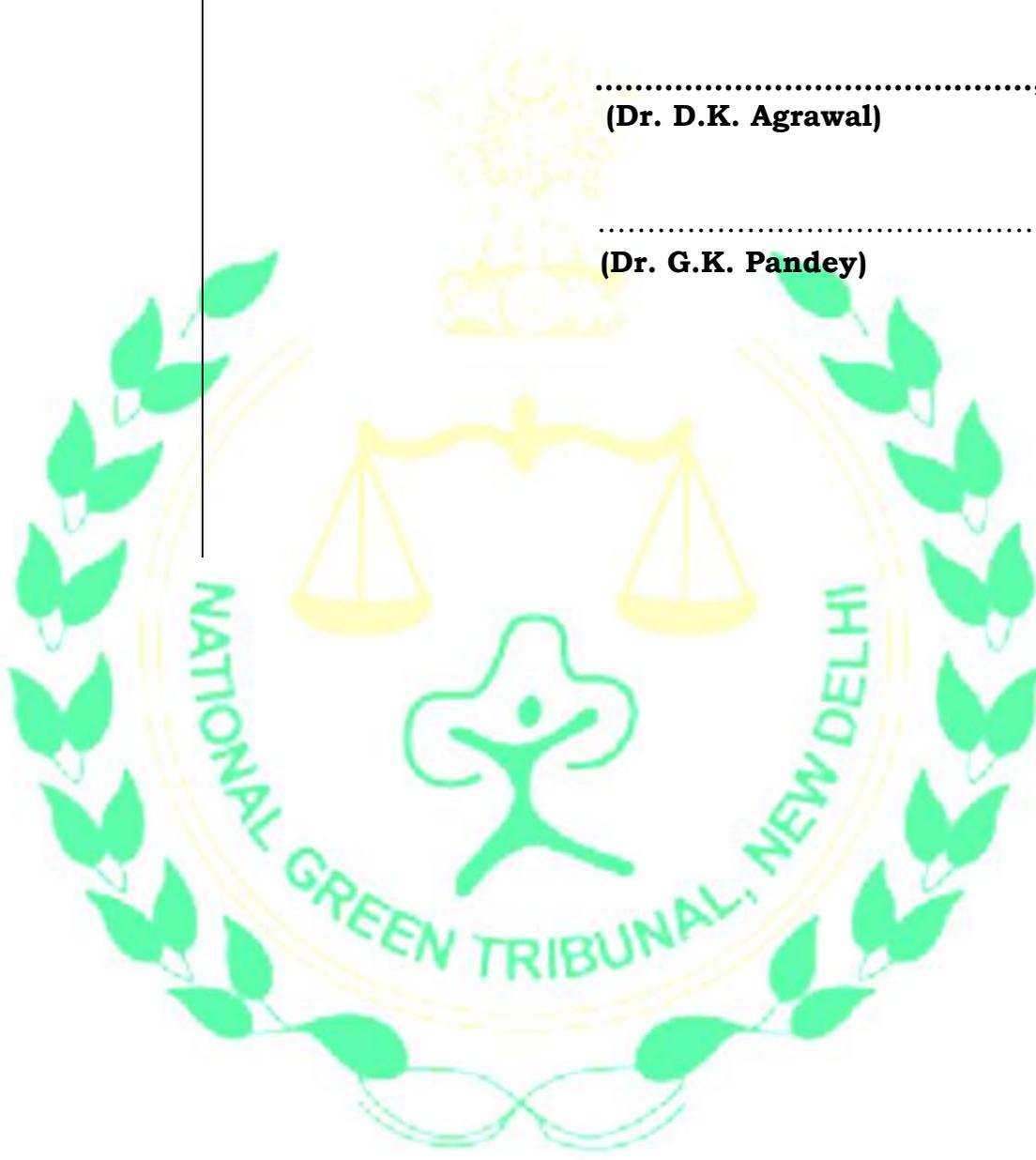
so far as it relates to the miner minerals like sand etc., list these matters on 30th May, 2014 for hearing.

....., **CP**
(Swatanter Kumar)

....., **JM**
(Dr. P. Jyothimani)

....., **EM**
(Dr. D.K. Agrawal)

....., **EM**
(Dr. G.K. Pandey)



**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

Original Application No. 123/2014

Himmat Singh Shekhawat V/s State of Rajasthan & Ors.

**CORAM: HON'BLE MR. JUSTICE M.S. NAMBIAR, JUDICIAL MEMBER
HON'BLE PROF. (DR.) R. NAGENDRAN, EXPERT MEMBER**

**Present: Applicant / Appellant : Mr. Raj Panjwani, Sr. Adv. with Mr. Anan Verma
and Mr. Sandeep Singh, Advs.
Respondent No. 3 : Mr. Vikas Malhotra, Adv.**

Date and Remarks	Orders of the Tribunal
<p>Item No. 1 June 6, 2014</p>	<p>We have heard the learned Sr. Counsel appearing for the applicant.</p> <p>Mr. Vikas Malhotra takes notice on behalf of respondent no. 3. Applicant to furnish copy of the application to the learned Counsel appearing for respondent no. 3, if not furnished.</p> <p>Admit. Issue Notice to the respondent nos. 1, 2 & 4 by registered post/acknowledgment due and Dasti as well.</p> <p>The Ministry of Environment & Forests (MoEF) issued an office memorandum on 24.12.2013 categorizing the original 'B' category provided under the 2006 Regulations, creating the category B-1 and B-2.</p> <p>The office memorandum dated 24.12.2013 provides that projects categorized as B-1 require EIA report for appraisal and has also to undergo public consultation process as applicable, while projects categorized as B-2 will be appraised based on the application in Form-1 accompanied by Pre-feasibility Report. Under clause 1(iii) no river sand mining project, with mine lease area less than 5 ha. may be considered for grant of environment clearance and river sand mining projects with mining lease area of 5 ha. but less than 25 ha. will be categorized as category B-2.</p>

In addition to the requirement as stated earlier, such projects will be considered subject to the stipulations shown therein.

The Hon'ble Supreme Court in the case of **"Deepak Kumar Vs State of Haryana" 2012 4 SCC 629** declared that lease of mine or minerals including their renewal for the area of less than 5 ha. also would be granted only after getting/granting environment clearance from MoEF. Evidently, the office memorandum was issued to wriggle-out of the said directions by creating category B-2 having an area of less than 25 ha and above 5 ha. This Tribunal by order dated 28.03.2014 considered the said office memorandum and held :

"the notification issued by the MoEF is an Act of subordinate legislation and was issued in exercise of statutory powers. The office memorandum is an administrative order and cannot frustrate the legislative act. In fact, it falls beyond the scope of administrative powers. Consequently, we stay the operation and effect of the order of office memorandum dated 24.12.2013."

The guidelines issued by the Government of Rajasthan on 08.01.2014 were following the office memorandum issued by the MoEF on 24.12.2013. Though, the said guidelines were issued prior to the order passed by this Tribunal staying the operation of the said office memorandum, further action cannot be legally initiated by the Government of Rajasthan, when the operation of the said office memorandum stood stayed by the order of this Tribunal. In such circumstances, the Government of Rajasthan cannot be permitted to proceed as provided under the office memorandum dated 24.12.2013, granting permission to mine. In such circumstances, the respondent nos. 1 and 2 are directed not to proceed further pursuant to the guidelines

issued by the Government of Rajasthan on 08.01.2014.

It is also clarified that even if any auction has been/or is to be conducted, no letter of intent shall be issued, without getting prior permission from this Tribunal.

List on 8th July, 2014.

....., JM
(M.S. Nambiar)

....., EM
(Prof. (Dr.) R. Nagendran)



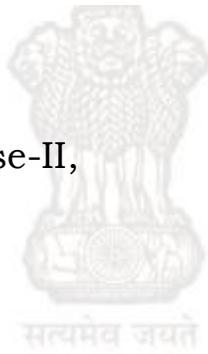
**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH
NEW DELHI**

.....

**ORIGINAL APPLICATION NO. 123 OF 2014
AND
M.A. NO. 419 of 2014**

IN THE MATTER OF:

Himmat Singh Shekhawat,
98, Rooprajat Township, Phase-II,
Pal Road, Jodhpur – 342008
Rajasthan



..... Applicant

Versus

1. State of Rajasthan
Through Principal Secretary, Mines Department,
Government of Rajasthan, Secretariat,
Jaipur – 302001,
Rajasthan.
2. Director, Mines & Geology Department
Khanij Bhawan,
Shashtri Circle, Udaipur - 313001,
Rajasthan
3. Union of India
Through the Secretary
Ministry of Environment and Forests
Government of India,
Paryavaran Bhawan, CGO Complex
Lodhi Road, New Delhi – 110003
4. Secretary, Forest Department
Government of Rajasthan,
Secretariat, Jaipur – 302001,
Rajasthan.
5. Larsen & Toubro Ltd.
4th Floor, SDC Monarch,
Plot no. D-236,
Amrapali Marg,
Jaipur – 302021
Rajasthan

Through Mr. Vivek Narayan Gokhale,
Project Director, Larsen and Tourbo Ltd.

6. M/s. Hi-Tech Rock Products & Aggregates Ltd.

(A Company incorporated under the Companies Act, 1956)

Having registered Office at
Mount Poonamallee Road,
Manapakkam, P.O. Box 979,
Chennai – 600089

Through Mr. K. Prasanna Kumar,
Manager (Mines)
Hi-Tech Rock Products & Aggregates Ltd.

7. Mr. Prahlad Rai
R/o Ward No. 10,
Behind DSP Office,
Ladnu Road,
Sujan Garh,
District Churu, Rajasthan
Through POA holder – Shri Rohitash.
8. Mr. Jagdish Kumar Jat
R/o 13, Ramdev Mandir Mohalla,
P.O. Salasar, Tehsil-Sujangarh,
District Churu,
Rajasthan 331507
Through POA holder – Shri Rohitash
9. Mr. Yogesh Kumar Nyariya
R/o Krishi Upaj Mandi,
Shrimadhampur,
District Sikar, Rajasthan
Through POA holder – Sh. Shahbuddin Quereshi
10. M Vinita Devi
R/o Karni Dharma Kanta,
H-Pratham,
23-Industrial Area,
Neemka Thana
District Sikar, Rajasthan
Through POA holder – Sh. Shahbuddin Quereshi
11. Ms. Kavita Jain
R/o Sadar Bazar, Rupangarh,
Tehsil-Kishangarh
District Ajmer, Rajasthan
Through POA Holer – Proprietor,
M/s. Maruti Mines & Minerals
Mr. Sarveshwar Agarwal &
Sh. Sanjay Kumar Jain
12. Ms. Sushila Jain
R/o Sadar Bazar, Rupangarh,
Tehsil – Kishangarh
District Ajmer, Rajasthan

Through POA Holder – Proprietor,
M/s. Maruti Mines & Minerals
Mr. Sarveshwar Agarwal &
Sh. Sanjay Kumar Jain

13. Mr. Virendra Dave
Bada Bas, Near Laxmi Temple,
Sojat City,
Dist, Pali, Rajasthan
Through POA Holder – Shri. Rajuram Gurjar
14. Mr. Sohanlal Gurjar
Gurjaro Ka Vas,
Village Kharchi

.....Respondents

AND

APPEAL NO. 23 OF 2014

AND

**M.As. NO. 469 OF 2014, 470 OF 2014, 471 OF 2014, 473 OF
2014, 479 OF 2014, 480 OF 2014, 488 OF 2014, 489 OF 2014,
512 OF 2014 AND 563 OF 2014**

IN

APPEAL NO. 23 OF 2014

IN THE MATTER OF:

Sunil Acharya
S/o Shri Chndra Shekhar Acharya,
245, Ramchandra, Matri Chhaya, Tajgiron Ki Bari,
Kalika Mata Road, Banswara
Rajasthan.

..... Applicant

Versus

1. Shri Sanjay Bakliwal
S/o Shri Manak Chandra Bakliwal,
Director, M/s. R.K. Grenny Marmo Pvt. Ltd.,
R/o Oswali Mohalla, Madanganj, Kishangarh,
District Ajmer, Rajasthan-305001
2. Shri Ashok Patni
S/o Shri Kanwarlal Patni,
Director, M/s. R.K. Premises Pvt. Ltd.,
R.K. House, Madanganj, Kishangarh,
District Ajmer, Rajasthan – 305001
3. Shri V.K. Gheeya
S/o Late Shri Kamal Prasad Gheeya,
Director, M/s. Patni Premises Pvt. Ltd.,
R/o 202, Mahalaxmi Apartment, Post Badgaon,
Bedla Road, Udaipur, Rajasthan-313001
Through the Chief Secretary,

Delhi Secretariat, I.P. Estate,
New Delhi - 110002

4. Shri Vinay Patni
S/o Shri Suresh Kumar Patni,
Director, M/s. Patni States Pvt. Ltd.
Through its Vice Chairman,
Vikas Bhawan,
New Delhi - 110002
5. Shri Suresh Patni
S/o Shri Kanwarlal Patni,
Director, M/s. Supreme Buildstates Pvt. Ltd.
R/o R.K. House, Madanganj, Kishangarh,
District Ajmer, Rajasthan-305001
6. Shri Parmanand Patidar
S/o Shri Prabhulal Patidar,
Director, M/s. Elegant Premises Pvt. Ltd.
R/o 20, Kanchan Deep, Bohra Ganesh Road,
Udaipur, Rajasthan-313001.
7. Shri Jaideep Shah
S/o M/s. R.K. Super Cement Product Pvt. Ltd.
R/o D-8, Lal Bahadur Nagar,
In front of Hotel Clark, J.L.N. Marg,
Jaipur, Rajasthan.
8. The Government of Rajasthan
Through the District Collector and the President,
District Level Forest Rights Committee,
Banswara, Rajasthan-327001.
9. The Assistant Engineer,
Mines and Geology Department,
Banwara - 327001.
10. The Dy. Forest Conservator,
Department of Forest,
Dahod Road,
Banswara - 327001
11. The Senior Assistant Inspector General of Forest,
Ministry of Forest Environment House,
C.G.O. Complex, Lodhi Road,
New Delhi.

.....Respondents

AND
ORIGINAL APPLICATION NO. 343/2013
AND
M.A. NO. 442 OF 2014 and M.A. NO. 1093 OF 2013
IN
ORIGINAL APPLICATION NO. 343 OF 2013

Shri Ranbir Singh
S/o Shri Swadesh Singh,
Proprietor M/s. New Shiva Stone Crusher,
Vill. & P.O. Kandwal, Tehsil Nurpur
And Distt. Kangra,
Himachal Pradesh.

..... Applicant

Versus

1. State of Himachal Pradesh
Through Secretary (Industries) to the Govt. of
Himachal Pradesh, Shimla-1.
2. Director Industries to the State of H.P.
Udyog Bhawan,
Shimla – 1
3. State Geologist to the State of H.P.
Udyog Bhawan,
Shimla –1
4. Mining Officer,
Solan Distt., Solan,
Himachal Pradesh
5. Mr. Parshant Joshi
5-A, Agar Nagar,
Ludhiana.

.....Respondents

AND

ORIGINAL APPLICATION No. 279(T_{HC}) of 2013

AND

M.A. NO. 1120 OF 2013

IN

ORIGINAL APPLICATION No. 279(T_{HC}) of 2013

1. Smt. Promila
W/o Shri Rajesh Kumar,
Proprietor M/s. Amarjeet Stone Crusher,
Vill. Sainsiwala, P.O. Barotiwala, Tehsil Baddi
And Distt. Solan,
Himachal Pradesh.
2. Shri Mohan Lal Mehta
S/o Shri Hira Nand Mehta,
Proprietor M/s. Vishwakarma Hard Stone Crusher,
Vill. Khali, P.O. Kumarhatti, Tehsil & Distt. Solan,
Himachal Pradesh.

3. Shri Sanjay Singh
S/o Shri Mohan Singh,
Proprietor M/s. Shiva Stone Crusher,
Vill. Kailar, P.O. Saproon, Tehsil & Distt. Solan,
Himachal Pradesh.

..... Applicants

Versus

4. State of Himachal Pradesh
Through Secretary (Industries) to the Govt. of
Himachal Pradesh, Shimla-1.
5. Director Industries to the State of H.P.
Udyog Bhawan,
Shimla – 1
6. State Geologist to the State of H.P.
Udyog Bhawan,
Shimla – 1
7. Mining Officer,
Solan Distt., Solan,
Himachal Pradesh

.....Respondents

AND

**M.A. NOs. 529 of 2014 & M.A. NO. 623 OF 2014
IN
Original Application No. 171 OF 2013**

IN THE MATTER OF:

National Green Tribunal Bar Association Applicant
Versus

Ministry of Environment & Forests & Ors.Respondents

AND IN THE MATTER OF:

Dr. Sarvabhoom Bagali,
Kachari Road, Opp. Head P.O.,
Indi, Dist. Bijapur, Karnataka-586209

..... Applicant

Versus

1. State of Karnataka
Department of Mines and Geology,
Through its Director,
No. 49, Khanija Bhavan,
Race Course Road, Bengaluru,
Karnataka – 560001

2. Department of Law, Justice & Human Rights,
Government of Karnataka,
Through its Principal Secretary,
Vidhana Soudha, Bengaluru-560001
3. Karnataka State Pollution Control Board
Through its Member Secretary,
'Parisara Bhavan', #49, IVth & Vth Floor,
Church Street, Bengaluru- 560001
4. Department of Industries and Commerce,
Govt. of Karnataka,
Through Secretary to the Government,
No. 49, South Block, Khanija Bhavana,
Race Course Road, Bengaluru- 560001
5. Karnataka State Environment Impact Assessment
Authority (SEIAA), Through its Chairman,
Department of Ecology & Environment,
Room No. 709, VII Floor, IV Gate,
M.S. Building, Bengaluru
6. Public Works Department,
Through its Principal Secretary,
Karnataka Government Secretariat,
III Floor, Vikasa Soudha, M.S. Building,
Dr. Ambedkar Road, Bengaluru- 560001
7. Executive Engineer,
Public Works Department,
Bangalore Rural Division,
PWDD Annexue Building, II Floor
K.R. Circle, Bengaluru,
Karnataka – 560001
8. Executive Engineer,
Public Works Department,
PWD Division, 23rd Sector,
Navanagar, Bagalkot,
Bagalkot Distt., Karnataka - 587103.
9. Executive Engineer,
Public Works Department,
PWD Division, Kote, Belgaum,
Belgaum Distt.,
Karnataka – 590016
10. Executive Engineer,
Public Works Department,
PWD Division, Kote, Bellary,
Bellary Distt.,

Karnataka – 583102

11. Executive Engineer,
Public Works Department,
PWD Division, Mangalpet,
Opp. to S.P. Office, Bidar, Bidar Distt.,
Karnataka – 585401
12. Executive Engineer,
Public Works Department,
PWD Division, Station Road,
Opp. to State Bank of India, Bijapur,
Bijapur Distt. Karnataka – 586101
13. Executive Engineer,
Public Works Department,
PWD Chamarajnagar Division,
Kote Road, Chamarajnagar,
Chamarajnagar Distt., Karnataka – 571313
14. Executive Engineer,
Public Works Department,
PWD Chikkaballapur Division,
Opp. to Govt. Hospital, Chikkaballapur,
Chikkaballapur Distt., Karnataka - 562101
15. Executive Engineer,
Public Works Department,
PWD Chikmagalore Division,
Near Azad Park, Belur Road, Chikmagalore,
Chikmagalore Distt., Karnataka – 577101
16. Executive Engineer,
Public Works Department,
PWD Chitradurga Division,
D.C. Circle, Chitradurga
Chitradurga Distt., Karnataka – 577501
17. Executive Engineer,
Public Works Department,
PWD Mangalore Division, Mini Soudha,
II Floor, Opp. Nehru Ground, Hampanakatte,
Mangalore, Dakshina Kannada Distt., Karnataka - 575001.
18. Chief Secretary,
Government of Mizoram
Civil Secretariat,
Block-C Aizwal-796001.
19. Chief Secretary,
Government of Nagaland
Secretariat,

- Kohima-797001.
20. Chief Secretary,
Government of NCT of Delhi
New Secretariat Building, I.P Estate
New Delhi-110002.
21. Chief Secretary,
Government of Orissa,
General Admn. Dept.
Orissa Secretariat,
Bhubaneswar-751001.
22. Chief Secretary,
Government of Pondicherry
No. 1, Beach Road,
Pondicherry-605001.
23. Chief Secretary,
Government of Punjab
Punjab Civil Secretariat,
Chandigarh-160001.
24. Chief Secretary,
Government of Rajasthan
Secretariat,
Jaipur-302005.
25. Chief Secretary,
Government of Sikkim
Tashiling Secretariat,
Gangtok-737101.
26. Chief Secretary,
Government of Tamil Nadu
Secretariat,
Chennai-600009.
27. Chief Secretary,
Government of Tripura
Civil Secretariat,
Agaartala -799001.
28. Chief Secretary,
Government of Uttar Pradesh
Lal Bahadur Shastri Bhavan
UP Secretariat,
Lucknow-226001.
29. Chief Secretary,
Government of Uttarakhand
Uttarakhand Secretariat,

- 4B Shubhash Road
Dehradun-248001.
30. Chief Secretary,
Government of West Bengal
Writers' Building,
Kolkata -700001.
31. Chief Secretary,
U.T. of Andaman & Nicobar Islands
Secretariat, Port Blair
Andaman – 744101
32. Adviser to Administrator
U.T. of Chandigarh
Secretariat, Sector 9
Chandigarh – 160001
33. Administrator
U.T. of Dadra & Nagar Haveli
Secretariat, Silvassa – 396230
34. Administrator
U.T. of Daman & Diu
Fort Area, Secretariat
Moti Daman – 396220
35. Administrator
U.T. of Lakshadweep
Secretariat, Kavaratti – 682555
36. State Level Environment Impact Assessment Authority
Directorate of Environment, State of Uttar Pradesh
Dr. Bhim Rao Ambedkar Paryavan Parisar,
Vineet Khand – I, Gomati Nagar
Lucknow, Uttar Pradesh PIN – 226010
37. Geological Survey of India
3rd Floor, A wing,
Shastri Bhawan, New Delhi 110001
38. Department of Geology & Mining
Through Director
State of Uttar Pradesh,
Khanij Bhawan 27/8,
Ram Mohan Rai Marg
Lucknow – 226001
39. Department of Irrigation
Through Engineer in Chief
State of Uttar Pradesh,

New Planning Bhawan Toilibag, 3rd Floor
Lucknow, PIN – 226001
Uttar Pradesh

40. Central Pollution Control Board
Through Member Secretary
Parivesh Bhawan, CBD-Cum Office Complex
East Arjun Nagar, Delhi – 110032
41. Uttar Pradesh State Pollution Control Board,
Through the Member Secretary
Picup Bhawan, 2nd Floor, B – block
Vibhuti Khand, Gomiti Nagar,
Lucknow – 226010
42. District Magistrate,
Gautam Budha Nagar,
Noida, Uttar Pradesh
PIN 201301
43. Superintendent of Police,
Gautam Budha Nagar,
Noida, Uttar Pradesh
PIN 201301
44. Ministry of Mining
Shastri Bhawan, New Delhi
45. Vishal Agarwal
S/o Lt. Sri Nahar Singh
R/o 12/10, Ashirwad Enclave
Ballupeer, Dehradun.
46. Vivek Kumar Aggarwal
47. Deepak Gupta
48. Jagannath Mane
49. Ministry of Environment and Forest.
50. Mohit, S/o Sh. Devendra,
Resident of Mandi, Mailganj
Tehsil Nagina, District.
51. Mrs. Muntur W/o P. Ismail
R/o Puliyamthodi House,
Vazhakkad Post
Malapurram, Dist.
Kerala.

52. Lasim C., S/o Basheer
R/o Kodi thodina House,
Payangadi Amsom,
Kondotty Post,
Malappuram Dist. Kerala
53. Dr. Sarvabhoom Bangali
Kacheri Road.
Opp. Head P.O.
Distt. Bijapur
Karnataka.
54. Ministry of Water Resources,
New Delhi
55. Santhakumar A, S/o U. Achuthan
Secretary, All Kerala Quarry Association,
Palakkad.
56. K.M. Koyamu, S/o Modi Kattathodi
Secretary, All Kerala Crusher Owner Association
State Committee, Malappuram, Kerala
57. Muneer, P.M. S/o Moidu
Paleri Town, P.O. Kulliyati
Kerala
58. A.K. Sasi
Athimattathil House
Palakkad, P.O.
Palakkad District
Kerala

Counsel for Applicants:

- Mr. Anand Verma, Advocate in OA No.123/2014.
Mr. Pinaki Mishra, Sr. Advocate with Mr. Rohit Gupta and Mrs. Megha Mehta Agarwal, Adv. in M.A. No. 419/2014 in OA No.123/2014.
Mr. Raj Panjwani, Sr. Advocate with Mr. Aagney Sail, Advocate in M.A. No. 529/2014 in OA No.171/2013.
Mr. Rishi Malhotra and Mr. Deepak Kaushal, Advocates in OA No.343/2013 and OA No. 279(THC)/2013.
Mr. Parikshit Nayak, Advocate in Appeal No. 23/2014

Counsel for Respondents :

- Mr. Parag P. Tripathi, Sr. Advocate along with Mrs. Megha Mehta Agarwal and Mr. Rohit Gupta, Advocates for Respondent No. 5 – 14 in OA No.123/2014
Mr. Vikas Malhotra along with Mr. P. Sahay, Advocates for MoEF in OA No.123/2014

Mr. Vikas Malhotra along with Mr. M.P. Sahay, Advocates for Respondent No. 1 in OA No.171/2013

Mr. Bikas Kargupta, Advocate for State of West Bengal, Respondent No. 30 in OA No.171/2013

Mr. Dev Raj Ashok, Advocate for State of Karnataka in OA No.171/2013

Mr. Suryanaryana Singh, Addl, AG along with Ms. Kanupriya Tiwari, Advocates for Respondent No. 1 in OA No. 343/2013

Mr. Vikas Malhotra along with Mr. M.P. Sahay, Advocates for MoEF and Applicant in M.A.No.442/2014

Mr. A.R. Takkar, Ms. Gurinderjit, Mr. Ankur Sharma, Ms. Nilika Kumar and Mr. Soumil Garg, Advocates for Respondent No. 6 in OA No.343/2013

Mr. Suryanaryana Singh along with Ms. Kanupriya Tiwari, Advocates for Respondent No. 1 in OA No. 279(T_{HC})/2013

Mr. Vikas Malhotra along with Mr. M.P. Sahay, Advocates for MoEF in OA No. 279(T_{HC})/2013

Mr. A.R. Takkar, Ms. Gurinderjit, Mr. Ankur Sharma, Ms. Nilika Kumar and Mr. Soumil Garg, Advocates for Respondent No. 6 in OA No. 279(T_{HC})/2013

Mr. Krishanan Venugopal, Sr. Advocate and Mr. Sandip Jha, Advocate in M.A. No. 470-471/2014 in (Appeal No.23/2014(PH))

Mr. Sanjeev, Advocate in M.A. No. 473/2014 in (Appeal No.23/2014(PH))

Mr. Sunil Prakash Sharma, Advocate in M.A. No. 480/2014 in (Appeal No.23/2014(PH))

Ms. Bhavna Sharma, Advocate in M.A. No. 488/2014 in (Appeal No.23/2014(PH))

Mr. Vivek Chib along with Mr. Asif Ahmed, Advocates for MoEF (Respondent No. 11) in (Appeal No.23/2014(PH))

JUDGMENT

PRESENT:

Hon'ble Mr. Justice Swatanter Kumar (Chairperson)

Hon'ble Mr. Justice M.S. Nambiar (Judicial Member)

Hon'ble Dr. D.K. Agrawal (Expert Member)

**Reserved on 16th October, 2014
Pronounced on 13th January, 2015**

1. Whether the judgment is allowed to be published on the net?
2. Whether the judgment is allowed to be published in the NGT Reporter?

JUSTICE SWATANTER KUMAR, (CHAIRPERSON)

The National Green Tribunal Bar Association filed Original Application No. 171 of 2013 under Sections 14 and 15 read with

Sections 18 (1) and 18 (2) of the National Green Tribunal Act, 2010 (for short 'the NGT Act') stating that rampant illegal sand mining in the Yamuna riverbed was going on in violation of law, without taking prior Environmental Clearance. This activity of sand mining has adversely affected the eco-system and overall ecology of the area. Various incidents of rampant illegal sand mining have been referred to in the petition. It is averred that, despite serious efforts made by some officers, still, the illegal activity was going on. Referring to a recent academic study on environment, which in fact, relates to sand mining, it has been stated that in-stream mining of sand and gravel can reduce water quality, as well as, degrade the channel bed and banks. Mining of these aggregates on the floodplain can affect water table and alter the land-use. The impacts of sand mining from a riverbed are stated to be Habitat and Aesthetic Beauty Degradation, Land use Change, River System Degradation, Floodplain Ponding, Riparian Zone Degradation. The applicant, while relying upon the judgment of the Hon'ble Supreme Court in *Deepak Kumar v. State of Haryana*, (2012) 4 SCC 629, stated that the extraction of alluvial material from within or near a stream bed has a direct impact on the stream's physical habitat characteristics. The Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) observed as follows:-

“These characteristics include bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Altering these habitat characteristics can have deleterious impacts on both in-stream biota and the associated riparian habitat. The demand for sand continues to increase day by day as building and construction of new infrastructures and

expansion of existing ones is continuous thereby placing immense pressure on the supply of the sand resource and hence mining activities are going on legally and illegally without any restrictions. Lack of proper planning and sand management cause disturbance of marine ecosystem and also upset the ability of natural marine processes to replenish the sand.”

In paragraph 29 of the same judgment, the Hon’ble Supreme Court, while emphasising upon the need for seeking Environmental Clearances in relation to mining activity, held as under:

“Leases of minor mineral including their renewal for an area of less than five hectares be granted by the States/Union Territories only after getting environmental clearance from the MoEF”

2. The applicant further submitted that, it is the duty of the said authorities and the State Environmental Impact Assessment Authority (for short, ‘SEIAA’) to ensure that the objective of Environmental Impact Assessment Notification, 2006 (for short, ‘Notification of 2006’) is upheld in letter and spirit and that indiscriminate and rampant mining in the riverbed is not permitted. Such authorities have failed to take or are intentionally not taking any effective steps to prevent this menace. The application was filed with the prayer that the Tribunal should direct the authorities to take appropriate legal action against all sand mining which was being carried on without seeking prior Environmental Clearance or wherever Environment Clearance has been granted, in violation of its conditions. Further, it is also prayed that respondent authorities should formulate proper scheme to prevent illegal mining.

3. It may be noticed here that the applicant has impleaded Ministry of Environment and Forest, Union of India (for short ‘MoEF’) and all

the State Governments, Central Pollution Control Board (for short, 'CPCB') and Pollution Control Board of the States particularly, Uttar Pradesh (for short, 'UPPCB') amongst other authorities of Union and the State Governments.

4. When this application (O.A. No. 171 of 2013) came up for hearing before the Tribunal on 5th August, 2013, the Tribunal passed a detailed order directing all concerned to prohibit illegal mining, particularly, on the riverbeds. While issuing notice to the respondents, the Tribunal passed the following directions:

“In the meantime, we restrain any person, company, authority to carry out any mining activity or removal of sand, from riverbeds anywhere in the country without obtaining Environmental Clearance from MoEF/SEIAA and license from the competent authorities.

All the Deputy Commissioners, Superintendent of Police and Mining Authorities of all the respective States are directed to ensure compliance of these directions.”

5. On 14th August, 2013, when the case again came up for hearing, the Tribunal, issued certain directions and also required the States to submit a status report as to what steps had been taken by them in furtherance to the Judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra). The Tribunal also invited suggestions in relation to the formation of a Committee of experts which would help in implementation of the directions. The States were required to submit details in relation to illegal mining and how many cases of that kind were caught by the different wings/departments of the States. The States were also required to submit a comprehensive study as to what extent and in what manner mining activity can be permitted.

6. Against the order of the Tribunal dated 5th August, 2013, the State of Madhya Pradesh had preferred an appeal before the Hon'ble Supreme Court of India. In that appeal, it was stated that an application had been filed, being M.A. No. 685 of 2013, before the Tribunal, for modification of the order dated 5th August, 2013 praying that a District Level Committee shall be constituted to grant permission to carry on mining at the district level and that the Tribunal had not passed any final order in that regard. The Hon'ble Supreme Court vide its order dated 16th August, 2013, disposed of the appeal with the following directions:

“Considering the aforesaid submission made by Mr. Tankha instead of entertaining these appeals, we request the National Green Tribunal, Principal Bench, New Delhi to take up IA No. 685 of 2013 and pass orders thereon in accordance with law if possible within a week from today. The appeals stand disposed of in the above terms.”

In the meanwhile, M.A. No. 708 of 2013 had been filed by the Madhya Pradesh State Mining Corporation Limited for impleadment and for being heard in support of M.A. No. 685 of 2013 filed by the State of Madhya Pradesh. In Original Application No. 171 of 2013, vide its order dated 28th November, 2013, passed by the Tribunal, M.A. No. 708 of 2013 was allowed, while, M.A. No. 685 of 2013 came to be dismissed. We would be dealing with some of the findings recorded by the Tribunal in this judgment dated 28th November, 2013, shortly here in after.

7. Another Original Application No. 279 of 2013(Thc) was filed by Smt. Promila Devi and others praying that the order dated 30th August, 2013, passed by the Mining Officer, Solan, Himachal

Pradesh be quashed and set aside. In view of the order dated 5th August, 2013, passed by this Tribunal in Original Application No. 171 of 2013, the authority, vide order dated 30th August, 2013, restrained the applicants from carrying on any mining activity or removing sand from the riverbed without obtaining Environmental Clearance from MoEF/SEIAA. The applicants were, thus, directed to take the requisite clearance. It is the case of these applicants that they hold mining lease for the land in question and the area is less than 5 hectares. The lease had been granted to the applicant on 29th March, 2011, i.e., prior to *Deepak Kumar's* judgment (supra) and as such, the order of the Tribunal dated 5th August, 2013, was not applicable to their case. Therefore, the order passed by the Mining Officer, Solan, Himachal Pradesh was liable to be set aside and they should be permitted to carry on with their activity.

8. On similar lines, however, without challenging any specific orders passed by the State of Himachal Pradesh, another Applicant - Ranbir Singh filed an Original Application No. 343 of 2013, praying that since mining leases of the applicants are not covered under the order of the Tribunal dated 5th August, 2013, therefore, their mining activity should not be disrupted by the respondent authorities.

9. Original Application Nos. 279(T_{HC}) of 2013 and 343 of 2013 had been listed together for hearing. On 28th March, 2014, when these matters came up for hearing, the Tribunal stayed the

operation and effect of the Office Memorandum dated 24th December, 2013, issued by the MoEF.

10. One Himmat Singh Shekhawat has filed an Original Application No. 123 of 2014, submitting that, he was the holder of Letter of Intent issued by the State of Rajasthan for excavation of minor mineral, bajri/sand in an area admeasuring 2439 hectares located on the riverbed of Rivers Luni and Mitri. According to him, he fulfilled three conditions for the grant and execution of mining lease, i.e, submission of mining plan duly approved by the competent authority, Environmental Clearance granted by the MoEF and had also submitted an affidavit for financial assurance under Rule 37J of the Rajasthan Minor Mineral Concession Rules, 1986 (for short, Rajasthan Rules of 1986). These Rules came to be amended by way of Rajasthan Minor Mineral Concession (Amendment) Rules, 2012, published on 23rd May, 2012, (for short 'Rajasthan Rules of 2012'). The amended Rules provided that mining leases for mineral, 'bajri', shall be granted only by way of auction or tender. On 8th January, 2014, the State of Rajasthan issued guidelines as well as a notice on 6th May, 2014 for auction of minor minerals. The applicant was aggrieved from the procedure being adopted by the State Government. Thus, he filed this application before the Tribunal, praying that, the guidelines issued by the State of Rajasthan dated 8th January, 2014 and the Public Notice dated 6th May, 2014, by the State of Rajasthan, should be quashed and as an interim order, its operation should be stayed.

11. Another Applicant, Sunil Acharya, filed an Appeal No. 23 of 2014. He submitted that, he is an eminent citizen and a social activist of Banswara and is concerned with the environment. He was raising challenge to the orders passed by the Government of State of Rajasthan, granting approval on the basis of the applications filed by the non-applicants in regard to grant of mining leases ML No. 9/09 to 24/09 in relation to village Kothara, Tehsil and District Banswara. According to the appellant, the Additional Director, Mines vide his letter dated 22nd February, 2012, addressed to the Assistant Mining Engineer, Banswara had directed him to comply point wise with the terms and conditions specified in the letter dated 13th February, 2012, issued by the Government of India and to submit a report in this regard to the Head Chief Forest Conservator, Jaipur through the Divisional Forest Officer, Banswara and Chief Forest Conservator, Udaipur. The matter was further examined by the Assistant Mining Engineer, Mines and Geology Department. Thereafter, the District Collector, Banswara, vide his letter dated 29th February, 2012, issued a certificate with regard to diversion of 64 hectare of forest land in favour of 16 lease holders for mining of marble in the Banswara district of Rajasthan. It was also stated that the permission granted under the Forest (Conservation) Act, 1980 (for short 'Act of 1980') shall be subject to Environmental Clearance under the Environment (Protection) Act, 1986 (for short 'Act of 1986'). It is stated by the appellant that the non-applicants/respondents no. 1 to 7, in collusion with the

Respondent Nos. 9 and 10, and in violation of the Notification of 2006, made false representations in their applications that the area of mining was less than 5 hectares, i.e., 4 hectares and hence the Notification was not applicable to them. The Respondents No. 1 to 7 were granted different mining leases. The appellant served the notice under Section 80 of Code of Civil Procedure, 1908. The appellant, being aggrieved by the decisions taken by the authorities, vide their orders dated 22nd February, 2012, 23rd February, 2012 and 29th February, 2012, has filed an appeal challenging the correctness of these orders. In the appeal, it was even prayed that temporary injunction may be issued for staying the orders of the authorities dated 22nd February, 2012, 23rd February, 2012 and 29th February, 2012, prohibiting Respondents No. 1 to 7 from carrying on illegal mining operation during the pendency of the appeal.

12. After hearing the Counsel for the parties on 10th July, 2014, the Tribunal issued notice on the appeal and passed the following order:

“We have heard Mr. Parikshit Nayak, learned Counsel appearing for the Applicant.

The grievance of the Applicant is that permission is granted to the Respondent Nos. 1 to 7 for carrying out mining operations without obtaining Environment Clearance and it was pursuant to the decision of the Ministry of Environment & Forests. Though, by Office Memorandum dated 24.12.2013, it is provided that EC is not necessary, if the area of mining is less than 5 hectares, the Tribunal has already stayed operation of the said Office Memorandum dated 24.12.2013 by order dated 28.03.2014 in the case of “(Ranbir Singh Vs. State of H.P. & Ors. Application No. 343/2013)”.

In such circumstances, if Respondent Nos. 1 to 7 have not obtained the EC and is not having the necessary consent to operate, they are not entitled to carry on mining.

In such circumstances, Issue Notice to the Respondents by registered post/acknowledgment due and Dasti as well. Requisites be filed within three days from today.

In the meanwhile, Respondent Nos. 1 to 7 are restrained from carrying on mining operations, without obtaining EC and obtaining consent from the Rajasthan State Pollution Control Board.”

It may be noticed here that M.A. No. 469 of 2014 was filed by the Respondent No. 5 in Appeal no. 23 of 2014, wherein he prayed for vacation of the order dated 10th July, 2014, as their business was being adversely affected. Similarly, M.A. No. 470 of 2014, M.A. No. 473 of 2014, M.A. No. 479 of 2014, M.A. No. 480 of 2014, M.A. No. 488 of 2014 and M.A. No. 489 of 2014 were filed by other respondents in Appeal No. 23 of 2014 with the same prayer as made by the applicant in M.A. No. 469 of 2014.

13. In continuation to the proceedings pending before the Tribunal in all the above five matters, which were being heard together, MoEF placed on record, the Office Memorandum dated 24th December, 2013, with an explanatory affidavit. Having noticed certain ambiguities in it, the Tribunal on 28th August, 2014, recorded the statement of Dr. V.P. Upadhyay and Dr. P.B. Rastogi from MoEF. This clarification is of serious consequences as far as the matter in issue in the present case is concerned. Thus, it will be useful to refer to the order of the Tribunal passed in this case on 28th August, 2014, which reads as under:

“Dr. V.P. Upadhyay, Scientist – ‘F’ (Director) and Dr. P.B. Rastogi, Scientist – ‘F’ (Director) from the Ministry of Environment and Forests are present before the Tribunal.

It is submitted before us that Office Memorandum dated 24th December, 2013 issued by the MoEF intended to stop consideration/grant of Environment Clearance for any river bed mining where area in question is less than 5 hectares. There are certain ambiguities in the said Memorandum. These Officers submit that they are duly authorised by their Ministry to make statement before the Tribunal today.

Joint Statement of both these Officers is being recorded, being authorised representatives of the MoEF, which is also confirmed by the learned counsel appearing for the MoEF.

They make the following statement:-

Statement

1. The Office Memorandum dated 24th December, 2013 intends and it is now clarified and reiterated that no Environmental Clearance will be granted for extraction of Minor Minerals (sand mining) from any river bed/ water body where the area is less than 5 hectares.

2. In other words the mining activity of minor minerals (river sand mining) area of less than 5 hectares is not permitted.

3. The surface water level as referred in the Office Memorandum dated 24th December, 2013 would be the normal water level prevalent during the lean season.

4. The minor minerals mining activity in areas other than riverbed (sand mining) would be permitted, provided that Environmental Clearance for the same is taken in accordance with law.

To that extent the Office Memorandum dated 24th December, 2013 is explained and clarified and it will bind the MoEF in accordance with law.

The above statement made on behalf of MoEF has been taken on record.

Learned counsel appearing for the different parties wish to argue the matter.”

14. M.A. No. 442 of 2014, M.A. No. 469 of 2014, M.A. No. 470 of 2014, M.A. No. 473 of 2014, M.A. No. 479 of 2014, M.A. No. 480 of 2014, M.A. No. 488 of 2014 and M.A. No. 489 of 2014 have been filed by different applicants in the above mentioned cases praying for the vacation of the injunction granted or the directions passed

by the Tribunal vide its order dated 5th August, 2013, 28th March, 2014 and 10th July, 2014.

15. As already noticed, vide these orders, the Tribunal had restricted carrying on of any mining activity from the riverbeds anywhere in the country, without obtaining Environmental Clearance from MoEF/SEIAA and license from the competent authority. The Tribunal had also stayed the operation of the Office Memorandum issued by the MoEF on 24th December, 2013. Lastly, in the case relating to the State of Rajasthan, similar restraint order was passed and it was also directed that, without obtaining consent from the Rajasthan State Pollution Control Board, the mining activity cannot be permitted to be carried on.

Discussion on law in force in relation to mining of minor minerals

16. In order to properly consider various contentions that have been raised in the above Original Applications, Appeal as well as Miscellaneous Applications, it is necessary for us to examine the regime of law, relating to mining of brick earth, ordinary earth and all other minor minerals that has been in force.

17. Entry 54 of List 1 in Schedule VII to the Constitution of India, is an entry that enabled the Parliament of India to acquire power in respect of 'Regulation of mines and minerals development, to the extent to which such regulation and development, under the control of the Union, is declared by the Parliament by law to be expedient in the public interest'. On the other hand, Entry 23 of List 2 of the

same Schedule, read with Article 246(3) of the Constitution of India, confers legislative powers on the State Legislature in respect of 'Regulation of mines and mineral development', but, this power is subject to the provisions of List 1 with respect to the regulation and development under the control of the Union. The Indian Parliament, with the object to amend and consolidate the law relating to the regulation of labour and safety in mines enacted the Mines Act, 1952. Section 2(JJ) of the Mines Act, 1952 defines "minerals" to mean, all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulic, quarrying or by any other operation and includes mineral oils (which, in turn, include natural gas and petroleum). This Act, primarily provided for welfare of the labourers working in mines, inspection and surveying by inspectors, mining operation and management of mines. Mines Rescue Rules also came to be framed under Section 59 of the Act in the year 1984.

18. On 1st June, 1958, the law, to provide for the regulation of mines and development of minerals under the control of the Union came into effect and was promulgated as the Mines and Minerals (Development and Regulation) Act, 1957 (for short 'Act of 1957'). This Act provides, *inter alia*, for general restrictions on undertaking prospecting and mining operations, the procedure for obtaining prospecting licences or mining leases in respect of the land in which the minerals vests in the Government, the rule making power for regulating the grant of prospecting licences and mining leases,

special powers of Central Government to undertake prospecting or mining operations in certain cases, and for development of minerals. This Act was amended by the Amendment Act of 1972 by adding Section 4A to the Act of 1957, which provided for premature termination of mining leases and the grant of fresh leases to Government Companies or Corporations owned or controlled by the Government. The word 'regulation' in Entry 54 would not include 'prohibition' and should not be confused with 'restrictions', occurring under Article 19(2) to (6) of the Constitution of India. The Entry was stated to be purposive and keeping in view, the object and purpose of the legislation, the Hon'ble Supreme Court said that the legislative power of regulation and development of mines must dictate the nature of law made in the exercise of that power because public interest demands that power [*K.C. Gajapati Narayan Deo and Ors. v. The State of Orissa*, (1954) 1 SCR 1].

19. With the passage of time and development of law, the Union of India, issued various Notifications and Circulars to impose restrictions and prohibitions on the expansion and modernization of any activity or new projects in respect of mining in major and minor minerals.

20. The Act of 1986 and Environment (Protection) Rules, 1986 (for short 'Rules of 1986') were enacted and came into force on 19th November, 1986. The object of this Act of 1986 is to provide for the protection and improvement of environment and for matters connected therewith. Under provisions of the Act and Rules of 1986,

MoEF issued various other Notifications regulating the mining of minor minerals, specifically stating the procedures that were required to be complied by persons intending to carry on such mining activity and for the authorities to regulate the same.

21. It appears that, prior to 1994, there was no specific regime in place in relation to mining activity being carried on in minerals. The Notification issued by MoEF on 27th January, 1994, in exercise of the powers vested in it under Sub-Rule 3 of Rule 5 of the Rules of 1986 and Sub Section (1) and Clause (v) of Sub-Section (2) of Section 3 of the Act of 1986, prescribed the requirement and procedure for seeking Environmental Clearance for the projects listed in Schedule I. Schedule I of this Notification did not deal with mining projects of minor minerals. On the contrary, the projects covered under S. No. 20 of Schedule I of this Notification were only “mining projects (major mineral) with leases more than 5 hectares”. This Notification provided as to how the applications have to be moved/considered and that the project should be site specific. It also provided for the constitution of Expert Committees and preparation of Environmental Impact Assessment Report which was to be evaluated and assessed by the Impact Assessment Agency. It is clear that there had been a vacuum in specific law for regulation of and effective control on the minor mineral mining activities. In exercise of its statutory powers afore-indicated, the Central Government on 14th September, 2006, issued a Notification, i.e., ‘Environmental Clearance Regulation, 2006’. In terms of this

Notification, the projects as stated in the Schedule to this Notification, required prior Environmental Clearance as per the procedure. The projects have been categorised into two kinds, i.e., Category 'A' and Category 'B' under Clause 2 of the Notification. Projects under Category 'A' were required to take prior Environmental Clearance by MoEF. For Category 'B' projects, Environmental Clearance was to be given by SEIAA. In the present case, we are considered with Entry 1(a) of the Schedule to the Notification of 2006 which was substituted vide Notification dated 1st December, 2009. This entry reads as under:

Project of 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)
¹⁸ [1(a)]	(i) Mining of minerals. (ii) Slurry pipe-lines (coal lignite and other ores) passing through national parks/sanctuaries/coral reefs, ecologically sensitive areas.	≥50 ha of mining lease area in respect of non-coal mine lease >150 ha of mining lease area in respire of coal mine lease Asbestos mining irrespective of mining area All projects	<50 ha ≥ 5 ha of mining lease area in respect of non-coal mine lease ≤150 ha ≥5 ha of mining lease area in respect of coal mine lease]	¹⁹ [General conditions shall apply <i>Note:</i> (i) Prior environmental clearance is as well as required at the stage of renewal of mine lease for which application should be made up to one year prior to date of renewal. (ii) Mineral prospecting is exempted.

22. From this Entry in the Schedule to the Notification of 2006, it is clear that projects in respect of non-coal mine leases, where the area is more than 50 hectares would require prior Environmental Clearance from MoEF, while the projects of less than 50 hectares and more than 5 hectares of mining area, would require prior Environmental Clearance from SEIAA. The procedure for taking prior Environmental Clearance under both these categories is more or less the same except that the agency which gives the clearance is different. Clause 7 of the Notification of 2006, specifies the stages through which such projects for grant of Environmental Clearance are required to be passed and processed. They include Screening, Scoping, Public Consultation and Appraisal, upon which, the Expert Appraisal Committee would make a recommendation to the MoEF/SEIAA as the case may be, which would then grant or refuse the Environmental Clearance to the project in question. Under the head 'Screening', this Clause 7 also provides for a further bifurcation of projects falling under category 'B' into 'B(1)' and 'B(2)'. The relevant part of Clause 7, dealing with this aspect, reads as under:

“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 'B1' 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."

23. In terms of the above, at the stage of 'Screening', the State Level Expert Appraisal Committee has to determine whether or not the project requires further environmental studies for preparation of an Environmental Impact Assessment report for its appraisal, prior to the grant of Environmental Clearance, depending upon the nature and location specificity of the project. The projects requiring an Environmental Impact Assessment report shall be termed as Category 'B1' and remaining projects shall be termed as Category 'B2', which will not require an Environment Impact Assessment report and for this categorisation, i.e., 'B1' and 'B2', the MoEF retained with itself, powers to issue guidelines from time to time. From the record before the Tribunal, it is evident that prior to the institution of these cases, no guidelines have been prepared or notified by the MoEF, in terms of Stage 1 of Clause 7 of the Notification of 2006. The Notification of 2006 came to be amended by Notification dated 1st December, 2009. It made some amendments in different clauses of the Notification of 2006 and deleted some portion appearing in column 5 of Entry 1(a) of the Schedule to the Notification of 2006. In substance, it made no change as far as minor mineral activity was concerned. Note (i) in column 5 stood omitted. Subsequent to the amendment of the Notification of 2006 in 2009, the judgment of the Hon'ble Supreme

Court came to be pronounced in IA No. 12-13 of 2011, in the case of *Deepak Kumar* (supra). In compliance to the direction of the Hon'ble Supreme Court in para 29 of the said judgment, MoEF issued an Office Memorandum dated 18th May, 2012, with an intent to implement the said direction of the Hon'ble Supreme Court. MoEF also noticed in the Office Memorandum, direction of the Hon'ble Supreme Court dated 16th April, 2012, wherein the applicants before the Hon'ble Supreme Court in the order dated 27th February, 2012, who were carrying on mining activity below 5 hectares were given liberty to approach MoEF for permission to carry on mining. These applications were to be disposed of by MoEF within 10 days from the date of the applications. The order of the Hon'ble Supreme Court dated 16th April, 2012, reads as under:

“All the same, liberty is granted to the applicants before us to approach the Ministry of Environment and Forests for permission to carry on mining below five hectares and in the event of which Ministry will dispose of all the applications within ten days from the date of receipt of the applications in accordance with law.”

24. In this Office Memorandum, it was decided by MoEF that all the mining projects for minor minerals, including their renewal, irrespective of the size of the lease would, henceforth, require prior Environmental Clearance. Wherever the area was less than 5 hectares, they would be treated as category 'B' projects in terms of Notification of 2006 and should be processed accordingly.

25. On 24th June, 2013, MoEF issued another Office Memorandum stating guidelines for consideration of proposals for grant of Environmental Clearance under the Notification of 2006 for

mining of 'brick earth' and 'ordinary earth' having lease area of less than 5 hectares. Referring to the judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) and its Office Memorandum dated 18th May, 2012, it further considered that the 'brick kiln' manufactures had stated that it was a small scale activity requiring that certain depth should be kept outside the purview of Environmental Clearance. Having considered various aspects, the recommendations of the Expert Committee, constituted by MoEF, were also examined and finally it was directed as follows:

“(a) The activities of borrowing / excavation of 'brick earth' and ordinary earth', upto an area of less than 5 ha, may be categorized under 'B2' Category subject to the following guidelines in terms of the provisions under '7.I Stage(1)-Screening' of EIA Notification, 2006:

(i) The activity associated with borrowing/excavation of 'brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.

(ii) The borrowing/excavation activity shall be restricted to a maximum depth of 2 m below general ground level at the site.

(iii) The borrowing/excavation activity shall be restricted to 2 m above the ground water table at the site.

(iv) The borrowing/excavation activity shall not alter the natural drainage pattern of the area.

(v) The borrowed/excavated pit shall be restored by the project proponent for useful purpose(s).

(vi) Appropriate fencing all around the borrowed/excavated pit shall be made to prevent any mishap.

(vii) Measures shall be taken to prevent dust emission by covering of borrowed/excavated earth during transportation.

(viii) Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth.

(ix) Workers / labourers shall be provided with facilities for drinking water and sanitation.

(x) A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth depth of proposed excavation.

(xi) A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.

(xii) The concerned SEIAA while considering granting environmental clearance for such activity for brick earth / ordinary earth will prescribe the guidelines as stated at (i) to (xi) above and specify that the clearance so granted shall be liable to be cancelled in case of any violation of above guidelines.

(b) Notwithstanding what has been stated at (a) above, the following will apply:-

(i) No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing/ excavation is within 1 km of boundary of national parks and wild life sanctuaries.

(ii) In case the area of borrowing / excavation is likely to result into a cluster situation i.e. if the periphery of one borrow area is less than 500 m from the periphery of another borrow area and the total borrow area equals or exceeds 5 ha, the activity shall become Category '8 I' Project under the EIA Notification, 2006. In such a case, mining operations in any of the borrow areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

This issues with the approval of the Competent Authority.”

26. These directions which were specific only to 'brick earth' and 'ordinary earth' activities for areas less than 5 hectares, as decided to be categorised as 'B(2)' Category projects, subject to the restrictions stated in the memorandum, provided that if the cluster area exceeded 5 hectares, then it would become Category 'B(1)' and would not be treated as Category 'B(2)' projects. It is clear that this Office Memorandum was not dealing with the issues of sand mining or any other minor mineral activity except 'brick earth' and 'ordinary earth'. On 9th September, 2013, MoEF, in exercise of its powers under the Act and Rules of 1986, dispensed with the requirement of notice and amended the Notification of 2006. Entry 1(a) was further amended as follows:

(1)	(2)	(3)	(4)	(5)
1(a)	(i) Mining of minerals.	<p>≥50 ha of mining lease Area in respect of non-coal mine lease.</p> <p>≥150 ha of mining lease area in respect of coal mine lease</p> <p>Asbestos mining irrespective of mining area.</p>	<p><50 ha of mining lease area in respect of minor minerals mine lease; and</p> <p>≤ 50 ha ≥ 5 ha of mining lease area in respect of other non-coal mine lease.</p> <p>≤ 150 ha > 5 ha of mining lease area in respect of coal mine lease.</p>	<p>General Conditions shall apply except for project or activity of less than 5 ha of mining lease area for minor minerals:</p> <p>Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environmental clearance and are located within 500 metres from the periphery of such project or activity equals or exceeds 5 ha.</p> <p>Note: (i) Prior</p>

				<p>environmental clearance is required at the stage of renewal of mine lease for which an application shall be made up to two years prior to the date due for renewal. Further, a period of two years with effect from the 4th April, 2011 with requisite valid environmental clearance and which have fallen due for renewal on or after 4th November, 2011.</p>
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27. During the pendency of the present application and passing of certain orders by the Tribunal requiring the MoEF to clarify its stand in the light of *Deepak Kumar's* judgment (supra) of the Hon'ble Supreme Court, MoEF, on 24th December, 2013, issued another memorandum for consideration of proposals for grant of Environmental Clearance regarding categorisation of Category 'B' projects into Category 'B(1)' and 'B(2)'. Mining of minor minerals

had been separately dealt with in this Office Memorandum. This Office Memorandum stated that no river sand mining project with mining lease area of less than 5 hectares may be considered for grant of Environmental Clearance. Such area up to 25 hectares would be Categorised as 'B(2)' and such projects were to be considered, subject to the stipulations stated therein. This Office Memorandum had apparent ambiguities, which, as already noticed, were cleared by the statement of officers of the Ministry made before the Tribunal on 24th August, 2014, wherein it was stated that no Environmental Clearance would be granted for extraction of minor minerals from any riverbed and/or water body, where the area is less than 5 hectares. Sand mining, in area other than riverbeds, would be permitted, only if the Project Proponent takes Environmental Clearance.

28. Against the order dated 5th August, 2013, the State of Rajasthan and some others have preferred an appeal before the Hon'ble Supreme Court. These appeals came to be dismissed as 9703-9706 of 2013 titled, *Chief Secretary, Government of Rajasthan v National Green Tribunal Bar Association and Others*. While issuing notice, the Hon'ble Supreme Court had stayed the proceedings before this Tribunal in Original Application No. 171 of 2013. However, this order of the Hon'ble Supreme Court came to be varied by the Hon'ble Supreme Court vide its order dated 25th November, 2013, which varied the order of stay of all proceedings and passed specific orders in relation to 82 applicants who were holders of Letter of Intent. In relation to those

remaining, including other States, the Hon'ble Supreme Court directed that the matters may go on unless there was a specific stay granted by the Hon'ble Supreme Court in that particular case. The order of the Hon'ble Supreme Court dated 25th November, 2013, reads as under:

“Pursuant to orders passed by this Court on 11th November, 2013, the learned Solicitor General has submitted a status note on behalf of the Ministry of Environment and Forests on the applications for environmental clearance in respect of mining lease of bajri in the State of Rajasthan which is pending before the Ministry of Environment and Forests.

From the aforesaid status note it appears that the time period prescribed under Environmental Impact Assessment Notification 2006 for processing the applications of 82 letter of intent holders/project proponents received from the State of Rajasthan will expire some time in February, 2014. Obviously the mining activity with regard to the bajri lease in the State of Rajasthan cannot be totally kept in abeyance till February, 2014.

We, therefore, direct that till the end of February, 2014, the letter of intent holders who have submitted their applications to the Ministry of Environment and Forests for clearance (numbering 82 only) can carry on mining operations in accordance with the Notification dated 21st June, 2012 of the Mines (Act 2) Department, Government of Rajasthan issued under Rule 65A of the Rajasthan Mines and Mineral Concession Rules, 1986.

We make it clear that the orders that will be passed by the Ministry of Environment and Forests on the 82 applications will be in accordance with the Notification, Environmental Impact Assessment 2006 dated 14th September, 2006.

The State of Rajasthan will ensure that this interim order is not violated in any manner.

It has been mentioned by Mr. Raj Panjwani, learned counsel appearing for the National Green Tribunal Bar Association that besides the Rajasthan matters, other matters are pending before the Tribunal. We make it clear that the other matters may go on in the Tribunal if there are no specific orders of this Court staying the proceedings in the particular matter.”

29. It is in furtherance to the above order, that, proceedings before this Tribunal continued in relation to all other States, as well as, beyond those 82 applicants who were specifically covered by the above order of the Hon'ble Supreme Court.

Stand of the Respective States and Respondents

30. We may now notice the stand taken by the respective States before the Tribunal in the above case.

State of Rajasthan has taken a common stand in two of these cases (Appeal No. 23 of 2014 and Original Application No. 123 of 2014). It is stated on behalf of the State that, Respondent No. 1, Sanjay Bakliwal, in Appeal No. 23 was granted consent to establish and operate on 26th November, 2012. This respondent was granted lease for mining of minor minerals on 23rd November, 2012. In furtherance to the judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), all the States were directed to consider the recommendations of the Committee which were recorded in the judgment and were directed to frame their rules and their mining policy. Accordingly, the State of Rajasthan amended the State Rules w.e.f. 19th June, 2012 by incorporating Chapter IVA for scientific and eco-friendly mining. Under the amended Rules, the mining area allowed for mining of minor minerals is 1 hectare. Obtaining Environmental Clearance, for carrying on river sand mining activity, in an area of less than 5 hectares, was not required. Such requirement was introduced vide Notification dated 9th September, 2013. Lease holders carrying on the minor mineral activity were to apply for

Environmental Clearance at the time of renewal as per the Notification of 9th September, 2013. This Notification made prior grant of Environmental Clearance mandatory in relation to river sand mining and provided that Environmental Clearance will only be required at the stage of renewal of mining in the cases of existing lease.

31. State of Rajasthan, as noticed above, had amended its rules and particularly introduced Rules 37P, 37Q, 37R, 37S, reference to which would be necessary. Rule 37P provided for grant of short term permits for mining in an area of less than 5 hectares. Association of lessees could, through recognised persons, submit Environment Management Plan to the District Level Environmental Committee for approval. The association was to be formed within three months from declaration of cluster. Under this, various persons would become Members of the association and apply for cluster mining. Even a person falling within a cluster was deemed to be a member of the association. 37R provided for the composition of the District Level Environmental Committee. Environment Management Plan had to be approved by such Committee, which was required to be implemented in terms of Rule 37S. This was to provide environmental safeguards which were to be implemented by the holders of the short term permits and the association. According to Respondent No. 1, the lessee, he had complied with all these requirements and as per Government practise, clusters were formed by the State Government and Environment Management Plan was approved by the District Environmental Committee. However, Respondent No. 1 also submits that, during the

operation of the orders of the Tribunal, he had applied for obtaining Environmental Clearance. The Rajasthan State Pollution Control Board, vide its letter dated 31st October, 2013, also directed Respondent No. 1 that if they wished to increase the production after 9th September, 2013, they must obtain Environmental Clearance. It is the stand of the Respondents that ToR has been issued by SEIAA and public hearing has been done on 27th-28th August, 2014 and that they are awaiting grant of Environmental Clearance. According to Respondent No. 1, the Notification dated 9th September, 2013, is not applicable to the lease as it operates only prospectively.

32. According to State of Rajasthan, post Notification dated 9th September, 2013, issued by the MoEF, they have not granted any mining lease without Environmental Clearance. However, in the period between 27th February, 2012 and 9th September, 2013, i.e., the bridge period, mining leases for minor minerals were granted to all the private respondents as no Environmental Clearance was required for such activity. Directions contained in the case of *Deepak Kumar* (supra) were followed by requiring clusters to make Environment Management Plan in accordance with the Rules afore-referred. It is further submitted by the State of Rajasthan, that, after the operation of the Office Memorandum issued by MoEF dated 24th December, 2013, was stayed by this Tribunal, the State has not given effect to the Office Memorandum dated 24th June, 2013 also, which, has in fact, become one of the grievances of the private respondents in OA No. 123 of 2014.

33. As already stated, two applicants, namely, Smt. Promila Devi and Shri Ranbir Singh have filed independent petitions, *inter alia*, praying for quashing of the order dated 31st August, 2013, and threat to implement the same against the other by the Mining Officer, Solan, wherein, for not obtaining Environmental Clearance, the mining activity was ordered to be stopped. While in the latter, according to the applicant, he was granted mining lease of sand, stone and bajri which is found in mixed states in Khads and not in any manner on the river bed. The applicant has, therefore, prayed that in both the mines at Mohal Maira Doomal/Maira Batrah, in Tehsil Nurpur, District Kangra, Himachal Pradesh, Mining activity should not be stopped, with reference to the order of the Tribunal dated 5th August, 2013. The applicant prayed for vacation of the stay order. According to the applicant, they are not covered by the said order of the Tribunal and therefore, their mining activity should be permitted to be continued.

34. The stand of State of Himachal Pradesh in the case of Ranbir Singh is that the applicant had initially applied for mining of an area which was more than 5 hectares, but, later sought for reduction of the area to less than 5 hectares. Upon the reduced area, supplementary mining lease was executed on 8th December, 2013. However, after passing of the order of the Tribunal dated 5th August, 2013, the Mining Officer, Kangra has suspended the mining activity as it falls in the Khad/stream, i.e., river bed.

35. The applicant also submits that his mining activity is connected to a stone crusher and, as such, he would suffer serious losses. The matter pertaining to the applicant was also pending before the High Court of Himachal Pradesh in terms of the order of the Hon'ble Supreme Court, in the case of *Nanak Chand Dhiman & Ors. v. Chief Secretary to the Government of Himachal Pradesh, Shimla & ors.*, dated 25th July, 2013.

36. In the case of Smt. Promila Devi, it is stated that the Mining Officer, Solan, has suspended the mining activity of the applicant in compliance to the order of the Tribunal dated 5th August, 2013. According to the State, the area of petitioner no. 1 does not form part of the river bed, but, that of petitioner nos. 2 and 3 partly or wholly lies in the river bed. As such, since the order of the Tribunal was applicable only to petitioner Nos. 2 and 3, the order passed against petitioner no. 1 was withdrawn vide letter dated 11th October, 2013.

37. Under the River/Stream Bed Mining Policy/Guidelines for the State of Himachal Pradesh, 2004 (for short 'Policy of 2004'), it was mandatory for the holder of the mineral concession to prepare Working-cum-Environmental Management Plan. This plan was to be approved by the State Geologist, Himachal Pradesh and not by the MoEF/SEIAA. The MoEF had also issued a Circular on 2nd July, 2007 stating that Notification of 2006 shall not be applicable to those leases where neither the production has increased nor area is enhanced, till expiry of lease period.

38. According to the Himachal Pradesh Minor Minerals (Concession) Revised Rules, 1971 (for short 'Rules of 1971'), the State of Himachal Pradesh had reserved to itself, the power to grant mining lease for an area as it may deem fit. In terms of provisions of Rule-13 (1), for setting up of crusher and granting lease for river stream bed mining, an area of 10 hectares or above, was to be given priority and free sale of minor minerals lease up to 5 hectare shall be granted. That means, less than 5 hectare of mining lease could be granted. This Rule does not specifically contemplate issuance of Environmental Clearance.

39. According to the State, none of the petitioners have so far applied for Environmental Clearance, in accordance with the Notification of 2006. Against the order of the High Court of Himachal Pradesh dated 15th June, 2012, a Civil Appeal No. 6179/2013 titled '*Nanak Chand Dhiman & Ors. Vs. Chief Secretary of Government of Himachal Pradesh & Ors.*' was filed. The Hon'ble Supreme Court of India had set aside the orders of the High Court dated 15th June, 2012 and 14th September, 2012 and ordered that the appellant would file an appropriate application for impleadment before the High Court of Himachal Pradesh which will be considered afresh in accordance with law. It may be noticed that as per website of the Himachal Pradesh High Court, Civil Writ PIL No. 9 of 2011 and other applications have been finally disposed of by the High Court, vide its order dated 20th March, 2014.

The Hon'ble Supreme Court, while setting aside the order of Himachal Pradesh High Court, which had permitted one year period for the lease holders to obtain Environmental Clearance, though they were operating prior to 27th February, 2012 and the mining leases which were executed after 27th February, 2012, had directed stoppage of mining operations on the ground that the order was passed without granting opportunity of representation to the lessees who were having a valid lease. The State has taken the stand before the Hon'ble Supreme Court that it has already framed Rules in line with the recommendations of MoEF, placing incidents of getting Environmental Clearance from the authorities concerned. Where the leases were granted prior to 27th February, 2012, Environmental Clearance was not warranted as they were being appropriately regulated under the respective mining plans. The Hon'ble Supreme Court, without commenting upon the restrictive contentions, had set aside the High Court orders and granted liberty to the appellants to file appropriate applications before the High Court.

40. Following the directive of the Hon'ble Supreme Court in the case of *Deepak Kumar v. State of Haryana & Ors*, (supra), the State of Himachal Pradesh submits that they have not executed any fresh mining lease after 27th February, 2012. Vide Office Memorandum dated 18th May, 2012, MoEF, Government of India has brought all the mining leases irrespective of the area under the ambit of Notification of 2006. Except to the exceptions carved out in their Circular dated 2nd July, 2007, the mining activity and sanctioning

of mining lease in State of Himachal Pradesh is being granted in accordance with the Rules of 1971.

41. It has also been brought on record that the State of Himachal Pradesh, in furtherance to the directions issued by the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), has taken necessary steps and safeguards. According to the State, they had already initiated such steps as back as in the year 2004, while framing Policy of 2004. The State has carried-out necessary amendments in the Rules of 1971 vide Notification dated 10th June, 2004. It is even averred by the State that the order of the Hon'ble Supreme Court dated 27th February, 2012, is not applicable to the current mining leases as the direction would be considered only at the time of renewal, including, grant of Environmental Clearance. In terms of the Policy of 2004, and subject to the satisfaction of the conditions provided therein, mining activity is permitted.

42. Documents have been filed and it was also contended on behalf of the State of Himachal Pradesh that, after order of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), the Rules of 1971, as such, have not been amended, but, the State Government has framed the Himachal Pradesh Mineral Policy – 2013 (for short 'Policy of 2013') which has been notified on 24th August, 2013, wherein, subject to compliance of conditions, mining activities in the area of less than 5 hectares have been permitted. The river bed mining is permitted, subject to Environmental Clearance. Under this Policy, Sub-Divisional Level Committee has

been constituted, which has to provide recommendatory role for grant of Environmental Clearance. Other minor mineral activity is also allowed in the area of less than 5 hectares, subject to Environmental Clearance. The difficulties posed, which are stated to be peculiar in States like Himachal Pradesh, are that, larger mining areas of more than 5 hectare are hardly available, particularly in the river beds. It is also contended that 95% of the mining areas are privately owned and are less than 5 hectare. Removal of sand from the river bed that gets accumulated from the flow of river, also justifies the grant of mining permission in areas of less than 5 hectares, without obtaining Environmental Clearance for the same.

43. The stand of MoEF, even in these cases, is that the Ministry has already taken a decision on 2nd September, 2014 that no Environmental Clearance will be granted for extraction of minor minerals (sand mining) from any river bed where the area is less than 5 hectare in terms of its Office Memorandum dated 24th December, 2013. The minor minerals mining activity in areas other than river bed (sand mining) would be permitted, provided, Environmental Clearance is obtained in accordance with law.

44. One Dr. Sarvabhoom Bhagali has filed M.A. No. 529/2014 praying that, there is rampant illegal mining going on in the State of Karnataka, including mining in eco-sensitive areas. According the applicant, through video-conferencing dated 2nd January, 2014, the Director of Mines and Geology, had issued instructions that one

year period be given to take Environmental Clearance and during the transit period, mining activity could be continued. It is also stated that Rule 31-R(20) of the Karnataka Minor Mineral Concession (Amendment) Rules, 2013 (for short 'KMMC Rules of 2013') should be construed to declare that no mining activity, including existing leases, can be carried on without obtaining Environmental Clearance. The mine lessees, which have been shown as Respondents No. 7 to 35 have carried on illegal sand mining and they should be asked to furnish the details thereof and of the mining that they have done since 16th December, 2013. The amendments to Rule 31-R are contrary to law and are impermissible. The amendments permitting mining without Environmental Clearance and appointment of Regional Environment Management Committee are contrary to the judgment of the Hon'ble Supreme Court in *Deepak Kumar's* case (supra), as well as, the Notification of 2006 issued by MoEF.

45. The State of Karnataka has filed a detailed affidavit taking the stand that after the order of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), the Karnataka Minor Minerals Concession Rules, 1994 (for short 'Rules of 1994') have been amended vide Notification dated 16th December, 2013, which was duly published in the Gazette. The State of Karnataka claims to have adopted a unique mechanism of disbursing of sand since 2nd July, 2011 wherein Public Works Department (for short 'PWD') is given the responsibility of quarrying, storing and sale of sand from blocks

handed over by the concerned District Sand Monitoring Committee but no lease or licence is being issued. According to them, there is a direct control of the State PWD. The State of Karnataka is collecting 'Environmental Protection Fee' of Rs.84,000/- per hectare from all mining leases including minor minerals, except sand, murram and brick earth, since 2009. After amendment, a fee called the 'Environment Management Fee' of Rs.10 per cubic meter of sand sold is being collected. Mining in *patta* lands is prohibited throughout the State. According to the State of Karnataka, Notification dated 16th December, 2013, has been issued which constituted the Regional Environmental Committees. However, it is stated that they do not have much significance, as the applicant is to seek Environmental Clearance from SEIAA or MoEF, as the case may be. This was also clarified vide amendment dated 5th March, 2014. In the State of Karnataka, 375 persons have been granted permission by SEIAA for carrying on the mining activity. The Karnataka State Pollution Control Board is not issuing any consent to the sand, lime shell and building stone mining/quarrying activity (minor minerals). The Department of Mines and Geology has caught about 18354 cases of illegal mining, including illegal transportation and about 17587 cases have been compounded, as per the provisions of Section 23A of Act of 1957, by collecting compounding penalty of Rs.3495.74 lakhs in total. 702 cases are pending for disposal before jurisdictional courts. According to the State, huge mining activity is being carried on in the State.

Referring to the statistics, it has been stated that from March, 2012 to March 2013, total 6810709 MT of sand, 433431 cubic meter of Ornamental stone and 13023699 MT of building stone and 1790347 MT of other minor minerals like Laterite, Lime Kankar, Lime shell, Murram, Steatite, Ordinary Clay etc. were extracted in the State and royalty of Rs. 747.76 Crores has been realized for that year. According to the State, there are 527 mines of specified minor minerals. In the major part of these mines, the area involved under the lease is less than five hectares. In 202 cases, Environmental Clearance has been granted for specified minor minerals, including, four expansion projects. 169 number of Environmental Clearances were granted for non-specified minor mineral leases by SEIAA.

46. 116 applications are stated to be pending with SEIAA for grant of Environmental Clearance and no consents are being issued by the Karnataka State Pollution Control Board. As far as the contention in relation to the instructions issued through video conference is concerned, such a meeting was held and instructions were issued. However, referring to the amended Rules, it was stated that, in terms of Rule-31R (1C), the Taluk Sand Monitoring Committee is to conduct spot inspection of the sand blocks identified and the blocks to be newly identified and submit report to the District Committee. One year time was granted to obtain Environmental Clearance. During this period, mining was permitted. The minimum extent of permitted area for ordinary sand mining is fixed as 10 acres and all sand blocks less than 10 acres

are to be taken up under cluster method and separate quarrying plan and Environmental Clearance certificate has to be obtained for such blocks. The District Committee was empowered to reserve any blocks for the State or Central Government or other government projects.

47. The PWD was required to invite tenders for extracting the sand for transportation, stocking and loading. To extract sand in the Coastal Regulation Zone in the coastal districts, it is mandatory to obtain Environmental Clearance. The District Committee was further empowered under Rule 31R (1B)(x) to delegate authority to any lower level officer of member department to control illegal sand mining activity.

48. Referring to the Notification of MoEF dated 9th September, 2013, categorisation of the projects relating to the minor minerals with an area less than 50 hectares as 'B' Category was also introduced. Six months' time was granted to submit approved quarrying plan in terms of Rule-8(I) for all the existing mines and one year time was granted to obtain approval of Environmental Management Project in terms of Rule-8(Q). The State Administration has also not admitted allegations in relation to illegal mining being carried on without Environmental Clearance. The State Government has also stated that they are taking steps to curb incidents of illegal mining and more coercive steps would be taken in future.

49. According to the State, prior to *Deepak Kumar's* judgment (supra), mining in less than 5 hectare was allowed without Environmental Clearance. The Hon'ble Supreme Court had not dealt with the existing cases of mining in the areas of less than 5 hectares as on the date of passing of the order. Hence, according to the State, order in the case of *Deepak Kumar* (supra) has no application to the leases which existed prior to 27th February, 2012, and accordingly, Notifications issued by the MoEF dated 9th September, 2013 and 16th December, 2013, have no application to these cases. They have also relied upon the Circular issued by the MoEF on 2nd July, 2007, stating that, the mining projects, which did not require Environmental Clearance under Notification of 1994, could continue to operate without Environmental Clearance till the mining lease falls due for renewal. The existing mines had to take Environmental Clearance within one year, with effect from, 16th December, 2013. Even in terms of the Amended Rule-25(A), no quarrying lease is to be granted or renewed to quarry non-specified minor minerals to the extent, not less than that specified in Schedule-II(A). Under Schedule-II(A), mining of ordinary sand has to have a minimum of 10 acres of area. The schedule gives different areas for different kinds of mining. For instance, for brick and tile clays, the area could be 1 acre, while for marble or crystalline limestone as ornamental stone the area could be 2.20 acres and for limestone under title "Shahabad Stone" it could be 0.20 acre. For all such unspecified minerals, it could be 1 acre.

50. As already noticed, and according to the stand taken by the parties, and more particularly, by the respective states, first and foremost, we have to deal with the legal history of the legislations in relation to extraction of minor minerals.

51. The Act of 1986 was enacted by the Parliament to implement the decision taken at the United Nations Conference on 'Human Environment' at Stockholm in 1972. The preliminary object was to take appropriate steps for protection and improvement of human environment. Environment includes water, air and land and inter-relationship which exists among and between water, air, land and human being and the other living creatures, plants, micro-organism and property. Anything that directly or indirectly pollutes any or all these, are subject to steps and action that could be taken by the concerned authorities, in terms of these laws. Mining of minor minerals in our country is an activity which is carried on at a large scale. Unregulated and illegal mining has serious adverse impacts on the environment and ecology of the State concerned.

52. MoEF, for the first time, issued a notification in exercise of the powers vested in it under Clause-(a) of Sub-Rule-(3) of Rule-(5) of the Rules of 1986 on 27th January, 1994. The draft Notification was issued on 28th January, 1993, inviting objections. Upon considering the same, final notification, specifying the imposition, restrictions and prohibition on the expansion and modernisation of any activity or new projects which were being undertaken in any part of India, unless Environment Clearance has been accorded by

the Central Government or State Government as per notification, was issued. This notification contemplated that any person who desires to undertake any new project or an expansion or modernisation of the existing industry or project listed in Schedule-I, has to move an application for seeking Environmental Clearance from the MoEF. Schedule-I to this notification, covered mining, amongst others, under Clause-II(a). However, in terms of Schedule-I, the list of projects requiring the Environmental Clearance from the Central Government, covered only mining projects (major minerals) with leases more than 5 hectares which were included under serial no. 20. In other words, there was no regulatory regime in place, as far as Central Government was concerned, in relation to carrying on extraction of minor minerals. However, some of the States, under their respective Rules, did provide regulation of minor minerals.

53. Then, in the year 2006, MoEF notified the Environmental Clearance Regulations, 2006, in exercise of its powers under the same provisions. Schedule to this Notification spells-out the list of projects or activities which require prior Environmental Clearance. Minor minerals were classified into two different categories. (i) where the mining lease area of more than 50 hectares was categorised as category 'A' project, while mining of an area of less than 50 hectare but more than 5 hectare was categorised as Category 'B' projects. Category 'A' projects required Environmental

Clearance from the MoEF, while category 'B' projects could be granted Environmental Clearance by SEIAA.

54. To this notification, certain objections were raised, which came to be clarified vide Circular dated 2nd July, 2007, whereby MoEF clarified that, all mining projects which did not require Environmental Clearance under the EIA Notification-1994 would continue to operate without Environmental Clearance till the mining lease falls due for renewal, and if, there is no increase in the lease area or enhancement of production.

55. This came to be amended vide notification dated 1st December, 2009, wherein amongst others, the Schedule-I was also amended. This notification made a distinction between non-coal mining lease and coal mining lease. Equal or more than 50 hectare of mining lease are in relation to non-coal mining lease with which we are concerned, required clearance from MoEF while more than or equal to 5 hectare but less than 50 hectare non-coal mine required clearance from SEIAA.

56. Thereafter, on 9th September, 2013, a Notification was issued under the relevant provisions of the Act and the Rules of 1986. By this Notification, Clause 4 of the Notification of 2006 was amended, i.e., for mining in respect of minor mineral, where the lease area was less than or equal to 50 hectares and greater than or equal to 5 hectares. In respect of other non-coal mine lease, the projects were to be treated as Category 'B' Projects, thus requiring Environmental Clearance from SEIAA. This Notification had been issued while

dispensing with the requirements of Clause (a) of Sub Rule 3 of Rule 5 in the public interest. In other words, inviting of the objections and dealing with them, in accordance with law, was waived. On 24th December, 2013, vide Office Memorandum, the Category 'B' Projects were divided into categories of 'B1' and 'B2' and guidelines in that behalf were issued. It was stated that the Project categorized as 'B1' will require Environmental Impact Assessment Report for appraisal and were to undergo public consultation process (as applicable). Projects categorized as 'B2' will be appraised based on the application in Form-I accompanied with the Pre-feasibility Report. While referring to earlier Office Memorandums in relation to brick earth and ordinary earth which termed some of them as 'B2' Projects, it also referred to the cluster situation and finally provided that river sand mining project with mine lease area of less than 5 hectares may be considered for granting Environmental Clearance on cluster basis. The river sand mining project within mining lease area of equal to or more than 5 hectares but less than 25 hectares were to be considered as B2 projects and were to furnish the required documents, subject to the conditions stated in that memorandum. From the above narrated events relating to issuance of Notifications, Office Memorandums and Circulars etc., it is clear that MoEF had been dealing with the entire situation on ad-hoc basis. Under the Notification of 2006, Clause 2, the Scheduled projects are to be divided only into two categories being category A and category B respectively. It does not contemplate any further

classification. However, Clause 7 of Notification of 2006 which primarily provides for the stages through which the project has to be cleared for grant and/or refusal of Environmental Clearance under 'Screening' states that, in case of Category B projects or activities at the time of scrutiny of application seeking Environmental Clearance, the State Expert Appraisal Committee is called upon to determine whether or not the project or activity requires further environmental study for preparation of an Environmental Impact Assessment for its appraisal prior to grant of Environmental Clearance depending upon the nature, location specificity of the Project. The project requiring Environment Impact Assessment Report shall be termed B1 and remaining projects shall be Category B2 and will not require an Environmental Impact Assessment Report. The Ministry has been empowered to issue guidelines from time to time for categorization of projects into B1 and B2 except item 8(b) of the Schedule i.e. township and area development projects.

57. It needs to be noticed here that, vide Office Memorandum dated 24th June, 2013, it was declared that no borrowing of brick earth or ordinary earth shall be permitted in case the area of borrowing excavation is within 1 km from the boundary of national parks and wild life sanctuaries. Another exception to the grant of such permissions was that in case the area of borrowing/excavation is likely to result into a cluster situation i.e. if the periphery of one borrow area is less than 500 m from the

periphery of another borrow area and the total borrow area equals or exceeds 5 hectares, the activity shall become Category 'B 1' in terms of the Notification of 2006 and such operation will be permitted only if the Environmental Clearance has been obtained in respect of the cluster.

Finally the Central Government issued an Office Memorandum dated 24th December, 2013 stating it to be guidelines for consideration of proposals for grant of Environmental Clearance. Under this memorandum, they categorized 'B' category projects into two categories, i.e., 'B1' and 'B2' and thus, it amended the notification dated 9th September, 2013 to that extent. The Category 'B2' projects, in relation to Brick Earth/ordinary Earth, mining projects where lease area was less than 5 hectares were to be considered as per guidelines of 24th June, 2013 for granting Environmental Clearance. The river sand mining project with mining lease area of more than 5 hectares but less than 25 hectares were categorized as 'B2' projects subject to the conditions stated in that Office Memorandum.

58. This power to issue guidelines is not a general power but is a specific power with inbuilt limitations. The limitations are that, such guidelines would alone be for the purposes of categorizing upon scrutiny of applications, projects that would fall under Category 'B1' and 'B2' respectively with specific exclusion of the projects specified under Item 8(b) of the Schedule. Restrictive power to issue guidelines, is further illustrated, by the fact that Clause 2

of the Notification of 2006 does not contemplate any such categorization except projects falling under Category 'A' and 'B' only. The purpose appears to be that the power of State Level Appraisal Committees to bifurcate projects into 'B1' and 'B2' categories respectively should not be unguided and unchecked. Prescription of such guidelines could be done by issuance of appropriate Office Memorandum or orders as the power to issue such guidelines has been vested in MoEF under the statutory provisions. But the greater part of such Office Order or Office Memorandum should be such that it would not vary the content or be contrary to the statutory provisions which are in place by virtue of enacting such provisions either by primarily legislative or delegated legislative power.

59. It is a settled principle that legislature can only delegate to an outside body subordinate or ancillary legislative power for carrying out a policy of the act. The body to whom such power is delegated is required to act strictly within the framework of such delegated powers. Such power is incidental to the exercise of all powers in as much as it is necessary to delegate for the proper discharge of all the public duties. It is because the body constituted should act in the manner indicated in law and should exercise its discretion by following the procedure therein itself or by such delegation as is permissible. Unlike the situation the judges are not allowed to surrender their judgments to others. The legislature and executive can delegate powers within the framework of law. It is an axiom of Constitutional law that representative legislative bodies are given the legislative powers

because the representative Government vested in the persons chosen to exercise the power of voting taxes and enacting laws which is the most important and sacred trust known to civil Government. The Delegation has its own restrictions. For instance, the legislature cannot delegate its functions of laying down legislative policy in respect of a measure and its formulation as a rule of conduct. A memorandum which is nothing but administrative order or instruction cannot amend or supersede the Statutory Rules adding something therein which would specifically alter the content and character of the Notification itself. It has been consistently reiterated with approval by the Hon'ble Supreme Court that administrative practice/ administrative order cannot supersede or override the statutory rule of Notification and it is stated to be a well settled proposition of law.

The delegated power is primarily for carrying out the purposes of the Act and this power could hardly be exercised to bring into existence a substantive right or obligation or disabilities not contemplated by the provisions of the Act or the primary Notification. A Constitution Bench of the Hon'ble Supreme Court in the case of *Sant Ram v. State of Rajasthan* AIR 1965 SC 1910, while dealing with the scope of executive instructions held that instructions can be issued only to supplement the statutory rules and not to supplant it. Such instructions should be subservient to the statutory provisions. They would have a binding effect provided the same has been issued to fill up the gaps between the statutory provisions and are not inconsistent with the said provisions. (Reference in regard to the above can be

made In Re: *The Delhi Laws Act*, 1912 AIR 1951 SC 332, *P.D. Aggarwal and Ors. v. State of U.P. and Ors.*, (1987) 3 SCC 622, *Ram Sharma v. State of Rajasthan and Anr.*, (1968) 1 ILLJ 830 SC, *Mahender Lal Jaine v. State of Uttar Pradesh*, (1963) Supp. 1 SCR 912, *Naga People's Movement of Human Rights v. Union of India*, AIR 1998 SC 431).

60. In the case before the Tribunal, specific challenge has been raised to the Office Memorandum dated 24th December, 2013 on the ground that it violates the above stated principles, in as much as by an Office Memorandum, guidelines for 'B1', 'B2' categories cannot be provided and thus, it runs contra to the statutory provisions. We may also notice here that vide this memorandum, besides providing guidelines for categorization of 'B1', 'B2' projects under Clause (iii) of paragraph 2, MoEF has taken a decision that river sand mining project with mine lease area of less than 5 hectares may not be considered for grant of Environmental Clearance and river sand mining projects with mining lease areas of equal or more than 5 hectares but less than 25 hectares will be categorized 'B2', that too subject to the restrictions stated in that Office Memorandum. Though, the applicants have primarily raised a challenge in regard to the former only, but bare reading of the Notification has brought before us the question in regard to the latter as well. Dealing with the former challenge afore-noticed, it is clear that Clause 7 of the Notification of 2006 provides for further categorization of projects falling under Category 'B' into 'B1' and 'B2'. Though Clause 2 of the said Notification does not contemplate any classification other than 'A' and 'B', but, there is no challenge raised before us to the

Notification of 2006 and we see no reason to go into that aspect. The Notification of 2006 *ex facie* permits classification of Category 'B' projects and that discretion has been vested in State Level Expert Appraisal Committee, which, upon scrutiny of the applications has to take the decision. This discretion vested in the Committee is ought to be controlled by the issuance of guidelines by MoEF. MoEF had issued two guidelines, one on 24th June, 2013 and the other on 24th December, 2013 in relation to further classification and criteria which is to be adopted in that regard. Since the Office Memorandum dated 24th June, 2013, only relates to brick earth and ordinary earth and as per that Office Memorandum, such projects where the excavation area was less than 5 hectares were to be categorized as 'B2' projects, subject to the guidelines stated therein they were to be screened in accordance with the Notification of 2006. Under Paragraph 4(b) of this Memorandum, restrictions were laid down prohibiting any excavation of brick earth or ordinary earth within one km of national parks and wild life sanctuaries as well as it intended to elaborate the cluster situation. If the periphery of one borrow area is less than 500 m from the periphery of another borrow area and the total borrow area equals or exceeds 5 hectares, the activity shall become Category 'B1' project in terms of the Notification of 2006 and such activity will be permitted only if the Environmental Clearance has been obtained in respect of the cluster. If we examine these two Office Memorandums in the light of the well settled legal principles that we have referred above, partially both these Office Memorandums cannot stand scrutiny of law. As far

as guidelines or instructions in relation to classification of projects falling under Category 'B' into 'B1' and 'B2' is concerned, the exercise of such power would be saved on the strength of Clause 7(1) of the Notification of 2006 because it is an Office Memorandum which provides guidelines for exercise of discretion by the State Level Expert Committee for such categorization. Thus, it is an exercise of executive power contemplated under the Notification of 2006. Hence the contention of the applicant on that behalf cannot be accepted and deserves to be rejected. However, in so far as the Office Memorandum dated 24th June, 2013 placing a prohibition under paragraph 4(b) (i) is concerned, it apparently is beyond the scope of such guidelines. Prohibition of carrying on of mining activity or excavation activity which is otherwise permitted by the Notification of 2006 cannot be done by an Office Order, because it would apparently run contra to the provisions of Notification of 2006. In other words, such restriction is not only beyond the scope of the power vested in MoEF but in fact imposition of absolute restriction in exercise of delegated power is not permissible. Similarly, the Office Memorandum dated 24th December, 2013 in so far as it declares that river sand mining of a lease area of less than 5 hectares would not be considered for grant of Environmental Clearance is again violative of the above settled principles. No such restriction has been placed under the Notification of 2006 or under the provisions of the Act and the Rules of 1986. The executive therefore, cannot take away the right which is impermissible under the principle of subordinate legislation. Of course, part of the same Paragraph 2(iii),

in so far as it categorizes 'B2' projects, covering the mine lease area equal to or more than 5 hectares but less than 25 hectares is concerned, the same cannot be faulted in view of the fact that it only provides a criteria or a guiding factor for determining the categorization of projects. It neither vests any substantive right, nor any obligation in relation to any matter that is not squarely or effectively covered under the Notification. This only furthers the cause of fair classification of projects, which is the primary purpose of the Notification. For these reasons, we quash paragraph 4(b)(i) of the Office Memorandum dated 24th June 2013 and part of paragraph 2(iii) in so far as it prohibits grant of Environmental Clearance to the mine area of less than 5 hectares as being violative of the Notification of 2006 and the Rules of 1986. The MoEF has no jurisdiction in exercise of its executive power to issue such prohibitions, impose restrictions and/or create substantive rights and obligations. It *ex facie* is not only in excess of powers conferred upon them, but, is also in violation of the Notification of 2006. As already noticed, this Notification has been issued by MoEF in exercise of powers conferred upon it under Clause 5 of sub section 2 of section 3 of the Act of 1986 read with sub rule 4 of rule 5 of the Rules of 1986. Vide this Notification, the Central Government substituted item no. 1(a) and entries relating thereto. A Clause stating that the projects relating to non-coal mine lease and where the mining area was less than 50 hectares equal or more than 5 hectares was to be treated as Category 'B' projects, in addition to that, the minor mineral lease projects, where the mine lease area was less

than 50 hectares, were also to be treated as Category 'B' projects, also, the general conditions with provisos were also substituted. It is significant to note here that the Notification of 2006 had been amended by the Central Government by issuing a Notification dated 1st December, 2009 in exercise of its delegated legislative powers. While issuing this Notification, the Central Government had followed the procedure prescribed under Sub Rule 2 and 3 of Rule 5 of Rules of 1986. It had invited objections from the public and considered those objections as is evident from the very recital of the Notification where it recorded "and where as all objection and suggestions received in response to above mentioned draft Notification have been duly considered by the Central Government....." and then it published the final Notification. Vide the Notification dated 1st December, 2009, the Central Government had substituted item no. 1(a) and the entries relating thereto of the Schedule to the Notification of 2006 besides making other amendments as well in different entries. However, while making further amendments vide Notification dated 9th September, 2013, the Central Government did not follow the prescribed procedure under Rule 5. On the contrary it substantially altered, and in fact substituted, as well as made additions of a substantial nature in Clause 4 and Clause 5 of the Notification of 2006, where, for the first time, it added minor mineral mine leases of less than 50 hectares, and also added 'general conditions to apply except for the projects where the area was less than 5 hectares in relation to minor mineral lease' and provisos thereto. The period for applying for renewal of mine lease

of one year was changed to two years under the Notification dated 9th September, 2013.

61. It is significant to note here that Sub Rule 4 of Rule 5 empowers the Central Government to dispense with the prescribed procedure under Sub Rules 2 and 3 of Rule 5 in public interest. Firstly, the Notification is entirely silent as to what was the public interest which was required to be served by dispensation of the prescribed procedure. Secondly, no material has been placed before us to show what the grounds were for invoking the exception carved out under Sub Rule 4 of Rule 5. Such justification has to be, both in fact and in law. Justification in support thereof, has to be in contradistinction to imperfect justification. The justification should be objective and need based. Public interest is an expression of definite connotation. The Courts, including the Hon'ble Supreme Court of India, have examined this expression in different contexts and fields. However, the essence of the expression has remained unchanged. 'Public interest' has been explained in different contexts differently with reference to the peculiar facts and circumstances of a given case. Usefully reference can be made to the following:

“Stroud’s Judicial Dictionary, Vol. 4, Fourth Edn.: A matter of public or general interest does not mean that which is interesting or gratifying curiosity or a love of information or amusement but in which a class of the community have a pecuniary interest, or some interest by which their legal rights or liabilities are affected. In the case of *Babu Ram Verma v. State of Uttar Pradesh through Commissioner and Secretary and others*, 1971 S.L.R. 649, the Allahabad High Court observed:

What is the meaning and scope of "Public interests"? Public interest in common parlance means an act beneficial to the general public. An action taken in public interest necessarily means an action taken for public purpose, public interest and public purpose are well-known terms, which have been used by the framers of our Constitution in Articles 19, 31 and 304(b). It is impossible to precisely define the expression 'public interest' or 'public purpose'. The requirements of public interest vary from case to case. In each case, all the facts and circumstances would require a close examination in order to determine whether the requirements of public interest or public purpose were satisfied.

In *Kalyani Stores v. State of Orissa*, 1966 SCR (1) 865, While discussing the reasonableness of the restriction and the requirement of public interest Shah J., speaking for the Court, made the following observations:-

"Reasonableness of the restriction would have to be adjudged in the light of the purpose for which the restriction is imposed, that is, "as may be required in the public interest". Without entering into an exhaustive categorization of what may be deemed required in the public interest", it may be said that restrictions which may validly be imposed under Article 304 are those which seek to protect public health, safety, morals and property within the territory."

In *Onkar Lal Bajaj and Ors. v. Union of India and Anr.*, (2003) 2 SCC 673, the Apex Court observed:

35. The expression 'public interest' or 'probity in governance' cannot be put in a strait-jacket. 'Public interest' takes into its fold several factors. There cannot be any hard and fast rule to determine what is public interest. The circumstance in each case would determine whether Government action was taken is in public interest or was taken to uphold probity in governance.

In the case of *Meerut Development Authority v. Association of Management Studies and Anr*, (2009) 6 SCC 171, the Supreme Court held as under:

67. The expression "public interest" if it is employed in a given statute is to be understood and interpreted in the light of the entire scheme,

purpose and object of the enactment but in the absence of the same it cannot be pressed into service to confer any right upon a person who otherwise does not possess any such right in law.”

From the above, it is clear that ‘Public Interest’ is an expression of general connotation which has to be interpreted in context of the facts of the case. However, in the present case, justifiable reasons had to be placed on record by MoEF to show that they have exercised their discretion in taking recourse to the exception in accordance with law.

62. It is noteworthy that the Notification dated 9th September, 2013 in its recital only records ‘after having dispensed with the requirements of the Notification under Clause (a) of sub rule 3 of the said rule 5 in public interest’. Sub Rule 4 of Rule 5 is an exception to the ‘rule of following the prescribed procedure’. The recourse to an exception of this kind cannot be made in a casual or routine manner. For instance, wherever recourse to emergency clause for acquisition of land is made and objections under Section 5(a) of the Land Acquisition Act are not invited. There, valid and proper reasons have to exist on record. In the case of *Gurinderpal singh and others v. State of Punjab*, Civil Appeal No. 10181 of 2013 (arising from SLP(C) No. 3916 of 2013), the Hon’ble Supreme Court while referring to the judgment of the Hon’ble Supreme Court in the case of *Radhy Shyam v. State of Uttar Pradesh* (2011) 5 SCC 553, reiterated that invocation of emergency clause has to be in cases of real urgency. Even an argument of an action taken in response to a public demand for invoking urgency provision was rejected.

This would clearly demonstrate that invocation of the exceptions have to be on existence of real demanding and exceptional grounds and circumstances. The purpose of the prescribed procedure is to give notice to all the concerned persons, who are likely to be affected by issuance of a restriction, to file objections. Such objections have to be considered by the authorities objectively so as to make the law framed in exercise of subordinate or delegated legislation effective in the public interest and to provide for due safeguards in regard to the imposition of restriction in the interest of environment. The purpose is to provide more comprehensive study and objective application of mind to avoid subjectivity in accordance with Rules/Notifications. Thus, avoidance of the prescribed procedure cannot be in a mechanical process, which is devoid of proper application of mind, reasons and grounds.

The Notification proceeded to make substantive amendments to law taking recourse to the provided exception. However, grounds, reasons and object of dispensing with the prescribed procedure are conspicuous by their absence in the Notification or any record before the Tribunal. Dispensation of prescribed procedure can only be on justifiable grounds and in public interest. Reference can also be made to the dictum of the Hon'ble Supreme Court in the case of *Ram Dhari Jindal Memorial Trust vs. Union of India (UOI) and Ors.* (2012) 11 SCC 370:

“The power of urgency by the Government under Section 17 for a public purpose like Residential Scheme cannot be invoked as a rule but has to be by way of exception. As noted above, no material is available on record that

justifies dispensation of enquiry under Section 5A of the Act. The High Court was clearly wrong in holding that there was sufficient urgency in invoking the provisions of Section 17 of the Act.”

Resultantly, we quash the Notification dated 9th September, 2013 in its entirety.

63. The MoEF through Dr. V.P. Upadhyay and Dr. P.B. Rastogi both scientists had made a submission on behalf of the MoEF on 28th August, 2014, before the Tribunal to explain an opinion to put the contents of the Office Memorandum dated 24th December, 2013 beyond ambiguity.

64. From those submissions, it is clear that no Environmental Clearance would be granted for extraction of minor minerals, sand mining from any riverbed where the area is less than 5 hectares. This will amount to total prohibition of carrying on of minor mineral activity of extraction of sand from riverbed anywhere in the country. Such prohibition, as we have already noticed, cannot be imposed in exercise of executive powers in face of the Notification of 2006 which places no such restriction. Furthermore, it will depend upon geographical and ecological situations in a given case. India is a diverse country with varied geographical, ecological and environmental limitations and situations. If such a direction is required to be imposed then it must be backed by proper data and objective application of mind. For instance, in the State of Himachal Pradesh which is symbolic of all hill States, may find it very difficult to find a mining area equal to or more than 5 hectares on the riverbed. It may be practically difficult to find an area where the area of sand mining is 5 hectares or more. It was

contended before us that if this restriction is to be imposed across the States, then it would be very difficult for the State of Himachal Pradesh to permit any sand mining on the riverbed in its entire State. For extraction of sand and other minor minerals, river/seasonal rivers are the main source in the State of Himachal Pradesh. This argument has to be considered with some merit. Again, neither the Office Memorandum dated 24th December, 2013 discusses any of these issues, nor it provides any data which was the foundation for issuing such Office Memorandum. Furthermore, no material in that regard is placed before the Tribunal. Therefore, we find that this restriction is without any basis and is incapable of being imposed through an Office Memorandum. The minor mineral mining activity, other than sand mining, on riverbed was permitted in the sense that for such activity even areas less than 5 hectares could be considered for grant of Environmental Clearance.

65. Now, we revert to the case advanced on behalf of the respective States in relation to the reliefs prayed by the applicant. According to the Applicant in Original Application No. 171/2013, rampant illegal mining is going on in different parts of the country particularly, the States involved in the present petition and there is clear violation of the orders passed by Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) and orders of the Tribunal. As already noticed most of the States have denied that there is any illegal or unauthorized mining which is being carried on, particularly, on the riverbeds. However, this contention of the State Governments does not appear to be absolutely

correct. Besides this, applicant made specific averments and even placed documents to show that illegal and unauthorized sand mining, particularly, in the riverbeds is being carried on in different locations where the area was less or even more than 5 hectares. Certain States have even filed affidavits, which we have referred above, wherein it was stated that large number of cases of illegal mining have been detected and State Governments have taken action against such persons, as well as, huge amount of revenue on account of royalty or otherwise has been recovered. There is apparently some dispute between the State of Himachal Pradesh and Punjab in regard to where and who is carrying on such illegal mining. According to one State, the activity is being carried on in the area of other State, exactly contra is the stand of the other State. Whatever be the correctness of these averments, fact of the matter remains that at the border of Himachal Pradesh and Punjab, illegal mining is going on, causing degradation of environment and ecology as well as loss of the revenue to the concerned State. In furtherance to the order of the Tribunal during the pendency of these applications, it was also noticed by the inspecting team that illegal mining was going on at the border of the two States.

66. According to the State of Himachal Pradesh, though they have not carried out any amendments to their State Rules after the pronouncement of the Judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), but they have issued Policy of 2013 which brings it in conformity with the recommendations of MoEF and directions of the Hon'ble Supreme Court in the case of *Deepak Kumar*

(supra). Under this scheme, the removal of over-accumulated sand from the riverbeds even in the area of 1 hectare is allowed. However, this direction was kept in abeyance because of the orders of the Tribunal. In other words, the State of Himachal Pradesh, under its policy, is permitting carrying on of minor mineral activity (sand mining) on the riverbed in areas of 1 hectare, which is obviously less than 5 hectares. As already noticed, an attempt was made on behalf of the State of Himachal Pradesh to justify this policy on the ground of necessity, but fact of the matter remains that this policy and the practice followed by the State of Himachal Pradesh is in direct conflict with the order of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) as well as the Office Memorandum issued by MoEF so far.

State of Himachal Pradesh, while granting lease in terms of Rule 14 of Rules of 1971, had also allowed grant of mining lease in relation to any area which is not compact and contiguous, for the reasons to be recorded in writing, in the interest of development of any mineral, if the State Government feels it to be necessary.

67. The State of Karnataka claims to have amended its Rules of 1994 after the passing of the Judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra). In terms of these Rules, minor minerals mining in area of less than 5 hectares has been permitted, by either cluster mining or mining in the minimum specified area, which is, 10 acres, i.e., less than 5 hectares. In regard to other minor mineral mining even in the areas less than 5 hectares but subject to grant of

Environmental Clearance. The holders of existing mining lease for sand mining, even in the areas less than 5 hectares, have been granted one year to take Environmental Clearance w.e.f. 16th December, 2013. Environment Management Plan is to be submitted which has to be approved by a regional authority which has now been given up by the States and consent/Environmental Clearance is to be granted by SEIAA/MoEF only. Reference can be made to the Rules:

“8Q. Environmental Management Plan for individual or clusters of leases / licenses / working permission/sand tender areas.-

Every holder of lease / license / working permission shall prepare an Environment Management Plan through recognized qualified person and submit to the Regional Environment Management Committee/State Environment Impact Assessment Authority/Ministry of Environment and Forest as the case may be for approval and the lessees / licensees / permission holders of a cluster shall submit a collective Environment Management Plan through cluster association within a period of three months of formation of cluster association.

Provided that the existing holder of lease/license/working permission having an area less than stipulated shall form the cluster association and submit collective EMP within one year from the commencement of these rules.

However in case of sand, the Environment Management Plan shall be prepared through recognized qualified person and submitted to the Regional Environment Management Committee/ SEIAA/MoEF as the case may be for approval by Deputy Director / Senior Geologist concerned.

Provided, that in respect of plans within its purview, the Regional Environment Management Committee may extend the above period up to a further period of six months by recording the reasons.”

Instructions issued by the State of Karnataka through its Video Conferencing are also not in conformity with law. They had permitted continuation of mining activity without obtaining Environmental Clearance for a period of one year from 16th December, 2013. That period of one year is now over. Thus, in any case, nothing would survive for consideration resulting from the said video conference. The obvious result would be whether, Environmental Clearance is required for persons carrying on mining activity in an area of less than 5 hectares, through cluster mining or otherwise?

68. State of Rajasthan has also amended its Rules after the judgment of the Hon'ble Supreme Court in *Deepak Kumar* (supra). Rajasthan Minor Mineral Concession Rules, 1986 were amended by Notification dated 3rd May, 2012. Under these Rules, there are three most noticeable aspects. First relates to permission for carrying on mining activity in an area of less than 5 hectares, that too without obtaining the Environmental Clearance from SEIAA/MoEF. It has created District Level Environmental Committees to whom application of Environmental Clearance is to be moved and which has to recommend grant/refusal of such clearances. It has permitted cluster-mining by stating that an Environmental Management Plan could be submitted for such cluster mining and permits could be given for an area of less than 5 hectares. The short-term permit holders of the lease in clusters were required to form an association and file applications along with the Environment Management Plan to the District Committee for approval in terms of Rule 37P. Under proviso to this Rule, the permit

holders of short-term permits within the boundary of the cluster after formation of the association will be deemed to be members of the association. All these three issues are not in conformity with the law in force and the judgment of the Hon'ble Supreme Court. Secondly, they also suffer from the infirmity of imposing obligations on a person who may not be desirous of becoming a member of the association within the cluster boundaries. In our considered view, the 'deeming fiction' contained in proviso to Rule 37Q would not stand the scrutiny of law. It is in fact impractical as well as unsustainable. This would encourage what the Hon'ble Supreme Court has specifically discourage in the case of *Deepak Kumar* (supra) that persons carrying on mining activity should not be permitted by creating smaller segments of the areas of the mining activity and then forming a cluster or even without forming the clusters carrying on the mining activity degrading the environment and ecology of the area. The Rules amended by the State of Rajasthan thus, are not in line with the dictum of the Hon'ble Supreme Court and even the Notifications issued by the MoEF including the Notification of 2006.

69. The Union Parliament is vested with the powers of making laws for regulation and development of mines and minerals so far they are expedient in public interest. Similarly, legislative power is vested in the State but it is subject to the provisions of List I. The Parliament having enacted the Act of 1957, the Rules for regulation that can be framed by the State Legislature under Section 15 of the said Act has to be compliant of the Parliamentary legislation. In other words, whatever

rules are to be framed by the State Government, they should be in conformity with the Act of 1957 as well as with the Act of 1986. In terms of Article 141 of the Constitution, the Judgment of the Hon'ble Supreme Court is the law of the land and is binding on all concerned. The State Government while framing Rules in exercise of powers of delegated legislation has to be conscious of the fact that such legislation is expected to be in conformity with the law of the land as declared by the Hon'ble Supreme Court. The said Rules thus, so framed have to be in conformity with all, the two enactments, i.e., the Act of 1957 and Act of 1986 and Judgment of the Hon'ble Supreme Court. The constitution of District Level Environmental Committee for the purpose of considering and approving the Environment Management Plan in terms of proviso to Rule 37(Q) is another provision that requires consideration. Under the Notification of 2006, the projects whether falling in category 'A', 'B', 'B1' or 'B2' have to be considered for the purposes of grant of Environmental Clearance and other related matters by MoEF/SEIAA. The District Level Committee is neither framed under the provisions of the Act or Rules of 1986 and for that matter, nor under the Notification of 2006. Once the law provides for a particular procedure to be done or undertaken in a particular manner and by a specified authority, then it can be done in that manner alone by that authority and not in any other way. Even in the case of *Deepak Kumar* (supra), the Hon'ble Supreme Court had permitted consideration of Environmental Clearance application only by SEIAA or MoEF. It was contended that such Committees were only

expected to recommend the cases to SEIAA and not to grant or refuse Environmental Clearances. Firstly, this submission is not supported by any of the Rule. The Rules 37P and 37Q clearly requires that an Environmental Management Plan for cluster would be approved by the Committee. In that context, the expression 'approval' cannot be granted, any other meaning except that a final 'decision' in that regard will be taken. Once approval is granted by the District Level Environmental Committee, it is impractical to imagine, how it would be able to decline Environmental Clearance. In other words, it is a machinery created by the Rules which is in derogation to the Principle legislation and the Notification of 2006.

70. At this stage, we may revert to the judgment of the Tribunal dated 28th November, 2013, in the case of *National Green Tribunal Bar Association* (supra). In this judgment, the Tribunal specifically rejected the contention of the State of Madhya Pradesh that in view of Rules 42 to 49 and 68 of the Madhya Pradesh Minor Mineral Rules, 1996, the State has given authority to the District Level Environmental Committees to grant lease or license in accordance with the Rules. Amendment of the Rules, by the State Governments, cannot be done so as to entirely wipe out the impact, effect and procedure prescribed in the Central law. The District Level Environmental Committees so constituted have to perform their functions under the Act of 1957 and the Rules framed therein. The Act does not empower the State authorities to grant Environmental Clearance. The Tribunal further held that the appropriate way to read and interpret these Sections

would be that such powers are to be exercised in relation to environment but primarily for the purposes of granting or refusing mining leases or licences. The consideration and grant of Environmental Clearance is statutorily regulated by the Notification of 2006 and the State Government would not be competent to alter or completely give a go-by to the said statutory procedure and methodology, the Environmental Clearance has to be granted in accordance with the Central law. Thus, the contentions raised in the present case on similar lines cannot be accepted by us as well.

71. The Hon'ble Supreme Court had permitted preparation of Mining Plan primarily with the object of providing for reclamation and rehabilitation of the mined out area. It was to deal with progressive mine closure plan and post mined land of use. The Judgment of the Hon'ble Supreme Court had also dealt with cluster mining approach for small size mines. The purpose of adopting cluster approach with reference to small mine leases was to take care of preparation of Environmental Management Plan in clusters of mines, where the mining activity was being carried out in smaller areas. The Hon'ble Supreme Court accepted the recommendation of MoEF in regard to the above. The Hon'ble Supreme Court specifically noticed, what was pointed by the CEC to examine, whether there has been an attempt to flout the Notification of 2006 by breaking of homogenous area into pieces of less than 5 hectares. The Hon'ble Supreme Court upon taking note of the recommendations of MoEF which were passed on technical, scientific and environmental grounds, had directed the State

Governments to implement the recommendations. They were directed to get the Mining Plan prepared as afore-noticed. Besides all these, the Hon'ble Supreme Court had directed that lease of minor minerals, including their renewal, for an area of less than 5 hectares is granted by the said Union Territories/State only after getting Environmental Clearance from the MoEF.

From the above discussion, it is clear that there is apparent contradiction between the Rules framed by the State under the shelter of the Judgment of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) on the one hand and the Central Law and Notifications on the other. This has created uncertainty in fact and in law. To put it more plainly, the actions taken by the State Governments post the case of *Deepak Kumar* (supra) has created more problems than it ought to have solved by the Hon'ble Supreme Court in its judgment. Thus, the State Government and MoEF needs to examine the matter collectively, objectively and with an intent to bring uniformity in law. We would issue directions in this regard separately.

72. India is not only a diverse country in relation to culture, language and character, but, it is also materially distinct and different in relation to geography, ecology and environment. Narrow rivers in the mid of the hills, limited riverbed space, snowing peaks and high altitude on the one hand and on the other huge river and riverbed, wide field areas are the indicators of this diversity. It may be difficult to have a uniform policy or law in relation to activities, like mining, particularly minor minerals, which have a very serious impact on the

environment, ecology and river flow. There is a dire need to formulate the laws which may be State specific but do not degrade or damage the environment and ecology. Any damage to the environment and ecology may be happening in one State but its adverse impacts would be seen on the entire nation. Therefore, there is a need for an effective and protective Central Legislation which will not only protect the environment in a particular area but the entire Indian Territory.

73. Another incidental but material issue that would fall for consideration is that whether State Rule providing for mining activity to be carried on in an area of less than 5 hectares would cause environmental concerns, particularly when no Environmental Clearance is obtained for the same.

This has to be answered in the affirmative. Indiscriminate, uncontrolled and unregulated mining activity being carried on in any area, particularly the riverbed, is bound to have an adverse impact on ecology and environment. These adverse impacts can be seen in two different and distinct manners. Firstly, uncontrolled and unregulated mining on the riverbed would adversely affect ground water and if the mining is carried on in excess of the specified depth, then, it would affect the course of the river. Secondly, it would also be a concern in relation to floods and may result in failure of flood protective measures. Mining of minor minerals, including sand mining, not only on the riverbed, but, even on other sites, has to be carried out in a regulated manner and under the effective supervision of the regulatory bodies. The law has created a complete regulatory regime for carrying

on of mining activities and that mechanism should be adhered to as otherwise the obvious consequences thereof would be prejudicial to the environmental interests of the country.

74. Another argument that has been advanced on behalf of the States, as well as, some of the respondents is that the Notification published by MoEF dated 9th September, 2013, which makes it compulsory for the minor mineral mining lease holders of area of less than 5 hectares to seek Environmental Clearance is not retrospective and therefore, will not be applicable to the mine leases that were in force as on that date. Firstly, we have already quashed and declared the Notification dated 9th September, 2013 as ineffective and inoperative, having not been issued in consonance with the provisions of law. As such, this argument would hardly survive. Since this argument may have some bearing even in relation to the other Office Memorandums issued by MoEF or on other Notifications validly issued by MoEF such as the one dated 1st December, 2009 and Office Memorandum of 24th June, 2013 and 24th December, 2013, we will even proceed to discuss the merits of this submission.

75. The environmental laws are laws enacted for the benefit of public at large. They are socio-beneficial legislation enacted to protect the environment for the benefit of the public at large. It is in discharge of their Constitutional obligation that such laws have been enacted by the Parliament or by other authorities in furtherance to the power of delegated legislation vested in them. These legislations and directives are incapable of being compared to the legislations in the field of

taxation or criminal jurisprudence. These laws have been enacted to protect the Fundamental Rights of the citizens. Thus, the contention that the existing mine holders would not be required to comply with the requirements of environmental laws, cannot be accepted. To illustratively examine this aspect, we may take a hypothetical situation, not far from reality. An industrial unit which had been established and operationalized prior to 1974, 1981 and/or 1986, was granted permission under the laws in force and the unit owner had made heavy investments in making the unit operational. The Water (Prevention and Control of Pollution) Act came into force in 1974, Air (Prevention and Control of Pollution) Act in 1981 and Environment (Protection) Act in 1986. All these Acts deal with existing units as well as the units which are to be established in future. These laws granted time to the existing units to take all anti-pollution measures and obtain the consent of the respective Pollution Control Boards to continue its operations. Failure to do so, could invite penal action including, closure of industry under these Acts. The said Unit should not be permitted to contend that since it was an existing unit, it has earned a right to pollute the environment and cause environmental pollution, putting the life of the others at risk, on the ground that it was an existing unit and was operating in accordance with law. Such a contention, if raised, would have to be noticed only to be rejected. Similarly, these Notifications or Office Memorandums, having been issued under the environmental laws, would equally apply to the existing industries as well. The directions contained in these

Notifications and Office Memorandums which are otherwise valid, would equally operate to the existing mines as well as the newly undertaken mining activities. All that the law would require, is to give them some reasonable time to comply with the requirements of law, wherever a specific time is not provided under the Act or the Notification. Obviously, these laws *stricto sensu* are not retrospective, as they do not abolish or impair any vested rights under the existing laws. However, these laws impose a new obligation without taking away the vested right. In that sense and somewhat loosely, it can be interpreted as being retroactive in nature, as they do not take away the right of the person to carry on business or his industrial unit, but only impose a new obligation to take Environmental Clearance under the environmental laws. The activity is not prohibited, but, compliance to the environmental laws is made mandatory. Examined from that angle, in so far as we have held, the Notification dated 1st December, 2009, Office Memorandums dated 18th May, 2012, 24th June, 2013 and 24th December, 2013, except to the extent they have been quashed as above by us, are valid and would be enforceable against even the existing mining lease holders. They cannot be permitted to destroy the environment and ecology for their personal gains on the strength of the contention that they are existing units and these Notifications, Office Memorandums would not apply to them.

State of Karnataka has already given a one year time to the existing mine lease holders to comply with the requirements of obtaining Environmental Clearance. Similarly, the State of Rajasthan

and Himachal Pradesh should also direct the existing mine lease holders to take Environmental Clearance, irrespective of their area of mining. The Hon'ble Supreme Court in the case of *Deepak Kumar* (supra) has clearly directed that the miners possessed of mining area of less than 5 hectares cannot operate without taking Environmental Clearance. This would unexceptionally apply to the new units, but, in our considered view, would also apply to the existing mine lease holders as well; except that they would have to be given time to comply with the requirements of law.

Sunil Acharya

76. We have already noticed above that Appeal No. 23/2014 has been filed by Mr. Sunil Acharya – Appellant, on the premise that there has been diversion of 64 hectare forest land for mining of marble near village Kothara, District Banswara. The District Collector vide letter dated 29th February, 2012 had issued a certificate with regard to such diversion in favour of 16 lease holders. The Government of India had directed the Assistant Engineer, Mining to comply with the certain conditions in compliance vide letter dated 13th February, 2012.

According to the applicant, indiscriminate mining of marble was carried on and, therefore, he prayed that the respondents should be directed to ensure that no mining work is done by respondent nos. 1 to 7 (in whose favour the mining lease has been granted). The private respondents, in fact, stated to have been given 4 hectares of mining area, each with an intent to circumvent the law and avoid seeking Environmental Clearance. According to the applicant, the entire

mining activity was being carried on illegally and in an unauthorised manner.

77. Each of the private respondents had filed independent M.As. like M.A. No. 469/2014 praying that the ex-parte stay granted by the Tribunal on 10th July, 2014 be vacated. It is admittedly a case where the forest land has been diverted for carrying on the marble mining activity. The private respondents have also claimed that they have been carrying on the mining operation since 29th November, 2012 till its closure on 14th July, 2014. Further, according to these private respondents, they have already applied on 24th March, 2014 for seeking Environmental Clearance in terms of the Notification dated 9th September, 2013.

These private respondents have the permission for diversion of the forest area for carrying on mining activity which is stated to have been granted by the competent authority and still these private respondents claimed to have applied for seeking Environmental Clearance despite the fact that the mining area is less than 5 hectares. If that be so, it is not necessary for us to examine the various controversies raised by the parties in these applications. Though, we have already dealt with the various legal issues that arise in these cases at length above.

78. Be that as it may, Appeal No. 23/2014 as well as M.A. No. 469/2014, M.A. No. 469 of 2014, 470 of 2014, 473 of 2014 479 of 2014, 480 of 2014 488 of 2014, 489 of 2014 can be disposed of merely by a direction to the concerned authorities to consider and dispose of

these applications for grant of Environmental Clearance expeditiously. The mining activity of all these respondents has been prohibited under the orders of the Tribunal, primarily on the ground that they have not received Environmental Clearance. If they have the permission for conversion of forest land and they obtained the Environmental Clearance for carrying on mining activity, in accordance with terms and conditions of the Notification of 2006 and other applicable Notification/Office Memorandums, then, they can obviously carry on their activity of marble mining in accordance with law. If applications are filed as cluster and the total extent of the cluster exceeds 5 hectares, the entire cluster will be taken as a unit for granting Environmental Clearance, subject to all the owners joining the cluster application.

79. Thus, we direct the respondent authorities, particularly SEIAA, to dispose of the applications of all these private respondents seeking Environmental Clearance as expeditiously as possible, in any case not later than three months from today. Thus, Appeal No. 23/2014 and M.A. No. 469/2014, M.A. No. M.A No. 488/2014, 489/2014, 479/2014, 480/2014, 473/2014, 470/2014, 471/2014, and 469/2014 stand disposed of with the above directions. We further direct that till the grant of Environmental Clearance they would not carry out any activity of marble mining

Himmat Singh

80. In Original Application No. 123/2014, the challenge has been raised to the guidelines issued by the Government of Rajasthan dated

8th January, 2014 and to the Office Memorandum issued by MoEF on 24th December, 2013. The challenge, as already referred by us above, is primarily based on the ground that attempt of both these documents is to permit illegal and unauthorised mining activity by directly auctioning and permitting mining in the areas less than 5 hectares or even between 5 to 25 hectares. Such action, being contrary to the very scheme under the Notification of 2006 and order of the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra), the Tribunal had granted an injunction for carrying of mining activities without obtaining proper mining lease, Environmental Clearance and other requisite permissions, in accordance with law.

81. In this application, M.A. No. 419/2014 was filed by various applicants, including the project proponent - Larsen and Toubro Ltd., praying therein that SEIAA be directed to consider the application for Environmental Clearance filed by the applicant in respect of the mining of minor minerals in areas which were owned/ were under the mining lease of the applicants. According to these applicants, they are only carrying on the activity of brick earth and ordinary earth excavation for the purposes of completing the project of construction of railway line of the portion of the Dedicated Freight Corridor from Rewari in Haryana to Iqbalgarh in Gujarat running along a length of 626 kms. on design build lumpsum price basis. The project involves formation in embankment/cuttings, bridges, structures, buildings, ballast on formation and track work, including testing and commissioning. The work comprises of railway track along a length of

626 kms, 110 major bridges, 1229 minor bridges and 20 stations. According to the applicants, they were not covered by the injunction order passed by the Tribunal, in as much as, the areas of lease mine holders were less than 5 hectares and in alternative, all of them had applied for taking Environmental Clearance as they are category 'B2' projects in terms of Office Memorandum dated 24th June, 2013. The challenge to the Office Memorandum dated 24th December, 2013 is also raised on the ground that though the Office Memorandum refers to the report of the Committee constituted by MoEF vide its Office Memorandum dated 30th January, 2013 but that Committee had not made any recommendations in regard to the criteria that should be adopted for categorisation of the projects as 'B1' and 'B2' respectively. Factually, it is correct that the report of the Committee in its recommendations has not made any recommendations in regard to the bifurcation of 'B' category projects into 'B1' and 'B2'. However, there is some discussion in the opening paragraphs of the report in that behalf. Once, Clause 7 of the Notification of 2006 empowers MoEF to issue guidelines on that behalf then such jurisdiction cannot be taken away on the ground that the Committee constituted by the Ministry did or did not make a particular recommendation. Of course, it is always more appropriate to issue Notifications/Office Memorandums which are based and are supported by scientific reason, but, that does not mean the absence thereof would vitiate office memorandums, which, otherwise have been issued in accordance with law and within the framework of the power vested in the MoEF. Therefore, we are

unable to accept the contention of the applicants that this Office Memorandum should be quashed or declared invalid in its entirety on that ground alone.

Therefore, in their application, the only prayer is that their application for grant of Environmental Clearance should be considered expeditiously to avoid any prejudice to the progress of the projects. In view of the limited prayer made in this application, it is not necessary for us to again deliberate much on this application.

82. We dispose of this application with a direction that SEIAA shall consider these applications filed for seeking Environmental Clearance, in accordance with law and observations made in this judgment, expeditiously and in any case within a period of three months from today.

83. In light of the above discussion and particularly keeping in view the persistent conflict between the State Regulations and the Central Notifications, it is imperative for us to issue directions specially to provide for an interim period, during which appropriate steps should be taken to comply with the Judgment of the Hon'ble Supreme Court and to issue Notifications which are necessary in that regard. Therefore, we pass the following order and directions:

- I. For the reasons afore recorded, we hold and declare that the Notification dated 9th September, 2013 is invalid and inoperative for non-compliance of the statutorily prescribed procedure under the Environment (Protection) Rules, 1986 and

for absence of any justifiable reason for dispensation of such procedure.

- II. We also hold and declare that the Office Memorandums dated 24th June, 2013 and 24th December, 2013 to the extent afore-indicated are invalid and inoperative being beyond the power of delegated legislation.
- III. All the Office Memorandums and Notifications issued by MoEF i.e. 1st December, 2009, 18th May, 2012 and 24th June, 2013 and 24th December, 2013(except to the extent afore-stated) are operative and would apply to the lease mine holders irrespective of the fact that whether the area involved is more or less than 5 hectares.
- IV. We further hold that the existing mining lease right holders would also have to comply with the requirement of obtaining Environmental Clearance from the competent authorities in accordance with law. However, all of them, if not already granted Environmental Clearance would be entitled to a reasonable period (say three months) to submit their applications for obtaining the same, which shall be disposed of expeditiously and in any case not later than six months from pronouncement of this judgment.
- V. All the States and the Ministry of Environment and Forest shall ensure strict compliance to the directions issued by the Hon'ble Supreme Court in the case of *Deepak Kumar* (supra). We direct Secretary, Ministry of Environment and Forest to hold a

meeting with the State of Rajasthan, Himachal Pradesh and Karnataka to bring complete uniformity in application of the above referred Notifications and Office Memorandums including the Notification of 2006.

VI. We direct that in the meeting it shall also discuss and appropriate recommendations be made and placed before the Tribunal, as to whether riverbed mining covering an area of less than 5 hectares can be permitted, if so, the conditions and regulatory measures that need to be adopted in that behalf.

VII. We direct that the District Environmental Committees constituted by the respective State Governments shall not discharge any functions and grant approval as contemplated under the Notification of 2006.

VIII. Secretary, Ministry of Environment and Forest along with such experts and the States afore-referred will also consider the possibility of constituting the branches of SEIAA at the district or at least, division levels, to ensure easy accessibility to encourage the mine holders to take Environmental Clearance expeditiously.

IX. It is stated before us that in large number of cases, particularly in relation of State of Rajasthan, persons carrying on mining activity of minor minerals, non-coal mining and brick earth and ordinary earth have applied for obtaining Environmental Clearances in accordance with the terms and conditions of the Notification of 2006. Let all such applications be dealt with and

orders passed by the concerned authorities at the earliest and in any case not later than six months from today.

X. We direct the respondent authorities, particularly SEIAA, to dispose of the application of all these private respondents who have already filed applications seeking Environmental Clearance as expeditiously as possible, in any case not later than three months from today. Thus, Appeal No. 23/2014 and M.A. No. 469/2014, M.A. No. M.A No. 488/2014, 489/2014, 479/2014, 480/2014, 473/2014, 470/2014, 471/2014 and 469/2014 stand disposed of with the above directions. Till the grant of environmental clearance they would not carry out any activity of marble mining.

XI. We dispose of Original Application No. 123/13 with a direction that SEIAA shall consider the applications filed for seeking Environmental Clearance in accordance with law and observations made in this judgment, expeditiously, and in any case within a period of three months from today.

XII. In the meanwhile, no State shall permit carrying on of sand mining or minor mineral extraction on riverbed or otherwise without the concerned person obtaining Environmental Clearance from the competent authority.

XIII. We direct the Ministry of Environment and Forest to issue comprehensive but self-contained Notification relating to all minor mineral activity on the riverbed or otherwise, to avoid

unnecessary confusion, ambiguities and practical difficulties in implementation of the environmental laws.

XIV. In light of the judgment of the Supreme Court and what has emerged from the various cases that are subject matter of this Judgment, we direct the Ministry of Environment and Forest to formulate a uniform cluster policy in consultation with the States for permitting minor mineral mining activity including, its regulatory regime, in accordance with law.

84. For the reasons afore stated, we dispose of the Original Applications, Appeal and Miscellaneous Applications filed by different parties in all those Original Applications and Appeal, in terms of above directions, while leaving the parties to bear their own costs.

Justice Swatanter Kumar
Chairperson

Justice M.S.Nambiar
Judicial Member

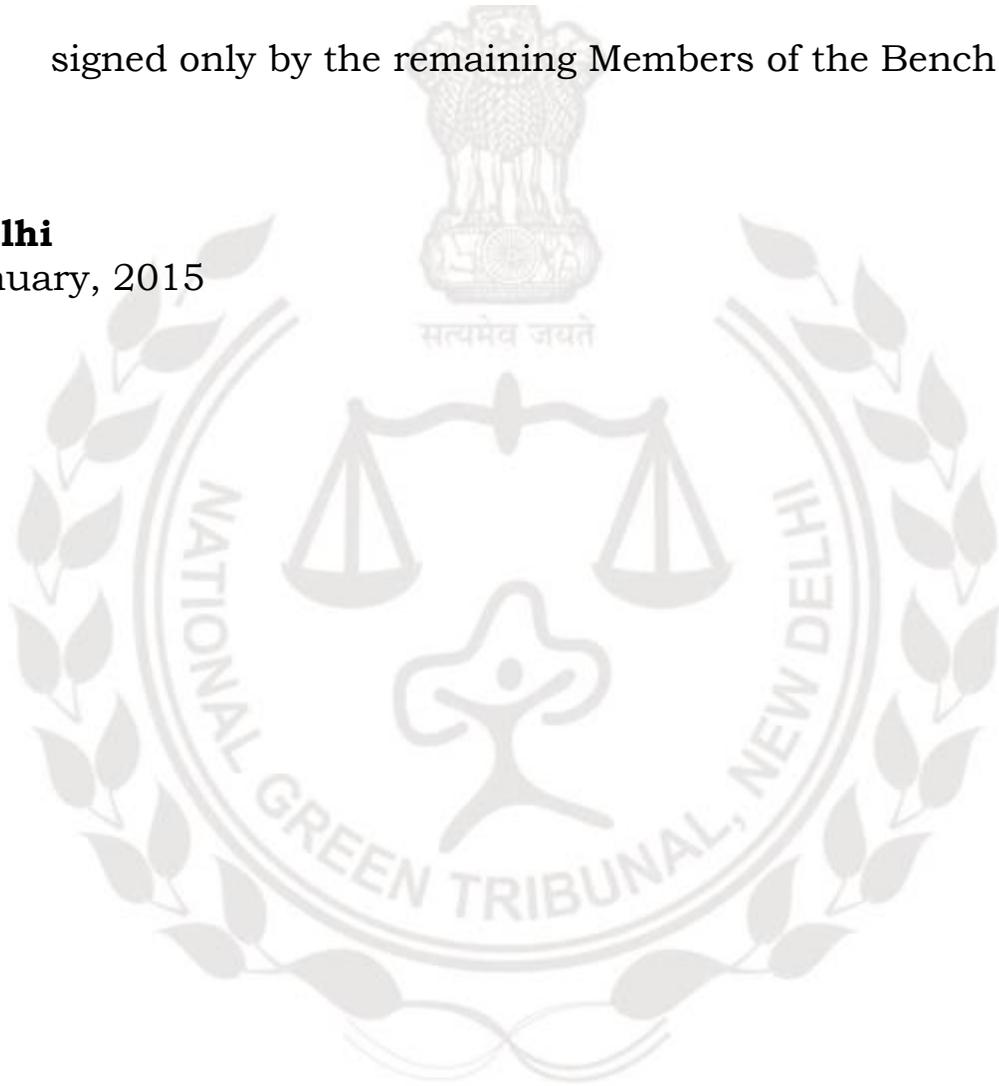
Dr. D.K. Agrawal
Expert Member

Order: This case was heard by a Bench consisting of Hon'ble Mr. Justice Swatanter Kumar (Chairperson), Hon'ble Mr. Justice M.S. Nambiar (Judicial Member), Hon'ble Dr. D.K. Agrawal (Expert Member) and Hon'ble Dr. R.C.

Trivedi (Expert Member). After the judgment was reserved, but, before its pronouncement, unfortunately, Dr. R.C. Trivedi, Learned Expert Member expired and left for heavenly abode on 26th December, 2014. Thus, the present judgment is being signed only by the remaining Members of the Bench.

New Delhi

13th January, 2015



NGT

10. का.आ. 562(अ) तारीख 26 फ़रवरी 2014;
11. का.आ. 637(अ) तारीख 28 फ़रवरी 2014;
12. का.आ. 1599(अ) तारीख 25 जून 2014;
13. का.आ. 2601(अ) तारीख 7 अक्टूबर 2014;
14. का.आ. 2600(अ) तारीख 9 अक्टूबर 2014.
15. का.आ. 3252(अ) तारीख 22 दिसम्बर 2014;
16. का.आ. 382(अ) तारीख 3 फरवरी, 2015;
17. का.आ. 811(अ) तारीख 23 मार्च, 2015;
18. का.आ. 996(अ) तारीख 10 अप्रैल 2015;
19. का.आ. 1142(अ) तारीख 17 अप्रैल 2015;
20. का.आ. 1141(अ) तारीख 29 अप्रैल 2015;
21. का.आ. 1834(अ) तारीख 6 जुलाई 2015;

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 15th January, 2016

S.O. 141(E).—Whereas in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), a draft notification for making certain amendments in the Environment Impact Assessment Notification, 2006, issued *vide* number S.O. 1533(E), dated the 14th September 2006, was published under sub-rule (3) of rule (5) of the Environment (Protection) Rules, 1986, *vide* number S.O. 2588(E), dated 22nd September, 2015, inviting objections and suggestions from all persons likely to be affected thereby, within a period of sixty days from the date of publication on which copies of Gazette containing the said notification were available to the public;

And whereas, copies of said notification were made available to the public on 22nd September 2015;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

And whereas, in pursuance to the order of Hon'ble Supreme Court dated the 27th February, 2012 in I.A. No.12-13 of 2011 in Special Leave Petition (C) No.19628-19629 of 2009, in the matter of Deepak Kumar etc. Vs. State of Haryana and Others etc., prior environmental clearance has now become mandatory for mining of minor minerals irrespective of the area of mining lease;

And whereas, as a result of the above said Order of Hon'ble Supreme Court, the number of cases which are now required to obtain prior environmental clearance has increased substantially;

And whereas, the Hon'ble National Green Tribunal, *vide* its order dated the 13th January, 2015 in the matter regarding sand mining has directed for making a policy on environmental clearance for mining leases in cluster for minor minerals;

And whereas, the State Governments have represented for streamlining the process of environmental clearance for mining of minor mineral;

And whereas, the Ministry of Environment, Forest and Climate Change in consultation with State Governments has prepared Guidelines on Sustainable Sand Mining detailing the provisions on environmental clearance for cluster, creation of District Environment Impact Assessment Authority and proper monitoring of sand mining using information technology and information technology enabled services to track the mined out material from source to destination;

Now, therefore, in exercise of the powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following amendments in the said notification, namely:-

In the said notification,-

(a) in paragraph 2, after the words “in the said Schedule”, the following words shall be inserted, namely:-
“and at District level, the District Environment Impact Assessment Authority (DEIAA) for matters falling under Category ‘B2’ for mining of minor minerals in the said Schedule”;

(b) after paragraph 3, the following paragraph shall be inserted, namely:-

“3 A. District Level Environment Impact Assessment Authority:-

- (1) A District Level Environment Impact Assessment Authority hereinafter referred to as the DEIAA shall be constituted by the Central Government under sub-section (3) of section 3 of the Environment (Protection) Act, 1986 comprising of four members including a Chairperson and a Member-Secretary.
 - (2) The District Magistrate or District Collector shall be the Chairperson of the DEIAA.
 - (3) The Sub-Divisional Magistrate or Sub-Divisional Officer of the district head quarter of the concerned district of the State shall be the Member-Secretary of the DEIAA.
 - (4) The other two members of the DEIAA shall be the senior most Divisional Forest Officer and one expert. The expert shall be nominated by the Divisional Commissioner of the Division or Chief Conservator of Forest, as the case may be. The term and qualifications of the expert fulfilling the eligibility criteria are given in Appendix VII to this notification.
 - (5) The members of the DEIAA who are serving officers of the concerned State Government or the Union territory Administration shall be *ex-officio* members except the expert member.
 - (6) The District Level Expert Appraisal Committee hereinafter referred to as the DEAC shall comprise of eleven members, including a Chairman and a Member-Secretary.
 - (7) The senior most Executive Engineer, Irrigation Department in the district of respective State Governments or Union territory Administration shall be the Chairperson of the DEAC.
 - (8) The Assistant Director or Deputy Director of the Department of Mines and Geology or District Mines Officer or Geologist of the district shall be the Member-Secretary of the DEAC in that order.
 - (9) A representative of the State Pollution Control Board or Committee, senior most Sub-Divisional Officer (Forest) in the district, representative of Remote Sensing Department or Geology Department or State Ground Water Department, one occupational health expert or Medical Officer to be nominated by the District Magistrate or District Collector, Engineer from Zila Parishad, and three expert members to be nominated by the Divisional Commissioner or Chief Conservator of Forest, as the case may be, shall be the other members of the DEAC. The term and qualifications of the experts fulfilling the eligibility criteria are given in Appendix VII to this notification.
 - (10) The members of the DEAC who are serving officers of the concerned State Government or the Union territory Administration shall be *ex-officio* members except the expert members.
 - (11) The District Magistrate or District Collector shall notify an agency to act as Secretariat for the DEIAA and the DEAC and shall provide all financial and logistic support for their statutory functions.
 - (12) The DEIAA and DEAC shall exercise the powers and follow the procedure as specified in the said notification, as amended from time to time.
 - (13) The DEAC shall function on the principle of collective responsibility and the Chairman shall endeavor to reach a consensus in each case and if consensus cannot be reached, the view of the majority shall prevail.”;
- (c) in paragraph 4, after sub-paragraph (iii), the following sub-paragraph shall be inserted, namely:-
“(iv) The ‘B2’ Category projects pertaining to mining of minor mineral of lease area less than or equal to five hectare shall require prior environmental clearance from DEIAA. The DEIAA shall base its decision on the recommendations of DEAC, as constituted for this notification.”;
- (d) for paragraph 5, the following paragraph shall be substituted, namely:-

“5. Screening, Scoping and Appraisal Committees:-

The same Expert Appraisal Committees (EACs) at the Central Government, SEACs at the State or Union territory level and DEAC at the district level shall screen, scope and appraise projects or activity in category ‘A’, ‘B1 and B2’ and ‘B2’ projects for mining of minor minerals of lease area less than and equal to five hectare respectively. EAC, SEACs and DEACs shall meet at least once every month.

(a) The composition of the EAC shall be as given in Appendix VI. The SEAC at the State or the Union territory level shall be constituted by the Central Government in consultation with the concerned State Government or the Union

territory Administration with identical composition. DEAC at the district level shall be constituted by the Central Government as per the composition given in paragraph 3 A.

(b) The Central Government may with the prior concurrence of the concerned State Governments or the Union territory Administration constitute one SEAC for more than one State or Union territory for reasons of administrative convenience and cost.

(c) The EAC and SEAC shall be reconstituted after every three years.

(d) The authorised members of the EAC, SEACs and DEACs concerned, may inspect any site connected with the project or activity in respect of which the prior environmental clearance is sought for the purpose of screening or scoping or appraisal with prior notice of at least seven days to the project proponent who shall provide necessary facilities for the inspection.

(e) The EAC, SEACs and DEACs shall function on the principle of collective responsibility. The Chairperson shall endeavor to reach a consensus in each case and if consensus cannot be reached the view of the majority shall prevail.”;

(e) for paragraph 6, the following paragraph shall be substituted, namely:-

“6. Application for Prior Environmental Clearance (EC):-

An application seeking prior environmental clearance in all cases shall be made by the project proponent in the prescribed Form 1 annexed herewith and Supplementary Form 1A, if applicable, as given in Appendix II after the identification of prospective site (s) for the project and/or activities to which the application relates; and in Form 1M for mining of minor minerals up to five hectare under Category ‘B2’ projects, as given in Appendix VIII, before commencing any construction activity, or preparation of land, or mining at the site by the project proponent. The project proponent shall furnish along with the application, a copy of the pre-feasibility project report, in addition to Form 1, Form 1A, and Form 1M; and in case of construction projects or activities (item 8 of the Schedule), a copy of the conceptual plan shall be provided instead of pre-feasibility report.”;

(f) in paragraph 7,-

(i) in sub-paragraph (i), under the heading “I. Stage (1)- Screening:”, the existing sub-paragraph shall be lettered as sub-paragraph “(A)” and after sub-paragraph as so lettered, the following sub-paragraph shall be inserted, namely:-
“(B) The cases as specified in Appendix IX shall be exempted from prior environmental clearance.” ;

(ii) after sub-paragraph 7 (ii), the following sub-paragraph shall be inserted, namely:-

“7 (iii) Preparation of District Survey Report for Sand Mining or River Bed Mining and Mining of other Minor Minerals:

(a) The prescribed procedure for preparation of District Survey Report for sand mining or river bed mining and mining of other minor minerals is given in Appendix X.

(b) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”;

(g) in paragraph 8,-

(i) for the letters and word “EAC or SEAC”, the words and letters “EAC or SEAC or DEAC” shall be substituted;

(ii) for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee” wherever they occur, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(h) in paragraph 9, in sub-paragraph (i),-

for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee”, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(i) in paragraph 10, after sub-paragraph (iii), the following sub-paragraph shall be inserted, namely:-

“(iv) The prescribed procedure for sand mining or river bed mining and monitoring is given in Appendix XII.”;

(j) in paragraph 11, -

for the words “Expert Appraisal Committee or State Level Expert Appraisal Committee”, the words “Expert Appraisal Committee or State Level Expert Appraisal Committee or District Level Expert Appraisal Committee” shall be substituted;

(k) in the Schedule,-

(i) for item 1 (a) and the entries relating thereto, the following item and entries shall be substituted, namely:-

(1)	(2)	(3)	(4)	(5)
“1(a)	(i) Mining of minerals	≥50 ha of mining lease area in respect of non-coal mine lease >150 ha of mining lease area in respect of coal mine lease Asbestos mining	<50 ha of mining lease area in respect of non-coal mine lease ≤150 ha of mining lease area in respect of coal mine lease	General Conditions shall apply except: (i) for project or activity of mining of minor minerals of Category ‘B2’ (up to 25 ha of mining lease area); (ii) River bed mining projects on account of inter-state boundary.

		irrespective of mining area		<p>Note:</p> <p>(1) Mineral prospecting is exempted. ”;</p> <p>(2) The prescribed procedure for environmental clearance for mining of minor minerals including cluster situation is given in Appendix XI.”;</p> <p>(3) The mining leases which have obtained environmental clearance under Environment Impact Assessment Notification, 1994 and Environment Impact Assessment Notification, 2006 shall not require fresh environmental clearance during renewal provided the project has valid and subsisting environmental clearance.</p>
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas.	All projects.		

(l) after Appendix VI, the following appendices shall be inserted, namely:-

“APPENDIX VII

(See paragraph 3 A)

Qualifications and terms for the Experts in DEIAA and DEAC

1. **Qualification:** The person should have at least (i) 5 years of formal University training in the concerned discipline leading to a MA or M Sc Degree or (ii) in case of Engineering/ Technology/ Architectural discipline, 4 years formal training course together with prescribed practical training in the field leading to a B. Tech/ B.E./ B. Arch. Degree, or (iii) Other professional degree (e.g. MBA etc.) involving a total of 5 years of formal University training and prescribed practical training, or (iv) Prescribed apprenticeship/ article ship and pass examinations conducted by the concerned professional associations (e.g. Chartered Accountancy) or (v) a University degree, followed by two years of formal training in a University or Service Academy (e.g. MBA/MPA etc.). In selecting the individual professionals, experience gained by them in their respective fields will be taken note of.
2. **Expert:** A professional fulfilling the above eligibility criteria with at least 10 years of relevant experience in the field or with an advanced degree (e.g. Ph. D) in a concerned field with at least 5 years of relevant experience.
3. **Age:** Below 70 years. However, in the event of non-availability of paucity of experts in a given field, the maximum age of a member may be allowed up to 75 years.
4. **Fields:** Experts in Mining, Geology, Hydrology, Remote Sensing, Environment Quality, Environment Impact Assessment Process, Risk Assessment, Life Sciences, Marine Sciences, Forestry and Wildlife, Environmental Economics, Bio-diversity, and River Ecology.

5. **Tenure:** The maximum tenure of expert members shall be for two terms of three years each.
6. The Expert Members may not be removed prior to expiry of the tenure without cause and proper enquiry.

APPENDIX VIII

(See paragraph 6)

FORM 1 M

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

(II) Basic Information

- (viii) Name of the Mining Lease site:
- (ix) Location / site (GPS Co-ordinates):
- (x) Size of the Mining Lease (Hectare):
- (xi) Capacity of Mining Lease (TPA):
- (xii) Period of Mining Lease:
- (xiii) Expected cost of the Project:
- (xiv) Contact Information:

Environmental Sensitivity

Sl. No.	Areas	Distance in kilometer / Details
1.	Distance of project site from nearest rail or road bridge over the concerned River, Rivulet, Nallah etc.	
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, over wintering, 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 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 hazard 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? (a) Name of the Court (b) Case No. (c) Orders or directions of the Court, if any, and its relevance with the proposed project.	

(Signature of Project Proponent
Along with name and address)

APPENDIX – IX

[See paragraph 7(i) (B)]

EXEMPTION OF CERTAIN CASES FROM REQUIREMENT OF ENVIRONMENTAL CLEARANCE

The following cases shall not require prior environmental clearance, namely:-

1. Extraction of ordinary clay or sand, manually, by the Kumhars (Potter) to prepare earthen pots, lamp, toys, etc. as per their customs.
2. Extraction of ordinary clay or sand, manually, by earthen tile makers who prepare earthen tiles.
3. Removal of sand deposits on agricultural field after flood by farmers.
4. Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
5. 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.
6. Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
7. Traditional occupational work of sand by Vanjara and Oads in Gujarat *vide* notification number GU/90(16)/MCR-2189(68)/5-CHH, dated the 14th February, 1990 of the Government of Gujarat.
8. Digging of well for irrigation or drinking water.
9. Digging of foundation for buildings not requiring prior environmental clearance.
10. 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.
11. 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.

APPENDIX - X

[See paragraph 7 (iii) (a)]

PROCEDURE FOR PREPARATION OF DISTRICT SURVEY REPORT

The main objective of the preparation of District Survey Report (as per the Sustainable Sand Mining Guideline) is to ensure the following:

Identification of areas of aggradations or deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited and calculation of annual rate of replenishment and allowing time for replenishment after mining in that area.

The report shall have the following structure:

1. Introduction
2. Overview of Mining Activity in the District
3. The List of Mining Leases in the District with location, area and period of validity
4. Details of Royalty or Revenue received in last three years
5. Detail of Production of Sand or Bajari or minor mineral in last three years
6. Process of Deposition of Sediments in the rivers of the District
7. General Profile of the District
8. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.

9. Physiography of the District
10. Rainfall: month-wise
11. Geology and Mineral Wealth

In addition to the above, the report shall contain the following:

- (a) District wise detail of river or stream and other sand source.
- (b) District wise availability of sand or gravel or aggregate resources.
- (c) District wise detail of existing mining leases of sand and aggregates.

A survey shall be carried out by the DEIAA with the assistance of Geology Department or Irrigation Department or Forest Department or Public Works Department or Ground Water Boards or Remote Sensing Department or Mining Department etc. in the district.

Drainage system with description of main rivers

S. No.	Name of the River	Area drained (Sq. Km)	% Area drained in the District

Salient Features of Important Rivers and Streams:

S. No.	Name of the River or Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin

Portion of the River or Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)

Mineral Potential

Boulder (MT)	Bajari (MT)	Sand (MT)	Total Mineable Mineral Potential (MT)

Annual Deposition

S. No.	River or Stream	Portion of the river or stream recommended for mineral concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
Total for the District						

A Sub-Divisional Committee comprising of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.

Methodology adopted for calculation of Mineral Potential:

The mineral potential is calculated based on field investigation and geology of the catchment area of the river or streams. As per the site conditions and location, depth of minable mineral is defined. The area for removal of the mineral in a river or stream can be decided depending on geo-morphology and other factors, it can be 50 % to 60 % of the area of a particular river or stream. For example in some hill States mineral constituents like boulders, river born Bajri, sand up

to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river or stream.

The District Survey Report shall be prepared for each minor mineral in the district separately and its draft shall be placed in the public domain by keeping its copy in Collectorate and posting it on district's website for twenty one days. The comments received shall be considered and if found fit, shall be incorporated in the final Report to be finalised within six months by the DEIAA.

The District Survey Report shall form the basis for application for environmental clearance, preparation of reports and appraisal of projects. The Report shall be updated once every five years.

APPENDIX - XI

[See paragraph 7 (iii) (b)]

PROCEDURE FOR ENVIRONMENTAL CLEARANCE FOR MINING OF MINOR MINERALS INCLUDING CLUSTER

The following policy shall be followed for environmental clearance of mining of minor minerals including cluster situation:-

- (1). The data provided by the States (Sustainable Sand Mining Guidelines) shows that most of the mining leases for minor minerals are of lease area less than 5 hectare. It is also reported that in hill States getting a stretch in river with area more than 5 hectare is very uncommon. So the size of lease for minor minerals including river sand mining will be determined by the States as per their circumstances.
- (2). The mining of minor minerals is mostly in clusters. The Environment Impact Assessment or Environment Management Plan are required to be prepared for the entire cluster in order to capture all the possible externalities. These reports shall capture carrying capacity of the cluster, transportation and related issues, replenishment and recharge issues, geo-hydrological study of the cluster area. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents in the Cluster or the project proponent in the cluster.
- (3). There shall be one public consultation for entire cluster after which the final Environment Impact Assessment or Environment Management Plan report for the cluster shall be prepared.
- (4). Environmental clearance shall be applied for and issued to the individual project proponent. The individual lease holders in cluster can use the same Environment Impact Assessment or Environment Management Plan for application for environmental clearance. The cluster Environment Impact Assessment or Environment Management Plan shall be updated as per need keeping in view any significant change.
- (5). The details of cluster Environment Impact Assessment or Environment Management Plan shall be reflected in each environmental clearance in that cluster and DEAC, SEAC, and EAC shall ensure that the mitigative measures emanating from the Environment Impact Assessment or Environment Management Plan study are fully reflected as environmental clearance conditions in the environmental clearance's of individual project proponents in that cluster.
- (6). A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area.
- (7). Form 1M, Pre-Feasibility Report and mine plan for Category 'B2' projects for mining of minor minerals shall be prepared by the Registered Qualified Person or Accredited Consultants of Quality Council of India, National Accreditation Board for Education and Training. The Environment Impact Assessment or Environment Management Plan for Category 'A' and Category 'B1' projects shall be prepared by the accredited consultants of Quality Council of India, National Accreditation Board for Education and Training.
- (8). The SEIAAs shall have supervisory jurisdiction over the DEIAAs and decisions of DEIAA shall be reviewed by the SEIAA without prejudice to any provisions under any existing law.

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
EC Proposal of Sand Mining and other Minor Mineral Mining on the basis of individual mine lease								
0 - 5ha	'B2'	Form -1M, 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	
EC Proposal of Sand Mining and other Minor Mineral Mining in cluster situation								
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	

APPENDIX - XII

[See paragraph 10 (iv)]

PROCEDURE FOR MONITORING OF SAND MINING OR RIVER BED MINING

1. The security feature of Transport Permit shall be as under:

- (a) Printed on Indian Banks’ Association (IBA) approved Magnetic Ink Character Recognition (MICR) Code paper.
- (b) Unique Barcode.
- (c) Unique Quick Response (QR) code.
- (d) Fugitive Ink Background.
- (e) Invisible Ink Mark.
- (f) Void Pantograph.
- (g) Watermark.

2. Requirement at Mine Lease Site:

- (a) Small Size Plot (Up to 5 hectare): Android Based Smart Phone.

- (b) Large Size Plots (More than 5 hectare): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
- (c) Access control of mine lease site.
- (d) Arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used.

3. Scanning of Transport Permit or Receipt and Uploading on Server:

- (a) Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
- (b) Android Application: Scanning on mining site can be done using Android Application using smart phone. It will require internet availability on SIM card;
- (c) SMS: Transport Permit or Receipt shall be uploaded on server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, an unique invoice code gets generated with its validity period.

4. Proposed working of the system:

The State Mining Department should print the Transport Permit or Receipt with security features enumerated at Paragraph 1 above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued.

When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

5. Checking On Route:

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.

6. Breakdown of Vehicle:

In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call centre.

7. Tracking of Vehicles:

The route of vehicle from source to destination can be tracked through the system using check points, RFID Tags, and GPS tracking.

8. Alerts or Report Generation and Action Review:

The system will enable the authorities to develop periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the DEIAA, SEIAA and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place not later than three months. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.”.

[No. Z-11013/98/2014-IA-II (M)]

MANOJ KUMAR SINGH, Jt. Secy.

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5. S.O. 674 (E) dated the 13th March, 2013;
6. S.O. 2204 (E) dated the 19th July 2013;
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8. S.O. 2559 (E) dated the 22nd August, 2013;
9. S.O. 2731 (E) dated the 9th September, 2013;
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सत्यमेव जयते

SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES 2016



पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय

इंदिरा पर्यावरण भवन, जोर बाग रोड, नई दिल्ली-110 003

Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi - 110 003

www.moef.nic.in

Acknowledgment

The Sustainable Sand Mining Management Guidelines 2016, has been prepared after extensive consultation with the States and stakeholders over a period of last one year. The Guideline assimilates the knowledge and experience of stakeholder. The main objective of the Guidelines is to ensure sustainable sand mining and environment friendly management practices in order to restore and maintain the ecology of river and other sand sources. The team of the officers of Ministry of Environment, Forest and Climate Change who have worked for preparing these Guidelines comprised of following:

1. Shri Manoj Kumar Singh, Joint Secretary
2. Dr. U. Sridharan, Scientist 'F'
3. Dr. R.B. Lal, Scientist 'D'
4. Dr. Sonu Singh, Scientist 'D'



SUSTAINABLE SAND MINING MANAGEMENT GUIDELINES

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प्रकाश जावडेकर
Prakash Javadekar



राज्य मंत्री (स्वतंत्र प्रभार)
MINISTER OF STATE (INDEPENDENT CHARGE)
पर्यावरण, वन एवं जलवायु परिवर्तन
ENVIRONMENT, FOREST & CLIMATE CHANGE
भारत सरकार / GOVERNMENT OF INDIA



FOREWORD

Environmental Protection and Sustainable Development have been the cornerstones of the policies and procedures governing the industrial and other developmental activities in India. The Ministry of Environment, Forest and Climate Change has taken several policy initiatives and enacted environmental and pollution control legislations to prevent indiscriminate exploitation of natural resources and to promote integration of environmental concerns in developmental projects. One such initiative is the Notification on Environmental Impact Assessment (EIA) of developmental projects issued on 14th September, 2006 under the provisions of Environment (Protection) Act, 1986, making EIA mandatory for certain categories of developmental projects.

Another land mark decision has been taken with the new notifications dated 15.01.2016 and 20.01.2016 on mining of minor minerals and constitution of District Level Environment Impact Assessment Authority and District Level Environment Appraisal Committee. This will ensure environmentally sustainable mining especially for sand and gravel under close supervision of district authorities. Use of information technology and information technology enabled services for scientific monitoring of mining and transportation of mined out material is another important feature of above notification.

Sand and gravel are one of the most important construction materials. Ensuring their availability is vital for the development of the infrastructure in the country. There are different sources of sand and gravel, the most important among them is the river. As the requirement of these construction materials is on rise, they also are very vital for the health, physical character of the river and the different important functions of the river. The extraction of sand and gravel from the river bodies has to be regulated and done with adoption of required environmental safeguards.

In view of evolving scenario in industry and development sector, My Ministry has prepared a "Sustainable Sand Mining Management Guidelines". The Guidelines *inter-alia* focus on preparation of District Survey Report; Management Plan; Marine Sand Mining and Impact on Marine Biodiversity; Issues and Management of Mining in Cluster; Management of Sand Deposited after Flood on Agricultural Field of Farmers; Mining of Sand from Agricultural Field; Monitoring System for Sustainable Sand Mining using Information Technology System; Creation of District Level Environment Impact Assessment Authority (DEIAA) and District Level Expert Appraisal Committee (DEAC) for granting Environment Clearance for Mining of Minor Minerals; Exemption of certain cases for requirement of Environment Clearance and Standard Environmental Conditions for Sustainable Sand Mining.

The Guidelines will help the Departments of Mines and Geology, State Pollution Control Boards/Committees, Industries, Regulators, Authorities and various Stakeholders to ensure environmentally sustainable mining in the Country.


(Prakash Javadekar)

Paryavaran Bhawan, Jor Bagh Road, New Delhi-110 003
Tel.: 011-24695136, 24695132, Fax : 011-24695329

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website : www.prakashjavadekar.com





अशोक लवासा
ASHOK LAVASA, IAS



सचिव
भारत सरकार
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय
Secretary
Government of India
Ministry of Environment, Forest and Climate Change



PREFACE

Sand is naturally occurring granular material composed of finely divided rock and mineral particles. Sand and gravel together known as aggregate, represent the highest volume of raw material used on earth. The mining of aggregate has been continuing for many years. Now the mining of aggregates has reached a level threatening the environment and ecosystem besides also reaching a level of scarcity that would threaten the economy. It is recommended that sand and aggregate mining, and quarrying should be done only after sound scientific assessment and adopting best practices to limit the impact on the environment.

The main objectives of the Guidelines, inter-alia, includes to ensure that sand and gravel mining is done in environmentally sustainable and socially responsible manner; availability of adequate quantity of aggregate in sustainable manner; improve the effectiveness of monitoring of mining and transportation of mined out material; conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system; avoid aggradation at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc.; to ensure the rivers are protected from bank and bed erosion beyond its stable profile; no obstruction to the river flow, water transport and restoring the riparian rights and in-stream habitats; to avoid pollution of river water leading to water quality deterioration; to prevent depletion of ground water reserves due to excessive draining out of ground water; and streamlining the process for grant of environmental clearance (EC) for sustainable mining.

The recommendations for management of sustainable sand extraction are the key objectives of the Guidelines. Emphasis is given to the setting up of monitoring plans that will provide data on profile changes and sediment transport capacity to enable the authorities to evaluate the long-term effect of the mining activities both upstream and downstream of sand extraction sites. Special emphasis is given on monitoring of the mined out material, which is key to the success of environment management plan. So use of IT and IT enabled services for effective monitoring of the quantity of mined out material and transportation along with process reengineering has been made a part of the Guideline. The Guidelines propose delegation of responsibility and authority to the cutting edge level i.e. the District Environment Impact Assessment Authority along with streamlining the process of impact assessment, environment management plan and environment clearance in cluster situation.



New Delhi
Date: 15-03-2016

Ashok Lavasa
Ashok Lavasa

इंदिरा पर्यावरण भवन, जोर बाग रोड़, नई दिल्ली-110 003 फोन : (011) 24695262, 24695265, फैक्स : (011) 24695270
INDIRA PARYAVARAN BHAWAN, JOR BAGH ROAD, NEW DELHI-110 003 Ph. : (011) 24695262, 2465265, Fax : (011) 24695270
E-mail : secy-moef@nic.in, alavasa@nic.in, Website : moef.gov.in





EXECUTIVE SUMMARY

The sand and gravel are one of the most important construction materials. Ensuring their availability is vital for the development of the infrastructure in the country. There are different sources of sand and gravel, the most important among them is the river. As the requirement of these construction materials is on rise, they also are very vital for the health, physical character of the river and the different important functions of the river. The extraction of sand and gravel from the river bodies has to be regulated and done with adoption of required environmental safeguards.

For making available these resources, a mapping of these resources at the district level, identification of appropriate sites for extraction, appraisal of the extraction process, putting in place the required environmental safeguards, and rigorous monitoring of the volume of extracted material is required to ensure sustainability of the entire process.

The district is the unit of administration which is best placed to do the mapping of these resources, adopt the best environmental practices for extraction of these materials and monitor its extraction and movement. The large number of leases which are awarded, the scattered geographical location of the availability of these materials and decentralized requirement and usage of the sand and aggregates also places districts in a unique position to play a vital role in adoption of environmental safeguards needed for sustainable extraction of river sand and gravel.

Recommendations for management of sustainable sand extraction are the key objective of the Guidelines. Emphasis is given to the setting up of monitoring plans that will provide data on profile changes and sediment transport capacity to enable the authorities to evaluate the long-term effect of the mining activities both upstream and downstream of sand extraction sites.

Special emphasis is given on monitoring of the mined out material, which is key to the success of environment management plan. So use of IT and IT enabled services for effective monitoring of the quantity of mined out material and transportation along with process reengineering has been made a part of the Guidelines. The Guidelines proposes delegation of responsibility and authority to the cutting edge level i.e. the District Environment Impact Assessment Authority along with streamlining the process of impact assessment, environment management plan and environment clearance in cluster situation.

Promotion of manufactured sand, artificial sand and alternative technologies in construction materials and processes are also required for reducing the dependence and demand on naturally occurring sand and gravel. Development of slag sand, sand from stone chips and there certification under BIS is an important step in this direction.



INTRODUCTION

Sustainable Development is built on three pillars - environmental, social and economic. Sustainable development cannot be achieved if the environment is protected but poverty is prevalent in a significant part of the population. Similarly, sustainable development cannot be achieved through inappropriate economic growth, if it undermines the environment in which people and businesses exist. These Guidelines support that fundamental concept, promoting environmental protection, limiting negative physiological, hydrological and social impacts underpinning sustainable economic growth.

Sand and gravel have long been used as aggregate for construction of roads and buildings. Today, the demand for these materials continues to rise. In India, the main sources of sand are river flood plain, coastal sand, paleo channel sand, and sand from agricultural fields.

River sand mining is a common practice as habitation concentrates along the rivers and the mining locations are preferred near the markets or along the transportation route, for reducing the transportation cost. River sand mining can damage private and public properties as well as aquatic habitats. Excessive removal of sand may significantly distort the natural equilibrium of a stream channel.

Removing sediment from the active channel bed in a river interrupts the continuity of sediment transport through the river system, disrupting the sediment mass balance in the river downstream and induces channel adjustments (usually incision) extending considerable distances (commonly one kilometer or more) beyond the extraction site.

The magnitude of the impact basically depends on the magnitudes of the extraction relative to bed load sediment supply and transport through the reach. Implementation of the principles and processes outlined in these Guidelines will limit the negative externalities of sand and gravel mining.



NEED FOR POLICY GUIDELINES

Sand is naturally occurring granular material composed of finely divided rock and mineral particles between 150 micron to 4.75 mm in diameter (IS 383-1970). Sand is formed due to weathering of rocks due to mechanical forces. In the process the weathered rocks forms gravel and then sand.

Sand and gravel together known as aggregate, represent the highest volume of raw material used on earth after water. The mining of aggregate has been continuing for many years. Now the mining of aggregates has reached a level threatening the environment and ecosystem besides also reaching a level of scarcity that would threaten the economy. It is recommended that sand & aggregate mining, and quarrying should be done only after sound scientific assessment and adopting best practices to limit the impact on the environment.

It is also felt that the greater use of substitute material (Manufactured Sand, artificial sand etc.) & construction technology, and sustainable use of the resource could drastically reduce adverse impact of mining on the environment.

OBJECTIVE OF THE GUIDELINES

The Guidelines has been based on the following principles:

- Uncontrolled sand mining is not sustainable.
- Compliance with present and future legislation and regulations on the subject is mandatory and not voluntary.
- Each lease holder should be given the opportunity to self-regulate to the extent that it can demonstrate compliance with legislation and regulations.
- Where self- regulation fails to deliver compliance with legislation and regulations, increased formal enforcement and monitoring should be implemented with punitive measures applied in line with the legal framework.
- There is a need to protect the environment and the right of the population to live in clean and safe surroundings, with the need to use natural resources in a way that will make a positive and sustainable contribution to the economy.

The main objectives of the Guidelines

- To ensure that sand and gravel mining is done in environmentally sustainable and socially responsible manner.
- To ensure availability of adequate quantity of aggregate in sustainable manner.
- To improve the effectiveness of monitoring of mining and transportation of mined out material.



- Ensure conservation of the river equilibrium and its natural environment by protection and restoration of the ecological system.
- Avoid aggradation at the downstream reach especially those with hydraulic structures such as jetties, water intakes etc.
- Ensure that the rivers are protected from bank and bed erosion beyond its stable profile.
- No obstruction to the river flow, water transport and restoring the riparian rights and in-stream habitats.
- Avoid pollution of river water leading to water quality deterioration.
- To prevent depletion of ground water reserves due to excessive draining out of ground water.
- To prevent ground water pollution by prohibiting sand mining on fissures where it works as filter prior to ground water recharge.
- To maintain the river equilibrium with the application of sediment transport principles in determining the locations, period and quantity to be extracted.
- Streamlining and simplifying the process for grant of environmental clearance (EC) for sustainable mining.



THE EFFECT OF SAND AND GRAVEL MINING

Mining within or near riverbed has a direct impact on the stream's physical characteristics, such as channel geometry, bed elevation, substratum composition and stability, in-stream roughness of the bed, flow velocity, discharge capacity, sediment transport capacity, turbidity, temperature etc. Alteration or modification of the above attributes may cause hazardous impact on ecological equilibrium of riverine regime. This may also cause adverse impact on in-stream biota and riparian habitats. This disturbance may also cause changes in channel configuration and flow-paths.

The effects of sand and gravel mining are as follows:

- a) Extraction of bed material in excess of replenishment by transport from upstream causes the bed to lower (degrade) upstream and downstream of the site of removal.
- b) In-stream habitat is impacted by increase in river gradient, suspended load, sediment transport and sediment deposition. Excessive sediment deposition for replenishment increases turbidity which prevents penetration of light required for photosynthesis and reduces food availability of aquatic fauna.
- c) Riparian habitat including vegetative cover on and adjacent to the river banks it controls erosion, provide nutrient inputs into the stream and prevents intrusion of pollutants in the stream through runoff. Bank erosion and change of morphology of the river can destroy the riparian vegetative cover.
- d) Bed degradation are responsible for channel shifting, causing loss of properties and degradation of landscape, it can also undermine bridge supports, pipe lines or other structures.
- e) Degradation may change the morphology of the river bed, which constitutes one aspect of the aquatic habitat.
- f) Degradation can deplete the entire depth of gravelly bed material, exposing other substrates that may underlie the gravel, which could in turn affect the quality of aquatic habitat. Lowering of ground water table in the flood plain because of lowering of riverbed level as well as river water level takes place because of extraction and draining out of excessive ground water from the adjacent areas. So, if a floodplain aquifer drains to the stream, groundwater levels can be lowered as a result of bed degradation.
- g) Lowering of the water table can destroy riparian vegetation.
- h) Excessive pumping of ground water in the process of mining in abandoned channels depletes ground water causing scarcity of irrigation and drinking water. In extreme cases it may create ground fissures and subsidence in adjacent areas.
- i) Flooding is reduced as bed elevations and flood heights decrease, reducing hazard for human occupancy of floodplains and the possibility of damage to engineering works.
- j) The supply of overbank sediments to floodplains is reduced as flood heights decrease.
- k) An un-scientific and unregulated sand and gravel mining tends to increase channel bank



scouring and erosion. This causes a large degree of meandering of rivers and sometimes it could be in kms.

- l) Rapid bed degradation may induce bank collapse and erosion by increasing the heights of banks.
- m) Polluting ground water by reducing the thickness of the filter material especially if mining is taking place at top of recharge fissures.
- n) Choking of sand layer which acts as filter for ingress of ground water from river by dumping of finer material, compaction of filter zone due to movement of heavy vehicles. It also reduces the permeability and porosity of the filter material.
- o) Removal of gravel from bars may cause downstream bars to erode if they subsequently receive less bed material than is carried downstream from them by fluvial transport.
- p) Ecological effects on bird nesting, fish migration, angling, etc.
- q) Indiscrete mining activities lead to increased concentration of suspended sediment in the river which in turn causes siltation of water resources projects.
- r) Un-scientific and unregulated sand and gravel mining leads to the severe health hazards like air quality degradation and dust fog.
- s) Direct destruction from heavy equipment operation; discharges from equipment and refueling.
- t) Biosecurity and pest risks.
- u) Impacts on coastal processes.

The other deleterious impacts of indiscrete mining include

Loss of riparian habitat resulting from direct removal of vegetation along the stream bank to facilitate the use of a dragline or through the process of lowering the water table, bank undercutting, and channel incision. The physical composition and stability of substrates are altered as a result of in-stream mining and most of these physical effects may exacerbate sediment entrainment in the channel. Furthermore, the process of in-stream mining and gravel washing produces fine sediments under all flow conditions, resulting in a deposition of fine sediment in riffles as well as other habitats at low discharge. Excess sediment is considered the greatest pollutant in waters and constitutes one of the major environmental factors in the degradation of stream fisheries.

However, in-stream mining may contribute additional sediment to downstream reaches due to the disruption of substrate stability. Once sediment enters the stream, it is best to let natural geomorphological and hydrological processes reach a dynamic equilibrium, rather than further exacerbating the situation by additional disturbance.

**All other things being equal:**

- a) Extracting gravel from an excavation that does not penetrate the water table and is located away from an active stream channel should cause little or no change to the natural hydrological processes unless the stream captures the pit during periods of flooding.
- b) In-stream extraction of gravel from below the water level of a stream generally causes more changes to the natural hydrologic processes than limiting extraction to a reference point above the water level.
- c) In-stream extraction of gravel below the deepest part of the channel (the thalweg) generally causes more changes to the natural hydrological processes than limiting extraction to a reference point above the thalweg.
- d) Excavating sand and gravel from a small straight channel with a narrow floodplain generally will have a greater impact on the natural hydrological processes than excavations on a braided channel with a wide floodplain.
- e) Extracting sand and gravel from a large river or stream will generally create less impact than extracting the same amount of material from a smaller river or stream.
- f) Over-extraction of gravel can destabilise channels and banks, and/or affect the ecologic functioning of rivers particularly if undertaken at the wrong time, or in the wrong place, or in a way that damages the river bed or margins.



GENERAL APPROACH TO SUSTAINABLE SAND AND GRAVEL MINING

Following considerations should be kept in mind for sand / gravel mining:

- a) Parts of the river reach that experience deposition or aggradation shall be identified first. The Lease holder/ Environmental Clearance holder may be allowed to extract the sand and gravel deposit in these locations to manage aggradation problem.
- b) The distance between sites for sand and gravel mining shall depend on the replenishment rate of the river. Sediment rating curve for the potential sites shall be developed and checked against the extracted volumes of sand and gravel.
- c) Sand and gravel may be extracted across the entire active channel during the dry season.
- d) Abandoned stream channels on terrace and inactive floodplains be preferred rather than active channels and their deltas and flood plains. Stream should not be diverted to form inactive channel.
- e) Layers of sand and gravel which could be removed from the river bed shall depend on the width of the river and replenishment rate of the river.
- f) Sand and gravel shall not be allowed to be extracted where erosion may occur, such as at the concave bank.
- g) Segments of braided river system should be used preferably falling within the lateral migration area of the river regime that enhances the feasibility of sediment replenishment.
- h) Sand and gravel shall not be extracted within 200 to 500 meter from any crucial hydraulic structure such as pumping station, water intakes, and bridges. The exact distance should be ascertained by the local authorities based on local situation. The cross-section survey should cover a minimum distance of 1.0 km upstream and 1.0 km downstream of the potential reach for extraction. The sediment sampling should include the bed material and bed material load before, during and after extraction period. Develop a sediment rating curve at the upstream end of the potential reach using the surveyed cross- section. Using the historical or gauged flow rating curve, determine the suitable period of high flow that can replenish the extracted volume. Calculate the extraction volume based on the sediment rating curve and high flow period after determining the allowable mining depth.
- i) Sand and gravel could be extracted from the downstream of the sand bar at river bends. Retaining the upstream one to two thirds of the bar and riparian vegetation is accepted as a method to promote channel stability.



- j) Flood discharge capacity of the river could be maintained in areas where there are significant flood hazard to existing structures or infrastructure. Sand and gravel mining may be allowed to maintain the natural flow capacity based on surveyed cross- section history.
- k) Alternatively, off-channel or floodplain extraction is recommended to allow rivers to replenish the quantity taken out during mining.
- l) The Piedmont Zone (Bhabhar area) particularly in the Himalayan foothills, where riverbed material is mined, this sandy-gravelly track constitutes excellent conduits and holds the greater potential for ground water recharge. Mining in such areas should be preferred in locations selected away from the channel bank stretches.
- m) Mining depth should be restricted to 3 meter and distance from the bank should be 3 meter or 10 percent of the river width whichever less.
- n) The borrow area should preferably be located on the river side of the proposed embankment, because they get silted up in course of time. For low embankment less than 6 m in height, borrow area should not be selected within 25 m from the toe/heel of the embankment. In case of higher embankment the distance should not be less than 50 m. In order to obviate development of flow parallel to embankment, cross bars of width eight times the depth of borrow pits spaced 50 to 60 meters centre-to-centre should be left in the borrow pits.
- o) Demarcation of mining area with pillars and geo-referencing should be done prior to start of mining.



THE WORLD SCENARIO

Sand and gravel are mined world-wide and account for the largest volume of solid material extracted globally. Formed by erosive processes over thousands of years, they are now being extracted at a rate far greater than their renewal. Furthermore, the volume being extracted is having a major impact on rivers, deltas and coastal and marine ecosystems, resulting in loss of land through river or coastal erosion, lowering of the water table and decrease in the amount of sediment supply. Despite the colossal quantities of sand and gravel being used, increasing dependence on them and the significant impact that their extraction has on the environment, this issue needs far better attention and awareness.

Globally, between 47 and 59 billion tonnes of material is mined every year of which sand and gravel, known as aggregates, account for both the largest share (from 68% to 85%) and the fastest growth in extraction increase. Although more sand and gravel are mined than any other material, reliable data on their extraction is not available. The absence of global data on aggregates mining makes environmental assessment very difficult and has contributed to the lack of awareness about this issue. One way to estimate the global use of aggregates indirectly is through the production of cement for concrete (concrete is made with cement, water, sand and gravel). The production of cement is reported by 150 countries and it reached 3.7 billion tonnes in 2012 (USGS, 2013a). For each tonne of cement, the building industry needs about six to seven times more tonnes of sand and gravel (USGS, 2013b). Thus, the world's use of aggregates for concrete can be estimated at 25.9 billion tonnes a year for 2012 alone.

Added to this are all the aggregates used in land reclamation, shoreline developments and road embankments (for which the global statistics are unavailable), added to this is the 180 million tonnes of sand used in industry (USGS, 2012). Aggregates also contribute to 90% of asphalt pavements and 80% of concrete roads (Robinson and Brown, 2002). Taking all these estimates into account, a conservative estimate for the world consumption of aggregates exceeds 40 billion tonnes a year.

This large quantity of material cannot be extracted and used without a significant impact on the environment. Extraction has an impact on biodiversity, water turbidity, water table levels and landscape and on climate through carbon dioxide emissions from transportation. There are also socio-economic, cultural and even political consequences. In some extreme cases, the mining of marine aggregates has changed international boundaries, such as through the disappearance of sand islands in Indonesia (New York Times, 2010; Guerin, 2003).

The impacts of sand mining can be mainly categorized as follows:



IMPACTS ON	DESCRIPTION
Biodiversity	Impacts on related ecosystems (for example; fisheries)
Land losses	Both inland and coastal through erosion
Hydrological functions	Change in water flows, flood regulation and marine currents
Water supply	Through lowering of the water table and pollution
Infrastructures	Damage to bridges, river embankments and coastal infrastructures
Climate	Directly through transport emissions
Landscape	Coastal erosion, changes in deltaic structures, quarries, pollution of rivers
Extreme events	Decline of protection against extreme events (flood, drought, storm surge)

World over sand was until recently extracted in land quarries and riverbeds; however, a shift to marine and coastal aggregates mining has occurred due to the decline of inland resources. River and marine aggregates remain the main sources for building and land reclamation. For concrete, in-stream gravel requires less processing and produces high-quality material while marine aggregate needs to be thoroughly washed to remove salt. If the chloride is not removed from marine aggregate, a structure built with it might collapse after few decades due to corrosion of steel reinforced structures. Most sand from deserts cannot be used for concrete and land reclaiming, as the wind erosion process forms round grains that do not bind well.



INDIAN SCENARIO

The data on consumption of sand and aggregate in country is not available with any source. It can be derived indirectly from the usage of cement, construction of roads and stowing of mines. The trend for aggregates extraction can be estimated using cement production as a proxy.

Cement production has multiplied three-fold in the last 20 years from 1.37 billion tonnes of cement in 1994 to 3.7 billion tonnes in 2012 (USGS, 2013a) mainly as a result of rapid economic growth in Asia (UNEP and CSIRO, 2011). Five countries: China (58%), India (6.75%), the United States (2%), Brazil and Turkey - produce 70% of the world's cement (USGS, 2013c). The consumption of cement is expected to reach 324 million tonnes, which equates to use of 2.2 billion tonnes of aggregates. This is in addition to sand and aggregates used in stowing of mines, industry and other allied usage.

In India the main sources of sand are:

- (a) River (riverbed and flood plain).
- (b) Lakes and reservoirs.
- (c) Agricultural fields (Haryana).
- (d) Coastal / marine sand.
- (e) Palaeo-channels (Bikaner in Rajasthan).



THE PRICE ELASTICITY FOR DEMAND OF SAND

As the price elasticity of demand for sand is inelastic (-0.88), any increase in price in absence of marketable alternative will not have any significant impact on demand. Use of crushed stones or other substitute material should be promoted. The regional context of aggregate resources, market demand, and the environmental impacts of various alternatives must be understood before any site-specific proposal for aggregate extraction can be reviewed.

Evaluation of aggregate supply and demand should be undertaken on the basis of production-consumption regions, encompassing the market for aggregate and all potential sources of aggregate within an economical transport distance. The finite nature of high-quality alluvial gravel resources must be recognized, and high-quality PCC-grade aggregates should be reserved only for the uses demanding this quality material (such as concrete). Alternative sources should be used in less demanding applications (such as road sub-base). Part replacement with fly ash in roads and embankments be promoted in place of sand and aggregates.

The environmental costs of sand mining should be incorporated into the price of the product so that alternative sources that require more processing but have less environmental impact become more attractive.

PROCESS OF SEDIMENT TRANSPORT

The loose boundary (consisting of movable material) of an alluvial channel deforms under the action of flowing water and the deformed bed with its changing roughness (bed forms) interacts with the flow. The resulting movement of the bed material (sediment) in the direction of flow is called sediment transport and a critical bed shear stress must be exceeded to start the particle movement.

Such a critical shear stress is referred as incipient (threshold) motion condition, below which the particles will be at rest and the flow is similar to that on a rigid boundary. Some sediment particles roll or slide along the bed intermittently and some others saltate (hopping or bouncing along the bed). The material transported in one or both of these modes is called 'bed load'.

Finer particles (with low fall velocities) are entrained in suspension by the fluid turbulence and transported along the channel in suspension. This mode of transport is called 'suspended load'. Sometimes finer particles from upland catchment (sizes which are not present in the bed material), called 'wash load', are also transported in suspension. The combined bed material and wash load is called 'total load'.



Bed load ranges from a few percent of total load in lowland rivers to perhaps 15% in Mountain Rivers to over 60% in some arid catchments. Although a relatively small part of the total sediment load, the arrangement of bed load sediment constitutes the architecture of sand, and gravel-bed channels.

The rate of sediment transport typically increases as a power function of flow; that is, a doubling of flow typically produces more than a doubling in sediment transport and most sediment transport occurs during floods. The environmental impacts from in-stream mining can be avoided, if the annual bed load is calculated and aggregate extraction is restricted to that value or some portion of it. To accurately limit extraction to some portion of bed load, the amount of sediment that passes the in-stream mining site during a given period of time must be calculated.

There is a large amount of uncertainty in the process of calculating annual rates of bed load transport. How much coarse material is moved, how long it remains in motion as also how far it moves depends on the size, shape & packing of the material and the characteristics of the river flow.

Downstream movement commonly occurs as irregular bursts of short-distance movement separated by longer periods, when the particles remain at rest. Because bed load changes from hour-to-hour, day-to-day, and year-to-year, estimating annual bed load rates is a dynamic process involving careful examination.

Constant variations in the flow of the river make the channel floor and riverbanks a dynamic interface, where some materials are being eroded while others are being deposited. The net balance of this activity, on a short-term basis, is referred to as scour or fill.

On a long-term basis, continued scour results in erosion (degradation), while continued fill results in deposition (aggradation).

A general indicator of the stability of a stream relates to the amount of vegetation present. Gravel bars that are vegetated or where the gravel is tightly packed, generally indicate streams, where the gravel supply is in balance. Streams with excessive gravel generally have gravel bars with little or no vegetation, and are surfaced with loosely packed gravel.



SUSTAINABLE SAND AND GRAVEL MINING GUIDELINES

The broad principle on which any sustainable sand mining Guidelines / policy can be based is that river/ natural resources must be utilized for the benefit of the present and future generation, so river resources should be prudently managed and developed. The preparation of District Survey Report is an important initial step.

The Processes under the Guidelines:

- (a) Identification of areas of aggradation / deposition where mining can be allowed; and identification of areas of erosion and proximity to infrastructural structures and installations where mining should be prohibited. Use of satellite imagery for identifying areas of sand deposit and quantity be done.
- (b) Calculation of annual rate of replenishment and allowing time for replenishment after mining in area.
- (c) Identifying ways of scientific and systematic mining.
- (d) Identifying measures for protection of environment and ecology.
- (e) Determining measures for protection of bank erosion.
- (f) A bench mark (BM) with respect to mean sea level (MSL) should be made essential to in-mining channel reaches (MCR). Below which no mining shall be allowed.
- (g) Identifying steps for conservation of mineral.
- (h) Permanent gauging facilities (for discharge and sediment both) should be made compulsory for the sites having excessive mining in consultation with Central Water Commission or any competent State Agency.
- (i) Implementing safeguards for checking illegal and indiscrete mining.

Following the above processes, to begin with it is important to prepare a survey document mapping the status of sand sources in a district. This survey should be conducted and report be prepared for each district. Though it is an acceptable fact that rivers cut across districts and States and every river is an ecosystem in itself. But, keeping in view the fact that the district is the most established unit of administration at which this kind of survey, planning and monitoring can be ensured effectively, it is proposed that every district will prepare this document taking the river stretch in that district as an ecological unit and inventorising other sources of sand in the district.

Besides, the production of aggregate in a particular area is a function of availability of natural resources, the size of the population, the economy of the area and various developmental and infrastructural works being undertaken in the area.



The natural resources must be utilized in environment friendly manner in scientific and systematic way and with the objective of sustainable development the policy on the subject should have provisions for protection of environment & ecology. These factors can be accounted for in a most efficient manner at district level.

The sustainable mining plan needs to be dynamic. A survey should be carried out by the District Environment Impact Assessment Authority (DEIAA) with the assistance of Geology Department, Irrigation Department, Forest Department, Public Works Department, Ground Water Boards, Remote Sensing Department and Mining Department etc. in the district at regular intervals.

The survey shall contain:

1. District wise detail of river or stream and other sand source.
2. District wise availability of sand or gravel or aggregate resources.
3. District wise detail of existing mining leases of sand and aggregates.

Based on this survey document, the action plan shall divide the river/ stream/ other sources of the District into the following categories:

1. River / Stream beds sections / other sources suitable for extraction of sand and aggregates.
2. River / Stream beds sections / other sources prohibited for extraction of sand and aggregates.

The river/ streams/ other sources of sand and aggregate are studied on following parameters:

a) Geomorphological studies

- i) Place of origin
- ii) Catchment area.
- iii) General profile of river stream.
- iv) Annual deposition factor.
- v) Replenishment.
- vi) Total potential of minor mineral in the river bed.

b) Geological studies

- i) Lithology of catchment area.
- ii) Tectonics and structural behavior of rocks.

c) Climatic Factors

- i) Intensity of rainfall.
- ii) Climate Zone.
- iii) Temperature variation



The following points to be considered while selecting the river / stream for mining besides the above parameters:

- i) A stable river is able to constantly transport the flow of sediments produced by watershed such that its dimensions (width and depth) pattern and vertical profile are maintained without aggrading (building up) or degrading (scouring down).
- ii) The amount of boulders, cobbles, pebbles, and sand deposited in river bed equals to the amount delivered to the river from catchment area and from bank erosion minus amount transported downstream each year.
- iii) It is compulsive nature of river to meander in their beds and therefore they will have to be provided with adequate corridor for meandering without hindrance. Any attempt to diminish the width of the corridor (floodway) and curb the freedom to meander would prove counterproductive.
- iv) Erosion and deposition is law of nature. The river stream has to complete its geomorphological cycles from youth, mature to old age.
- v) River capturing is unavoidable.
- vi) Fundamentally the lowest point of any stream is fixed by sea level.

This survey document should be prepared in the district based on direct and indirect benefits of mining and identification of the potential threats to the river / stream beds in the district.

Besides, calculating the carrying capacity of the river / stream beds / other sources to find out maximum quantity available to be allowed for removal each year from the sources, it should also provide various measures to regulate sand and aggregate mining in a systemic way.

It has to provide for environmentally safe depth of mining and safeguards of banks by prescribing safe distance from banks. It is required that there should be a Sub-Divisional Committee which should visit each site and make recommendation. The Committee should comprise of Sub-Divisional Magistrate, Officers from Irrigation department, State Pollution Control Board or Committee, Forest department, Geology or mining officer shall visit each site for which environmental clearance has been applied for and make recommendation on suitability of site for mining or prohibition thereof.



THE STRUCTURE OF DISTRICT SURVEY REPORT

The report can have following structure:

1. Introduction
2. Overview of Mining Activity in the District
3. The List of Mining Leases in the District with location, area and period of validity
4. Details of Royalty or Revenue received in last three years
5. Detail of Production of Sand or Bajari or minor mineral in last three years
6. Process of Deposition of Sediments in the rivers of the District
7. General Profile of the District
8. Land Utilization Pattern in the district: Forest, Agriculture, Horticulture, Mining etc.
9. Physiography of the District
10. Rainfall: month-wise
11. Geology and Mineral Wealth

12. Drainage System with description of main rivers.

Sl.No.	NAME OF RIVER	AREA DRAINED (Sq. Km)	% AREA DRAINED

13. Salient Features of Important Rivers and Streams:

Sl.No.	Name of the River / Stream	Total Length in the District (in Km)	Place of origin	Altitude at Origin

14. Methodology Adopted for Calculating of Mineral Potential

The mineral potential is calculated based on field investigation and geology of the catchment area of the river/ streams. As per the policy of the State and location, depth of minable mineral is defined. The area for removal of mineral in a river or stream can be decided depending on geo-morphology



and other factors, it can be 50% to 60% of the area of a particular river/stream, e.g. in Himachal Pradesh mineral constituents like boulders, river born bajari, sand up to a depth of one meter are considered as resource mineral. Other constituents like clay and silt are excluded as waste while calculating the mineral potential of particular river/ stream.

The specific gravity of each mineral constituent is different. While calculating the mineral potential, the average specific gravity is taken as 2.25. The percent of mineral constituent like boulder, river bajari, sand also varies for different river and streams. While calculating the mineral potential the percentage of each mineral constituent is taken as, Boulders 35-40%, Bajari - 30-35%, Sand 25-30% and 5-10% for silt and clay.

The quantum of deposition varies from stream to stream depending upon factors like catchment lithology, discharge, river profile and geomorphology of the river course. There are certain geomorphological features developed in the river beds such as channel bar, point bar etc. where annual deposition is more even two to three meters.

For illustration one example of Yamuna River in Sirmaour district of Himachal Pradesh is given below:

Portion of the River / Stream Recommended for Mineral Concession	Length of area recommended for mineral concession (in kilometer)	Average width of area recommended for mineral concession (in meters)	Area recommended for mineral concession (in square meter)	Mineable mineral potential (in metric tonne) (60% of total mineral potential)
From Downstream of confluence with Tons River to Behral near Haryana and Uttar Pradesh border	31	478	14818000	16803612

Note: Considering the density of river bed material to be **1.89 g/cm³**

Present Status of Mining

This gives the detail of mining leases already in operation in this stretch, area and production in last three years from these leases is calculated.



zone of deposition. These zones of deposition and erosion are extended in different patches in the river.

Any mining lease granted in larger tract can cover both the zones, and mining activity in zone of erosion can further aggravate the problem of erosion and as such the mining activity can be allowed only in the zone of the deposition. The mining leases of larger areas in rivers are neither in interest of environment nor in the interest of mineral conservation.

In Himalayan states the rivers and wasteland has been mostly classed as forest land and mining on that requires diversion of forest land and payment of compensatory afforestation and NPV etc. The land in river beds in hilly tracts and many small rivers at any one site seldom exceed 5 hectare, so not allowing sand mining leases less than 5 hectare on river beds further aggravates the situation. So the size of mining lease for river sand mining should be determined by the State as per the local situation.



MANAGEMENT PLAN

1. River Bed Mining Recommendations:

a) Permit Mining Volume Based on Measured Annual Replenishment

In the first year following adoption of the management plan, a volume equal to the estimated annual replenishment could be extracted from the reach of channel. Replenishment (up to the elevation of the selected channel configuration) would need to occur before subsequent extraction could take place. The concept of annual replenishment accounts for the episodic nature of sediment transport. For example, during wet periods with high stream flows, and a high contribution of sediment from hill slopes and tributaries, monitoring data would show that sand and gravel bars are replenished quickly. During drought periods with low stream flow, and little sediment supply or transport, monitoring data would likely show that bars were replenished at a slower rate.

The use of monitoring data is essential in measuring when actual replenishment occurs. The use of the concept of annual replenishment protects long-term channel stability as well as aquatic and riparian habitat by extracting a volume sustainable by watershed processes.

b) Establish an Absolute Elevation below Which No Extraction May Occur (Minimum Enveloped Level or Redline).

The absolute elevation below which no mining could occur or "redline" would be surveyed on a site-specific basis in order to avoid impacts to structures such as bridges and to avoid vegetation impacts associated with down-cutting due to excessive removal of sediment. An extraction site can be determined after setting the deposition level at 1 m above natural channel thalweg elevation, as determined by the survey approved by mine plan approving authority.

c) Limit River Bed Extraction Methods to Bar Skimming

If mining is limited to the downstream end of the bar with a riparian buffer on both the channel and hill slope (or floodplain) side, bar skimming would minimise impacts. Other methods such as excavation of trenches or pools in the low flow channel lower the local base level, and maximise upstream (head cutting and incision) and downstream (widening and braiding) impacts. In addition, direct disturbance of the substrate in the low flow channel should be avoided. Trenching on bars may be beneficial in the future if the river becomes severely aggraded, flat, shallow and braided. Trenching of bars may initially impact a smaller area of riparian habitat than skimming - as a result of excavating deeper rather than shallow skimming of a large area. However, over the



long-term, the upstream and downstream effects of a trench on the bar or in the channel may offset any short-term benefit derived from this method.

d) Extract Sand and Gravel from the Downstream Portion of the Bar:

Retaining the upstream one to two thirds of the bar and riparian vegetation while excavating from the downstream one to two third of the bar is accepted as a method to promote channel stability and protect the narrow width of the low flow channel necessary for aquatic life. Sand and gravel would be re-deposited in the excavated downstream one to two thirds of the bar (or downstream of the widest point of the bar) where an eddy would form during sediment transporting flows. In contrast, if excavation occurs on the entire bar after removing existing riparian vegetation, there is a greater potential for widening and braiding of the low flow channel.

e) Concentrate Activities to Minimise Disturbance:

River bed extraction activities should be concentrated or localised to a few bars rather than spread out over many bars. This localisation of extraction will minimise the area of disturbance of upstream and downstream effects. Skimming decreases habitat and species diversity - these effects should not be expanded over a large portion of the area.

f) Review Cumulative Effects of Sand and Gravel Extraction:

The cumulative impact of all mining proposals should be reviewed on an annual basis to determine if cumulative riverine effects or effects to the estuary are likely.

g) Maintain Flood Capacity:

Flood capacity in the river should be maintained in areas where there are significant flood hazards to existing structures or infrastructure.

h) Establish a Long-term Monitoring Program:

Monitoring of changes in bed elevation and channel morphology, and aquatic and riparian habitat upstream and downstream of the extraction would identify any impacts of sand and gravel extraction to biologic resources. Long-term data collected over a period of decades as sand and gravel extraction occurs will provide data to use in determining trends.

i) Minimise Activities That Release Fine Sediment to the River:

No washing, crushing, screening, stockpiling, or plant operations should occur at or below the streams "average high water elevation," or the dominant discharge. These and similar activities have the potential to release fine sediments into the stream, providing habitat conditions harmful to local fish.



j) Retain Vegetation Buffer at Edge of Water and Against River Bank:

Riparian vegetation performs several functions essential to the proper maintenance of geomorphic and biological processes in rivers. It shields river banks and bars from erosion. Additionally, riparian vegetation, including roots and downed trees, serves as cover for fish, provides food source, works as a filter against sediment inputs, and aids in nutrient cycling. More broadly, the riparian zone is necessary to the integrity of the ecosystem providing habitat for invertebrates, birds and other wildlife.

k) The River Bed mining should only be allowed during the dry season.

No River bed mining should be permitted during rainy season (see Appendix 9).

l) An Annual Status and Trends Report:

This report should review permitted extraction quantities in light of results of the monitoring program, or as improved estimates of replenishment become available. The report should document changes in bed elevation, channel morphology, and aquatic and riparian habitat. The report should also include a record of extraction volumes permitted, and excavation location. Finally, recommendations for reclamation, if needed should be documented.

2. Off-Channel or Floodplain Extraction Recommendations

a) Floodplain Extraction should be set back from the Main Channel

In a dynamic alluvial system, it is not uncommon for meanders to migrate across a floodplain. In areas where sand and gravel occurs on floodplains or terraces, there is a potential for the river channel to migrate toward the pit. If the river erodes through the area left between the excavated pit and the river, there is a potential for "river capture," a situation where the low flow channel is diverted through the pit. In order to avoid river capture, excavation pits should set back from the river to provide a buffer, and should be designed to withstand the 100-year flood (100-year ARI). Adequate buffer widths and reduced pit slope gradients are preferred over engineered structures which require maintenance in perpetuity. Hydraulic, geomorphic, and geotechnical studies should be conducted prior to design and construction of the pit and bund. In addition to river capture, extraction pits create the possibility of stranding fish.

b) The maximum depth of Floodplain Extraction should remain above the Channel Thalweg

Floodplain pits should not be excavated below the elevation of the thalweg in the adjacent channel. This will minimise the impacts of potential river capture by limiting the potential for head cutting and the potential of the pit to trap sediment. A shallow excavation (above the water table) would provide a depression that would fill with



water part of the year, and develop seasonal wetland habitat. An excavation below the water table would provide deep water habitat.

c) Side Slopes of Floodplain Excavation Should Range from 3:1 to 10:1

Side slopes of a floodplain pit should be graded to a slope that ranges from 3:1 to 10:1. This will allow for a range of vegetation from wetland to upland. Steep side slopes excavated in floodplain pits on other systems have not been successfully reclaimed, since it is difficult for vegetation to become stabilised. Terrace pits should be designed with a large percentage of edge habitat with a low gradient which will naturally sustain vegetation at a variety of water levels.

d) Place Stockpiled Topsoil above the 25-year Return Period or ARI Level

Stockpiled topsoil can introduce a large supply of fines to the river during a flood event and degrade fish habitat. Storage above the 25-year flood (25-year ARI) inundation level is sufficient to minimise this risk.

e) Floodplain Pits Should Be Restored to Wetland Habitat or Reclaimed for Agriculture

The key to successful restoration or reclamation is to conserve or import adequate material to re-fill the pit, while ensuring that pit margins are graded to allow for development of significant wetland and emergent vegetation.

f) Establish a Long-term Monitoring Program

A long-term monitoring program should provide data illustrating any impacts to river stability, groundwater, fisheries, and riparian vegetation. The monitoring program should assess the success of any reclamation or restoration attempted.

g) An Annual Status and Trends Report

The status and trends report described previously should include a section on the hydrologic and biologic components of floodplain pit reclamation.

3. Extraction Methods

The important methods of sand and gravel mining operations are as below:

- a) Bar scalping or skimming** is extraction of sand and gravel from the surface of bars. This method generally requires that surface irregularities be smoothed out and that the extracted material be limited to what could be taken above an imaginary line sloping upwards and away from the water from a specified level above the river's water surface at the time of extraction (typically 0.3 - 0.6 m (1-2 ft)). Bar scalping is commonly repeated year after year. To maintain the hydraulic control provided to upstream by the Riffle head, the preferred method of bar scalping is now generally to leave the top one-third (approximately) of the bar undisturbed, mining only from the downstream two-



thirds.

b) Dry-Pit Channel Mining

Dry-pit channel mines are pits excavated within the active channel on dry intermittent or ephemeral stream beds. Dry pits are often left with abrupt upstream margins, from which head cuts are likely to propagate upstream.

c) Wet-Pit Channel Mining

Wet-pit mining involves excavation of a pit in the active channel below the surface water in a perennial stream or below the alluvial groundwater table.

d) Bar Excavation

A pit is excavated at the downstream end of the bar as a source of aggregate and as a site to trap sand and gravel. Upon completion, the pit may be connected to the channel at its downstream end to provide side channel habitat.

e) Channel-wide River bed Mining

In rivers with a highly variable flow regime, sand and gravel are commonly extracted across the entire active channel during the dry season. The bed is evened out and uniformly (or nearly so) lowered.

4. Reclamation Plans

Reclamation plans should include:

- a) A baseline survey consisting of existing condition cross-section data: Cross-sections must be surveyed between two documented endpoints set back from the top of bank, and elevations should be referenced to bench mark;
- b) The proposed mining cross-section data should be plotted over the baseline data to illustrate the vertical extent of the proposed excavation;
- c) The cross-section of the replenished bar should be the same as the baseline data. This illustrates that the bar elevation after the bar is replenished will be the same as the bar before extraction;
- d) A planimetric map showing the aerial extent of the excavation and extent of the riparian buffers;
- e) A planting plan developed by a plant ecologist familiar with the flora of the river for any areas such as roads that need to be restored;
- f) A monitoring plan: The appropriate reclamation plans can turn river-bed and floodplain sand and gravel mining operations into something perceived by the public as desirable.



MARINE SAND MINING AND IMPACT ON MARINE BIODIVERSITY

The mining of marine aggregates is increasing significantly. Marine sand mining has had an impact on seabed flora and fauna. Dredging and extraction of aggregates from the benthic (sea bottom) zone destroys organisms, habitats and ecosystems and deeply affects the composition of biodiversity, usually leading to a net decline in faunal biomass and abundance or a shift in species composition. Aggregate particles that are too fine to be used are rejected by dredging boats, releasing vast dust plumes and changing water turbidity, resulting in major changes to aquatic and riparian habitats over large areas.

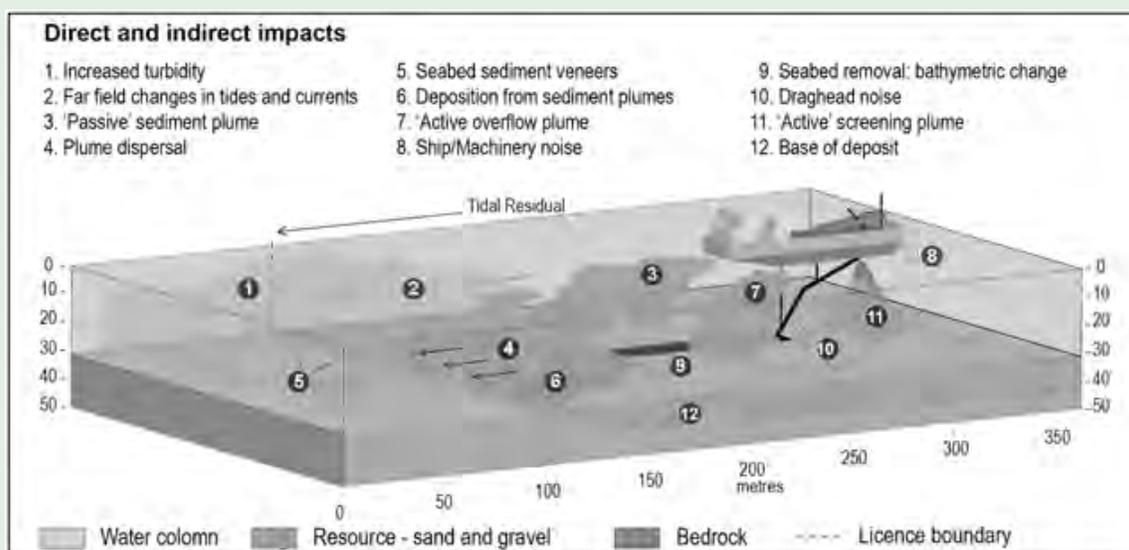


Figure: Direct and indirect consequences of aggregates dredging on the marine environment.

Source: Tillin, H.M., Houghton, A.J., Saunders, J.E., Drabble, R. and Hull, S.C., 2011. Direct and Indirect Impacts of Aggregate Dredging, Marine Aggregate Levy Sustainability Fund (MALSF). Science Monograph Series 1, 1-46.



REDUCING CONSUMPTION OF SAND

Because sand is still very cheap - sand itself is freely accessible; only extraction and transportation costs need to be covered - there is little or no incentive to induce a change in our consumption. Despite the very high value of minerals found in the sand, it is mostly used for concrete or is buried under highways. Recycled building and quarry dust material can be a substitute for sand. Concrete rubble should be recycled to avoid using aggregates, at least for low-quality uses.

Substitutes for sand are available. Quarry dust could be used to replace sand in general concrete structures. The replacement of sand by up to 40% of incinerator ash exhibits higher compressive strength than regular cement mortars. Some desert sand can be used if mixed with other material. There are alternatives for building houses, including wood, straw and recycled material. However, the current building industry is geared toward concrete know-how and equipment.

Training of architects and engineers, new laws and regulations, and positive incentives are needed to initiate a shift for lowering our dependency on sand. Renewable and recycled materials need to be targeted for building houses and roads. Use of Manufactured Sand (M-Sand) also needs to be promoted.

Alternative sources of sand and gravel, which accumulate at the bottom of dams, can also be targeted. Their use would address the problem of these aggregates accumulating which leads to a reduced capacity of dams to store water and could result in the dams' water intakes being blocked. Dams regularly release large amounts of water to flush out aggregates.

The important standard setting bodies in India are taking steps to promote the usage of alternatives to sand and gravel. Bureau of Indian Standards, the National Standards Body of the country, considering the scarcity of sand and coarse aggregates from natural sources, has evolved number of alternatives which are ultimately aimed at conservation of natural resources apart from promoting use of various waste materials without compromising in quality.

These measures include permitting in the Concrete Code (IS 456) as also in the National Building Code of India, the use of slag - a waste from steel industry, fly ash - a waste from thermal power plants, crushed over-burnt bricks and tiles - waste from clay brick and tile industry, in plain cement concrete as an alternative to sand/natural aggregate, subject to fulfilling the requirements of the Code. This Code, further, encourages use of fly ash and ground granulated blast furnace slag as part replacement of ordinary Portland cement in plain as well as reinforced cement concrete.

The Indian Standard on concrete mix design (IS 10262) has been upgraded to include guidance and examples of designing concrete mixes using fly ash and slag. Provisions for compliance for requisite quality of concrete made using fly ash and slag have been duly covered for the manufacturers of ready-mixed concrete in the Indian Standard Code of practice for RMC (IS 4926).

BIS has also formulated an Indian Standard Specification for artificial lightweight aggregates covering manufactured aggregates, such as foamed blast furnace slag, bloated clay aggregate, sintered fly ash aggregate and cinder aggregate (IS 9142).

A series of Indian Standards has also been formulated on various precast concrete products such as solid and hollow concrete blocks, light weight concrete blocks, autoclaved aerated concrete blocks, preformed foam concrete blocks, partial prefabricated concrete flooring and roofing units, concrete pipes, etc, all permitting use of fly ash and slag.



THE REPORT OF THE COMMITTEE HEADED BY SECRETARY, MoEF - 2010

A Committee headed by Secretary, Ministry of Environment and Forest was set up on the subject in 2010. The Committee considered this subject in detail and prepared a report. The important parts of the report are as follows:

Definition of Minor Mineral:

The term 'minor mineral' is defined in clause (e) of Section 3 of MMDR Act, 1957: '3 (e) "minor minerals" means building stones, gravel, ordinary clay, ordinary sand other than sand used for prescribed purposes and any other material which the Central Government may, by Notification in the Gazette of India declare to be a minor mineral;'

The term 'ordinary sand' used in clause (e) of Section 3 of the MMDR Act, 1957 has been further clarified in rule 70 of the MCR, 1960 as:

- (iv) Purposes of stowing in coal mines,
- (v) For manufacture of silvicate cement,
- (vi) Manufacture of sodium silicate and for
- (vii) Manufacture of pottery and glass.

Additionally, the Central Government has declared the following minerals as minor minerals:

Sl.No.	Minor Minerals	Sl.No.	Minor Minerals	Sl.No.	Minor Minerals
i)	Boulder	vi)	Brick-earth	xi)	Slate and shale when used for building material
ii)	Shingle	vii)	Fuller's earth	xii)	Marble
iii)	Chalcedony pebbles used for ball mill purposes only	viii)	Bentonite	xiii)	Stone used for making household utensils
iv)	Lime shell, kankar and limestone used in kilns for manufacture of lime used as building material	ix)	Road metal	xiv)	Quartzite and sandstone when used for purposes of building or for making road metal and household utensils
v)	Murrum	x)	Reh-matti	xv)	Saltpetre, and
xvi)	Ordinary earth (Used for filling or leveling purposes in construction or embankments, roads, railways building).				



It may thus be observed that minerals have been classified into major and minor minerals based on their end use rather than level of production, level of mechanization, export and import etc. There do exist some minor mineral mines of silica sand and limestone where the scale of mechanization and level of production is much higher than those of industrial mineral mines. Further, in terms of the economic cost and revenue, it has been estimated that the total value of minor minerals constitutes about 10% of the total value of mineral production whereas the value of non-metallic minerals comprises only 3%. It is, therefore, evident that the operations of mines of minor minerals need to be subject to some regulatory parameters as that of mines of major minerals. Further, unlike India there does not exist such system in any other country where minerals are classified as major and minor based on end usage. Thus, there is a need to re-look at the definition of 'minor minerals' per se. It is, therefore, recommended that Ministry of Mines along with Indian Bureau of Mines, in consultation with the State Governments may re-examine the classification of minerals into major and minor categories so that the regulatory aspects and environment mitigation measures are appropriately integrated for ensuring sustainable and scientific mining with least impacts on environment.

Size of the Mine Lease:

Area for grant of mine lease varies from State to State. Maximum area which can be held under one or more mine lease is 2590 ha or 25.90 sq. miles in Jammu and Kashmir. Rajasthan prescribed a minimum limit of 1 ha for a lease. Maximum area prescribed for permit is 50x50 m. In most of the States area of permit is not specified in the rules.

It has recently been observed by Punjab and Haryana High Court in its order dated 15.05.2009 that State Government are apparently granting short term permits by dividing the mining area into small zones in effect to avoid environmental norms. There is, thus a need to bring uniformity in the extent of area to be granted for mine lease so as to ensure that eco-friendly scientific mining practices can be adopted. It is recommended that the minimum size of mine lease should be 5 ha. Further, preparation of comprehensive mine plan for contiguous stretches of mineral deposits by the respective State Governments may also be encouraged. This may suitably be incorporated in the Mineral Concession Rules, 1960 by Ministry of Mines.

Period of Mine Lease:

The period of lease varies from State to State depending on type of concessions, minerals and its end use. The minimum lease period is one year and maximum 30 years. Minerals like granite where huge investments are required, a period of 20 years is generally given with the provisions of renewal. Permits are generally granted for short periods which vary from one month to a maximum one year. In States like Haryana, minor mineral leases are auctioned for a particular time period. Mining is considered to be capital intensive industry and considerable time is lost for developing the mine before it attains the status of fully developed mine. If the tenure of the mine lease is short, it would encourage the lessee to concentrate more on rapid exploitation of mineral without really undertaking adequate measures for reclamation and rehabilitation of mined out area, posing thereby a serious threat to the environment and health of the workers and public at large.



There is thus, a need to bring uniformity in the period of lease. It is recommended that a minimum period of mine lease should be 5 years, so that eco- friendly scientific and sustainable mining practices are adopted. However, under exceptional circumstances arising due to judicial interventions, short term mining leases / contracts could be granted to the State Agencies to meet the situation arising there from.

Cluster of Mine Approach for Small Sized Mines:

Considering the nature of occurrence of minor mineral, economic condition of the lessee and the likely difficulties to be faced by Regulatory Authorities in monitoring the environmental impacts and implementation of necessary mitigation measures, it may be desirable to adopt cluster approach in case of smaller mine leases being operated presently. Further, these clusters need be provided with processing/crusher zones for forward integration and minimizing excessive pressure on road infrastructure. The respective State Governments / Mine Owners Associations may facilitate implementation of Environment Management Plans in such cluster of mines.

Requirement of Mine Plan for Minor Minerals:

At present, most of the State Governments have not made it mandatory for preparation of mining plan in respect of minor minerals. In some States like Rajasthan, eco- friendly mining plans are prepared, which are approved by the State Mining Department. The eco- friendly mining plans so prepared, though conceptually welcome, are observed to be deficient and need to be made comprehensive in a manner as is being done for major minerals. Besides, the aspects of reclamation and rehabilitation of mined out areas, progressive mine closure plan, as in vogue for major minerals could be introduced for minor minerals as well.

It is recommended that provision for preparation and approval of mine plan, as in the case of major minerals may appropriately be provided in the Rules governing the mining of minor minerals by the respective State Governments. These should specifically include the provision for reclamation and rehabilitation of mined out area, progressive mine closure plan and post mine land use.

Creation of Separate Corpus for Reclamation / Rehabilitation of Mines of Minor Minerals:

Mining of minor minerals, in our country, is by and large unorganized sector and is practiced in haphazard and unscientific manner. At times, the size of the leasehold is also too small to address the issue of reclamation and rehabilitation of mined outs areas. It may, therefore, be desirable that before the concept of mine closure plan for minor minerals is adopted, the existing abandoned mines may be reclaimed and rehabilitated with the involvement of the State Government. There is thus, a need to create a separate corpus, which may be utilized for reclamation and rehabilitation of mined out areas. The respective State Governments may work out a suitable mechanism for creation of such corpus on the 'polluter pays' principle. An organizational structure may also need to be created for undertaking and monitoring these activities.

Depth of Mining:

Mining of minerals, whether major or minor have a direct bearing on the hydrological regime of the



area. Besides, affecting the availability of water as a resource, it also affects the quality of water through direct run of going into the surface water bodies and infiltration / leaching into groundwater. Further, groundwater withdrawal, dewatering of water from mine pit and diversion of surface water may cause surface and sub- surface hydrologic systems to dry up. An ideal situation would require that quarrying should be restricted to unsaturated zone only above the phreatic water table and should not intersect the groundwater table at any point of time. However, from the point of view of mineral conservation, it may not be desirable to impose blanket ban on mining operation below groundwater table. It is, therefore, recommended that detailed hydro-geological report should be prepared in respect of any mining operation for minor minerals to be undertaken below groundwater table. Based on the findings of the study so undertaken and the comments/ recommendations of Central Ground Water Authority/ State Ground Water Board, a decision regarding restriction on depth of mining for any area should be taken on case to case basis.

Uniform Minor Mineral Concession Rules:

The economic value of the minor minerals excavated in the country is estimated to contribute to about 9% of the total value of the minerals whereas the non- metallic minerals contribute to about 2.8%. Keeping in view the large extent of mining of minor minerals and its significant potential to adversely affect the environment, it is recommended that Model Mineral Concession rules may be framed for minor minerals as well and the minor minerals may be subjected to a simpler regulatory regime, which is, however, similar to major minerals regime.

River Bed Mining:

1. Environment damage being caused by unregulated river bed mining of sand, bajri and boulders is attracting considerable attention including in the courts. The following recommendations are therefore made for the river bed mining.
 - (a) In the case of mining leases for riverbed sand mining, specific river stretches should be identified and mining permits/lease should be granted stretch wise, so that the requisite safeguard measures are duly implemented and are effectively monitored by the respective Regulatory Authorities.
 - (b) The depth of mining may be restricted to 3m / water level, whichever is less.
 - (c) For carrying out mining in proximity to any bridge and / or embankment, appropriate safety zone should be worked out on case to case basis, taking into account the structural parameters, locational aspects, flow rate etc. and no mining should be carried out in the safety zone so worked out.

Conclusion:

Mining of minor minerals, though individually, because of smaller size of mine leases is perceived to have lesser impact as compared to mining of major minerals. However, the activity as a whole is seen to have significant adverse impacts on environment. It is, therefore, necessary that the mining of minor minerals is subjected to simpler but strict regulatory regime and carried out only under an



approved framework of mining plan, which should provide for reclamation and rehabilitation of the mined out areas. Further, while granting mining leases by the respective State Governments "location of any eco-fragile zone (s) within the impact zone of the proposed mining area, the linked Rules/ Notifications governing such zones and the judicial pronouncements, if any, need be duly noted.

The Union Ministry of Mines along with Indian Bureau of Mines and respective State Governments should therefore make necessary provisions in this regard under the Mines and Minerals (Development and Regulation) Act, 1957, Mineral Concession Rules, 1960 and adopt model Guidelines to be followed by all States (emphasis supplied)".



REGIME OF LAW AND ADMINISTRATIVE ORDERS RELATING TO MINING OF MINOR MINERALS

The Entry 54 of List 1 in Schedule VII to the Constitution of India is the entry which empowers the Parliament in respect of 'Regulation of Mines and Minerals Development. Entry 23 of List 2 of the same Schedule, read with Article 246 (3) of the Constitution confers legislative powers on the State Legislature in respect of Regulation of Mines and Mineral Development, but, this power is subject to the provisions of List 1 with respect to the regulation and development under the control of the Union. The Parliament, with the object to amend and consolidate the law relating to the regulation of labour and safety in mines enacted the Mines Act, 1952. Section 2 (JJ) of the Mines Act, 1952 defines "minerals" to mean, all substances which can be obtained from the earth by mining, digging, drilling, dredging, hydraulic, quarrying or by any other operation and includes mineral oils (which, in turn, include natural gas and petroleum). On 1st June, 1958, the Mines and Minerals (Development and Regulation) Act, 1957 was promulgated. This Act provides, inter alia, for general restrictions on undertaking prospecting and mining operations, the procedure for obtaining prospecting licenses or mining leases in respect of the land in which the minerals vests in the Government, the rule making power for regulating the grant of prospecting licenses and mining leases, special powers of Central Government to undertake prospecting or mining operations in certain cases, and for development of minerals.

The protection of natural environment is one of the fundamental duties of every citizen under Article 51-A of the Constitution of India. Article 48-A of the Constitution, obliged the State to endeavor to protect and improve the environment and to safeguard the forests and wild life of the country. The Environment (Protection) Act and Rules, 1986 were enacted and came into force on 19th November, 1986. The object of this Act is to provide for the protection and improvement of environment and for matters connected therewith. Under provisions of the Act and Rules of 1986, MoEFCC has issued various Notifications regulating the mining of minor minerals, specifically stating the procedures that were required to be complied by persons intending to carry on such mining activity and for the authorities to regulate the same.

Prior to 1994, there was no specific regime in place in relation to mining activity being carried out. The Notification issued by MoEF on 27th January, 1994, in exercise of the powers vested in it under Sub-Rule 3 of Rule 5 of the Rules of 1986 and Sub Section (1) and Clause (v) of Sub-Section (2) of Section 3 of the Act of 1986, prescribed the requirement and procedure for seeking Environmental Clearance for the projects listed in Schedule I. Schedule I of this Notification did not list mining projects of minor minerals. On the contrary, the projects covered under S. No. 20 of Schedule I of this Notification were only "mining projects (major mineral) with leases more than 5 hectares".

It provided for the constitution of Expert Committees and preparation of Environmental Impact Assessment Report which was to be evaluated and assessed by the Impact Assessment Agency. In exercise of its statutory powers afore-indicated, the Central Government on 14th September, 2006,



issued a Notification, i.e., 'Environment Impact Assessment Notification, 2006'. In terms of this Notification, the projects as stated in the Schedule to this Notification required prior Environmental Clearance as per the procedure. The projects have been categorised into two kinds, i.e., Category 'A' and Category 'B' under Clause 2 of the Notification. Projects under Category 'A' were required to take prior Environmental Clearance by MoEFCC. For Category 'B' projects, Environmental Clearance was to be given by State Environment Impact Assessment Authority (SEIAA).

The mining of minerals (both major and minor) were brought under the ambit of the EIA Notification, 2006. The mine lease area of more than equal to 50 ha was Category 'A' and mine lease area less than 50 ha and more than equal to 5 ha was category 'B' project. Mine lease area of less than 5 ha (both major and minor) was kept out of EIA Notification purview.

The Notification of 2006 came to be amended by Notification dated 1st December, 2009. It included the category of non-coal mine and coal mine lease and provided that non-coal mine lease of area more than equal to 5 ha and less than 50 ha will be category 'B' and mine lease area more than equal to 50 ha will be category 'A'. Similarly, mine lease area of more than equal to 5 ha and less than 150 ha for coal mine lease will be category 'B' and mine lease area of coal mine more than 150 ha will be category 'A'. Here again mining lease area of less than 5 ha (both coal and non-coal mine) was kept out of EIA Notification purview.

The Hon'ble Supreme Court, vide its order dated 27.2.2012 in I.A. No.12-13 of 2011 in SLP (C) No.19628-19629 of 2009 titled Deepak Kumar etc. v/s State of Haryana & Ors. has inter alia ordered "*We, in the meanwhile, order that leases of minor mineral including their renewal for an area of less than five hectares be granted by the States/Union Territories only after getting environmental clearance from the MoEF.*"

Hon'ble Apex Court in Deepak Kumar's case (supra) extensively examined the environmental concerns, in the context of mining of minor minerals, considering its impact on the environment. The Apex Court observed that Extraction of alluvial material from within or near a streambed has a direct impact on the stream's physical habitat characteristics. These characteristics include bed elevation, substrate composition and stability, in-stream roughness elements, depth, velocity, turbidity, sediment transport, stream discharge and temperature. Altering these habitat characteristics can have deleterious impacts on both in-stream biota and the associated riparian habitat. The demand for sand continues to increase day by day as building and construction of new infrastructures and expansion of existing ones is continuous thereby placing immense pressure on the supply of the sand resource and hence mining activities are going on legally and illegally without any restrictions. Lack of proper planning and sand management cause disturbance of marine ecosystem and also upset the ability of natural marine processes to replenish the sand. Quarrying, mining and removal of sand from in-stream and upstream of several rivers, which may have serious environmental impact on ephemeral, seasonal and perennial rivers and river beds and sand extraction may have an adverse effect on bio-diversity as well. Further it may also lead to bed degradation and sedimentation having a negative effect on the aquatic life.

Apex Court observed that without conducting any study on the possible environmental impact on/



in the river beds and else- where the auction notices have been issued. Hon'ble Apex Court observed that "We are of the considered view that when we are faced with a situation where extraction of alluvial material within or near a river bed has an impact on the rivers physical habitat characteristics, like river stability, flood risk, environmental degradation, loss of habitat, decline in biodiversity, it is not an answer to say that the extraction is in blocks of less than 5 hectares, separated by 1 kilo meter, because their collective impact may be significant, hence the necessity of a proper environmental assessment plan".

In order to ensure compliance of the aforesaid order of the Hon'ble Supreme Court, MoEF issued an OM No.L-11011/47/2011-IA.II(M) dated 18.05.2012 stating inter alia that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior EC and that the projects of minor minerals with lease area less than 5 ha would be treated as Category "B" as defined in EIA Notification, 2006 and will be considered by the respective State Environment Impact Assessment Authorities (SEIAAs) notified by MoEF and following the procedure prescribed under the EIA Notification, 2006.

On 24th June, 2013, MoEF issued another Office Memorandum stating Guideliness for consideration of proposals for grant of Environmental Clearance under the Notification of 2006 for mining of 'brick earth' and 'ordinary earth' having lease area of less than 5 hectares. Referring to the judgment of the Hon'ble Supreme Court in the case of Deepak Kumar (supra) and its Office Memorandum dated 18th May, 2012, it further considered that the 'brick kiln' manufactures had stated that it was a small scale activity requiring that certain depth should be kept outside the purview of Environmental Clearance. Having considered various aspects, examining the recommendations of the Expert Committee, constituted by MoEF, finally it was directed as follows:

"(a) The activities of borrowing / excavation of 'brick earth' and ordinary earth', upto an area of less than 5 ha, may be categorized under 'B2' Category subject to the following Guideliness in terms of the provisions under '7.I Stage(1)-Screening' of EIA Notification, 2006:

- (i) The activity associated with borrowing/excavation of 'brick earth' and 'ordinary earth' for purpose of brick manufacturing, construction of roads, embankments etc. shall not involve blasting.
- (ii) The borrowing/excavation activity shall be restricted to a maximum depth of 2 m below general ground level at the site.
- (iii) The borrowing/excavation activity shall be restricted to 2 m above the ground water table at the site.
- (iv) The borrowing/excavation activity shall not alter the natural drainage pattern of the area.
- (v) The borrowed/excavated pit shall be restored by the project proponent for useful purpose(s).
- (vi) Appropriate fencing all around the borrowed/excavated pit shall be made to prevent any mishap.



- (vii) Measures shall be taken to prevent dust emission by covering of borrowed/excavated earth during transportation.
 - (viii) Safeguards shall be adopted against health risks on account of breeding of vectors in the water bodies created due to borrowing/excavation of earth.
 - (ix) Workers / labourers shall be provided with facilities for drinking water and sanitation.
 - (x) A berm shall be left from the boundary of adjoining field having a width equal to at least half the depth of proposed excavation.
 - (xi) A minimum distance of 15 m from any civil structure shall be kept from the periphery of any excavation area.
2. (a) The concerned SEIAA while considering granting environmental clearance for such activity for brick earth / ordinary earth will prescribe the Guidelines as stated at (i) to (xi) above and specify that the clearance so granted shall be liable to be cancelled in case of any violation of above Guidelines.
- (b) Notwithstanding what has been stated at (a) above, the following will apply:
- (i) No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing/ excavation is within 1 km of boundary of national parks and wild life sanctuaries.
 - (ii) In case the area of borrowing / excavation is likely to result into a cluster situation i.e. if the periphery of one borrow area is less than 500 m from the periphery of another borrow area and the total borrow area equals or exceeds 5 ha, the activity shall become Category 'B 1' Project under the EIA Notification, 2006. In such a case, mining operations in any of the borrow areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster. This issues with the approval of the Competent Authority."

These directions which were specific only to 'brick earth' and 'ordinary earth' activities for areas less than 5 hectares, as decided to be categorised as 'B 2' Category projects, subject to the restrictions stated in the memorandum, provided that if the cluster area exceeded 5 hectares, then it would become Category 'B 1' and would not be treated as Category 'B 2' projects. The above Office Memorandum was not dealing with the issues of sand mining or any other minor mineral activity except 'brick earth' and 'ordinary earth'. Further, MoEF has issued an amendment to EIA Notification vide Notification S.O. 2731 (E) dated 9th September 2013 and amended the EIA Notification, 2006 for item 1 (a) as follows:



(1)	(2)	(3)	(4)	(5)
"1(a)	(i) Mining of minerals.	≥ 50 ha of mining lease area in respect of non-coal mine lease	<50 ha of mining lease area in respect of minor minerals mine lease ; and < 50 ha ≥5 ha of mining lease area in respect of other non-coal mine lease.	General Conditions shall apply except for project or activity of less than 5 ha of mining lease area for minor minerals: Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 metres from the periphery of such project or activity equals or exceeds 5 ha.
		>150 ha of mining lease area in respect of coal mine lease.	≤ 150 ha ≥ 5 ha of mining lease area in respect of coal mine lease.	(i) Prior environmental clearance is required at the stage of renewal of mine lease for which an application shall be made up to two years prior to the date due for renewal. Further, a period of two years with effect from the 4th April, 2011 is provided for obtaining environmental clearance for all those mine leases, which were operating as



(1)	(2)	(3)	(4)	(5)
	(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas.	All projects.		<p>on the 4th April, 2011 with requisite valid environmental clearance and which have fallen due for renewal on or after the 4th November, 2011:</p> <p>Provided that no fresh environmental clearance shall be required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under this notification.</p> <p>(ii) Mineral prospecting is exempted.</p>



In this Notification a new category of minor mineral was introduced and it was provided that mining lease area of minor mineral less than 50 ha will be category 'B' and will require EC. Accordingly the minor mineral mining projects having less than 5 hectare of lease area are required to be appraised by the SEIAA/SEAC of respective State for granting environment clearance. It was provided that the project or activity of less than 5 ha of mining lease area for minor minerals will be exempt from the General Conditions. Simultaneously the concept of cluster was introduced and it was provided that the exemption of applicability of General Conditions shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded EC and are located within 500 m from the periphery of such project or activity equal or exceeds 5 ha.

The Ministry, on 24th December, 2013, issued another Office Memorandum for consideration of proposals for grant of Environmental Clearance regarding categorisation of Category 'B' projects into Category 'B (1)' and 'B (2)'. Mining of minor minerals had been separately dealt with in this Office Memorandum. This Office Memorandum stated that no river sand mining project with mining lease area of less than 5 hectares may be considered for grant of Environmental Clearance. Such area up to 25 hectares would be categorised as 'B (2)' and such projects were to be considered, subject to the stipulations stated therein. This Office Memorandum stated that no Environmental Clearance would be granted for extraction of minor minerals from any riverbed where the area is less than 5 hectares. Sand mining, in area other than riverbeds, would be permitted, only if the Project Proponent takes Environmental Clearance.

The Ministry vide Notification No. S.O. 1599 (E) dated 25.06.2014 reduced the area of 10 kilo meter to 5 kilo meters for applicability of General Conditions increasing the delegation to States by taking out projects located in 5 to 10 kilo meter of interstate boundary, CEPI, and, PAs from category 'A'.

The anomaly created by the Notification dated 09.09.2013 was corrected vide Notification No. S.O. 2601 (E) dated 7th October 2014, and category of minor mineral was deleted and mining leases were again classed as non-coal mine and coal mine and mining lease area of less than 50 ha was made category 'B' for non-coal mine and mine lease area of less than equal to 150 ha for coal mine was made category 'B'. The mine lease area of less than 5 ha was exempt from the applicability of General Conditions and cluster concept of Notification dated 09.09.2013 was retained.



Notification S.O. 2601 (E) dated 7th October 2014 provides as follows:

(1)	(2)	(3)	(4)	(5)
"1(a)	<p>(i) Mining of minerals.</p> <p>(ii) Slurry pipelines (coal lignite and other ores) passing through national parks or sanctuaries or coral reefs, ecologically sensitive areas</p>	<p>≥ 50 ha of mining lease area in respect of non-coal mine lease.</p> <p>>150 ha of mining lease area in respect of coal mine lease.</p> <p>Asbestos mining irrespective of mining area.</p> <p>All projects.</p>	<p><50 ha of mining lease area in respect of non-coal mine lease.</p> <p>≤ 150 ha of mining lease area in respect of coal mine lease.</p>	<p>General Conditions shall apply except for project or activity of less than 5 ha of mining lease area:</p> <p>Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 metres from the periphery of such project or activity equals or exceeds 5 ha.</p> <p>Note:</p> <p>(i) Prior environmental clearance is required at the stage of renewal of mine lease for which an application shall be made up to two years prior to the date due for renewal.</p> <p>Provided that no fresh environmental clearance shall be required for a mining project or activity at the time of renewal of mining lease, which has already obtained environmental clearance under this notification.</p> <p>(ii) Mineral prospecting is exempted."</p>



The NGT vide order dated 13.01.2015 (O.A. No. 123 of 2014 and M.A. No. 419 of 2014) has declared the Notification dated 09.09.2013 as invalid, inoperative and quashed it. The above order has also quashed the paragraph 4 (b) (i) of O.M. dated 24th June 2013 which provided that "No borrowing of earth / excavation of 'brick earth' or 'ordinary earth' shall be permitted in case the area of borrowing / excavation is within 1 km of boundary of national parks and wild life sanctuary." Though this provision was taken from the observation of Hon'ble Supreme Court in W.P. No. 435 of 2012 (Goa Foundation Vs. Union of India) and order dated 04.08.2006 of Supreme Court in *T.N. Godavarman Thirumulpad v. Union of India & Ors.* Supreme Court has taken a view that 1 km. from the boundaries of National Parks and Sanctuaries would be a safety zone, subject to the orders that may be made in IA No.1000 regarding Jamua Ramgarh Sanctuary and the State will not grant any Temporary Working Permit (TWP) in these safety zones comprising 1 km. from the boundaries of National Parks and Sanctuaries.

Similarly the proviso at paragraph 2 (iii) of O.M. dated 24.12.2013 which says that "No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC" has been quashed. This condition was taken from the recommendations of the Committee headed by the Secretary, MoEF constituted in 2010. The above proviso were quashed on the ground that as EIA Notification places no such restriction, so same cannot be imposed by an executive order and many hill States find it very difficult to get an area equal to or more than 5 ha. in riverbed. The information made available by the States also makes it clear that majority of the mining leases of sand are of area less than 5 hectares.



THE ISSUES AND MANAGEMENT OF MINING IN CLUSTER

In I.A. No. 12-13 of 2011 in SLP Nos. 729-731 / 2011, 21833 / 2009, 12498-499 / 2010, SLP (C) CC ... 16157 / 2011 & CC 18235 / 2011 (Deepak Kumar and Ors. Vs. State of Haryana and Ors. etc.) Hon'ble Supreme Court in its order dated 27.02.2012 on the subject of cluster has quoted the submission of affidavit dated 23.11.2011 of MOEFCC. It says that "The Ministry is of the opinion that where the mining area is homogeneous, physically proximate and on identifiable piece of land of 5 ha. or more, it should not be broken into smaller sizes to circumvent the EIA Notification, 2006 as the EIA Notification, 2006 is not applicable to the mining projects having lease area of less than 5 ha. The Report of Committee on Minor Minerals, under the Chairmanship of Secretary (E&F) with representatives of various state governments as members including the State of Haryana and Rajasthan recommended a minimum lease size of 5 ha for minor minerals for undertaking scientific mining for the purpose of integrating and addressing environmental concerns. Only in cases of isolated discontinued mineral deposits in less than 5 ha, such mining leases may be considered keeping in view the mineral conservation".

The order further quotes that "Cluster of Mine Approach for Small Sized Mines: Considering the nature of occurrence of minor mineral, economic condition of the lessee and the likely difficulties to be faced by Regulatory Authorities in monitoring the environmental impacts and implementation of necessary mitigation measures, it may be desirable to adopt cluster approach in case of smaller mine leases being operated presently. Further these clusters need be provided with processing / crusher zones for forward integration and minimizing excessive pressure on road infrastructure. The respective State Governments / Mine Owners Association may facilitate implementation of Environment Management Plans in such cluster of mines." The order has further quoted the letter dated 1.06.2010 written by the then Minister of Environment, Forest and Climate Change which says on the subject that "A cluster approach to mines should be taken in case of smaller mines leases operating currently". The Hon'ble Court has ordered that "The State of Haryana and various other States have not so far implemented the above recommendations of the MoEF or the Guidelines issued by the Ministry of Mines before issuing auction notices granting short term permits by way of auction of minor mineral boulders gravel, sand etc., in the river beds and elsewhere of less than 5 hectares. We therefore, direct to all the States, Union Territories, MoEF and the Ministry of Mines to give effect to the recommendations made by MoEF in its report of March 2010 and the model Guidelines framed by the Ministry of Mines, within a period of six months from today and submit their compliance reports."

"We in the meanwhile, order that leases of minor mineral including their renewal for an area of less than five hectares be granted by the States/ Union Territories only after getting environmental clearance from the MoEF."



The Ministry vide O.M. No. L-11011/47/2011-IA.II (M) dated 18th May 2012 said that "In order to ensure compliance of the above referred order of the Hon'ble Supreme Court dated 27.02.2012, it has now been decided that all mining projects of minor minerals including their renewal, irrespective of the size of the lease would henceforth require prior environment clearance. Mining projects with lease area up to less than 50 ha including projects of minor mineral with lease area less than 5 ha would be treated as Category 'B' as defined in EIA Notification, 2006 and will be considered by the respective SEIAAs notified by MoEF and following the procedure prescribed under EIA Notification, 2006."

On the issue of cluster, the Notifications No. S.O. 2731 (E) dated 09.09.2013 and Notification No. S.O. No. 2601 (E) of 07.10.2014 were issued.

The above Notifications in Schedule at Item No. 1 (a) in Conditions mentions that "General Conditions shall apply except for projects or activity of less than 5 ha of mining lease area:

Provided that the above exception shall not apply for project or activity if the sum total of the mining lease area of the said project or activity and that of existing operating mines and mining projects which were accorded environment clearance and are located within 500 meters from the periphery of such projects or activity equals or exceeds 5 ha. The Office Memorandum No. J-13012/12/2013-IA-II (1) dated 24.12.2013 is about Guideliness for consideration of proposals for grant of environment clearance under Environment Impact Assessment Notification 2006 and its amendments - regarding categorization of Category 'B' projects/ activities into Category 'B1' & 'B2'.

The above O.M. besides categorizing the Category B into Category B1 & B2 also has directions on mining of brick earth / ordinary earth and river sand mining. These provisions are as follows:

"Mining of minor minerals:

As of now, mining projects of minor minerals with less than 50 hectare of mining lease areas are categorized as Category 'B' as per Notification S.O. 2731 (E) dated 9th September 2013. Also vide O.M. No. L-11011/47/2011-IA-II (M) dated 24.06.2013, Guideliness has been issued regarding categorization of mining projects of brick earth and ordinary earth having lease areas less than 5 hectare as Category 'B2' subject to stipulations stated therein.

In the above backdrop, the projects of mining of minor minerals, categorized as Category 'B' are hereby categorized as 'B2' as per the following:

- (i) 'Brick Earth' / 'Ordinary Earth' mining projects having lease area less than 5 ha will be considered for granting EC as per the aforesaid Guideliness issued by MOEF on 24.06.2013.
- (ii) 'Brick Earth' / 'Ordinary Earth' mining projects with mining lease area more than equal to 5 ha but less than equal to 25 ha and all other minor , mineral mining projects with mining lease area < 25 ha, except for river sand mining projects will be appraised as Category 'B2' projects.



These projects will be appraised based on the following documents:

- (a) Form-1 as per the Appendix-I under the EIA Notification 2006
- (b) Pre-feasibility report of the project
- (c) Mining plan approved by the authorized agency of the concerned State Government.

Provided in case the mining lease area is likely to result into a cluster situation, i.e. if the periphery of one lease area is less than 500 meter from the periphery of another lease area and the total lease area equals or exceeds 25 ha, the activity shall become Category 'B1' Project under the EIA

Notification, 2006. In such a case, mining operations in any of the mine lease areas in the cluster will be allowed only if the environmental clearance has been obtained in respect of the cluster.

About river sand mining it says that:

(iii) No river sand mining project, with mine lease area less than 5 ha, may be considered for granting EC. The river sand mining projects with lease area more than equal to 5 ha but less than 25 ha will be categorized as 'B2'. In addition to the requirement of documents, as brought out above under sub-para (ii) above for appraisal, such projects will be considered subject to the following stipulations:

- (a) The mining activity shall be done manually. The depth of mining shall be restricted to 3 m / water level, whichever is less.
- (b) For carrying out mining in proximity to any bridge and / or embankment, appropriate safety zone shall be worked out on case to case basis to the satisfaction of SEAC / SEIAA, taking into account the structural parameters, locational aspects, flow rate etc., and no mining shall be carried out in the safety zone so worked out. No in-stream mining shall be allowed.
- (c) The mining plan approved by the authorized agency of the State Government shall inter-alia include study to show that the annual replenishment of sand in the mining lease area is sufficient to sustain mining operations at levels prescribed in the mining plan and that the transport infrastructure is adequate to transport the mines material. In case of transportation by road the transport vehicles will be covered with the tarpaulin to minimize dust/ sand particle emissions.
- (d) EC will be valid for mine lease period subject to a ceiling of 5 years.

Provided, in case the mining lease area is likely to result into a cluster situation i.e. if the periphery of one lease area is less than 1 km from the periphery of another lease area and total lease area equals to or exceeds 25 ha., the activity shall become Category 'B1' Projects under EIA Notification, 2006. In such a case, mining operation in any of the mine lease area in the cluster will be allowed only if the environment clearance has been obtained in respect of the cluster.



The NGT order dated 13.01.2015 in O.A. No. 123 of 2014 and M.A. No. 419 of 2014 has following directions on the issue of cluster: "In light of the judgment of the Supreme Court and what has emerged from the various cases that are subject matter of this Judgment, we direct the Ministry of Environment and Forest to formulate a uniform cluster policy in consultation with the States for permitting minor mineral mining activity including its regulatory regime, in accordance with law.

Notification S.O. 1559 (E) dated 25th June 2014 provides that "Any project or activity specified in Category 'B' will be appraised at the Central Level as Category 'A', if located in whole or in part within 5 km. from the boundary of: (i) Protected Areas; (ii) CEPI; (iii) ESA; (iv) I n t e r - s t a t e boundaries or international boundaries".

The NGT vide its order dated 13.01.2015 has quashed the Notification dated 9th September 2013, but similar provision on clusters exists in Notification dated 7th October 2014.

The EIA Notification 2006, as amended makes it clear that projects in respect of non-coal mine leases, where the area is more than equal to 50 hectares would require prior Environmental Clearance from MoEFCC, while the projects of area less than 50 hectares would be appraised for prior Environmental Clearance at the level of SEIAA.

The EIA Notification of 2006 in Clause 7 specifies the stages through which projects for grant of Environmental Clearance are required to be passed and processed. The stages include Screening, Scoping, Public Consultation and Appraisal, upon which, the Expert Appraisal Committee makes recommendation to the MoEF/SEIAA. Under 'Screening', this Clause 7 also provides for a further bifurcation of projects falling under category 'B' into 'B 1' and 'B 2'. The relevant part of Clause 7, dealing with this aspect, reads as under: "Stage (1) - Screening (Only for Category 'B' projects and activities): 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 'B1' 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 Guideliness from time to time."

The Ministry on 24th December, 2013, issued Office Memorandum for consideration of proposals for grant of Environmental Clearance regarding categorisation of Category 'B' projects into Category 'B1' and 'B2'. Mining of minor minerals had been separately dealt with in this Office Memorandum. Such area up to 25 hectares would be categorised as 'B 2' and such projects were to be considered, subject to the stipulations stated therein.



The EIA Notification, 2006 does not provide for issuance of Environment Clearance to Cluster of mines. It provides for EC to individual lease holders / project proponents. This position has also been upheld by the Hon'ble Supreme Court in its judgment of Vivek Bansal Vs. State of Haryana that EC should be applied for and granted to the individual lease holder.

There has been rising concerns about adverse impact of mining on small leases (less than 5 hectare) in case the numbers of such leases are large and they are located in close proximity to each other. This leads to the definition of Cluster. To avoid the rigors of environment impact assessment studies, environment management plan and the environment clearance there has been a tendency to break the leases into size which does not attract the provisions of environment impact assessment studies, environment management plan, public consultation and the environment clearance. In Deepak Kumar's case Hon'ble Supreme Court also encountered this situation and in its order dated 27.02.2012 mandated that no mining lease or renewal be done without environment clearance irrespective of size.

It is seen that the categorization of mines into 'B1' and 'B2' category in which Category 'B2' leases are being exempted from the requirement of Environment Impact Assessment, Environment Management Plan, and Public Consultation for grant of EC, in many cases now the mining leases are being given for 25 hectares or less. This defeats the purpose and intent of Hon'ble Supreme Court Judgment which orders environment clearance for all mining leases irrespective of size. The environment clearance without Environment Impact Assessment, Environment Management Plan, and Public Consultation does not serve the purpose of environment clearance which is to ensure environmentally sustainable and socially responsible mining. So if a cluster or individual lease size exceeds 5 hectare, the EIA/ EMP should be completed in the process of grant of prior environment clearance.

The EIA Notification, 2006 and subsequent amendments to that or any O.M. issued by the Ministry do not provide for procedures and Competent Authority for environment clearance for cluster. In a cluster there will mostly be situation where there are a number of different lease holders and as per the settled law the lease holder has to do the working of mine and the lease holder is the one who can apply for and get the environment clearance. The conditions stipulated in the environment clearance have to be complied by the EC holder and any violation of that empowers the authority to cancel the environment clearance or prosecute the EC holder if necessitated by the circumstances.

For cluster there is no mechanism about who will apply for EC, EC will be issued in whose name, and who will be responsible for compliance of EC conditions.

The intent of cluster assessment is to have a holistic knowledge of the impact on environment by different mines operating in close proximity of each other. There are also requirement of mitigative measures which need implementation in concerted manner by different EC holders of that cluster. To ensure that it is important that there should be an integrated Environment Impact Assessment /



Environment Management Plan for the cluster to be presented before the authority appraising the projects and considering the proposals for grant of EC. This integrated EIA/ EMP can be prepared by either the lease holder, group of lease holders, State or the State Agencies. This EIA/ EMP need to be prepared by the accredited consultants / Registered Qualified Persons of the State Governments. The application for EC and grant of EC should be done in the name of individual lease holders in the background of the integrated EIA/EMP report. The Competent Authority (SEIAA/ SEAC / EAC) will entertain individual lease holder's application for grant of EC to individual mining lease projects in that cluster in the name of lease holders. The conditions related to mitigative measures necessitated by the integrated EIA/EMP may run across more than one lease holder or EC holders, that should figure in each EC accordingly and its compliance be ensured by the individual EC holders.

The Hon'ble Supreme Court, NGT, SEAC/EAC and the Project Proponents have raised issue of cluster in mine lease allotment and environment clearance for the same, so following conditions need to be ensured for cluster of mines:

1. To address the concern of adverse impact of minor mineral mining on environment it is proposed that all mining activity including river sand mining (above 5 hectare individual or cluster) will need to prepare Environment Impact Assessment Report - and Environment Management Plan before grant of environment clearance. These reports (EIA /EMP) can be prepared by the State or State nominated Agency / the Project Proponent (s).
2. As can be seen from the data provided by the States most of the mining leases for minor minerals are of lease area less than 5 hectare. It is also reported that in hill states getting a stretch in river with area more than 5 hectare is very uncommon. So the size of lease for minor minerals including river sand mining will be determined by the States as per their circumstances.
3. The EIA Notification, 2006 does not provide for cluster EC, it provides for issuance of EC to individual project proponents and the same has also been upheld in the judgment of Hon'ble Supreme Court in Vijay Bansal vs. State of Haryana case. So EC will have to be applied for and issued to the individual project proponent.
4. A cluster shall be formed when the distance between the peripheries of one lease is less than 500 meters from the periphery of other lease in a homogeneous mineral area.
5. The mining of minor minerals is mostly in clusters. The Environment Impact Assessment or Environment Management Plan are required to be prepared for the entire cluster in order to capture all the possible externalities. These reports shall capture carrying capacity of the cluster, transportation and related issues, replenishment and recharge issues, geo-hydrological study of the cluster area. The Environment Impact Assessment or Environment Management Plan shall be prepared by the State or State nominated Agency or group of project proponents



in the Cluster or the project proponent in the cluster.

6. The individual lease holders in cluster can use the same Environment Impact Assessment or Environment Management Plan for application for environmental clearance. The cluster Environment Impact Assessment or Environment Management Plan shall be updated as per need keeping in view any significant change.
7. There shall be one public consultation for entire cluster after which the final Environment Impact Assessment or Environment Management Plan report for the cluster shall be prepared.
8. The details of cluster Environment Impact Assessment or Environment Management Plan shall be reflected in each environmental clearance in that cluster and District Expert Appraisal Committee (DEAC), SEAC, and EAC shall ensure that the mitigative measures emanating from the Environment Impact Assessment or Environment Management Plan study are fully reflected as environmental clearance conditions in the environmental clearance's of individual project proponents in that cluster.
9. As the sand is mostly mined from rivers and majority of the rivers which are important source of sand also form boundary between States, so because of General Conditions most of the sand mining projects become Category 'A' project. So the General Conditions will not apply in case of river sand and gravel mining projects on account of being in 5 kilometer of inter-state boundary.
10. The Committee headed by the District Magistrate or District Collector will be empowered to appraise and grant EC for mining leases up to 5 ha in case of individual lease and up to 25ha in case of cluster for sand mining.
11. In case the mining leases are in cluster (if periphery of one lease is within 500 meters), following are the categorization of projects:-
 - Category 'B2'Project: Cluster area of mine leases up to 5 ha and to be dealt at DEIAA/ DEAC level
 - Category 'B2'Project: Cluster area of Mine leases > 5 ha and < 25 ha with no individual lease > 5 ha and to be dealt at DEIAA/DEAC level
 - Category 'B1'Project: Cluster of mine leases of area > 25 hectares with individual lease size < 50ha and to be dealt at SEIAA/SEAC level
 - Category 'A' Project: Cluster of any size with any of the individual lease >50ha and to be dealt at MoEFCC/EAC level



The schematic presentation of requirements on Environmental Clearance of Sand Mining including cluster situation is detailed as below:-

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
EC Proposal of Sand Mining in cluster situation								
Cluster area of mine leases up to 5 ha	'B2'	Form-1M, 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	
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MANAGEMENT OF SAND DEPOSITED AFTER FLOOD ON AGRICULTURAL FIELD OF FARMERS

The Standing Committee on Water Resources on issues, concerning flood management, compensation, and status of ownership of submerged and eroded land in the country including compensation to farmers for loss of their crops destroyed by floods and right to disposal of the sand left in the fields of farmers in its meeting held on 29.04.2015 made observations on this subject.

The Committee observed that pursuant to Hon'ble Supreme Court of India decision in "Deepak Kumar Case" in 2012, regulations were framed by the Ministry of Mines to guide environmental clearance of minor minerals. . . . The Committee, therefore, desires the Ministry of Water Resources, River Development and Ganga Rejuvenation to work in close coordination with the Ministry of Mines and Environment, Forest and Climate Change to frame regulations / Guidelines in this regard expeditiously.

Mining of Sand

The Committee further observed that due to the floods, the agricultural land of farmer is destroyed and rendered infertile. Further the farmer loses his livelihood as the produce of his land is destroyed by flood and become unsalable. The farmer is also deprived of the right of lifting sand from his land. He is therefore, left helpless and destitute and leave their land in search of job.

The Committee observes that "mining operation" means any operation undertaken for the purpose of winning any mineral. Accordingly, if desilting is undertaken perse with the objective of winning a mineral then only it will be construed as a mining operation. Apparently, if the desilting is undertaken not for winning any mineral, it will not be construed as mining operation and therefore, the farmer can remove the sand from the land without requiring the requisite permits. However, the Committee strongly feels that the farmer be given the right to use and dispose-off the sand accumulated over their land post flood, by incorporating the necessary provisions in the Mines and Mineral (Development and Regulation) Act, 1957".

Removal of sand from the agricultural field by the owner farmer of the land from environment point of view will not be considered as mining operation and its removal and disposal can be allowed without the requirement of environment clearance till it is done only to the extent of reclaiming the agricultural land. The sand deposited after flood only be removed, so no mining / digging below the ground level is allowed. For removing sand in case where private land has gone into the river due to erosion, the requirement of mining lease and environment clearance will continue. This operation



of removal of sand deposited on agricultural field should be done after a mapping of deposition is done by the Land Management Committee of the Gram Panchayat. The sand so deposited post flood can be removed by the farmer owning the land / group of farmers affected by this post flood sand deposition or the Gram Panchayat. Customary rights to remove and dispose off the sand should be given to the farmer affected by deposition of sand on account of sudden flood in his agricultural land.



MINING OF SAND FROM AGRICULTURAL FIELD

This practice is prevalent in Haryana, where the top layer of soil varying between 1 and 2 meters is removed and stacked separately and thereafter the sand deposit which may be 10-15 meter deep is mined. After removing the sand layer up to a maximum depth of 09 meters, the top soil stacked is spread out on the field and the same is brought under the cultivation. Though the level of this land (mined out area) is lowered to the depth of the excavation and in initial years of cultivation the productivity is low, but the productivity of the fields improves with continued cultivation and addition of organic manure in the field. In Haryana some leases are of large area (ranging from 1000 hectare to 2000 hectare) the agricultural fields and river bed both are included in the same lease for mining.

The following recommendations should be kept in mind for mining in such leases:

1. Mining of sand in such mine leases will require environment clearance.
2. The lease should be of sand mining either from the agricultural field or river. In same lease both type of area should not be included.
3. The sand mining from agricultural field is being done in Haryana for a long time and it can be done in a more sustainable manner without adverse impact on agricultural productivity, if proper environmental safeguards are taken.
4. The slope of mining area adjacent to agricultural fields should be proper (preferably 45-60 degree) and adequate gap (minimum 10 feet) be left from adjacent agricultural field to avoid erosion and scouring.

CUSTOMARY RIGHT ON SAND MINING

The native people have their long held customary rights to take silt, sand & soil from their tanks and nearby rivers for their use or community works in the village in almost all the States in some form or the other.

Next to the reserved forests, tanks and rivers are the biggest common properties in India. Most of the village tanks are 'government properties' with some exceptions of privately held tanks. Land revenue department, irrigation department and forest department is given powers to deal with property right' and hence protecting all tanks and rivers preventing damages including encroachments is their responsibility. The local villagers were given 'customary rights' under the Revenue Department Orders, and other laws related to Panchayats and Easements to take sand, soil and earth for agricultural and domestic purposes without seeking any permission from anyone. The States strive to keep these customary rights to use such resources like soil and sand for individuals work and community work in the village intact without requirement of any permit and clearance. These customary rights need to be protected and respected.



DESILTING OF RESERVOIRS / BARRAGES / ANNECUTS / LAKES / CANALS

These structures are generally in possession and maintenance of Irrigation Department / Minor Irrigation Department / PHED of State Governments. The dams and reservoirs can be a significant source of sand. Many such structures are silted and their water holding capacity has gone down considerably. In some instances to compensate for silted capacity raising of height of dam or construction of new structures is proposed which further leads to submergence of new areas of agricultural field and forests. Taking up desilting of such projects can serve dual purpose of increasing the water holding capacity and making available the sand for other usage. In some States the Irrigation Department is permitted to use it for the departmental works free of charge and balance can be disposed of in market after paying the due royalty. A detailed study is required to be carried out to verify economic viability and environmental sustainability before contemplating dredging of storage reservoirs for sand / gravel mining.

The de-silting of reservoir, dredging for upkeep and maintenance of structures, channels and averting natural disasters will not be treated as mining for the purpose of environmental clearance.

The Ministry of Water Resources (MoWR) view on desiltation from flood control point of view is as follows:

A multidisciplinary Committee (Mittal Committee) under the chairmanship of Dr. B.K. Mittal, former Chairman, Central Water Commission was constituted by MoWR, vide letter dated 08.10.2001 to identify cause and extent of siltations in rivers, suggest measures to minimize siltation, examine as to whether desilting is a technically feasible means to minimize magnitude of flood in rivers, suggest appropriate technology/ methods of desilting of rivers, propose a realistic operational programme in a time bound manner and other related aspects. The committee studied in respect of few sites on Ganga, Brahmaputra, Godavari, Krishna etc., and inter-alia concluded that:

- i) Siltation in river is not pronounced and alarming;
- ii) Desilting of rivers for flood control is not an economically viable solution;
- iii) Dredging in general has been found to be inadequate and should not be resorted to, particularly in major rivers;
- iv) There are, of course, some locations such as tidal rivers, confluence points with narrow constrictions and the like which can be tackled by desilting after thorough examination and techno-economic justification;
- v) Selective dredging is suggested depending upon local conditions; and
- vi) Desilting of rivers can marginally minimize the magnitude of floods and be effective only for a short period.

Thus, desilting in general is not feasible technically, due to several reasons like non-sustainability, non-availability of vast land required for disposal of dredged material etc. This cannot be viewed in isolation of other approaches to manage floods. Desilting of rivers in vulnerable reaches may be suggested based on model study, if it is found techno-economically viable. For navigation purposes, the river reaches in the water ways path may be dredged to have minimum depth of water.



MINING PLAN

The Environment Clearance shall be given to only those mining leases which have mine plan approved by the Competent Authority designated by the States. Modification of the mining plan during operation will also need approval of the Competent Authority. The Mining Plan shall be prepared by the Recognised Qualified Persons (RQP). The person to be recognized for preparing the mining plan should be a holding a degree of Mining Engineering, Environmental Engineering or a post graduate degree in Geology granted by a University established or incorporated by or under a Central Act or a State Act including any institutions recognized by the UGC or any equivalent qualification granted by any University or institution outside India and have a professional experience of three years of working in a supervisory capacity in the field of mining after obtaining a degree. The States will devise their own mechanism of selection and empanelment of RQPs. A mining plan should be valid for a period of 5 years, which can be renewed further.

EVALUATING THE IMPACT OF SAND MINING

To assess the impact of mining and effect of remedial measures can be assessed through monitoring. This is also required for mid-course corrections. Monitoring will provide data to evaluate the upstream and downstream effects of sand and gravel extraction activities, and long-term changes. A brief report summarizing the annual results of the physical and biological monitoring should document the evolution of the sites over time, and the cumulative effects of sand and gravel extraction. The summary should also recommend any modification of extraction rates needed to minimize impacts of extraction.

Sand Replenishment, Geomorphology and Hydrology:

Physical monitoring requirements of sand and gravel extraction activities should include surveyed channel cross-sections, longitudinal profiles, bed material measurements, geomorphic maps, and discharge and sediment transport measurements. The physical data will illustrate bar replenishment and any changes in channel morphology, bank erosion, or particle size.

In addition to local monitoring for replenishment at specific mining sites, monitoring of the entire reach through the estuary will provide information on the cumulative response of the system to sand and gravel extraction. For example, it is important for downstream bars and the estuary to receive sufficient sand and gravel to maintain estuarine structure and function. Because the elevation of the bed of the channel is variable from year to year, a reach-based approach to monitoring will provide a larger context for site-specific changes. If long-term monitoring data show that there is a reach-scale trend of bed lowering (on bars or in the thalweg), the extraction could be limited.

Cross-sections:

Surveyed channel cross-sections should be located at permanently documented sites upstream, downstream and within the extraction area. Cross-sections intended to show reach- scale changes



should be consistently located over geomorphic features such as at the head of riffles, across the deepest part of pools, or across particular types of channel bars.

Cross-section spacing should be close enough to define the morphology of the river channel. Cross-section data should be surveyed in March or April to evaluate changes that may occur during the flooding season.

Cross-section data should be collected over the reach to the estuary, and locally upstream, downstream, and within each mining site. This long-term monitoring data should be collected and analyzed even if no mining occurs in order to understand and estimate the sand budget of the river reach.

Photo-documentation:

Photographs of the project sites should be taken prior to excavation to document the baseline conditions, and again during each monitoring session. Photos should be taken twice a year. Photos of structures nearby like outfalls / off-takes, intakes, bridges and other structures may also be regularly taken.

Groundwater Level:

Monitoring wells should be established adjacent to each off-channel floodplain excavation to record changes in ground water levels. Measurements should be taken monthly. This should help analyse surface water and ground water interaction along the reach.

Extent and Quality of Riparian Vegetation:

Document the extent and quality of riparian vegetation, including successional status, and any increase in disturbance indicators (non-native plants). The extent of riparian habitat can be determined utilising aerial photos. Habitat quality data, i.e., successional status and species composition, must be determined through field reconnaissance.

Riparian Vegetation Maps:

Develop yearly maps of the sensitive habitat areas and document their aerial extent over time. These maps may be combined with the geomorphic maps. Monitor sites identified as sensitive for disturbance in excess of expected geomorphic trends - i.e., massive bank wasting up or downstream from an active mine site. Monitor sand and gravel mining impacts which may translate up and downstream, causing accelerated erosion of sensitive zones and impacting the ability of new habitat to form due to excessive scour or sedimentation.

This monitoring / documentation should be done by the EC holders and will be regularly checked and assessed by the DEIAA for corrective steps in time. The DEIAA should review the status of monitoring and documentation data of each mining site especially for sand mining once in a year.



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

The implementation of these Guidelines on Sustainable Sand Mining is not possible till States create a robust mechanism to monitor the mining operation and measure the mined out mineral. The entire exercise of Environment Impact Assessment and Environment Management Plan aims towards making the mining process environmentally sustainable. The Environment Clearance letter indicates the EC capacity that is the quantity of material which can be mined in a year. If this quantity is not measured, and much more mineral than envisaged in the EC is mined out then the entire process of EC is rendered futile. Keeping above objective in mind it is required of the State / State Agencies to create and establish a robust system to monitor and measure the mined out mineral at each lease location and its transportation in State.

The State Governments have tried various methods for monitoring the sand mining in their areas, the main feature of which generally has been through Transport Permits (T.P.). The printing of Transport Permits on security paper, invisible ink mark, fugitive ink background, VOID pantograph and Unique Barcode are some of the tools used by the States. These tools need to be backed by suitable software and dedicated websites with security certifications at different levels.

The system proposed is that States should issue Transport Permit. Bar code on the T.P. when scanned using the system, will generate a unique invoice number. The bidder has to enter destination, distance between plot and destination, vehicle number etc in the system. After scanning, unique bar code number; invoice date & time and validity date & time is sent to the bidder, which need to be written on T.P. Validity of T.P. is calculated based on distance between plot and destination. After validity time is over the T.P. stands invalid. The officers involved in monitoring should be provided with the android application using which the T.P. can be checked anywhere on road. As soon as the bar code on T.P. gets scanned through using android application, all details of T.P. such as plot details, vehicle details, validity time etc. should get fetched from server. This means, if anything is re-written on T.P. and attempt is made to reuse the same, it can be traced immediately. Registering of T.P. on server can be done using website, using android application (smartphone with internet) or even through SMS (smartphone without internet). This implies that TP can be registered on server even if only mobile phone range is available on plot. Various reports can be generated using the system showing daily lifting reports and user performance report. This way the vehicles carrying sand can be tracked from source to destination.



MONITORING SYSTEM FOR SUSTAINABLE SAND MINING

PROCEDURE FOR MONITORING OF SAND MINING OR RIVER BED MINING

- 1. The security feature of Transport Permit shall be as under:**
 - (a) Printed on Indian Banks' Association (IBA) approved Magnetic Ink Character Recognition (MICR) Code paper.
 - (b) Unique Barcode.
 - (c) Unique Quick Response (QR) code.
 - (d) Fugitive Ink Background.
 - (e) Invisible Ink Mark.
 - (f) Void Pantograph.
 - (g) Watermark.

- 2. Requirement at Mine Lease Site:**
 - (a) Small Size Plot (Up to 5 hectare): Android Based Smart Phone.
 - (b) Large Size Plots (More than 5 hectare): CCTV camera, Personal Computer (PC), Internet Connection, Power Back up.
 - (c) Access control of mine lease site.
 - (d) Arrangement for weight or approximation of weight of mined out mineral on basis of volume of the trailer of vehicle used.

- 3. Scanning of Transport Permit or Receipt and Uploading on Server:**
 - (a) Website: Scanning of receipt on mining site can be done through barcode scanner and computer using the software;
 - (b) Android Application: Scanning on mining site can be done using Android Application using smart phone. It will require internet availability on SIM card;
 - (c) SMS: Transport Permit or Receipt shall be uploaded on server even by sending SMS through mobile. Once Transport Permit or Receipt get uploaded, an unique invoice code gets generated with its validity period.



4. **Proposed working of the system:**

The State Mining Department should print the Transport Permit or Receipt with security features enumerated at Paragraph 1 above and issue them to the mine lease holder through the District Collector. Once these Transport Permits or Receipts are issued, they would be uploaded on the server against that mine lease area. Each receipt should be preferably with pre-fixed quantity, so the total quantity gets determined for the receipts issued.

When the Transport Permit or Receipt barcode gets scanned and invoice is generated, that particular barcode gets used and its validity time is recorded on the server. So all the details of transporting of mined out material can be captured on the server and the Transport Permit or Receipt cannot be reused.

5. **Checking On Route:**

The staff deployed for the purpose of checking of vehicles carrying mined mineral should be in a position to check the validity of Transport Permit or Receipt by scanning them using website, Android Application and SMS.

6. **Breakdown of Vehicle:**

In case the Vehicle breakdown, the validity of Transport Permit or Receipt shall be extended by sending SMS by driver in specific format to report breakdown of vehicle. The server will register this information and register the breakdown. The State can also establish a call centre, which can register breakdowns of such vehicles and extend the validity period. The subsequent restart of the vehicle also should be similarly reported to the server or call centre.

7. **Tracking of Vehicles:**

The route of vehicle from source to destination can be tracked through the system using check points, RFID Tags, and GPS tracking.

8. **Alerts or Report Generation and Action Review:**

The system will enable the authorities to develop periodic report on different parameters like daily lifting report, vehicle log or history, lifting against allocation, and total lifting. The system can be used to generate auto mails or SMS. This will enable the District Collector or District Magistrate to get all the relevant details and shall enable the authority to block the scanning facility of any site found to be indulged in irregularity. Whenever any authority intercepts any vehicle transporting illegal sand, it shall get registered on the server and shall be mandatory for the officer to fill in the report on action taken. Every intercepted vehicle shall be tracked.

The monitoring of mined out mineral, environmental clearance conditions and enforcement of Environment Management Plan will be ensured by the DEIAA, SEIAA and the State Pollution Control Board or Committee. The monitoring arrangements envisaged above shall be put in place. The monitoring of enforcement of environmental clearance conditions shall be done by the Central Pollution Control Board, Ministry of Environment, Forest and Climate Change and the agency nominated by the Ministry for the purpose.



ADMINISTRATIVE STRUCTURE FOR ENVIRONMENT CLEARANCE AND ENSURING COMPLIANCE OF EC CONDITIONS

An no mining in allowed without Envirnomental Clearance. The process of EC involves preparation of EIA/EMP, PER and mine plan.

The EIA/EMP can be prepared by the State Government or any agency of the State, group of project proponents in the cluster or the individual project proponent. The EIA / EMP can be prepared by the accredited consultants or the Registered Qualified Person(s) / agencies selected by the States.

DISTRICT ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

The Central Government has constituted the District Level Environment Impact Assessment Authority (DEIAA), for grant of environmental clearance for Category 'B2' Projects for mining of minor minerals, for all the districts in the country.

For, minor minerals including sand and gravel mining lease of area up to 5 hectare in case of individual lease and up to 25 ha in case of cluster for sand mining, the grant of EC will be done by the District Environment Impact Assessment Authority (DEIAA) headed by the District Magistrate or District Collector. This Authority will be responsible for proper and sustainable management of sand mining in the district. The Authority will be responsible for designating the area / stretch in river suitable for mining in the district and also identifying the area / stretch in river prohibited for sand mining. The Authority will ensure clear demarcation of mining site, its documentation, and ensuring that no mining takes place without EIA / EMP and EC of the mining site.

The Chairperson and official members of the Authority for the districts should hold office during their tenure in the district on said posts and the expert member shall hold office for a period of three years from the date of nomination by the Competent Authority. The Committee shall meet at least once in a month.

The District Environment Impact Assessment Authority (DEIAA) :

The DEIAA will have following composition :

- | | | |
|----|--|------------------|
| 1. | District Magistrate or District Collector of the district | Chairperson |
| 2. | Senior most Divisional Forest Officer in the district | Member |
| 3. | An expert member to be nominated by the Divisional Commissioner or Chief Conservator of the Forest | Member |
| 4. | Sub-Divisional Magistrate or Sub-Divisional Officer of the district head quarter | Member-Secretary |



DISTRICT LEVEL EXPERT APPRAISAL COMMITTEE:

The District Level Expert Appraisal Committee (DEAC) will appraise the cases and make recommendations to the District Environment Impact Assessment Authority for environmental clearance. This Committee will also make recommendations / suggestions on the District Survey Report to the DEIAA. The DEAC will have following composition:

- | | | |
|-----|---|-------------------|
| 1. | Senior most Executive Engineer, Irrigation Department | Chairperson |
| 2. | Senior most Sub-Divisional Officer (Forest) | Member |
| 3. | A representative of Remote Sensing Department or Geology Department or State Ground Water Department to be nominated by the District Magistrate or District Collector | Member |
| 4. | Occupational health expert or Medical Officer to be nominated by the District Magistrate or District Collector | Member |
| 5. | Engineer from Zila Parishad | Member |
| 6. | A representative of State Pollution Control Board or Committee | Member |
| 7. | An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest | Member |
| 8. | An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest | Member |
| 9. | An expert to be nominated by the Divisional Commissioner or Chief Conservator of Forest | Member |
| 10. | Senior most Assistant Engineer, Public Works Department | Member |
| 11. | Assistant Director or Deputy Director or District Mines Officer or Geologist in the district in that order | Member- Secretary |

The DEAC will meet at least once a month, depending on the work load the frequency of meetings can be decided by the Chairperson of DEAC and Chairperson, DEIAA.

Each proposal for the mining lease under consideration for environmental clearance in the district will be inspected on-site by the Sub-Divisional Level Committee headed by the SDM.



The Sub-Divisional Committee should comprise of following officers:

Sub-Divisional Magistrate	Chairperson
Sub-Divisional Officer, Forest/ Assistant Conservator of Forest/ Forest Range Officer	Member
Representative of State Pollution Control Board	Member
SDO, Irrigation Department	Member
Geologist or Assistant Geologist or Mining Officer / Mining Inspector	Member

The presence of at least three members will be needed for inspection. This Committee shall submit its report within 15 days from the receipt of the proposal.

The monitoring of EC conditions and enforcement of EMP will be ensured by the District Collector and the, State Pollution Control Board. The monitoring of enforcement of EC conditions can also be done by the Central Pollution Control Board, Ministry of Environment, Forest & Climate Change and the agency nominated by the Ministry for the purpose.

Schematic Presentation of Requirements on Environmental Clearance of Sand Mining 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
EC Proposal of Sand Mining on the basis of individual mine lease								
0 - 5ha	'B2'	Form - 1M, PFR and Approved Mine Plan	No	Yes	Project Proponent	Project Proponent	DEAC/ DEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC



> 5 ha and < 25 ha	'B2'	Form-I, PFR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency 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	SEAC / SEIAA	
EC Proposal of Sand Mining in cluster situation								
Cluster area of mine leases up to 5 ha	'B2'	Form - 1M, 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 \geq 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 \geq 50ha	'A'	Yes	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/ MoEFCC	

General Conditions will not apply on account of inter- state boundaries for river sand mining leases.



EXEMPTION OF CERTAIN CASES FROM BEING CONSIDERED AS MINING FOR THE PURPOSE OF REQUIREMENT OF ENVIRONMENTAL CLEARANCE

Keeping in view the purpose, maintenance of infrastructure, abatement of disasters, customary easement and property rights, it is felt that following cases may not be treated as mining for the purpose of requirement of environmental clearance. The following cases shall not require prior environmental clearance, namely:-

1. Extraction of ordinary clay or sand, manually, by the Kumhars (Potter) to prepare earthen pots, lamp, toys, etc. as per their customs.
2. Extraction of ordinary clay or sand, manually, by earthen tile makers who prepare earthen tiles.
3. Removal of sand deposits on agricultural field after flood by farmers.
4. Customary extraction of sand and ordinary earth from sources situated in Gram Panchayat for personal use or community work in village.
5. 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.
6. Dredging and de-silting of dams, reservoirs, weirs, barrages, river, and canals for the purpose of their maintenance, upkeep and disaster management.
7. Traditional occupational work of sand by Vanjara and Oads in Gujarat vide notification number GU/90(16)/MCR-2189(68)/5-CHH, dated the 14th February, 1990 of the Government of Gujarat.
8. Digging of well for irrigation or drinking water.
9. Digging of foundation for buildings not requiring prior environmental clearance.
10. 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.
11. 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.



STANDARD ENVIRONMENTAL CONDITIONS FOR SAND MINING

Impact Category	S.No.	Environmental Conditions
Stakeholder Engagement	1	In the case of private land not owned by the lease holder an affidavit should be obtained regarding consent of the concerned land owner (s) for carrying out the mining operation.
	2	Stakeholder awareness and ability to raise concerns and getting it to be addressed.
	3	Implementation of Action Plan on the issues raised during the Public Hearing. The Proponent shall complete all the tasks as per the Action Plan submitted with the budgetary provisions during the Public Hearing.
	4	Having valid lease and all the permits is very much needed.
	5	To establish a Monitoring Committee including Local Panchayat, to check on traffic due to transportation and submit an annual report on the same.
	6	The directions given by the Hon'ble Supreme Court of India vide order dated 27.02.2012 in Deepak Kumar case [SLP(C) Nos. 19628-19629 of 2009] and order dated 05.08.2013 of the Hon'ble National Green Tribunal in application No. 171/2013 may be strictly followed.
	7	All the provisions made and restrictions imposed as covered in the Minor Mineral Rule, shall be complied with, particularly regarding Environment Management Practices and its fund management and Payment of compensation to the land owners.
Sustainable Mining Practices	8	District level Survey Report should be prepared and area suitable for mining and area prohibited for mining be identified.
	9	The depth of mining in Riverbed shall not exceed one meter or water level whichever is less, provided that where the Joint Inspection Committee certifies about excessive deposit or over accumulation of mineral in certain reaches requiring channelization, it can go up to 3 meters on defined reaches of the River.
	10	No River sand mining be allowed in rainy season.
	11	To submit annual replenishment report certified by an authorized agency. In case the replenishment is lower than the approved rate of production,



		then the mining activity / production levels shall be decreased / stopped accordingly till the replenishment is completed.
	12	Ultimate working depth shall be up to 3.0 m from Riverbed level and not less than one meter from the water level of the River channel whichever is reached earlier. In hilly terrain this depth be preferably restricted to one meter.
	13	In River flood plain mining a buffer of 3 meter to be left from the River bank for mining.
	14	In mining from agricultural field a buffer of 3 meter to be left from the adjacent field.
	15	Mining shall be done in layers of 1 meter depth to avoid ponding effect and after first layer is excavated, the process will be repeated for the next layers.
	16	To maintain safety and stability of Riverbanks i.e. 3 meter or 10% of the width of the River whichever is more will be left intact as no mining zone.
	17	No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.
	18	No blasting shall be resorted to in River mining and without permission at any other place.
	19	Depending upon the location, thickness of sand, deposition, agricultural land/Riverbed, the method of mining may be manual, semi-mechanized or mechanized; however, manual method of mining shall be preferred over any other method.
Identification and Preparation of Mining Site	20	Mining should be done only in area / stretch identified in the District Level Survey Report suitable for mining and so certified by the Sub-Divisional Level Committee after site visit.
	21	Mining should begin only after pucca pillar marking the boundary of lease area is erected at the cost of the lease holder after certification by the mining official and its geo coordinates are made available to the District Level Committee.
	22	The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.



Monitoring the Mining of Mineral and its Transportation	23	The EC holder shall keep a correct account of quantity of mineral mined out, dispatched from the mine, mode of transport, registration number of vehicle, person in-charge of vehicle and mine plan. This should be produced before officers of Central Government and State for inspection.
	24	For each mining lease site the access should be controlled in a way that vehicles carrying mineral from that area are tracked and accounted for.
	25	The State / District Level Environment Committee should use technology like Bar Coding, Information and Communications Technology (ICT), Web based and ICT enabled services, mobile SMS App etc. to account for weight of mineral being taken out of the lease area and the number of trucks moving out with the mineral.
	26	There should be regular monitoring of the mining activities in the State to ensure effective compliance of stipulated EC conditions and of the provisions under the Minor Mineral Concessions Rules framed by the State Government.
Noise Management	27	Noise arising out of mining and processing shall be abated and controlled at source to keep within permissible limit.
	28	Restricted working hours. Sand mining operation has to be carried out between 6 am to 7 pm.
Air Pollution and Dust Management	29	The pollution due to transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly.
	30	Air Pollution due to dust, exhaust emission or fumes during mining and processing phase should be controlled and kept in permissible limits specified under environmental laws.
	31	The mineral transportation shall be carried out through covered trucks only and the vehicles carrying the mineral shall not be overloaded. Wheel washing facility should be installed and used.
Management of Visual Impact	32	The mining operations are to be done in a systematic manner so that the operations shall create a major visual impact on the site.
Bio-Diversity Protection	33	Restoration of flora affected by mining should be done immediately. Twice the number of trees destroyed by mining to be planted preferably of indigenous species. Each EC holder should plant and maintain for lease period at least 5 trees per hectare in area near lease.
	34	No mining lease shall be granted in the forest area without forest clearance in accordance with the provisions of the Forest Conservation Act, 1980 and the rules made thereunder.



	35	Protection of turtle and bird habitats shall be ensured.
	36	No felling of tree near quarry is allowed. For mining lease within 10km of the National Park / Sanctuary or in Eco-Sensitive Zone of the Protected Area, recommendation of Standing Committee of National Board of Wild Life (NBWL) have to be obtained as per the Hon'ble Supreme Court order in I.A. No. 460 of 2004.
	37	Spring sources should not be affected due to mining activities. Necessary Protection measures are to be incorporated.
Management of Instability and Erosion	38	Removal, stacking and utilization of top soil in mining are should be ensured. Where top soil cannot be used concurrently, it shall be stored separately for future use keeping in view that the bacterial organism should not die and should be spread nearby area.
	39	The EC should stipulate conditions for adequate steps to check soil erosion and control debris flow etc. by constructing engineering structures
	40	Use of oversize material to control erosion and movement of sediments
	41	No overhangs shall be allowed to be formed due to mining and mining shall not be allowed in area where subsidence of rocks is likely to occur due to steep angle of slope.
	42	No extraction of stone / boulder / sand in landslide prone areas.
	43	Controlled clearance of riparian vegetation to be undertaken
Waste Management	44	Site clearance and tidiness is very much needed to have less visual impact of mining.
	45	Dumping of waste shall be done in earmarked places as approved in Mining Plan.
	46	Rubbish burial shall not be done in the Rivers.
Pollution Prevention	47	The EC holder shall take all possible precautions for the protection of environment and control of pollution.
	48	Effluent discharge should be kept to the minimum and it should meet the standards prescribed.
Protection of Infrastructure	49	Mining shall not be undertaken in a mining lease located in 200-500 meter of bridge, 200 meter upstream and downstream of water supply / irrigation scheme, 100 meters from the edge of National Highway and railway line, 50 meters from a reservoir, canal or building, 25 meter from the edge of State Highway and 10 meters from the edge of other



		roads except on special exemption by the Sub-Divisional level Joint Inspection Committee.
	50	For carrying out mining in proximity to any bridge or embankment, appropriate safety zone (not less than 200 meters) should be worked out on case to case basis, taking into account the structural parameters, location aspects and flow rate, and no mining should be carried out in the safety zone so worked out.
	51	Mining activities shall not be done for mine lease where mining can cause danger to site of flood protection works, places of cultural, religious, historical, and archeological importance.
Enhancement Road Safety	52	Vehicles used for transportation of sand are to be permitted only with of fitness and PUC Certificates.
	53	Junction at takeoff point of approach road with main road be properly developed with proper width and geometry required for safe movement of traffic by concession holder at his own cost.
	54	Project Proponent shall ensure that the road may not be damaged due to transportation of the mineral; and transport of minerals will be as per IRC Guideliness with respect to complying with traffic congestion and density.
	55	No stacking allowed on road side along National Highways.
Closure and Reclamation of Mined Out Area	56	The Project Proponent shall undertake phased restoration, reclamation and rehabilitation of land affected by mining and completes this work before abandonment of mine.
	57	Restoration, reclamation and rehabilitation in cluster should be done systematically and jointly by each EC holder in that cluster. This should be appropriately reflected as EC condition in each EC in cluster.
	58	Site specific plan with eco-restoration should be in place and implemented.
Health and Safety	59	Health and safety of workers should be taken care of.
	60	Transport of mineral will not be done through villages / habitations.
	61	The Project Proponent shall make arrangement for drinking water, first aid facility (along with species specific anti-venom provisioning) in case of emergency for the workers.



	62	Project Proponent shall implement the Disaster Management Plan if the mine lease area is located in Seismic Zone-IV. Project Proponent shall appoint a Committee to have a check over any disaster to warn workers well before for the safety of the workers. Emergency helpline number will be displayed at all levels.
	63	Project Proponent shall appoint an Occupational Health Specialist for Regular and Periodical medical examination of the workers engaged in the Project and records maintained; also, Occupational health check-ups for workers having some ailments like BP, diabetes, habitual smokers, etc. shall be undertaken once in six months and necessary remedial/preventive measures taken accordingly. Recommendations of National Institute for Labour for ensuring good occupational environment for mine workers would also be adopted.
Monitoring the Impact of Mining	64	The Project Proponent shall report monitoring data on replenishment, traffic management, levels of production, River Bank erosion and maintenance of Road etc.
Mineral Conservation	65	Use of alternate material such as M-sand in place of natural River sand shall be encouraged in order to reduce stress on natural eco-system.



APPENDIX: TABLE - 1

REVENUE FROM SAND MINING IN STATES / UTs

(Rs. in crores)

Sl.No.	STATE / U.T	2012 - 2013	2013 - 2014	2014 - 2015
01	Andaman & Nicobar	0.073	0	0
02	Arunachal Pradesh	7	8	5
03	National Capital Territory of Delhi	0	0	
04	Himachal Pradesh	0.70	0.35	0.07
05	Jharkhand	4.25	3.04	0.07
06	Karnataka	23.74	15.33	25.99
07	Madhya Pradesh	184.93	179.41	172.53
08	Meghalaya	14.50	15.88	15.50 (as forest royalty from govt. contractors)
09	Mizoram	0.018	0.0475	0.0861
10	Puducherry	0.80	0.20	0.03
11	Rajasthan	173.36	252.06	134
12	Tamil Nadu	188.50	117.73	109.10
13	Uttar Pradesh	97.27	166.45	168.38

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 2

NUMBER OF MINING LEASES IN STATE

Sl.No.	STATE / U.T	In stream	Flood Plain	Sea Shore	Agricultural field	River	Total
01	Andaman & Nicobar						Nil
02	Andhra Pradesh						Nil
03	Haryana	5	12		7		31
04	Jammu & Kashmir					650	650
05	Jharkhand	10				387	397
06	Lakshadweep					1090	1090
07	Manipur						NIL
08	Meghalaya						NIL
09	Odisha						NIL
10	Punjab	2 + 80 Temporary Working Permit				73	155
11	Sikkim		85				85
12	Tripura	21	244		5		270

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 3

**AVERAGE SIZE OF SAND MINING LEASES IN
STATE / UT: 2014-15**

(In Hectare)

Sl.No.	STATE / U.T	AVERAGE SIZE	SMALLEST MINING LEASE AREA	LARGEST MINING LEASE AREA
01	Andaman & Nicobar	NOT APPLICABLE		
02	Arunachal Pradesh	ONLY MINING PERMITS		
03	Himachal Pradesh	1.20	0.25	4.09
04	Jharkhand	0.25	0.13	87.38
05	Karnataka	5	5	19.42
06	Madhya Pradesh	8.52	0.30	306.98
07	Meghalaya	Mostly < 1.5 ha.		
08	Mizoram	NA		
09	Puducherry	NA		
10	Rajasthan	2 5 in Bikaner	24.82 2 in Bikaner	1901.89 5 in Bikaner
11	Tamil Nadu	29 leases < 10 ha.	14 leases of 10 - 15 ha.	42 leases > 15 ha.
12	Uttar Pradesh	25	5	200

* States/UTs not mentioned have not provided the data.

**APPENDIX: TABLE - 4**
**AVERAGE PERIOD OF SAND MINING
LEASES IN STATE / UT**

(In Hectare)

Sl.No.	STATE / U.T	AVERAGE MINING LEASE PERIOD (YEARS)
01	Andaman & Nicobar	Not Applicable
02	Arunachal Pradesh	Only mining permit is given
03	Himachal Pradesh	5
04	Jharkhand	3
05	Karnataka	2
06	Madhya Pradesh	5 to 10
07	Meghalaya	No lease in operation currently
08	Mizoram	No mining lease in operation currently
09	Puducherry	One year permit
10	Rajasthan	5 20-30 years in Bikaner
11	Tamil Nadu	3
12	Uttar Pradesh	3

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 5

COMMON METHOD AND PRACTICE OF SAND MINING IN STATE / UT

Sl.No.	STATE / U.T	COMMON METHOD AND PRACTICE OF SAND MINING
01	Andaman & Nicobar	<ol style="list-style-type: none"> 1. The Apex Court in its order dated 7.5.2002 in I.A. No. 502 in WP (C) No. 202 of 1995, had directed that extraction of sand be phased out @ minimum 20% per year on reducing balance basis to bring the sand mining to a level of 33% of the present level of mining within a maximum period of five years. 2. Since the level of extraction of sand in the territory in the year 2001-02 i.e. the base year, was 68909 cubic meter, the quantity of extractable sand is fixed at 22581 cubic meter. 3. The quantity of sea sand so allowed by MoEF is extracted from the identified and approved sites having such deposits on the sea beaches (identified accreting area) with adequate environmental safeguards so as to prevent any damage to the sensitive coastal eco-system including corals, turtle/ bird nesting sites and the protected areas. 4. The allotment of sea sand is made to the individuals by the Sand Allotment Committee constituted by the Lieutenant Governor under the Chairmanship of Chief Secretary who also heads the A&N CZMA. The quantum of sea sand allotted is fixed by the Committee on the basis of availability of sea sand and the number of applicants (local) applied for their bonafide use.
02	Arunachal Pradesh	<ol style="list-style-type: none"> 1. Mining of sand restricted to foothills only that too for a very short period. Grant of mining lease is kept in abeyance, short term mining permits are issued to various Central and State agencies for carrying out developmental works under the strict supervision of the departmental officers.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	COMMON METHOD AND PRACTICE OF SAND MINING
03	Himachal Pradesh	Manual. The mining lease areas are sanctioned on the river bed if the area is approved in survey document. The mining activities are allowed strictly in accordance with the approved working cum Environment Management Plan and after the environment clearance.
04	Jharkhand	Manual
05	Karnataka	Manual
06	Madhya Pradesh	Manual
07	Meghalaya	Hill quarrying in private areas
08	Mizoram	Extraction of sand limited mainly for domestic purpose in the state. The produce extracted illegally is seized as per the Mizoram Forest Act, 1955. Mining is only limited to river banks and riverbeds with improvised equipments like spade, shovel, small canoes, etc.
09	Puducherry	Manual
10	Rajasthan	In Rajasthan sand is available in seasonal streams and rivers except Chambal which is perennial but mining is banned because of Chambal Crocodile Sanctuary. Mining is done up to 3 meters and is open cast. It is filled in trucks either manually or semi mechanized method. In Bikaner no river exists and mining for sand is being done from palaeo-channel. In this palaeo-channel the sand deposit occurs at the depth of 5 meter to 20 meter below ground level with an over burden of 5 to 20 meters. The mining here is done open cast benching method, where overlying blown sand, gravel, pebble etc. is removed, the sand is further sieved, graded and washed upto 12 to 18 mesh size.
11	Tamil Nadu	Manual mining is carried out in certain quarries. In most of the sand quarries two poclains are used by the PWD.
12	Uttar Pradesh	Manual and Semi-mechanised

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 6

**SUGGESTIONS / RECOMMENDATIONS FROM STATES / UTs
FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING**

Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
01	Andaman & Nicobar	The quantum of extractable sand fixed at 22581 cubic meter should be enhanced. This limit has been fixed by the orders of Hon'ble Supreme Court subject to study by National Institute of Oceanography.
02	Arunachal Pradesh	<ol style="list-style-type: none"> 1. For environmentally sustainable sand mining a strict and comprehensive sand mining policy need to be framed. 2. River sand is becoming a scarce commodity and hence exploring alternative to it has become imminent. Manufactured sand is a good alternative both for fine as well as coarse sand used in concrete. 3. Sand mining should be restricted to surface collection only without the use of heavy machinery. 4. Due to turbulent and inaccessible nature of rivers flowing in the hilly terrains of the state, deposition of the sand in the river bed is very negligible and except for few quarries in the foothills and plains, most of the notified quarries are boulders and mining of sand is very negligible. 5. In view of environment related issues the grant of mining lease for river bed minor mineral viz. sand, gravel, shingle, aggregate, boulder are kept in abeyance and extraction of these minerals is regulated only by grant of mining permits, that too not exceeding 3000 cubic meter in one permit. 6. For scientific mining of sand and other minor minerals Guideliness has been prepared and accordingly Geo-Technical Committee has been constituted under the chairmanship of ADC/SDO in the district level to determine the quantity of quarriable mineral that can be safely removed and also to give technical clearance for notification of quarries of smaller size, preferably within one hectare.
03	Chhattisgarh	<ol style="list-style-type: none"> 1. While attempting to prepare a model Guidelines / policy for the country, the differences that exist in different states may be taken into account. It may be tried to take all stakeholders along.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		<p>2. To ease the process of EC granting, SEIAA may have benches across the State with each bench having a SEAC under it. Time bound clearance with ease of access and grant.</p> <p>3. Sand mining with use of machinery should be allowed.</p> <p>4. Road construction material like murrum should be exempted from EC considering their local / pocket occurrences and impossibility of obtaining EC.</p> <p>5. Considering the traffic issue at urban areas and to reduce intermediaries like storage point dealers, night mining with adequate lighting should be allowed.</p> <p>6. To make the availability of sand from local rivulet / streams the river bank to in-stream mine area distance should be reduced from 10 meter to 3 meters.</p>
04	NCT of Delhi	<p>1. Location of sand mining should be identified by a committee comprising of revenue deptt., Irrigation Deptt., CGWB, SPCB, Forest Department and mining department. Mining area should distinctly be marked at site, before allowing mining.</p> <p>2. Depth of mining should be restricted to 3 mtrs or water level, whichever is less and that to from aggradation areas. The side slope of excavation should be less than 3:1.</p> <p>3. Requirement of sand and gravel should be reduced by utilization of construction and demolition waste. It requires not only legislative support but also awareness campaign among the society.</p> <p>4. Guidelines should be distinctly clear and easy to understand covering do's and don't during mining operation.</p> <p>5. Sufficient safe distance should be left between mining site and adjoining engineering structures like embankment, spurs, bed bars, bridges, reservoir and regulator etc.</p> <p>6. Security amount should be sufficient enough to compel the agency to carry out rehabilitation, corrective measures and to ensure strict compliance of conditions of lease. S.D. should be released after inspection of committee and recording of certificate that agency complied with the lease conditions.</p> <p>7. Mining may be carried out by state agency instead of private agencies.</p>

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
05	Himachal Pradesh	1. Working cum Environment Management Plan has been made mandatory. The mining activities are allowed after submission of environment clearance.
		2. In compliance of order of Hon'ble Supreme Court dated 27.02.2012 in Deepak Kumar case, the Himachal Pradesh has repealed its rules called the Himachal Pradesh Minor Mineral (Concession) and Mineral (Prevention of illegal mining, transportation and Storage) Rule, 2015 in accordance to the recommendation of the Ministry of Environment & Forest and rules circulated by the Ministry of Mines. Hence the State of Himachal Pradesh has complied with the above directions of the Hon'ble Apex Court,
		3. Therefore the condition of applicability of Environment Clearance on the area less than 5 hectare shall be exempted.
		4. Further keeping in view, the peculiar topography, geography and socio-economic fabric of the State, the condition for the minimum size of the lease should be exempted as the rivers are in youth stage forming different land forms, land holdings are less, population is thin and scattered and the demand of minor mineral is limited, which could be met out locally by exploiting local resources on the small scale.
06	Jammu & Kashmir	1. Uniform Guidelines be framed for sand mining and river bed mining as they cannot be segregated.
		2. Identification of sand belts be made in consultation with CGWB and while framing Guideliness CGWB may be taken on board.
		3. Sand mining leases less than 5 hectare be exempted from EC and comprehensive policy may be made for hilly states for easing the process of grant of lease.
07	Jharkhand	1. Machine should not be used in sand mining. Only manual mining should be done.
		2. The depth of mining shall be restricted to 3 meter / water level whichever is less.
		3. No mining should be carried out in proximity of any bridge / embankment.
		4. In-stream mining should not be allowed.
		5. Mining should be done in accordance with an approved mining plan.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		6. EC should be valid for settlement period subject to ceiling of five years.
08	Karnataka	<p>1. Undertaking sand mining activity through a Government agency to be governed by District Level Sand Monitoring Committee headed by Deputy Commissioner.</p> <p>2. The area should be properly surveyed and mapped with the help of GPS to assign geo coordinates and accordingly erect boundary pillars so as to avoid illegal and unscientific mining.</p> <p>3. Depth of sand available may be indicated in a contour map using suitable drilled holes to ensure sand mining do not exceed one meter depth.</p> <p>4. Once thickness is established sand mining may be permitted to one meter depth where the thickness of sand is more than three meter deep. If the thickness of sand is less than three meter, sand mining shall not be permitted.</p> <p>5. Sufficient spacing shall be ensured from one block to another block and sufficient time gap shall be provided for replenishment before undertaking mining activity in the same block.</p> <p>6. Mining activity shall be restricted to only non-monsoon season and in the area that is exposed.</p> <p>7. No in-stream mining shall be permitted.</p> <p>8. No stream should be diverted for the purpose of sand mining. No natural water course and/ or water resources are obstructed due to mining operations.</p> <p>9. Site specific plan with eco-restoration should be in place.</p> <p>10. Sand mining shall be undertaken only by manual method without use of earth moving equipment such as JCB etc. Use of mechanized boats for sucking sand from in-stream area shall be strictly prohibited.</p> <p>11. Appropriate safety zones shall be maintained in proximity to any bridge / and / or embankment and other permanent structures. No sand mining shall be undertaken in such safety / buffer zones. Guideliness issued by the Ministry of Mines in this regard shall also be adhered to.</p> <p>12. The quarrying activity shall not intersect subterranean water level and ground water table.</p>

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		13.The top soil in case of surface land mining shall be stored temporarily in an earmarked site and concurrently used for land reclamation.
		14.Use of alternate material such as M-sand in place of natural river sand shall be encouraged in order to reduce stress on natural eco-system.
09	Madhya Pradesh	1. Geographical location of the state should be taken care of.
		2. Keep provision for extraction of sand from forest areas.
		3. Expedite the EC process.
		4. In inter-state boundary leases sand mining EC be giver by the SEIAA.
		5. Clear Guidelines for B-1, B2 be issued.
		6. Simplify cluster cases.
		7. Exempt mining leases of less than 5 hectare from EC.
10	Meghalaya	1. No sand mining within 3 kilometer from Protected area and Reserved Forest area.
		2. Advance royalty etc for entire quantity of mineral be realized in full.
		3. Only loose boulder and sand are allowed to be removed from the mid river stream leaving 15 meter on either side untouched.
		4. No collection of sand is allowed on 15 meter of either side of structures like bridge, culvert etc.
		5. No blasting allowed.
		6. No extraction of stone / boulder / sand in landslide prone areas.
		7. No stacking allowed on road side along national highways.
		8. No felling of tree near quarry is allowed.
		9. No transportation of forest produce (sand from forest area) is allowed after sunset.
		10.Export fee realized if sand is sent outside the state.
		11.Stone crusher cannot be installed without permission of DFO.
		12.Tree should be planted at quarry after completion of mining.
		13.Violation of above conditions will result in cancellation of permit and forfeiture of advance royalty already paid.
11	Mizoram	1. Extraction of sand from the forest may be permitted strictly as per mining plan approved by the Competent Authority and after getting necessary clearance under various acts related to the forest and environment.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
12	Odisha	1. EC may be exempted for leases less than 5 hectare.
		2. EC should not be required for earth mining.
		3. Minor minerals even close to inter-state borders should be allowed to be cleared by the SEIAA.
		4. In case a river is forming boundary of states and mechanized mining of sand is causing tension in states it should be resolved at the national level.
13	Puducherry	1. Environment Clearance is issued by SEIAA, Puducherry strictly under the provisions of the EIA Notification, 2006 and subsequent amendments.
14	Rajasthan	1. The bajari mined out from river bed is filled back by the river itself during the next rainy season. So, nature itself reclaims the mined out area every year. The formation of bajari is a natural process in the river and it is also essential to remove bajari from the river bed to avoid silting. If the sand deposited in the river bed is not removed, it may cause change of river course and may also results in flood plains will be developed.
		2. Price control system adopted in Rajasthan. Sand is a essential commodity.
		3. The depth of mining should be restricted to 3 meters or above water table.
		4. Machinery having boom height more than 3 meter shall not be allowed in extraction of bajari.
		5. Size of mining leases be allowed below 5 hectare.
		6. In streams with low deposit of sand and if use is mostly local no mechanized mining should be allowed and EC should not be required.
		7. In larger deposits there should be semi-mechanised mining with EC.
		8. The sand (river and stream) in different categories, with their availability, use and size of the deposit. Category A: Small deposits in river and stream where thickness of sand bed is very less and sand is used locally in villages and towns only and no mechanical mining is done, in such areas restriction of obtaining Environment Clearance can be relaxed for manual mining.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		<p>Category B: Large deposits, where in rivers and streams having thickness of sand bed is medium to large, sand mining, shall be allowed with semi mechanized manner after obtaining Environment Clearance.</p> <p>Bikaner District: Bikaner district is a desert terrain where ground water table is very deep. Bajari is excavated above water table and it does not affect the water table. In addition to this boulder, gravel and waste generated due to bajari mining is used in reclamation of pits. Hence environment is not adversely affected due to bajari mining.</p>
15	Sikkim	<ol style="list-style-type: none"> 1. Forest department is the nodal department for sand and stone extraction from the riverbed. 2. Use of machines is prohibited. 3. Quarrying sites are allotted to village youth cooperatives. 4. For bigger companies quarry sites in forest area are allotted after FC. 5. State Government has considerations for allotment of quarries for Border Road Organization and MoD. 6. GoI can monitor mining in states through GIS.
16	Tamil Nadu	<ol style="list-style-type: none"> 1. Excess sand deposits identified in the flood plains and in-stream areas only to be mined in order to safeguard and maintain ground water table. 2. Sand mining operation has to be carried out between 6 am to 7 pm. 3. Mining operation should be carried out in a systematic manner without affecting environment and ecology of the area.
17	Uttar Pradesh	<ol style="list-style-type: none"> 1. Depth of mining cannot be more than 3 meter or water table whichever is less. 2. Mining can be done in slices forming benches where bench height cannot be more than 1 meter and bench width cannot be less than 10 meter. 3. A width of not less than 50 meter or 10% width of river can be restricted for mining activities from river bank. A condition can be imposed that mining will be done from river activities from river bank. 4. SEIAA should be decentralized to expedite EC process. It can be decentralized to district or zonal level.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	SUGGESTIONS / RECOMMENDATIONS FOR ENVIRONMENTALLY SUSTAINABLE SAND MINING
		5. Make EC conditions practical.
		6. Requirement of mining plan in river bed mining be done away with.
		7. There should not be requirement of EC for short term permit.
		8. The quantity of sand should not be fixed in EC as it leads to loss in revenue and illegal mining.
		9. Semi-mechanised form of sand mining be allowed.
		10. Sand mining to be exempted from EC as it takes 6-8 months and environment department do not have requisite work force to enforce EC conditions. A Guidelines for environmentally sustainable sand mining be framed and it can be complied by imposing it in the lease condition.
18	Uttarakhand	1. Area less than 5 hectare be exempted from EC.
		2. Use of machine be allowed for scientific mining and reducing the cost of production.
		3. RBM deposition in the lease should not be fixed for the entire lease period. RBM in lease area be assessed after rains every year.
		4. 70% of leases in state not operating for want of EC and these vacant lots are source of illegal mining.

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 7

BEST PRACTICE OF SAND MINING ADOPTED IN DISTRICT / STATE / UT

Sl.No.	STATE / U.T	DESCRIPTION OF BEST PRACTICES
01	Andaman & Nicobar	Institute of Ocean Management has been entrusted the task of identification of sand accreting sites.
02	Arunachal Pradesh	Mining of sand is restricted to foothills only that too for a very short period.
03	National Capital Territory of Delhi	In Delhi sand mining lease is granted by Revenue department. NOC from I&FC Deptt. Were issued with condition of limitation of depth, area of mining, operation timing limitation and limited period of NOC. Compliance of laid down conditions and monitoring is ensured by collector.
04	Himachal Pradesh	<ol style="list-style-type: none"> 1. The mining activities on river beds are allowed strictly as per the provisions of river / stream bed mining policy as under. 2. No river / stream bed mining shall be allowed without the recommendation of the Sub Divisional Level Committee constituted under the Chairmanship of Sub Divisional Magistrate having XEN PWD, Irrigation and Public Health, SPCB, DFO and Mining Officer as its member. 3. Nor river / stream bed mining shall be allowed within 75 meter from the periphery of soil conservation works, nursery plantations, check dams or within the distance as recommended by the Sub-Divisional Committee whichever is more. 4. No river / stream bed mining shall be allowed within 1/10th of its span or 5 meters from the banks or as specified by the Sub-Divisional Level Committee, whichever is more. 5. Nor river / stream bed mining shall be allowed within 200 meters upstream and downstream of water supply scheme or as specified by the Committee whichever is more. 6. Nor river / stream bed mining shall be allowed within 200 meters upstream and 200 to 500 meters downstream of bridges depending upon the site specific conditions.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	DESCRIPTION OF BEST PRACTICES
		<p>7. No approach road from PWD road shall be allowed to lease area unless lessee / contractor obtains written permission from XEN, PWD for making road leading to all intake places from the PWD road.</p> <p>8. No boulders/ cobbles/ hand broken road ballast shall be allowed to be transported outside the State from river/stream beds.</p> <p>9. No digging for more than 3 feet shall be allowed in river/ stream beds.</p> <p>10.No blasting shall be allowed in river/stream beds.</p>
05	Madhya Pradesh	1. In some districts the Cooperative Societies of Labour are doing the sand collection, loading and unloading work.
06	Tamil Nadu	Permission has been granted in favour of PWD for quarrying sand in the river Poramboke lands in 16 districts in the state of Tamil Nadu. Sand mining is being carried out by the PWD in the entire State.
07	Uttar Pradesh	U.P. Minor Mineral Concession Rules, 1963.

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE - 8

STATUS OF PROMULGATION OF RULE ON SAND MINING IN THE STATE / UT

Sl.No.	STATE / U.T	NAME OF RULE WITH YEAR OF PROMULGATION
01	Andaman & Nicobar	Indian Forest Act, 1927 as sand has been included as forest produce.
02	Arunachal Pradesh	APMMCR 2002 and made effective from 1.01.2003
03	Himachal Pradesh	1. River/Stream bed Mining Policy-2004. 2. Himachal Pradesh Minor Mineral Policy-2013. 3. Himachal Pradesh Minor Mineral (Concession) and Mineral (Prevention of illegal mining, transportation and storage) Rule, 2015.
04	Jharkhand	Rule 12 of Jharkhand Minor Mineral Concession (Amendment) Rule 2014.
05	Karnataka	Karnataka Sand Policy was brought out in the year 2011 and as such amendment to the Karnataka Minor Mineral Concession Rule 1994 were made in the year 2011 and a separate chapter IV B for sand mining was introduced under Rule 31-R. Further, as per the Hon'ble Supreme Court orders sated 27.02.2012 in SLP No. 19628-19629 between Deepak Kumar and State of Haryana and others and as per the model Guideliness issued by the Government of India for Environmental Management of Mining of Minor Minerals, amendment to the Karnataka Minor Mineral Concessions Rule 1994 were brought out on 16.12.2013 incorporating a new chapter II A applicable to all minor minerals on Systematic, Scientific Mining and Protection of Environment, wherein Quarrying Plan, Environmental Management Plan and Environment Clearance was made mandatory. Amendments to Rule 31- R were also made wherein the Government, PWD Department was entrusted with sand mining, storage and transportation, under the District Sand Monitoring Committee and Taluk Sand Monitoring Committee.
06	Madhya Pradesh	Rules have been framed as per the orders of Hon'ble Supreme Court for sand mining under M.P. Minor Mineral Rules 1996 and Sand Mining Policy 2015 is also formulated in the State.

* States/UTs not mentioned have not provided the data.



Sl.No.	STATE / U.T	NAME OF RULE WITH YEAR OF PROMULGATION
07	Meghalaya	No rules notified by the state on sand mining
08	Mizoram	Mizoram Forest Act, 1955, which came into force on 1.01.1956.
09	Puducherry	Puducherry Minor Minerals (Concession) Rules, 1977.
10	Rajasthan	RMMCR, 1986 Notification dated 2.11.2012: 1. First proviso of Rule 8(2) and first proviso of 17 (1) - Renewal of Bajari Mining Leases is not allowed. 2. Rule 16 (3) - Mining Leases of Bajari to be granted for 5 years. 3. Rule 18 (18) - Part surrender of lease area of Bajari not allowed. Notification dated 3.4.2013 - (First proviso Rule 7 (1)- Mining leases of Bajari to be granted only by way of tender or auction. Notification dated 12.07.2013 - (First proviso Rule 11 (2)) - Maximum area limit of 10 sq. km. not applicable for Bajari Mining Leases. Bikaner District: Chapter II of RMMCR, 1986 (last amended 12.07.2013).
11	Sikkim	Sikkim Forest (Allotment of Areas for Quarrying of Sand and Stone), 2006.
12	Tamil Nadu	1. As per G.O. Ms. No. 95 Industries (MMCI) Department dated 1.10.2003, a new Rule 38 A has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959. Accordingly quarrying and sale of sand is being carried out by PWD in the state of Tamil Nadu since October 2003. 2. As per G.O. Ms. No. 158 Industries (MMIC) Department dated 25.08.2008, a new Rule 38 B has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959. Accordingly transportation of sand outside the state not to be made. To regulate storage and transportation of sand a new Rule 38 C B has been introduced in the Tamil Nadu Minor Mineral Concession Rules, 1959 vide G.O. No. 32 Industries (MMIC) Department dated 11.02.2011.

* States/UTs not mentioned have not provided the data.



APPENDIX: TABLE -9

NORMAL DATES OF ONSET AND WITHDRAWAL OF SOUTH-WEST MONSOON

The India Meteorological Department, Nagpur, vide letter No. NAGPUR RMC /CS-312, dated 18th January, 2016 has provided the period of Rainy Season viz. Normal dates of Onset and Withdrawal of Southwest Monsoon over India as state-wise and union territory- wise which are as below:-

States	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Andhra Pradesh	1st June	15th October
Arunachal Pradesh	5th June	15th October
Assam	5th June	15th October
Bihar	10th June	15th October
Chhattisgarh	10th June	15th October
Goa	5th June	15th October
Gujarat	15th June	15th September
Haryana	1st July	15th September
Himachal Pradesh	1st July	15th September
Jammu & Kashmir	1st July	15th September
Jharkhand	10th June	15th October
Karnataka	5th June	15th October
Kerala	1st June	15th October
Madhya Pradesh	15th June	1st October
Maharashtra	10th June	1st October
Manipur	1st June	15th October
Meghalaya	1st June	15th October
Mizoram	1st June	15th October
Nagaland	5th June	15th October
Odisha (Orissa)	5th June	15th October
Punjab	1st July	15th September
Rajasthan	1st July	1st September
Sikkim	5th June	15th October
Tamil Nadu	1st June	15th October
Telangana	5th June	15th October
Tripura	1st June	15th October



States	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Uttar Pradesh	15th June	1st October
Uttarakhand	15th June	1st October
West Bengal	10th June	15th October
Union territory	Normal date of Onset of SW-Monsoon	Normal date of Withdrawal of SW-Monsoon
Andaman and Nicobar Islands	20th May	15th October
Dadra and Nagar Haveli	10th June	1st October
Daman and Diu	10th June	1st October
Lakshadweep	1st June	15th October
Delhi	1st July	15th September
Puducherry	1st June	15th October

Note: The District Environment Impact Assessment Authority (DEIAA) in consultation with District Expert Appraisal Committee (DEAC) can make necessary changes as per local meteorological variations in this period of rainy season with respect to prohibition of River Sand Mining in the District.

ENSURING SUSTAINABLE SAND MINING FOR SUSTAINABLE DEVELOPMENT

A Major Initiative of Ministry of Environment, Forest and Climate Change for ensuring Environmentally Sustainable Sand Mining and Prevention of illegal Sand Mining.

{Notification No: SO No. 141 (E) dated 15.01.2016 and S.O. No. 190 (E) dated 20.01.2016 available at www.envfor.nic.in}

- ◆ Use of Satellite imagery to decide the site suitable for mining and quantity of sand which can be mined.
- ◆ Transit permit with tamper proof security features and tracking of mined out mineral.
- ◆ Monitoring of mined out mineral to prevent mining in excess of environmental clearance capacity.

- ▶ Delegation of power to grant environmental clearance for sand mining to an authority headed by District Magistrate.

- ▶ Intergration of power with District Authorities to grant environmental clearance and prevent illegal mining.



Note : Any information of mining without environmental clearance or against the norms prescribed in these notifications be reported at e-mail id: sandmining-moef@gov.in



ABSTRACT

Industries - Mines and Minerals - Sand quarries - Usage of machinery - Various orders issued from time to time for usage of poclains in Sand Mining - Guidelines issued by the Government of India - Earlier orders superceded - Orders - Issued.

Industries (MMC.1) Department

G.O.(2D) No. 21

Dated: 02.06.2017

ஹேவிளம்பி - வைகாசி 19,
திருவள்ளூர் ஆண்டு -2048

Read:

1. G.O.(D)No.7, Industries (MMC.2) Department, dated 11.01.2011.
2. G.O.(D)No.39, Industries (MMC.1) Department, dated 01.02.2011.
3. G.O.(D)No.67, Industries (MMC.2) Department, dated 11.03.2011.
4. G.O.(D)No.22, Industries (MMC.2) Department, dated 20.02.2014.
5. G.O.(D)No.110, Industries (MMC.2) Department, dated 17.06.2015.
6. From the Government of India, Ministry of Environment, Forest and Climate Change, notification S.O.141(E), dated 15.1.2016.
7. From the Engineer-in-Chief, WRD, Public Works Department, Letter No.S7(3)/ 62535/OT2/2003, dated 26.05.2017.
8. From the Commissioner of Geology and Mining, Letter No.8828/MM6/2012, dated 29.5.2017.
9. Opinion of the Advocate General of Tamil Nadu, dated 31.5.2017.

ORDER:

In the Government Orders 1st to 4th read above, orders have been issued permitting the District Collectors for restricted and judicious use of minimum number of poclains and not more than two poclains in each of the sand quarries in the State (other than Palar and Thamirabarani Rivers).

2. In the Government Order 5th read above, based on the recommendation of the Committee headed by Thiru Rajesh Lakhoni, IAS., the Government reiterated the instructions regarding usage of poclains already issued in the Government orders 1st to 4th read above.

3. The Ministry of Environment, Forest and Climate Change, Government of India in its notification 6th read above issued under Sec.3(2) of the Environment Protection Act had stated that the Ministry of Environment and

Forest and Climate Change, in consultation with the State Governments, has prepared guidelines on Sustainable Sand Mining dealing with the provisions on environmental clearance. In terms of the said notification, the Ministry of Environment and Forest, has issued Sustainable Sand Mining Guidelines, 2016, in which it is stated that depending upon the location, thickness of sand, deposition, Agricultural land/river bed, the method of mining may be manual, semi-mechanized or mechanized. However, manual method of mining shall be preferred over any other method.

4. In the letter 7th read above, the Public Works Department has sent a proposal to the Government for increase in the usage of poclains upto 5 nos. per quarry.

5. In the letter 8th read above, the Commissioner of Geology and Mining has informed, among others, that the State Level Environmental Impact Assessment Authority (SEIAA) and Environment Department are the competent authorities to decide the usage of machineries in the sand quarries without damage to the Ecology and Environment.

6. The Government carefully examined the issue in consultation with the Advocate General of Tamil Nadu and the Government have decided to supercede the earlier orders in the Government orders 1st to 5th read above which were issued prior to Ministry of Environment, Forest and Climate Change notification vide reference 6th cited and to direct the Public Works Department to move State Level Environmental Impact Assessment Authority (SEIAA) to permit more number of poclains taking into account the factors mentioned in the Sustainable Sand Mining Guidelines, 2016 issued by the Government of India.

7. Accordingly, the Government also direct that the Public Works Department may move the SEIAA on a case to case basis to permit more number of poclains for usage in sand quarries.

(BY ORDER OF THE GOVERNOR)

ATULYA MISRA

PRINCIPAL SECRETARY TO GOVERNMENT

To

The Principal Secretary to Government, Public Works Department, Chennai -9.

The Principal Secretary to Government, Environment and Forest, Chennai -9.

The Chairman, State Level Environmental Impact Assessment Authority (SEIAA), Chennai-35.

The Commissioner of Geology and Mining Guindy, Chennai-32.

The Engineer-in-Chief, WRD, Public Works Department, Chennai-5.

All the District Collectors.

Copy to:

O/o. the Hon'ble Minister (Industries), Chennai-9.

The Law Department, Chennai-9.

Sf/sc.

// Forwarded / By order //


26/17
Section Officer

PR
26/17

21. का.आ. 1142(अ), तारीख 17 अप्रैल, 2015 ;
22. का.आ. 1141(अ), तारीख 29 अप्रैल, 2015 ;
23. का.आ. 1834(अ), तारीख 6 जुलाई, 2015 ;
24. का.आ. 2571(अ), तारीख 31 अगस्त, 2015,
25. का.आ. 2572(अ), तारीख 14 सितंबर, 2015, .
26. का.आ. 141(अ) 15 जनवरी, 2016, .
27. का.आ. 648(अ) तारीख 3 मार्च, 2016 ;
28. का.आ. 2269(अ) तारीख 1 जुलाई, 2016 ;
29. का.आ. 2944(अ), तारीख 14 सितम्बर, 2016; .
30. का.आ. 3518(अ), तारीख 23 नवंबर, 2016 ;
31. का.आ. 3999(अ), तारीख 9 दिसंबर, 2016;
32. का.आ. 4241(अ), तारीख 30 दिसम्बर, 2016; और
33. का.आ. 3611(अ), तारीख 25 जुलाई, 2018 ।

MINISTRY OF ENVIRONMENT, FOREST AND CLIMATE CHANGE

NOTIFICATION

New Delhi, the 14th August, 2018

S.O. 3977(E).— Whereas, by notification of the Government of India in the erstwhile Ministry of Environment and Forests vide number S.O.1533 (E), dated the 14th September, 2006 issued under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government directed that on and from the date of its publication, the required construction of new projects or activities or the expansion or modernisation of existing projects or activities listed in the Schedule to the said notification entailing capacity addition with change in process or technology or product mix shall be undertaken in any part of India only after prior environmental clearance from the Central Government or as the case may be, by the State Level Environment Impact Assessment Authority, duly constituted by the Central Government under sub-section (3) of section 3 of the said Act, in accordance with the procedure specified therein;

And whereas, the said Ministry has received requests, for delegation of more powers to State Environment Impact Assessment Authority (SEIAA) and District Environment Impact Assessment Authority (DEIAA) with respect to grant of Environment Clearances;

And whereas clause (a) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 provides that, whenever the Central Government considers that prohibition or restrictions of any industry or carrying on any processes or operation in any area should be imposed, it shall give notice of its intention to do so;

And whereas, a draft notification for making amendments in the Environment Impact Assessment Notification, 2006 in exercise of the powers conferred under sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 was published, vide number S.O.3933 (E) dated the 18th December 2017, inviting objections and suggestions from all the persons likely to be affected thereby, within a period of sixty days from the date of publication of said notification in the Gazette of India;

And whereas, copies of the said notification were made available to the public on 18th December 2017;

And whereas, all objections and suggestions received in response to the above mentioned draft notification have been duly considered by the Central Government;

Now, therefore, in exercise of powers conferred by sub-section (1) and clause (v) of sub-section (2) of section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986, the Central Government hereby makes the following further amendments in the Environment Impact Assessment Notification, 2006 namely:-

In the said Notification, in the SCHEDULE, for item 1(a), 1(c), and the Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix-XI and entries relating thereto, the following item and entries shall be substituted, namely:

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 (ii) Slurry pipelines (coal, lignite and other ores) passing through national parks / sanctuaries / coral reefs, ecologically sensitive areas.	> 100 ha. of mining lease area in respect of non-coal mine lease. > 150 ha of mining lease area in respect of coal mine lease Asbestos mining irrespective of mining area. All projects.	≤ 100 ha of mining lease area in respect of non-coal mine lease. ≤ 150 ha of mining lease area in respect of coal mine lease.	General Conditions shall apply except: (i) for project or activity of mining of minor minerals of Category 'B2' (up to 25 ha of mining lease area); (ii) for project or activity of mining of minor minerals of Category 'B1' in case of cluster of mining lease area; and (iii) River bed mining projects on account of inter-state boundary. 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;
1(c)	(i) River Valley projects (ii) Irrigation projects	(i) ≥ 50 MW hydroelectric power generation; (ii) ≥ 50,000 ha. of culturable command area	(i) ≥ 25 MW and < 50 MW hydroelectric power generation; (ii) > 2000 ha. and < 50,000 ha. of culturable command area.	General Condition shall apply. Note:- (i) Category 'B' river valley projects falling in more than one state shall be appraised at the central Government Level. (ii) Change in irrigation technology having environmental benefits (eg. From flood irrigation to Drip irrigation etc.) by an existing project, leading to increase in Culturable Command Area but without increase in dam height and submergence, will not require amendment/ revision of EC.
			Irrigation system	Requirement of EC
			(a) Minor Irrigation system (≤ 2000 Ha)	Exempted
			(b) Medium irrigation system (> 2000 and < 10,000 ha.)	Required to prepare EMP and to be dealt at State Level (B ₂ category).

			(c) Major irrigation system (≥10,000 to < 50,000 ha.)	Required to prepare EIA/EMP and to be dealt at State Level (B ₁ category).	
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Schematic Presentation of Requirements on Environmental Clearance of Minor Minerals including cluster situation in Appendix-XI:

Area of Lease (Hectare)	Category of Project	Requirement of EIA / EMP/ DSR	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
EC Proposal of Sand Mining and other Minor Mineral Mining on the basis of individual mine lease								
0 – 5ha	'B2'	Form –IM, PFR, DSR and Approved Mine Plan	No	Yes	Project Proponent	Project Proponent	DEAC/ DEIAA	DEIAA SEIAA SPCB CPCB MoEFCC Agency nominated by MoEFCC
> 5 ha and < 25 ha	'B2'	Form –I, PFR, DSR and Approved Mine Plan and EMP	No	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
≥ 25ha and ≤ 100ha	'B1'	Form –I, PFR, DSR and Approved Mine Plan and EIA and EMP	Yes	Yes	Project Proponent	Project Proponent	SEAC / SEIAA	
> 100 ha	'A'	Form –I, PFR, DSR and Approved Mine Plan and EIA and EMP	Yes	Yes	Project Proponent	Project Proponent	EAC/ MoEFCC	
EC Proposal of Sand Mining and other Minor Mineral Mining in cluster situation								
Cluster area of mine leases up to 5 ha	'B2'	Form –IM, PFR, DSR 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, DSR 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 area of Mine leases > 5 ha and < 25 ha with any individual lease > 5 ha	'B2'	Form –I, PFR, DSR 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	SEAC/ SEIAA	

Cluster of mine leases of area ≥ 25 hectares with individual lease size ≤ 100 ha	'B1'	Form -I, PFR, DSR and Approved Mine Plan and one EIA/EMP for all leases in the Cluster	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 > 100 ha	'A'	Form -I, PFR, DSR and Approved Mine Plan and one EIA/EMP for all leases in the Cluster	Yes	Yes	State, State Agency, Group of Project Proponents, Project Proponent	Project Proponent	EAC/MoEFCC	

[F. No. 19-2/2013-IA.III (Pt.II)]

GYANESH BHARTI, Jt. Secy.

Note: The principal rules were published in the Gazette of India, Extraordinary, Part II, Section 3, Sub-section (ii) *vide* number S.O. 1533 (E), dated the 14th September, 2006 and subsequently amended *vide* the following numbers: -

1. S.O. 1949 (E) dated the 13th November, 2006
2. S.O. 1737 (E) dated the 11th October, 2007;
3. S.O. 3067 (E) dated the 1st December, 2009;
4. S.O. 695 (E) dated the 4th April, 2011;
5. S.O. 156 (E) dated the 25th January, 2012;
6. S.O. 2896 (E) dated the 13th December, 2012;
7. S.O. 674 (E) dated the 13th March, 2013;
8. S.O. 2204 (E) dated the 19th July 2013;
9. S.O. 2555 (E) dated the 21st August, 2013;
10. S.O. 2559 (E) dated the 22nd August, 2013;
11. S.O. 2731 (E) dated the 9th September, 2013;
12. S.O. 562 (E) dated the 26th February, 2014;
13. S.O. 637 (E) dated the 28th February, 2014;
14. S.O. 1599 (E) dated the 25th June, 2014;
15. S.O. 2601 (E) dated the 7th October, 2014;
16. S.O. 2600 (E) dated the 9th October, 2014
17. S.O. 3252 (E) dated the 22nd December, 2014;
18. S.O. 382 (E) dated the 3rd February, 2015;
19. S.O. 811 (E) dated the 23rd March, 2015;
20. S.O. 996 (E) dated the 10th April, 2015;
21. S.O. 1142 (E) dated the 17th April, 2015;
22. S.O. 1141 (E) dated the 29th April, 2015;
23. S.O. 1834 (E) dated the 6th July, 2015;
24. S.O. 2571 (E) dated the 31st August, 2015;
25. S.O. 2572 (E) dated the 14th September, 2015;
26. S.O. 141 (E) dated the 15th January, 2016;
27. S.O. 648 (E) dated the 3rd March, 2016;
28. S.O. 2269(E) dated the 1st July, 2016;
29. S.O. 2944(E) dated the 14th September, 2016;

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30. S.O. 3518 (E) dated 23rd November 2016;
 31. S.O. 3999 (E) dated the 9th December, 2016;
 32. S.O. 4241(E) dated the 30th December, 2016; and
 33. S.O. 3611(E) dated the 25th July, 2018.

**BEFORE THE HONBLE
NATIONAL GREEN TRIBUNAL
SOUTHERN ZONE AT CHENNAI**

APPEAL NO.80 of 2022

IN THE MATTER OF :

Anaithu Vivasaykalin Kanimavala
Neervalu, Sutrusoolal Padhukappu
Sangam

... Applicant

Versus

The Secretary,
Government of India,
Ministry of Environment, Forests
and Climate Change,
And Ors.

...Respondents

TYPED SET

**DR. D SHANMUGANATHAN
SPECIAL GOVERNMENT PLEADER
COUNSEL FOR 4th RESPONDENT**