

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

**Original Application no. 76/2019**

**State of Kerala & Others : Respondent(s)**

**Report filed by the Chief Environmental Engineer,  
Kerala State Pollution Control Board, Regional Office, Thiruvananthapuram  
in Original Application No. 76/2019**

**Adv.Jogy Scaria,**

**ADDITIONAL STANDING COUNSEL**

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

**Original Application no. 76/2019**

**State of Kerala & Others : Respondent(s)**

**VOLUME 1**

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Dated this the ...15<sup>th</sup>... day of July 2020.

**Jogy Scaria**, Advocate  
Additional Standing Counsel

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RADHAKRISHNAN

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

**Original Application no. 76/2019**

**State of Kerala & Others : Respondent(s)**

**VOLUME 2**

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Dated this the ...15<sup>th</sup> ..... day of July 2020.

Jogy Scaria, Advocate  
Additional Standing Counsel

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

**Original Application no. 76/2019**

**State of Kerala & Others : Respondent(s)**

**VERIFICATION**

I, Sindhu Radhakrishnan, Chief Environmental Engineer, Kerala State Pollution Control Board, Regional Office, Thiruvananthapuram, do hereby verify on this the ...15th..day of July 2020, that all what is stated above are true and correct to the best of my knowledge information and belief.

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**Sindhu Radhakrishnan  
Chief Environmental Engineer**

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

**Original Application no. 76/2019**

**State of Kerala & Others:**

**Respondent(s)**

**Report filed by Chief Environmental Engineer, Kerala State Pollution Control Board,  
Regional Office, Thiruvananthapuram in the matter of  
Original Application No. 76/2019.**

The issue for consideration in the O.A No.76/2019 is the illegal mining carried out by M/s. Indian Rare Earths Limited (IREL) and M/s. Kerala Minerals & Metals Limited (KMML) along the coastal area of Alappad and Chavara, in Kollam District, Kerala. The committee constituted as per the direction of Honorable National Green Tribunal, including the Central Pollution Control Board (CPCB) and Kerala State Pollution Control Board (KSPCB), had assessed the interim damage caused to the environment due to the unsustainable mining of the industries and submitted report before the Honourable Court.

The Honourable National Green Tribunal vide order dated 25.02.2020 directed the Kerala SPCB to take further action according with law, after hearing the affected parties and to furnish the action taken report. (Copy of the said order is attached as Annexure I). The Chief Environmental Engineer, Regional Office, Thiruvananthapuram was authorized to file the report after the hearing, vide Order no. PCB/HO/EE4/NGT/76/2019 dated 29.06.2020 of the Member Secretary, Kerala State Pollution Control Board. (Copy of the said order is attached as Annexure II).

In compliance with the order of Honorable National Green Tribunal, a hearing of the affected parties, IREL and KMML was arranged on 06-04-2020. But due to the pandemic COVID 19 lockdown it was postponed. Both the industries were heard by the Chairman of Kerala State Pollution Control Board on **18.06.2020**.

Both the parties put forward their contentions, on the report submitted by the joint committee, recommending recovery of compensation based on the damage to the environment, before the Honorable National Green Tribunal. They submitted written

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representations also during the hearing. The main contentions of IREL & KMML during the hearing are summarised below.

### **IREL**

1. The IREL had got conducted 2 studies by NCESS for estimating sustainable mining of heavy minerals that can be done from the Chavara Beach. The 2 study reports were pertaining to the years 2001-2002 and 2010-2012. In these reports, NCESS has specified the permissible quantity that can be mined. The first NCESS study reported a net accretion of 60 m<sup>3</sup>/meter length of beach per annum and the company regulated mining accordingly. As per the second study report obtained in 2012, the quantity of permissible mining was reduced to 32.4 m<sup>3</sup>/meter length of beach per annum. They reported that the quantity of beach sand IREL had mined is not different from that specified in the above reports of the NCESS.
2. IREL is not aware of the NCESS report of 2019. The mining quantity quoted in NCESS report 2019 has not been provided by the Company. Hence the quantities are questionable. All data has been made available to the State PCB.
3. Mining is not the only reason for erosion.
4. IREL has submitted detailed a written report during the hearing

### **KMML**

Representative of KMML submitted that all the contentions raised by IREL are identical to that of KMML. In addition, they submitted the following.

1. They had not been given an opportunity for hearing before submission of the report to the Hon'ble NGT
2. The illegality & unscientific-ness of mining activities has not been established legally by the Joint Committee.
3. Quantity specified in NCESS report is also disputed.
4. Written submission against the Report has been submitted by KMML.
5. One week time is required to submit detailed report regarding the quantity of mining shown in the document submitted to the Board.
6. A lot positive developments have come about in the locality due to the existence of the company

The Chief Environmental Engineer, Regional Office, Thiruvananthapuram, one of the members of the Joint Committee, who was present in the hearing, pointed out the following.

1. The report of NCESS in 2019 had been prepared by NCESS as per the direction of Kerala Government (Industries Department) and the report was made available to the Kerala State Pollution Board by the Government for filing before the Hon'ble NGT.

2. In this NCESS report (2019) obtained from the Government, it is clearly stated that excess mining was carried out by IREL & KMML. NCESS report also gives mining data of the companies which were annexed to the report.

3. The mining data provided by IREL & KMML to the Committee are not significantly different from the data in NCESS report.

4. Honourable National Green Tribunal has not directed the Joint Committee to go into the legal aspects of mining but to assess the environmental damage due to the unsustainable mining conducted by the Companies.

Dr. Deepesh, Scientist, Central Pollution Control Board, another member of the joint committee, who attended the hearing through Video Conference, informed the following about the calculation of environmental compensation been done.

1. The calculation of environmental compensation has been done following the methodology accepted by World Bank, and it is a Worldwide accepted methodology.

2. If there is any change in data, the environmental compensation can be reworked accordingly. Only partial data has been given by the Companies.

3. As to the contention that the whole of West Coast is erosion prone, erosion rate in Kanyakumari District area is very less and here this particular mining has accelerated erosion. It is evident from satellite imagery.

4. The rate of erosion in this area is much higher than the natural process.

After hearing both parties, the Chairman of the Board observed that KMML and IREL have raised concern on excess mining as reported by NCESS and so if needed, complete data can be called for from the parties. Also rate of erosion has to be studied. However it was noted that the documents submitted by KMML to the Board during the damage assessment itself revealed that excess mining has been done. It was also decided after the hearing KMML and IREL that, if they desire so, can implead in the O.A and submit their contentions before the Honorable National Green Tribunal. Based on the hearing and written submissions from the companies report will be filed before the Honourable NGT.

The main contentions of IREL & KMML based on their written representations are summarised below.

### **Submissions from IREL**

1. IREL is functioning under the Department of Atomic Energy. It is the only Government agency in the country authorized to mine and handle Monazite, an atomic mineral occurred in beach sand along with 6 other minerals such as Ilmenite, Rutile Zircon, Leucosene, Silimanite and Garnet. The Monozite produced by IREL is used for producing several nuclear grade compounds which have strategic applications. The other minerals have applications in Titanium production , steel industries, Nuclear reactors etc. IREL has been conducting mining as per the Mining lease of Govt. of Kerala along the Coast of Chavara ,Kollam since 1970.
2. IREL had engaged NCESS in 1999 and in 2010 to conduct studies on Heavy metal budgeting on the Chavara coast and since then mining had been conducted only as per the sustainable quantity recommended by NCESS. The total quantity of mining when calculated for a block period of 9 years from 2000 to 2009 and 2010 to 2019 are within this limit .
3. Mining is not the only reason for beach erosion. Studies have shown that the entire coast of Kerala is prone to accretion and erosion.
4. The calculations made for land deterioration and destruction due to tailing as per the joint committee report is unscientific. Since the heavy mineral concentration is not a chemical process but a physical process involving washing of beach sand with water and centrifuging there are no chances of land pollution and deterioration. Deposition of tailing sand on the beaches was not recommended by NCESS in their reports
5. IREL has been permitted to carry on mining activities on the basis of mining leases issued by the Government.
6. IREL mining operations are not responsible for the alleged damages or degradation of the area and thus not liable to pay any damages towards loss caused to the environment.

### **Submissions from KMML**

1. The parameters adopted for the study by the joint committee are not relevant and the legality & unscientific-ness of mining activities has not been established legally by the Joint Committee.

2. The entire study is based on two studies of NCESS, first one during 2011-13 and second in 2019, in which KMML is not aware of second one. Quantity specified in NCESS report is also disputed. The findings of the joint committee have not pointed out violations to any applicable law.
3. The mining of minerals is being carried out by KMML as per the approved mining plans issued from appropriate authorities from time to time.
4. Mining is carried out in accordance with law. Overburden and tailings are stored for refilling at a later stage.
5. The committee has not done comparative analysis of mining and non mining areas.
6. Even though the work of construction of groynes by KMML has been pointed out in the report by the committee, the advantages gained have not been considered.
7. Further proceedings against KMML based on the Joint Committee report may be dropped.

(Copy of the minutes of the hearing on 18.06.2020 and written submissions from KMML and IREL are attached as **Annexure III.**)

It is submitted that the companies have still not submitted any additional data so as to make any changes in the interim damage assessment. The submission of IREL that land pollution is included in the damage calculation is not correct. Considering sand washing as a non polluting industrial operation, effects of pollution is not included. Similarly cost of construction of beach protective measures such as groynes have not been included in the total damage assessment, even though it is as per the methodology, a part of damage assessment.

It is submitted that both companies have raised objection regarding the NCESS report prepared in 2019 and produced before this Honourable court on 19- 7-2019. This report as stated earlier had been prepared by NCESS as per the direction of Govt of Kerala. Copies of Government direction to NCESS to prepare the report and later handing over to the Kerala SPCB for producing before the court are produced herewith as **Annexure IV** .

Both companies have raised objection that destruction of beach is not entirely due to the beach mining but there are several reasons for which they demand an extensive study. NCESS who have done 4 years of study for IREL and 2 years for KMML along the Chavara coast have conducted one month study and used previous data to assess the damage to the beach . Even though both units are relying on NCESS reports for the sustainable volume that can be mined they are not willing to accept the findings of NCESS in this regard. Similarly the companies report that they are conducting mining as per the mining plans and

Government lease issued to them. However the units, even though applied for, have not obtained Environmental Clearance, for beach mining. It is humbly submitted that the Board is not competent to assess the other legal aspects of mining, which comes under the Department of Mining and Geology, Atomic Mineral Division, Government of India etc. and causes of beach erosion. Due to the above reasons and the COVID 19 lock down prevailing in the State further actions could not be taken against the companies.

The above facts are humbly submitted before the Honorable National Green Tribunal for kind consideration.

All that stated above are true to the best of my knowledge, information and belief.

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**Sindhu Radhakrishnan**  
**Chief Environmental Engineer**

Item No. 06

Court No. 1

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

Original Application No. 76/2019  
(I.A. No. 109/2020)

(With report dated 13.02.2020)

News item published in "Indian  
Express" Authored by Vishnu Varma  
Titled

"17-year-old's video gets Kerala talking of impact of sand mining"

Date of hearing: 25.02.2020

**CORAM:** HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON  
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER  
HON'BLE MR. SIDDHANTA DAS, EXPERT MEMBER

For Applicant(s): Ms. Geeti Ara, Mr. Sumit Goel, Advocates  
For Respondent(s): Mr. Keerthi Priyan, Advocate for KSPCB  
Mr. Nishe Rajen Shonker, Advocate for State  
of Kerala

**ORDER**

1. The issue for consideration is the alleged unscientific mining by Centre Rare Earths Limited and Kerala Minerals and Metal Limited along the coastal area of Kollam in Kerala. Vide order dated 29.03.2019, a report was directed to be furnished on the factual aspects by District Magistrate, Kollam and the State Pollution Control Board (PSCB).
2. This Tribunal vide order dated 19.07.2019 considered the report jointly submitted by the State PCB and District Magistrate showing illegal mining and directed as follows:

"4. In view of above, we constitute a joint Committee with representatives from the Central Pollution Control Board (CPCB) and the State Pollution Control Board (SPCB) to determine the amount of compensation to be recovered for damage to the environment by two months by e-mail at

*judicial-ngt@gov.in. It is open to the concerned regulatory authorities to recover the compensation by following due procedure of law."*

3. Accordingly, further report has been filed on 02.11.2019 by the joint Committee recommending recovery of compensation based on the damage to the environment and to enforce the Rule of Law as follows:

***"Summary of damage assessment***

- (a) *Interim damage assessment and compensation for temporary restoration activities calculated for IREL for the period 2001-19 is Rs.69,12,76,280 (69.12 Cr and the total value of excess mining 223,81,60,851 (223.81 Cr)*
- (b) *Interim damage assessment and compensation for temporary restoration activities calculated for KMML for the period 2001-19 is Rs.95,36,24,067 (95.36 Cr) and the total value of excess mining is 266,50,55,094 (266.51 Cr)."*
4. In view of the above, the State PCB may take further action according with law, after giving hearing to the affected parties. Since the State PCB is to hear the affected parties, we do not consider it necessary to hear the said parties at this stage, in view of the fact that order of the State PCB is appealable to this Tribunal.
5. The State PCB may file action taken report before the next date by email at [judicial-ngt@gov.in](mailto:judicial-ngt@gov.in).

List again on July 8, 2020.

Adarsh Kumar Goel, CP

Dr.Nagin Nanda, EM

Siddhanta Das, EM

*e*



Annexure 2

☎: General: 0471- 2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151  
E-mail: ms.keralapcb@gov.in FAX: 0471 - 2318134, 2318152 web: [www.keralapcb.nic.in](http://www.keralapcb.nic.in)



# KERALA STATE POLLUTION CONTROL BOARD

കേരള സംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്

Pattom P.O., Thiruvananthapuram - 695 004  
പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

PCB/HO/EE4/NGT/76/2019

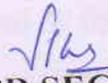
Date: 29 /06/2020

## AUTHORISATION

Sub: - O.A.No.76/2019- reg.

The Chief Environmental Engineer, Regional Office, Thiruvananthapuram is hereby authorised to represent the Board in the above O.A and to file necessary reports on behalf of the Board.

For and on behalf of the  
**KERALA STATE POLLUTION CONTROL BOARD**

  
**MEMBER SECRETARY**

To  
The Chief Environmental Engineer,  
Regional Office,  
Thiruvananthapuram

Copy to:

Adv. Jogy Scaria  
Advocate-on-Record  
Supreme Court of India  
SB-41, Sophia Apartment,  
Abhaykhand-4, Indirapuram  
Ghaziabad, UP-201010  
(O) 01204264302

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29/6/2020

Annexure 3



General: 0471-2312910, 2318153, 2318154, 2318155 Chairman: 2318150 Member Secretary: 2318151  
e-mail: ms.kspcb@gov.in FAX: 2318152 web: www.keralapcb.nic.in

**KERALA STATE POLLUTION CONTROL BOARD**  
**കേരളസംസ്ഥാന മലിനീകരണ നിയന്ത്രണ ബോർഡ്**

Pattom P.O., Thiruvananthapuram - 695 004  
പട്ടം പി.ഒ., തിരുവനന്തപുരം - 695 004

Date: 29/06/2020

PCB/HO/EE4/NGT/76/2019

From

The Member Secretary

To

1. The Managing Director  
Kerala Minerals and Metals Ltd  
NH 66, Sankaramangalam,  
Chavara, Kollam-691 583
2. The Managing Director  
Indian Rare Earths Ltd  
Chavara, Kollam-691 584

Sub: Unscientific mining along coastal area of Kollam

Sir,

Please find the enclosed minutes of the meeting conducted on 18/06/2020 in the chamber of Chairman.

Yours faithfully,

  
MEMBER SECRETARY

Copy to:

1. The Chief Environmental Engineer  
KSPCB, Head Office, TVM
2. The Chief Environmental Engineer  
KSPCB, Regional Office, TVM
3. The Environmental Engineer  
KSPCB, District Office, Kollam
4. The Environmental Engineer-1  
KSPCB, Head Office

AB2  
7  
29/6/2020

## MINUTES OF THE MEETING CONDUCTED ON 18/06/2020

The meeting commenced at 11.15 AM with the Chairman, KSPCB presiding. The Member Secretary was also present. Representatives of KMML & IREL, Chief Environmental Engineer, Head Office, Chief Environmental Engineer, Regional Office, Thiruvananthapuram, Officers from concerned sections, Assistant Engineer, District Office, Kollam were also present. Dr. Deepesh, Scientist, CPCB, Bangalore was present via video conferencing. List of participants is attached.

The Chairman welcomed everyone to the meeting, and requested the industry representatives to introduce themselves. He then asked IREL to present their points. They mentioned that they have certain contentions on the report prepared by the KSPCB. The points raised by the IREL are given below:

The IREL had got conducted 2 studies by NCESS for estimating sustainable mining of heavy minerals that can be done from the Chavara Beach. The 2 study reports were pertaining to the years 2001-2010 and 2010-2012. In these reports, NCESS has specified the permissible quantity that can be mined. They mentioned that the quantity of sand the IREL has mined is not different from that specified in the reports of the NCESS. The NCESS study reported a net accretion of 60 m<sup>3</sup>/meter length of beach per annum and the company regulated mining accordingly. As per the the second study, whose report was obtained in 2012, the quantity of permissible mining was reduced to 32.4 m<sup>3</sup>/meter length of beach per annum. The IREL mentioned that they are not aware of the recent NCESS report submitted to the Government of Kerala, quoted in the KSPCB report. The IREL claims that they have submitted all the data called for by the Pollution Control Board. There is no chemical process in their operations, only physical separation

of minerals and sand is done. Tailings are used for refilling the mined areas and the land, which is leased, is returned to the owners. They also contested that the coastal erosion cannot be considered only due to the mining, as there are other factors also that cause erosion. .

They also submitted that a lot of positive developments have come about in the locality due to the existence of the Company. There are 2 estuaries in the area being investigated, and the IREL has put up many structures for protection of estuaries.

**KMML submitted the following**

Representative of KMML submitted that all the contentions raised by IREL are also identical to that of KMML. In addition, they submitted that they also have not seen the 2019 report of NCESS. They claim that no excess quantity of sand is mined by them. They contest that the quantity of sand mined by KMML as reported in the 2019 NCESS report might have been obtained from sources other than their Company. They had not been given an opportunity for hearing or submission before the Hon'ble NGT. They also reiterated that the whole of the west coast of the country is erosion prone, and the erosion in the area cannot be attributed mining alone.

They mentioned that the NCESS has conducted the study during 2011-2013 regarding sustainable mining for KMML, and taking this report of NCESS as guideline mining is done as per the rules and mining plan approved by Department of Atomic Energy.

An Objection was raised by the KMML that violation of any mining law is not pointed out in the report. Provisions of law for imposing penalty are also not

pointed out. It has not been legally established that unsustainable mining has been carried out.

They also submitted that a lot of positive developments have come about in the locality due to the existence of the Company.

The Chief Environmental Engineer, Regional Office, Thiruvananthapuram pointed out the following.

1. The report of NCESS in 2019 had been prepared by NCESS as per the direction of Government. (Industries Department)
2. This report was furnished to the Board by the Government for filing before the Hon'ble NGT.
3. In this NCESS report (2019) obtained from Industries Department, it is clearly stated that excess mining was carried out by IREL & KMML. NCESS report also gives mining data of the companies which are annexed in the report. The CEE also pointed out that the mining data provided by IREL & KMML are not significantly different from the data in NCESS report. The CEE also said that the NGT has not directed the Joint Committee to go into the legal aspects of mining but to assess the environmental damage due to the unsustainable mining conducted by the Companies.

On enquiry by the Chairman how the calculation of environmental compensation has been done, Dr. Deepesh informed that this has been done following the methodology accepted by World Bank, and it is a World wide accepted methodology. He also informed that if there is any change in data, the environmental compensation can be reworked accordingly. He also informed that only partial data has been given by the Companies. As to the contention that the

whole of West Coast is erosion prone, Dr. Deepesh said that erosion rate in Kanyakumari District area is very less and here this particular mining has accelerated erosion. It is evident from satellite imagery. He also said that rate of erosion in this area is much higher than the natural process.

The Member Secretary directed that mining should be done only as per SOP and if they have any objection to the report of the Joint Committee, they can implead in the present Original Application and voice their objections.

After hearing the submissions, Chairman observed that both the industries have raised concern on excess mining as reported. If need be, complete data can be called for. Rate of erosion has to be studied. However, he noted that the document submitted by KMML to the Board itself revealed that excess mining has been done. In conclusion, the main contentions of IREL & KMML are given below.

#### IREL

1. IREL is not aware of the NCESS report of 2019 and is not ready to accept it.
2. The mining quantity quoted in NCESS report 2019 has not been provided by the Company. Hence the quantities are questionable. All data has been made available to PCB.
3. Mining is not the only reason for erosion.
4. IREL has submitted detailed written report during the hearing

#### KMML

1. The illegality & unscientific-ness of mining activities has not been established legally by the Joint Committee.
2. Quantity specified in NCESS report is also disputed.

3. Report has been submitted by KMML.

4. One week time is required to submit detailed report regarding the quantity of mining shown in the document submitted to the Board.

In conclusion, the Chairman said that the Hon'ble NGT has directed the Board to hear the affected parties and submit action taken report, which is due on 08/07/2020. Based on the hearing and written reports received from the Companies, report will be submitted before the Hon'ble NGT. IREL & KMML, if they desire so, can implead in the O.A and submit their contentions before the Hon'ble NGT. The Chairman thanked all the participants.

The meeting came to close at 12.45 PM.



**CHAIRMAN**



# आईआरईएल (इंडिया) लिमिटेड

## IREL (INDIA) LIMITED

(Formerly Indian Rare Earths Limited)

(भारत सरकार का उपक्रम / A Govt. of India Undertaking)

चवरा, कोल्लम - 691 583, केरल राज्य, भारत

Chavara, Kollam - 691 583, Kerala State, INDIA

CIN : U15100MH1950GOI008187

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फैक्स } 0476-2680141  
Fax }  
इमेल } cgm-ch@irel.co.in  
Email }  
वेबसाइट } [www.irel.co.in](http://www.irel.co.in)  
website }

ISO 9001:2015, ISO 14001:2015 & OHSAS 18001:2007 Company

CH/MNG/PCB/2020  
17.06.2020

To  
The Chairman,  
Kerala State pollution Control Board,  
Pattom PO,  
Thiruvananthapuram

*Need dir  
the heavy  
18/6/20*

Sir/Madam,

Sub : Unscientific mining along coastal area of Kollam

Ref : (i) Hon'ble NGT order dated 25.02.2020 in OA No.76/2019

(ii) KSPCB letter no. PCB/HO/EE4/NGT/76/2019 dated 09.06.2020

This has reference to the above. We hereby submit our responses to the Joint Committee report filed in OA No. 76/2019 for your consideration.

Thanking you,

For IREL (India) Limited, Chavara

*S. Surya Kumar*  
17/6/2020

S.Surya Kumar,

Chief General Manager&Head.

### Enclosures

1. IREL response - 12 pages
2. Annexure-1 (relevant page of NCESS report 2002)
3. Annexure -2 (relevant pages of NCESS report 2011)
4. Copy of GOs for Mining lease
5. Copy of Mining Plan approval letter from AMD, Hyderabad



**IREL (India) Limited,  
Minerals Division  
Chavara , 691583**

OBJECTIONS TO THE REPORT OF THE JOINT COMMITTEE FILED IN OA NO.76 OF 2019

The Hon'ble National Green Tribunal on 16-01-2019 taking suo moto cognizance of a newspaper report published in the Indian Express dated 11<sup>th</sup> January 2019 on the rampant beach sand mining in the coastal district of Kollam directed the District Magistrate Kollam and KSPCB (Kerala State Pollution Control Board) to take appropriate action and furnish a factual and action taken report within a month. A report on all factual aspects and the remedial measures to be taken as examined by NCESS was filed by KSPCB by email on 17.07.2019. The said report was taken on record during the hearing held on 19.07.2019. The Hon'ble Tribunal took note of some of the specific findings mentioned in the report filed by KSPCB more particularly that there has been a shoreward shift of isobaths in Ponmana and Vellanathuruthu as prepared in 2000, 2010 and 2019, the mining volumes by IREL and KMML during the last two decades namely 2000 to 2010 and 2010-2019 have been considerably higher than sustainable mining quantities recommended by CESS/NCESS and that severe erosion is attributable to the unsustainable mining practice that has been going on along this coast.

The Hon'ble Tribunal constituted a Joint Committee with representatives from CPCB and KSPCB to determine the amount of compensation to be recovered for the damage caused to the environment by unsustainable, illegal mining and further directed the Committee to file a report. IREL(India) Limited filed an application in the Hon'ble Tribunal for impleadment and permission to file objections to the report filed KSPCB which was listed for hearing on 25.02.2020. On the said date, the Hon'ble Tribunal directed KSPCB to issue notice to the affected parties and hear them before taking any further action. Accordingly, KSPCB has issued the notice to IREL (India) Limited on 09.06.2020 calling upon IREL to attend the hearing on 18.06.2020..

**IREL is thus submitting its objections to the report filed by KSPCB in the Hon'ble Tribunal on 02. 11. 2019 in writing, apart from making its oral submissions.**



**IREL (India) Limited,  
Minerals Division  
Chavara , 691583**

IREL (India) Limited at a glance:

IREL, a Mini Ratna (Category-I) Central Public Sector Enterprise (CPSE) under the administrative control of the Department of Atomic Energy was established in August 1950. The first plant was set up at Rare Earth Division (RED) in Aluva, Kerala in the year 1950, with the mandate of producing Rare Earths and compounds of strategic importance from Monazite. The products from Monazite viz; Rare Earth, Thorium, Uranium compounds used in the Atomic Energy, Space and Defence sectors. In order to ensure sustained supply of raw material for monazite processing, Govt. of India took over the operations of Travancore Minerals Limited in Chavara, Kerala and Manavalakurichi, Tamil Nadu in 1965 through backward integration of IREL and entered into the business of winning and processing of atomic minerals (commonly known as Beach Sand Minerals). The position of IREL is clearly defined under Department of Atomic Energy in The Government of India (Allocation of Business) Rules, 1961.

IREL is the only Government agency in the country authorized to mine and handle "monazite". Monazite occurs as an associated mineral in the suite of other six minerals viz; Ilmenite, Rutile, Zircon, Leucoxene, Sillimanite and Garnet. This suite of seven minerals is also called Beach Sand Minerals and declared as "atomic minerals" under Part-B of First Schedule of MMDR Act 1957. Monazite produced from IREL, Chavara mining lease areas is utilized for the production of Nuclear Grade Ammonium Di-Uranate (NGADU), mixed rare earth chloride (MRECI), Thorium Compounds, tri-sodium phosphate (TSP) and other compounds having a number of strategic and niche application. The thorium values generated from monazite processing are stockpiled as per the directives of Atomic Energy Regulatory Board (AERB) for future use in the 3<sup>rd</sup> Stage Nuclear Power Programme of the Country in line with Energy Security Mission. NGADU produced out of monazite is directly used for Atomic Energy applications in the country.

The government of Kerala granted mining lease in favour of IREL, Chavara in Kollam District during the 1970s for winning of atomic minerals and since then IREL, Chavara



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has been carrying on its operations in a sustainable manner. Government of Kerala further renewed the mining lease of IREL, Chavara during May 2006 upto Feb 2020. Presently the mining lease areas of IREL, Chavara are operated under Rule 6(11) of Atomic Mineral Concession Rules, 2016. IREL, Chavara caters the raw material requirements of the prestigious State-owned PSUs, M/s Travancore Titanium Products Limited (TTPL) and M/s Kerala Minerals and Metals Limited (KMML) by supplying Ilmenite. Other minerals viz monazite is used for strategic application stated above. Zircon is also used in nuclear reactors as fuel bundle for nuclear power generation. In addition, hundreds of downstream industries in and around state of Kerala are benefitted by the products of IREL.

Ilmenite - Feed stock to state PSU's M/s KMML and M/s TTPL

Monazite - Nuclear Power Generation stage 3

Zircon - Nuclear Power Generation stage 1 and infrastructure based industry

Rutile - Infrastructure sector

Sillimanite - Steel industry

IREL adopts two methods for winning of atomic minerals viz; beach wash collection and inland mining. The beach wash collection, which is a replenishable resource, is being done from 1970s in Chavara and Vellanathuruthu area. The beach washing collection is done by manual scooping of beach sand thus providing livelihood for a large number of local inhabitants. The inland mining activity was started in Chavara area in 1990 and in Vellanathuruthu area in the year 2016. The methodology adopted is harvesting of minerals without drilling and blasting as these minerals are naturally occurring in liberated form. Being a wet operation, there is no emission of dust, no usage / storage of explosives and no emission of toxic fumes. The minerals are separated by physical processes and there is no use of chemicals. The methodology adopted by IREL, Chavara for winning of atomic minerals from the mining lease areas is environment friendly and operations are carried out in a sustainable manner as per the approved mining plan since remaining sand (tailings) after extraction of minerals is backfilled to maintain the topography.



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**The phenomenon of accretion of atomic minerals at southern west coast of Kerala state:**

It is a well known fact that the Western Ghats contain atomic minerals which were formed due to solidification of metamorphic rock during volcanic eruptions. Due to heavy rains in monsoon and hot sun ray incidence the rocks have been weathered, the mineral grains liberated which are carried down during rainy season by the rivers to the sea. The width of the beach in the west coast is very narrow (around 500 mts only) unlike on the eastern side where the width of the beach is around 2000 mts. These minerals are carried to the Arabian Sea not only by the rivers but also several streams which is also a unique feature of the western coast in Kerala. The minerals are pushed back to the beach during the non rainy season thus resulting in accretion of sand on the beach and replenishing the beach. Even though accretion and erosion is a natural phenomenon in the south western coast, the accretion period is more than the erosion period which is 3 times, thus resulting in net accretion of minerals.

**NECSS REPORTS:**

IREL, Chavara conducted a workshop on "Sustainable development of heavy mineral resources of Chavara" in October 1997, by inviting various stake holders like local panchayat members, eminent scientists and government officials in which, it was recommended to identify the information gaps on heavy mineral (HM) budgeting at Chavara coast. Towards establishing the HM budgeting and management of the same in the coastal stretches of Chavara, IREL engaged NCESS for conducting the scientific studies in February 1999. NCESS carried out an extensive study and submitted the report in the year 2002. Based on the extensive field visits and measurements (including beach, offshore and inland) and modelling, the processes involved for replenishment of HM and sediment fluxes in the coastal regions of Chavara were worked out. The step ladder concept was proposed based on all season study for an extent of almost two years, to describe the near-shore sediment transport processes along the coast. A numerical model to work out the net replenishment of volume of mineral sand was developed considering the net accretion and erosion processes.



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NCESS study resulted in a sustainable volume of net accretion of 60 m<sup>3</sup>/mt/year was established. Bulk density was calculated to be 2.088 t/m<sup>3</sup>.

To combat the sea erosion issue, which is a natural phenomenon in the west coast, the Government of Kerala constructed a sea wall along the coast in 1960s. About 1500mt of the coastline (including Kovilthottam, Ponmana and Vellanathuruthu) has been left open to enable beach wash collection by IREL. The corresponding tonnage calculated as Heavy Mineral Sand budgeting is 1,87,920 t/year. The relevant chapter of NCESS report (February 2002) showing the Heavy Mineral Sand annual accretion details is enclosed herewith as Annexure-I.

In 2010-11, IREL once again engaged NCESS to take up a study on " Depletion of Heavy mineral content" in beach washing as IREL observed that there was a considerable decrease in HM content after the tsunami. A report was submitted to IREL in 2012. As per this report, the accretion volume of sand was 32.4m<sup>3</sup>/mt/year and the corresponding bulk density was 1.799t/m<sup>3</sup>. Accordingly, the sand budgeting calculated for 1500 mt was 87,431t/year. The values shown have been taken as the recommended quantities of beach wash collection for the years 2001-2012 and 2012-2019 respectively. The relevant chapter of NCESS report (received in 2012) is enclosed herewith as Annexure-II.

The recommended and permissible quantities of beach wash collection for Block II and Block IV viz. a viz. the actual quantities are given in the table below:



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Period	Permissible quantity as per NCESS report		Actual quantity collected by IREL	
	Volume in m <sup>3</sup>	Quantity in tons	Quantity from Block II and IV (tons)	Excess quantity collected (ton)
2001-2010	8,10,000 (60 m <sup>3</sup> X 1500 m X 9 years)	<b>16,91,280</b> (8,10,000 m <sup>3</sup> X 2.088 t/m <sup>3</sup> )	<b>16,43,978</b>	Nil
2010 - 2019	5,20,200 (60 m <sup>3</sup> X 1500 m X 2 years + 32.4 m <sup>3</sup> X 1500 m X 7 years)	<b>9,87,860</b> (1,80,000 m <sup>3</sup> X 2.088 t/m <sup>3</sup> + 3,40,200 m <sup>3</sup> X 1.799)	<b>9,57,723</b>	Nil

From the above table, it is clear that IREL has not collected any excess quantity during the period 2001-10 and 2010-2019.

**OBJECTIONS TO THE REPORT OF THE JOINT COMMITTEE FILED IN OA NO. 76 OF 2019**

Paragraph No. 2.1 Specific observations based on site visit:

Unsustainable mining practices resulting in environmental damage/ degradation to the area causing:

- *"Loss of beach land and natural plantation.*
- *Loss natural beach and recreational value*
- *Loss of traditional fishing*
- *Loss of natural coastal protection*
- *Loss of habitat properties and cultural values*
- *Loss of ecological services offered by coastal region"*



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Response by IREL:

The beach wash collection is done in a sustainable manner, taking into account all aspects to safeguard the environment. Studies have been conducted by NCESS regarding sustainable volume of mining and their recommendations are being implicitly followed which is evident from the following tabulated statement:

Period	Permissible qty as per NCESS		Actual quantity collected by IREL	
	Volume in m <sup>3</sup>	Quantity in tons	Quantity from Block II and IV (tons)	Excess quantity collected (ton)
2001-2010 (9 years)	8,10,000	<b>16,91,280</b>	<b>16,43,978</b>	Nil
2010 -2019 (9 years)	5,20,200	<b>9,87,860</b>	<b>9,57,723</b>	Nil

IREL carried out sustainable mining during the above two decades in line with the NCESS reports. IREL practices only manual mining in the intertidal zone (ITZ) for collection of beach washings since inception and no machinery is used for collecting beach washings.

IREL mining operations are not responsible for the alleged damages or degradation of the mining lease area. Sea erosion and accretion are common natural phenomena happening all across the west coast. Hence it is denied that the mining activities of IREL have caused damage to the environment.

Paragraph 3.2 Interim Damage Assessments

3.2.1 Land deterioration / destruction due to tailings:

The report states that tailings is the solid waste generated from beach mining / washings. The black sand rich in Ilmenite and other heavy minerals are processed on/ or off site to separate heavy metal rich fractions and tailings consisting of silica sand are deposited in surrounding areas in mounds or trenches in the industry premises.



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It is also stated that NCESS recommends tailings should be deposited back on the shore to prevent further erosion of beach and to reclaim the lost beach. This is also one of the requirements of the approved mining plan and mining lease which requires the lessee to do the reclamation of mined area and progressive closure of mine as per the plan.

The report further states that excessive extraction of beach sand using heavy earth moving equipment and non-deposit of tailings on the beach front has caused loss of beach area and has assessed the damage caused to the environment because of the deterioration of the land surface with mine tailing and associated activities by IREL during the period 2001-2019 at Rs. 30.995 Crores.

Response by IREL:

The collection of beach washing does not involve any drilling or blasting. The minerals are in liberated form. The process doesn't require any chemicals. In case of beach wash collection from the beaches and beach sand mining in the inland area which involves wet operations, the same are carried out using spiral separators for pre-concentration, where tailings (silica sand) and concentrate (atomic minerals) are collected separately. There is no solid waste generation and instead there is physical separation only. The tailing sand is non-hazardous, non-leachable and cannot cause land deterioration and destruction. In turn, it is used for simultaneous refilling of the back beaches and is well accepted by NCESS.

NCESS, in their reports has never recommended that the tailings should be deposited on the beach to prevent further erosion of beach and to reclaim the lost beach due to mining activities. In fact, the reports only recommend the tailings to be used to refill the back beaches.

Hence the calculation made for land deterioration and destruction due to tailing from page 18 to 23 of the report is unscientific and hence the damages claimed are denied.



Observations of the Committee:

Paragraph No. 3.2.2 *Cost of land/beach lost due to beach mining*

*"The extent of beach area lost/affected by unsustainable beach mining by IREL is taken from Google earth satellite historic data with respect to the 2000 shoreline determined by NCESS in their April 2019 report. The extent of beach mining was determined by the geo morphologic changes observed in the Google earth historic satellite imagery over a period from 2003 to 2019. Accordingly, area of 29047.8 and 105924.66 m<sup>2</sup> were affected due to beach mining activities of IREL near Kovilhottam (NK Block II) and Vellanathuruthu (NK Block IV) respectively."*

The damages for the cost of lost land as assessed by the committee have been fixed at Rs. 6.66 Crores.

Response by IREL:

As explained above, the quantity of beach washings collected by IREL is strictly as per the scientific study carried out by NCESS, which recommends the collection of beach washing to the extent of net accretion. Repeated studies show that the entire coast of Kerala is prone to erosion and accretion and hence the coastline is subject to dynamic changes and is not static due to the action of the ferocious Arabian sea on the entire length (650km) of Kerala coast. Many studies also show that other coastal areas in Kerala are also facing severe sea erosion even though there is no mining activity eg. Eravipuram, south of Kollam beach, Shanghumukham beach in Thiruvananthapuram, Chellanam beach in Ernakulam etc. Thus the natural process of erosion and accretion of the coast cannot be attributed to the sustainable mining activities by IREL.

Hence the calculation of costs towards loss of land / beach is denied.

Observations of the Committee:

Paragraph No.3.2.3 Land plot damage:

3.2.3.1 Agricultural gain from coconut cultivation (Rs 0.86 crores)



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**3.2.3.2 Recreational /cultural cost**

Recreational value assigned by local population (Rs. 1.21 Crores per annum)

Recreational value assigned by outstation people (Rs. 1.52 Crore per annum)

Cultural value assigned by the local population (Rs. 0.48 Crores per annum)

Total for 19 years Rs. 30.61 Crores

Response by IREL:

Mining Leases have been granted to IREL to collect/mine the atomic minerals by the government of Kerala in 1970. Once the area has been allotted for mining purpose, through mining lease by the Government, the calculation of damage by considering "had it been not utilized for mining" is meaningless and hypothetical.

IREL is an organization functioning under the Department of Atomic Energy to mine the atomic minerals which is a permissible activity even as per the CRZ notification and the AMCR- 2016. The atomic minerals mined by IREL are used for strategic purposes in the nation's nuclear energy programme having critical elements as declared by the NITI Ayog. There can be no damage that can be assessed in carrying such exclusive and strategic activities. The damage assessed for such loss is thus denied.

Observations of the Committee:

Paragraph No. 3.2.4     Damage due to unsustainable extraction of minerals:

*"In the April 2019 report submitted by NCESS, it is clearly pointed out that IREL has not adhered to the sustainable mining quantity already recommended by NCESS in previous study report of 2012. It is also maintained that unsustainable mining extraction beyond the recommended quantity resulted in severe erosion of beach and coastal stretches. Had the industries, exercised caution while mining, the present situation of loss of beach could be prevented."*

The damage assessed due to unsustainable extraction of minerals is Rs. 223.82 Crores



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Response by IREL:

IREL has always been collecting raw sand from the beach washing sites as per the quantity recommended by NCESS vide their report in the year 2002 and 2011. The quantity permitted and mined during the year 2001 - 2019 is as under.

Period	permissible qty as per NCESS		Actual quantity collected by IREL	
	Volume in m <sup>3</sup>	Quantity in tons	Quantity from Block II and IV (tons)	Excess quantity collected (ton)
2001-2010 (9 years)	8,10,000	<b>16,91,280</b>	<b>16,43,978</b>	Nil
2010 -2019 (9 years)	5,20,200	<b>9,87,860</b>	<b>9,57,723</b>	Nil

IREL has carried out sustainable mining during the above two decades as per the NCESS reports.

Therefore, the observation made by the Joint Committee in their report submitted to the Hon'ble NGT is not based on facts. Hence the damages assessed due to unsustainable extraction is denied.

Observations of the Committee:

Paragraph No. 4.0                      Total interim environmental damages:

"Summary of damage assessment:

*Interim damage assessment and compensation for temporary restoration activities calculated for IREL for the period 2001 - 19 is Rs.69.12 crores and the total values of excess mining is Rs.223.81 crores"*

Response by IREL:

IREL has been permitted to carry on mining activities in the coastal stretches of Chavara in the State of Kerala coast on the basis of the mining leases executed by the State



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Government and the conditions set in the mining plan, duly approved by Atomic Minerals Directorate. There has been no deviation by IREL in respect of the mining leases or conditions set in the approved mining plan. It has entrusted NCESS to conduct scientific studies in the years 2002 & 2011 so as to enable it to carry on the mining activities in the most scientific and sustainable manner. These reports have enabled IREL to assess HM budgeting which would in turn reflect the quantities that can be efficiently mined with minimal damage to the environment. This is despite the fact that the Coastal Regulation Zone notifications which regulate all activities along the coastline of India, permit collection of beach wash which are exclusively available in the southern coastal states. The collection of beach washings by manual harvesting does not involve the use of any heavy machinery and the lands are back filled in the case of inland mining. The manual harvesting of beach sand minerals provides livelihood to the local population who would otherwise be unemployed during the non-fishing season. There is no serious threat of irreversible damage being caused which is also evident from the fact that the report itself is silent as regards the same.

The beach washings which are naturally replenished by wave action are collected manually as required to be done under the relevant CRZ notification. As per the National Mineral Policy 2019, " 6.9 Beach Sand Minerals - Efforts will be made to encourage extraction of replenishable deposits of beach sand minerals for improved economic growth by ensuring coordination between the different agencies viz., State Governments, Ministry of Environment, Forest & Climate Change , Indian Bureau of Mines, Department of Atomic Energy, Atomic Minerals Directorate for Exploration & Research and Department of Customs & Excise etc. So that regulations of Mining of Beach sand minerals is in conformity with the mining and other related laws, while also conforming to National security requirements and established International protocols". This activity can thus be described as "sustainable" and hence IREL has not caused any degradation of the environment and consequently, not liable to pay any damages.

In view of the facts explained above, IREL has not caused any destruction of the environment and is thus not liable to pay any damages towards loss caused to the environment along the coastal stretch of Chavara.

*Heavy Mineral Budgeting and Management at Chavara*

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extracting sediments that are coming from the inner shelf primarily during the accreting phase. This can be done because the beaches are being protected by the rock walls during the erosion phase, which prevents erosion at that time.

In this way:

- mining mostly occurs in the accretionary phase when inputs are mostly cross-shore from the inner shelf
- the effects can continuously diffuse during the periods of beach accretion, rather than conducting large mining operations in the erosion phase, and exacerbating the erosion.
- Reduced mining can still occur in the monsoon when littoral drift is directed south and therefore the impact will be primarily felt to the south. Notably, such a strategy would not be valid if the rock walls were not present.

So that mining should not interfere with longshore transport rates and so that the mining occurs in the accretion period when sediment is coming from continental shelf,

- A total annual extraction of not more than 60,000 m<sup>3</sup> is recommended; and
- The monthly distribution of mining volumes is summarized in Table 7.1.

The volume is equal to the cross-shore inputs in the accreting period from August to February and equivalent to a mass of 1,25,280 metric tonnes for a density of 3480 kg/m<sup>3</sup> and porosity of 0.4, as adopted to calculate the cubic meter volumes (Table 4.1).

The total volume is equal to the annual input during the accreting phase from August to February from the continental shelf over a 1000 m length of coast, and allowance will be made for the inter-annual variability in the erosion/accretion patterns (see below). While the mining areas are only a total of about 750 m long, we have allowed for the bigger 1000 m coastline because sand from the immediate environs are expected to move into

*Study on Depletion of Heavy Mineral Content in the Beach Washings of IREL, Chavara*

Panmana and Kovilthottam mining sites and dredging from the inland region. The collection of heavy rich sand through local people is less. The raw sand data provided by IREL for the past one decade from 2001 to 2011 indicates that the intake from the beach constituted a major share. These raw sands are passed through the plant where the heavy and light minerals are separated through wet gravity method. The light minerals consist mostly of quartz and were used for back filling the dredging sites of IREL.

*Table 7.3 Innershelf cross-shore sediment transport for Srayikkad location*

Location	Inner-shelf cross-shore transport		
	Onshore (m <sup>3</sup> /m/year)	Offshore (m <sup>3</sup> /m/year)	Net (m <sup>3</sup> /m/year)
Srayikkad	32.41	-27.48	4.93 (Onshore)

#### 7.4.1 Mining volumes

The mining data provided by the IREL and KMML are in metric tonnes. However, since our sediment budget computations are by volume, the mining data have to be converted to volume. For the volume computations, the average porosity and density of beach sediment samples from the two mining sites has been worked out. The average sediment density is estimated to be 3.00 g/cm<sup>3</sup>. Based on these values, assuming a porosity value of 0.4 (Kurian et al., 2002), the conversion factor for volume computations from metric tonne is found to be 0.5556. Mining quantities which were in metric tonne have been converted to volume (m<sup>3</sup>) using this factor.

The quantities of sand that were extracted from the Kovilthottam and Vellanathuruthu-Panmana mining sites by IREL are summarized below in Table 7.4. On an average during the past one decade, IREL was extracting a sediment volume of 1,02,899 m<sup>3</sup>/yr averaged across the two mining sites at Kovilthottam and Vellanathuruthu-Panmana. Needless to mention here that this mining volume is considerably higher than the annual replenishment to the beaches. In addition to the IREL mining, the KMML also takes considerable amount of sand from their blocks – Panmana-I & II, Neendakara and

### **1. Reduction in the Mining Volumes of IREL and KMML**

By now it is clear that the combined mining volume of IREL and KMML is much higher than the sustainable mining limit. It is very essential that the mining volume is limited to the quantum of sediment replenished from the offshore each year. The present study estimates that the annual replenishment is around 32.4 m<sup>3</sup>/m. Hence it is recommended that the IREL may limit the mining volume at Vallanathuruthu and Kovilthottam to 48,600 m<sup>3</sup> taking the combined beach washing collection site length as 1500 m. In a similar way KMML will also have to bring down their mining volume based on the beach washing collection site length. Any increase in the quantity over and above the prescribed limit will lead to drastic reduction in offshore reserves and reduction in the overall heavy mineral content in the innershelf and beach.

### **2. Opening up of Beach Washing Collection Sites in the Northern Sector of the Coast**

Considering the acute scarcity of raw material that the IREL is facing, it is proposed that a new beach washing collection site be opened in one of the mining blocks of IREL in the northern sector. It has to be ensured that the beach washing collection is strictly limited to the annual replenishment from the offshore. A length of 500 m of the beach can be opened up. The quantum of annual beach washing collection should be restricted to a maximum of 20,000 m<sup>3</sup>. The limit in the intake has to be meticulously ensured in order to protect the coast from adverse implications and caving in of the shore.

In case the IREL decides to open up a new beach washing collection site, every effort has to be made in rehabilitating the local residents of the project site before taking up the project work.

### **3. Deposition of Dredge Spoil from the Neendakara Harbour**

One method of enhancing the offshore resource of heavies is by depositing the dredge spoil of the Kayamkulam and Neendakara harbors in the beaches of this coast. Annual

## GOVERNMENT OF KERALA

## Abstract

Industries Department- Mining & Geology- Mines and Minerals- Major minerals- mineral sand- Mining Lease granted to M/s.Indian Rare Earths Limited, Chavara- Kollam-Renewed Orders- issued.

## INDUSTRIES(A)DEPARTMENT

G.O.(Ms) 22/2005/ID

Dated, Thiruvananthapuram, 22 -2-05

- Read:-1. G.O.(Ms) No. 195/70/ID dated 30/5/70  
 2. G.O.(Ms) No. 166/97/ID dated 13/11/97  
 3. G.O.(Ms) No. 125/02/ID dated 22/11/02  
 4. Letter No.C.H/0100/ML/2002 dated 27-11-2002 from the Chief General Manager, IREL, Chavara, Kollam  
 5. Letter No.IRE/DT/CH/03 dated 16-4-03 from the Chairman & Managing Director, IRE, Chavara.  
 6. Letters No.1688/M1/2003 dated 15-3-2003 and 9-4-03 from the Director of Mining & Geology, Thiruvananthapuram  
 7. G.O.(Ms) No. 140/2003/ID dated 1-12-2003  
 8. Letter No. 4/8/2004-MIV dated 9-11-2004 from Ministry of Coal and Mines, Government of India, New Delhi.

ORDER

The Indian Rare Earths Limited, Chavara, Kollam was being given extension of Mining Lease for areas in the Block Nos. II & IV between Neendakara and Kayamkulam for specified short periods since 1990. However, the Indian Rare Earths Limited had not executed lease deed for the extended periods of mining lease granted to them from 1990 to 2002 for areas in Blocks II & IV. Since they had not executed the agreement and started value added projects in the State, no further extension of Mining Lease was being granted to them.

2. The Chief General Manager, Indian Rare Earths Limited, Chavara, as per his letter read as 4th paper above had requested Government for extension of Mining Lease for a period of 20 years in areas in Blocks II & IV to maintain their present level of production. They also had requested for mining lease extension for 20 years for Blocks VI & VIII and Kayamkulam Pozhi for obtaining Minerals for a Joint Venture Project with NMDC.

3. Government having examined the matter in detail duly considering all the aspects of the case and with the recommendation of the Director of Mining & Geology as per G.O. read as 7<sup>th</sup> paper above ordered as follows:-

Mining Lease for a period of 20 years will be recommended for areas applied for by IRE and forwarded to Government of India for approval in the Ministry of Atomic Energy and Environment.

- ii. In the Blocks No. VI and VIII of Karunagappally Taluk for areas Applied for by IRE and in the Kayamkulam Pozhi, for areas applied for by IRE of 4.9 hectares in Sy.No.197 in Arattupuzha Village and 4.8 Hectares in Sy.No.159 of Alappad Village will be recommended and forwarded to Government of India, on finalisation of the project report by the Joint Venture Company with NMDC by IRE and after location of the site of the Joint Venture Company to be established.

4. Government of India in their letter read as 8<sup>th</sup> paper above has now conveyed their approval for grant of first renewal of mining lease for mineral sand over an area of 102.77 hectares of land in villages of Thekkumbhagom, Chavara, Panmana and Karunagappally in Kollam District in favour of M/s.Indian Rare Earths Limited, Chavara for a period of twenty years with effect from 28-12-90 under section 8(4) of the Mines and Minerals (Development and Regulation) Act 1957 subject to the conditions specified therein and under rule 27(3) of MCR 1960.

5. In the circumstances, having examined the matter in detail, Government are pleased to accord sanction for the first renewal of Mining lease in favour of M/s.Indian Rare Earths Limited Chavara, Kollam over an area of 102.77 hectares of land comprised in Thekkumbhagom, Chavara, Panmana and Karunagappally villages (Block II & IV of Karunagally Taluk) for a period of 20 years with effect from 28-12-90 subject to the following conditions.

- (i) Prescribed substances/ atomic minerals shall be disposed of only after obtaining a licence from the Department of Atomic Energy (DAE) as required under the Atomic Energy (Working of Mines, Minerals and Handling of Prescribed Substances) Rules, 1984.

(ii) If monazite is produced in the process of exploitation of beach sand minerals, such monazite shall be disposed of by the entity concerned at its cost, in accordance with the instructions/directives of the Atomic Energy Regulatory Board or any person/body authorized by the Competent Authority in accordance with the provisions of the Atomic Energy Act 1962 and the relevant Rules and Orders thereunder.

- (iii) The company should have no objection to Atomic Minerals and Research's exploration activities

- (iv) The applicant, company, at the time of export of garnet or any other mineral shall contact AMD for sampling their export consignment and obtain the relevant Monazite Test Certificate(MTC).

6. The following further conditions will also be adhered to before the mining operations are started.

- a) Royalty is payable as per sub section (2) of section 9 of the Mines & Minerals (D&R) Act, 1957.
- b) Dead rent is payable as per sub section (1) of section 9-A of the Mines & Minerals (Development & Regulation) Act, 1957
- c) The mining lease deed will be executed only after production of the Mining Plan duly approved by Central Government or its duly authorized officer.

#### Special Conditions

- (i) The lessee shall take steps for preservation of the present configuration of the land sea interface in the Mining lease hold.
- (ii) The Mining activities in the area covered under this grant shall not extend below the sea level.
- (iii) The mining activities in the area covered under this grant shall be conducted without any obstruction to navigation or fishing activities.
- (iv) NOC from the date of execution of mining lease deed shall be obtained from the District Collector, Kollam or from the land owners concerned as per the rules and regulations applicable in the matter.
- (v) Before Starting Mining activities the Director of Mining & Geology will ensure compliance of the amended provisions of the Act and Rules, and other applicable Acts and Rules including Forest (Conservation) Act, 1980 and Environmental Notification dated 27/1/1994 as issued and amended by Ministry of Environment and Forests.

7. The above terms and conditions shall be subject to such modifications and alterations as may be made by Government from time to time.

8. The Director, Survey and Land Records, Thiruvananthapuram will prepare a cadastral map of the area on a suitable scale showing therein the area with the survey numbers and sub divisions. The boundary survey numbers with sub divisions has to be delineated on the sketch. The area covered under this grant may be coloured in red and indexed accordingly. Three copies of the map may be forwarded to the Director of Mining & Geology in Original under signature and office seal of that authority.

By Order of the Governor

P.JAYAPRAKASH  
Additional Secretary

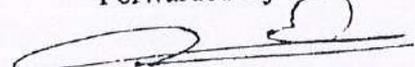
To

M/s.Indian Rare Earths Limited , Chavara, Kollam District-691 583  
The Director of Mining & Geology , Thiruvananthapuram  
The Secretary to Government of India, Ministry of Coal and Mines,  
New Delhi (with C.L.)  
The Controller, Indian Bureau of Mines, Nagpur (with C.L.)  
The Secretary , Department of Atomic Energy, CSW Marg, Mumbai- 40001  
(with C.L.)  
The Secretary, Department of Environment and Forest, Government of India,  
New Delhi (with C.L.)  
The Director of Mine Safety, Oorgam, Bangalore (with C.L.)  
The Managing Director, KSIDC, Thiruvananthapuram  
The District Collector, Kollam  
The Director of Survey and Land Records, Thiruvananthapuram  
Stock File/O.C.

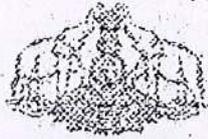
Copy to:-

Private Secretary to Chief Minister  
Private Secretary to Minister for Industries & Social Welfare  
Personal Assistant to Principal Secretary-I  
Confidential Assistant to Additional Secretary-I

Forwarded/By Order



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18/12

GOVERNMENT OF KERALA

Abstract

Industries Department - Mining and Geology - Mines and Minerals - Major Minerals - mineral sand - Mining lease granted to M/S Indian Rare Earth Limited, Chavara - Kollam - modified - Orders issued.

INDUSTRIES (A) DEPARTMENT

G.O.(MS) No. 32 /2006/ID

Dated, Thiruvananthapuram 15/3/2006

Read:- 1. GO(MS) No. 22/05/ID dated 22-2-05.

2. Letter No. CH/MNG/4006(7) dated 7-3-05 from the Executive Director, IREL, Chavara, Kollam

3. Letter No.1688/M1/2005 dated 10-5-2005 from the Director of Mining and Geology, Thiruvananthapuram.

ORDER

As per the Government Order read as first paper above sanction was accorded for the first renewal of mining lease in favour of M/S Indian Rare Earths Limited Chavara, Kollam over an area of 102.77 hectares of land comprised in Thekkumbhagam, Chavara, Panmana and Karunagappally Villages (Block II & IV of Karunagapally Taluk) for a period of 20 years from 28-12-90 subject to the conditions and special conditions stipulated therein.

2. Now as per the letter second cited the IREL has requested for certain modifications in the GO read above. Government examined the request in detail and are pleased to order as follows:-

- (i) The validity of the mining lease granted in the GO read above shall be extended up to 28-2-2020.
- (ii) The special condition in Para 6(ii) in the GO read above shall be limited to the collection of beach washing from the shoreline.

The orders issued in GO read above stand modified to this extent.

By Order of the Governor

P. Jayaprakash

For Principal Secretary to Government.

To

M/S Indian Rare Earths Limited, Chavara, Kollam District.  
The Director of Mining and Geology, Thiruvananthapuram.  
Secretary to Government of India, Ministry of Coal and Mines, New Delhi (with C.L.)

17/3

Secretary, Department of Atomic Energy, CSW Marg, Mumbai - 40001 (with C.L)  
The Controller, Indian Bureau of Mines, Nagpur (with CL)  
The Director of Mines Safety Organ, Bangalore.  
The Managing Director, KSIDC, Thiruvananthapuram.  
The District Collector, Kollam.  
The Director of Survey and Land Records, Thiruvananthapuram.  
The Principal Accountant General (Audit), Kerala, Thiruvananthapuram  
The Accountant General(A&E), Kerala, Thiruvananthapuram

Forwarded/By order



Section Officer.

भारत सरकार Government of India  
परमाणु ऊर्जा विभाग Department of Atomic Energy  
परमाणु खनिज अन्वेषण और अनुसंधान निदेशालय  
Atomic Minerals Directorate for Exploration and Research

1-10-153-156, बेगमपेट Begumpet  
हैदराबाद Hyderabad - 500 016

सितंबर 17 September, 2019

सं.No.AMD/MRG/IREL-Chavara/MP/102.77 Ha

**विषय:** मैसर्स आईआरईएल (इंडिया) लिमिटेड, चवरा के पक्ष में तेक्कुमभागम, चवरा, करुनागापल्ली, पन्मना गांव, करुनागापल्ली तालुक, जिला कोल्लम, केरल में 102.77 क्षेत्र की सीमा में एनके ब्लाक II और IV की खनन योजना और खान बंद करने की प्रगतिशील योजना के अनुमोदन के संदर्भ में।

**Sub:** Approval of Mining Plan and Progressive Mine Closure Plan in respect of NK Block II & IV Ilmenite Mine over an extent 102.77 Ha in Thekkumbhagom, Chavara, Karunagapally, Panmana villages, Karunagapally Taluk, Kollam district of Kerala in favour of M/s IREL (India) Limited, Chavara-reg.

**सं. :** आईआरईएल का दिनांक 06/08/2019 का पत्रांक IREL/CH/MNG/MP/2019

**Ref :** IREL Letter No. IREL/CH/MNG/2019, dated 06/08/2019

खान एवं खनिज (विकास एवं विनियमन) अधिनियम, 1957 की धारा 5 की उपधारा (2) के खण्ड (ख) और परमाणु खनिज रियायत नियमावली, 2016 के नियम 8(2) के द्वारा प्रदत्त शक्तियों का उपयोग करते हुए निदेशक, पखनि, द्वारा मैसर्स आईआरईएल (इंडिया) लिमिटेड को करुनागापल्ली तालूका, कोल्लम जिला, केरल के तेक्कुमभागम, चवरा, करुनागापल्ली, पन्मना गावों में 102.77 हेक्टेयर क्षेत्र की सीमा में एनके ब्लाक II और IV इल्मेनाइट खान की खनन योजना और खान बंद करने की प्रगतिशील योजना को निम्न लिखित शर्तों के तहत अनुमोदित किया जाता है:

In exercise of the powers conferred by clause (b) of sub-section (2) of Section 5 of the Mines and Minerals (Development and Regulation) Act, 1957 and Rule 8(2) of the Atomic Minerals Concession Rules, 2016, the Mining Plan and Progressive Mine Closure Plan of NK Block II & IV Ilmenite Mine over an extent 102.77 Ha in Thekkumbhagom, Chavara, Karunagapally, Panmana villages of Karunagapally Taluk, Kollam district, Kerala is approved by the Director, AMD in favour of M/s IREL (India) Limited, Chavara subject to the following conditions:

**अनुमोदन की शर्तें Conditions of approval:**

1. एमएमडीआर अधिनियम, 1957 की प्रथम अनुसूची के खण्ड ख के अधीन "परमाणु खनिज" के रूप में अधिसूचित इल्मेनाइट, रूटाइल, जिरकान, मोनाज़ाइट, ल्यूकाकजीन और सिलिमेनाइट खनिजों के संबंध में खनन योजना और खान बंद करने की प्रगतिशील योजना को अनुमोदित किया जाता है।

The Mining Plan and Progressive Mine Closure Plan is approved in respect of minerals Ilmenite, Rutile, Zircon, Monazite, Leucosene and Sillimanite which are notified as "Atomic Minerals" under Part B of First Schedule of MMDR Act, 1957.

2. यह स्वीकृति इस खनन योजना में निहित खनन परिचालन के अनुसार वित्त वर्ष 2019-20 से 2023-24 तक पांच वर्ष की योजना अवधि के लिए है।

This approval is for the five year plan period from FY 2019-20 to 2023-24 as per the mining operations contained in this Modified Mining Plan.

3. मैसर्स आईआरईएल (इंडिया) लिमिटेड, एएमसीआर, 2016 के उपबंधों के अनुसार प्रत्येक पांच वर्ष में खनन योजना की समीक्षा करनी होगी और इन नियमों के अंतर्गत निर्दिष्ट समय-सरिणी के अनुसार, खनन योजना को अनुमोदन हेतु पखनि को प्रस्तुत करेगा।  
The mining plan shall be subject to review and updation for every five year as per the provisions of AMCR, 2016 and M/s IREL (India) Limited shall submit the same for approval of AMD as per the time schedule specified under these Rules.
4. मैसर्स आईआरईएल (इंडिया) लिमिटेड, चवरा राज्य सरकार द्वारा पट्टा देने का विवरण अथवा खनन पट्टे में संशोधन की विस्तृत जानकारी रिकार्ड हेतु निदेशक, पखनि को प्रस्तुत करेगा।  
M/s. IREL (India) Limited, Chavara, shall furnish the details of grant of lease or modifications in mining lease by State Government to Director, AMD for record.
5. पट्टेदार, पट्टा विलेख की प्रति जिसे वर्तमान नियमों के अंतर्गत कार्यान्वित किया गया है, को रिकार्ड के लिए इस निदेशालय में प्रस्तुत करेगा।  
The lessee shall submit a copy of lease deed executed as per the extant rules to this Directorate for record.
6. राज्य सरकार द्वारा खनन का पट्टा देते समय निर्धारित की गई शर्तों और उसके बाद के आदेश यदि कोई हों तो खनन योजना (खान बंद करने की प्रगतिशील योजना सहित) को कार्यान्वित करते समय उसका ध्यान रखा जाए।  
The conditions stipulated by the State Government while granting the mining lease and subsequent orders, if any shall be taken care of while implementing the Mining Plan (including Progressive Mine Closure Plan).
7. परमाणु ऊर्जा (खान, खनिज कार्यक्रम और विहित पदार्थों उठाई-धराई) नियम, 1984 के उपबंधों के अनुसार मैसर्स आईआरईएल(इंडिया) लिमिटेड, चवरा को विहित पदार्थों का उठाई-धराई / खनन करने के लिए पत्रि से लाइसेंस प्राप्त करेगा और उक्त लाइसेंस में निर्धारित शर्तों और विनियमों का अनुपालन करना होगा। इसकी एक प्रति रिकार्ड के लिए पखनि को भेजी जाए।  
M/s. IREL (India) Limited, Chavara, shall obtain License from DAE to handle/mine prescribed substances as per the provisions of Atomic Energy (Working of Mines, Minerals and Handling of Prescribed Substances) Rules, 1984 and comply with the terms and conditions stipulated in the said License. Copy of the same may be sent to AMD for records.
8. परमाणु ऊर्जा (विकिरण संरक्षण) नियम, 2004 (दिनांक 9/5/2009 केस्था.आदेशसं. 1210) के उपबंधों के अनुसार, मैसर्स आईआरईएल(इंडिया) लिमिटेड, चवरा, एईआरबी से लाइसेंस प्राप्त करेगा। इसकी प्रति रिकार्ड के लिए पखनि को भेजी जाए।  
M/s IREL (India) Limited, Chavara, shall obtain License from AERB as per the provisions of Atomic Energy (Radiation Protection) Rules, 2004 (vide S. O. No. 1210 dated 09-05-2009). A copy of the same may be sent to AMD for records.
9. उत्पादित मोनाज़ाइट का भंडारण/निपटान पत्रि एवं एईआरबी के लाइसेंस की शर्तों एवं एमएमडीआर अधिनियम, 1957 के अंतर्गत उपाबंधों के अधीन होगी।  
The storage/disposal of monazite recovered shall be subject to the conditions of licences by DAE and AERB and also the provisions under MMDR Act, 1957.

10. भारत सरकार, राज्य सरकार अथवा किसी अन्य सक्षम प्राधिकारी द्वारा खनन / क्षेत्र के लिए समय-समय पर लागू या कोई अन्य कानून पर प्रतिकूल प्रभाव डाले बिना खनन योजना और खान बंद करने की प्रगतिशील योजना अनुमोदित की जाती है।  
That the Mining and Progressive Mine Closure Plan is approved without prejudice to any other laws applicable to the mine/area from time to time whether made by the Government of India, State Government, or any other competent authority.
11. खनन योजना (खान बंद करने की प्रगतिशील योजना सहित) का यह अनुमोदन किसी भी तरह खान एवं खनिज (विकास एवं विनियमन) अधिनियम, 1957 अथवा परमाणु खनिज रियायत नियमावली, 2016 अथवा किसी दूसरे कानून जैसे वन (संरक्षण) अधिनियम, 1960, पर्यावरण संरक्षण अधिनियम, 1986 और उस के अधीन बनाए गए नियमों अथवा सी.आर. ज़ेड. अधिसूचना आदि के किसी अन्य उपबंधों की शर्तों को समाविष्ट नहीं करता और न ही यह सरकार द्वारा अनुमोदन माना जायेगा।  
That this approval of the Mining Plan (including Progressive Mine Closure Plan) does not in any way imply the approval of the Government in terms of any other provisions of the Mines & Mineral (Development and Regulation) Act, 1957 or the Atomic Mineral Concession Rules, 2016 or any other law including Forest (Conservation) Act 1960, Environment Protection Act, 1986 and the rules made thereunder, or CRZ notification etc.
12. खान अधिनियम, 1952 के उपबंध और उस के अधीन बनाए गए नियमों और विनियमों के अधीन खदान खोलने की सूचना को प्रस्तुत करने, प्रबंधक और अन्य वैधानिक कर्मचारियों की नियुक्ति का अनुपालन यथापेक्षित खान अधिनियम, 1952 के अनुसार किया जाए।  
That the provisions of the Mines Act, 1952 and Rules and Regulations made thereunder including submission of notice of opening, appointment of manager and other statutory officials as required by the Mines Act, 1952 shall be complied with.
13. खनन योजना (खान बंद करने की प्रगतिशील योजना सहित) कि सीभी अन्य कानून पर अथवा किसी भी सक्षम न्यायालय के निर्देश पर प्रतिकूल प्रभाव डाले बिना अनुमोदन किया गया है।  
That the Mining Plan (including Progressive Mine Closure Plan) is approved without prejudice to any other order or direction from any court of competent jurisdiction.
14. खनन योजना (खान बंद करने की प्रगतिशील योजना सहित) का क्रियान्वयन, निषेधात्मक आदेश / सूचना यदि कोई है, के रद्द होने के अधीन होगी।  
The execution of Mining Plan (including Progressive Mine Closure Plan) shall be subject to vacation of prohibitory orders/notices, if any.
15. खनन योजना (खान बंद करने की प्रगतिशील योजना सहित) के कथन में खनन अधिनियम, 1952 के अधीन यथापेक्षित किसी सूचना का छिपाया जाना ज्ञात होता है और उसमें सुधार का प्रस्ताव नहीं किया गया तो अनुमोदन को तत्काल प्रभाव से वापस लिया माना जाएगा।  
If any information as required under Mines Act, 1952 in the contents of the Mining Plan (including Progressive Mine Closure Plan) is found to be concealed and the proposals for rectification has not been made, the approval shall be deemed to have been withdrawn with immediate effect.
16. यदि किसी भी चरण में यह पाया गया कि दस्तेवाज में दी गई सूचना असत्य अथवा गलत तथ्यों को प्रस्तुत करता है तो अनुमोदन दस्तेवाज तत्काल प्रभाव से रद्द हो जाएगा।  
If at any stage, it is observed that the information furnished in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.

17. यह अनुमोदन, खनन कार्य एवं संबंधित गतिविधियों को खनन हेतु पट्टेक्षेत्र तक ही सीमित करता है। खनन पट्टाक्षेत्र को खनिज संरक्षण और विकास नियम, 2017 के नियम 32 के अंतर्गत वैधानिक योजना पर पट्टेदार / आर्हित व्यक्ति / आवेदक द्वारा दिखाया गया है। आवेदक / पट्टेदार द्वारा दिया गया पट्टे का नक्शा और अन्य योजना के संबंध में भूमि पर दिखाई गई पट्टे की सीमा की सत्यता के संबंध में पखनि की कोई जिम्मेदारी नहीं होती है।

This approval of mining operations and associated activities is restricted to the mining lease area only. The mining lease area is as shown on the statutory plans under Rule 32 of Mineral Conservation and Development Rules, 2017 by the lessee/Qualified Person/applicant. AMD does not take any responsibility regarding correctness of the boundaries of the lease shown on the ground with reference to the lease map and other plans furnished by the applicant/lessee.

18. मुख्य नियंत्रक, खनन आईबीएम नागपुर द्वारा उनके दिनांक 06/4/2010 के पत्रांक 11013/3/एमपी/90-सीसीओएम वाल्यूम VII द्वारा जारी किये गये परिपत्रांक 2/2010 की अंतर्वस्तु का अनुपालन किया जाए और खनन पट्टा मिलने/क्रियान्वयन की तारीख से छह माह की अवधि के भीतर पखनि को इसकी प्रति पृष्ठांकित की जाए।

The contents of circular No. 2/2010 issued by the Chief Controller of Mines, IBM, Nagpur vide his letter No. 11013/3/MP/90-CCoM Vol VII dated 06-04-2010 shall be complied with and a copy endorsed to AMD within a period of six months from the date of grant/execution of mining lease.

19. किसी भी समय खनन कार्य के दौरान यह पाया गया कि वर्तमान कानूनों का पालन नहीं किया जा रहा है तो निदेशक, पखनि लिखित रूप में संबंधित तकारणों को देते हुए प्रदत्त अनुमोदन को स्थगित कर सकते हैं।  
That if anytime during the operation of mines, it is found that the existing laws are not being followed, the Director, AMD may suspend the approval accorded, by giving the relevant reasons in writing.

20. यदि खनन / मिलिंग पद्धति में सहसा परिवर्तन होता है तो इस संबंध में सूचना निदेशक, पखनि, हैदराबाद को दी जाए एवं खनन योजना में आवश्यकतानुसार पूर्ण निरीक्षण किया जा सकता है।  
That if there is any drastic change in the method of mining/milling, the information in this regard shall be sent to the Director, AMD and the mining plan may be subjected to further revision as per requirement.

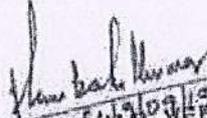
21. खनन योजना के क्रियान्वयन की निगरानी करने के लिए पखनि के प्राधिकृत अधिकारी को पूरी सुविधाएं प्रदान की जानी हैं।  
Full facilities shall be accorded to authorized officer of AMD for monitoring of implementation of the mining plan.

22. एमसीडीआर, 2017 के नियम 27 के अंतर्गत यथापेक्षित वित्तीय आश्वासन पखनि के प्राधिकृत अधिकारी को प्रस्तुत किया जाए।  
The Financial Assurance as required under Rule 27 of MCDR, 2017 shall be submitted to the authorized officer of AMD.

23. विद्यमान नियमों के अनुसार सभी वैधानिक विवरणी एवं नोटिस की प्रतियां राज्य सरकार और निदेशक, पखनि को रिकार्ड हेतु भेजी जाएं।  
Copies of all statutory returns and notices as per rules in vogue shall be sent to the State Government and the Director, AMD.

उपरोक्त शर्तों की पूर्ति के अधीन इल्मेनाइट, रुटाइल, जिस्कात, मोनाज़ाइट, ल्यूकाकजीन और सिलिमेनाइट के संबंध में अनुमोदित खनन योजना की दो प्रतियाँ तदद्वारा संलग्न हैं।

Two copies of approved Mining Plan in respect of Ilmenite, Rutile, Zircon, Monazite, Leucoxene and Sillimanite subject to fulfillment of above conditions are enclosed.

  
 (मोहन बाबू वर्मा / M.B. Verma)  
 परमाणु खनिज अन्वेषण और शोध विभाग  
 Atomic Minerals Directorate for Exploration and Research  
 परमाणु ऊर्जा विभाग Department of Atomic Energy  
 भारत सरकार Government of India  
 मुंबई Begumpet, Hyderabad-500 016.

सेवा में To

श्री एस सूर्य कुमार मुख्य महाप्रबंधक और यूनिट हेड मेसर्स आईआरईएल (इंडिया) लिमिटेड, चवरा, जिला : कोल्लम, केरल - 691583	Shri. S. Surya Kumar Chief General Manager and Unit Head M/s IREL (India) Limited, Chavara, Kollam District, Kerala - 691583
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सूचनार्थ प्रतिप्रेषित Copy for information to:

- संयुक्त सचिव (उवख), परमाणु ऊर्जा विभाग, पञ्च सचिवालय, अणुशक्ति भवन, सीएसएम मार्ग, मुंबई-400001.  
Joint Secretary (I & M), Department of Atomic Energy, DAE Secretariat, Anushakti Bhavan, Chatrapati Shivaji Maharaj Marg, Mumbai-400001
- चेयरमैन, ऐईआरबी, नियामक भवन, अणुशक्ति नगर, चेम्बूर ईस्ट, मुंबई, महाराष्ट्र - 400094  
The Chairman, Atomic Energy Regulatory Board, Niyamak Bhavan, Anushakti Nagar, Chembur East, Mumbai, Maharashtra 400094
- मुख्य खान नियंत्रक, भारतीय खान ब्यूरो, 6वां तल, 'डी'-ब्लॉक, इंदिरा भवन, सिविल लाइन्स, नागपुर-440001.  
The Chief Controller of Mines, Indian Bureau of Mines, 6<sup>th</sup> Floor, Block 'D', Indira Bhavan, Civil Lines, Nagpur-440001.
- क्षेत्रीय खान नियंत्रक, भारतीय खान ब्यूरो, इंडस्ट्रियल सबर्ब, स्टेज II, तुमकूर रोड, यशवंतपुर, बेंगलूर - 560 022  
The Regional Controller of Mines, Indian Bureau of Mines, Industrial Suburb, II Stage, Tumkur Road, Yeshwantpur, Bangalore -560 022
- निदेशक, खनन एवं भूविज्ञान विभाग, केरल सरकार, केशवदासपुरम, पट्टम पैलेस पोस्ट, तिरुवनंतपुरम - 695 004, केरल  
The Director, Directorate of Mining and Geology, Govt. of Kerala, Kesavadasapuram, Pattom Palace P.O., Thiruvananthapuram-695004, Kerala
- निदेशक, बेंगलूर क्षेत्र, डायरेक्टर जनरल ऑफ माइंस सेफ्टी, No.5, 14th Main (100ft) Road, 4th B Block, कोरमंगला, बेंगलूर -560034  
The Director, Bangalore Region, Director General of Mines Safety, No.5, 14th Main (100ft) Road, 4th B Block, Koramangla, Bengaluru - 560034

7. श्री सी सुंदर, आर्हित व्यक्ति, खनन अभियन्ता, मेसर्स आईआरईएल (इंडिया) लिमिटेड, चवरा, जिला :  
कोल्लम, केरल - 691583  
Shri C. Sundar, Qualified Person, Mining Engineer, M/s IREL (India) Limited, Chavara, Kollam  
District, Kerala - 691583

(मोहन बाबू वर्मा M.B. Verma)  
निदेशक Director



## The Kerala Minerals and Metals Ltd.

(A Govt. Of Kerala Undertaking)

(An ISO 9001, ISO 14001, OHSAS 18001 & SA 8000 Certified Company)

SANKARAMANGALAM, CHAVARA-691 583

KOLLAM, KERALA, INDIA.

Phone : 0476-2686722 to 2686733 (12 Lines), 2651000

Fax : 91-476-2680101, 2686721

E-mail : kmml@md3.vsnl.net.in, URL www.kmml.com



CIN-U14109KL1972SGC002399

KMML/MS/Mines/NGT-KSPCB/01

17.06.2020

**The Chairman,  
The Kerala State Pollution Control Board,  
Pattom P.O.,  
Thiruvananthapuram-695004**

*Received by  
the  
18/6/20*

Sir,

Sub: National Green Tribunal order dated 25.02.2020 in O.A.No.76/2019

Ref: Your letter No. PCB/HO/EE4/NGT/76/2019; dated 09/06/2020

We wish to submit the following points in connection with the above for your kind information and records;

Preliminary submission made during the hearing held on 18/06/2020 in connection with the OA No.76/2019 of the Principal Bench of the NGT. KMML prays for a liberty to make a detailed submission later.

It is understood that, vide Order dated 25.02.2020 of the OA No.76/2019NGT directed "the State Pollution Control Board to take further action in accordance with law".

The direction of the NGT was based on the Joint Committee Report constituted as per the said OA. In this connection the following is submitted for kind consideration:-

- (1) The findings regarding the illegal mining, excess mining etc., against KMML is without any basis. The parameters adopted for the study are not relevant. The penalty imposed on KMML is baseless and it is without any statutory backing.
- (2) The premise on which the entire report has been based is that KMML is carrying out illegal and unscientific mining activities along the coastal area of Alappad and Chavara in Kollam District, Kerala. The Committee has not established the "illegality & unscientificness" of the mining activities of KMML. Hence, the report and the conclusions are not acceptable to KMML. The illegal and unscientific mining activity mentioned is denied. The mining activities of KMML are being carried out as per the approved mining plans and monitoring of the concerned statutory authorities.
- (3) The entire report is based on two studies of NCESS:  
The 1<sup>st</sup> report carried out during 2011-13 and the 2<sup>nd</sup> one in 2019. Whereas, the first report was based on two year seasonal study done for KMML and the second report was based on a two months study. KMML is also not aware of the two months study

*102*

conducted in 2019. The findings and conclusions of the report of the Joint Committee have not pointed to violations of any applicable law for which penalty is specifically mentioned. The penalty prescribed is arbitrary. That being the case, the quantum of penalty, which is not an illegal activity or violation of any of the applicable provisions of law is unacceptable and is against the fundamental provisions of law. The penalty seems to have been computed based on the data of the World Bank, which is not applicable to the present case and it has no statutory sanctity.

The Mining of Beach Sand Minerals is being carried out by KMML as per the approved mining plans from appropriate authorities from time to time.

The minerals being mined by KMML are Atomic minerals specified in Part B of Schedule (1) of the MMRD Act 1957. Periodical inspection by the officials of the Indian Bureau of Mines, Department of Atomic Energy, Director General of Mines Safety, DMG, AERB etc. is being carried out and the activities are monitored. The Directorate of Mining and Geology, Government of Kerala, is also carry out the annual auditing of the Mining activities.

KMML is in possession of valid mining licenses under the Atomic Energy Act 1962 and approved mining plans, as required under law.

It may be mentioned that in the National Mineral Policy, 2019 in para 6.9., the Government of India encourages extraction of the replenishable deposits of beach sand minerals for improved economic growth

From the above it is clear that the intention of the Government is to promote extraction of the replenish beach sand minerals.

Mining of minerals from the beach for Beach Sand Minerals is therefore not illegal.

Further, while finalizing report by the Joint Committee KMML was not given a hearing or an opportunity to present its stand or defend itself which is against natural justice. Had KMML being given an opportunity for being heard, the committee would not have reached the present conclusion.

Further, there are various contradictory statements in the report itself. And the contention of the report that the environment could have been protected by not carrying out mining cannot be accepted as it is against the National Mining Policy. The basic function, activities and business of KMML is Mining of Beach Sand Minerals, processing, Value addition upto manufacture of Titanium sponge. Titanium Sponge is manufactured in collaboration with DMRL & VSSC and is the only indigenous source for Indian Space & Defence programs. Hence, penalizing for mining, which is done in accordance with law cannot be justified. Also it is normal for any mining activity to store the overburden or tailings and use it for refilling at a later stage. These activities form part of normal routine mining activity.

*[Handwritten signature]*

For such and many other reasons the report cannot be accepted.

It is pertinent to note that the entire west coast of India, from Kanyakumari in the south to Gujarat in the North, extending for a length of about 5000 to 6000 kms. Is a predominantly erosion beach. The activities of KMML is confined to just 800mtrs. Attributing the erosion to the mining activity of KMML is unjust and unfair. All the locations were which are not protected by sea wall is prone to erosion, along the entire west coast and Google map pictures relied on by the Committee only highlights the points near KMML. The committee has not done a comparative analysis of various locations (mining and non-mining areas), which is necessary to get a true picture of the impact of mining.

KMML has an approved Mine Closure plan as per the statute. At present the activities of KMML is an ongoing process and only at the end of the life of the mine, assessment can be made whether mining closure activities has been completed as per law. Hence, the decision in this connection during the period of mining is totally unjustified. KMML has also submitted a Bank Guarantee to Government of India to ensure that the Mine closure plan is carried out as per direction of the Department of Atomic energy, which is also the regulatory authority for Mining of Atomic Minerals.

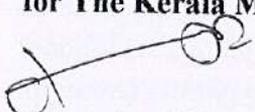
KMML has got conducted a study by IIT, Chennai, Department of Oceanography and CWPRS, Department of Marine Division for studies for reclamation of land and for mitigation measures against Sea erosion. The work of construction of groins, as suggested by IIT, Madras and designed by CWPRS has also started. This is pointed out in the report. However, the advantage gained due to such action has not been considered while finalizing the report.

It is also submitted that KMML has received the notice from this office only on 11/06/2020 and need further time of 2 weeks to provide the entire data regarding mining. This is because the data is voluminous, spanning from 2001 onwards and it required some time to gather the records and assimilate the data.

For this and other points to be submitted later and based on this hearing it is humbly submitted that further proceedings against KMML based on the joint committee report be dropped.

Thanking you,

**Yours faithfully,  
for The Kerala Minerals & Metals Ltd.,**

  
**Managing Director**

Mr. Ramji Kanner  
Admin Secretary

35

Annexure-1



GOVERNMENT OF KERALA

No.IND-A3/49/2019-IND

Industries (A) Department,  
Thiruvananthapuram,  
Dated : 29.01.2019

From  
Principal Secretary

To  
Director, National Centre for Earth Science Studies,  
Akkulam, Thiruvananthapuram

Sir,  
Sub:- Industries Department - Mining & Geology - Mining in Alappad -  
Entrusting study with NCESS - Request - reg.  
Ref:- Minutes of the meeting chaired by the Hon'ble Chief Minister of Kerala  
on 16.01.2019 (Copy enclosed for ready reference)

Please recall the meeting convened by Hon'ble Chief Minister on 16.01.2019.

M/s Indian Rare Earths Limited has been carrying out mining activities involved in the extraction of Beach Sand Minerals from Alappad village in Kollam district for many years. There has been protests on the part of the public against the mining practices (especially beach washing) adopted by IREL. Taking the apprehensions of the people into consideration, vide reference cited the Government of Kerala have decided to entrust a study with NCESS so as to identify the quantum of sea erosion occurred in Alappad due to beach washing and to suggest sustainable scientific mining practices that may suit the Alappad village in Kollam district.

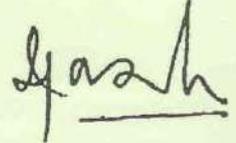
In these circumstances, I am to request you to conduct a study in Alappad region, with the help of available records, to find out the extent of sea erosion happened due to mining and to suggest scientific ways to continue mining Beach



SABAH NAZEEMUDEEN  
Assistant Engineer

Sand Minerals in a sustainable manner. You are also requested to submit an interim study report with recommendations, within a month positively. Kindly intimate the probable date on which the proposed study can be begun and details of the funds needed for the proposed study.

Yours faithfully,



**Dr. K. ELLANGO VAN**  
**PRINCIPAL SECRETARY**



**SABAH NAZEEMUDEEN**  
Assistant Environmental Engineer

Handwritten notes in purple ink at the bottom left corner, including the word "COAC" and some illegible scribbles.



GOVERNMENT OF KERALA  
Environment (A) Department

3141  
10.07.19

No.A3/139/2019/Envt

Thiruvananthapuram,  
Dated:02.07.2019

From

Principal Secretary to Government.

To

The Chief Environment Engineer  
Kerala State Pollution Control Board,  
Pattom, Thiruvananthapuram-695004.

Sir,

Sub: Environment Department- National Green Tribunal  
O.A. No.76/20619 – Recent study report of NCESS-  
Forwarding of - Reg.

- Ref : 1. Your letter PCB/RO/GEN/NGT Order – O.A No.76/2019  
dated 17-05-2019.  
2. Report (April 2019) submitted by NCESS,  
Thiruvananthapuram on Impact of Beach Sand Mining  
by IREL & KMML along the Chavara Coast, Kollam District.

.....

I am to invite your attention to the reference 1<sup>st</sup> cited and to  
forward herewith a copy of the recent study report of NCESS at reference 2<sup>nd</sup>  
cited for further necessary action.

Yours faithfully,  
**SANTHOSH.R**  
Under Secretary  
for Principal Secretary to Government

Approved for issue,

Section Officer



**SABAH NAZEEMUDEEN**  
Assistant Environmental Engineer

271(RO)  
11/07/19

CE, RO  
10/7/19