



**Quarterly report to NGT**

**Status of compliance of the directions of the NGT as on 29.02.2024.**

#	Direction from NGT	Status of Compliance
1	<p>i. Prepare the design for both short term and long term measures suggested by NEERI through competent and expert developers/contractors with suitable time frame for completion and presenting the design to the KSPCB for its approval/further direction, within three months from the date of Judgment (31.08.2017).</p> <p>ii. Implementation of the measures after receipt of approval from the KSPCB within the time frame proposed for completion.</p> <div style="text-align: right; margin-top: 20px;">   <b>PRADEEP KUMAR P.</b>            MANAGING DIRECTOR            The Kerala Minerals and Metals Ltd.            Sankaramangalam, Chavara P.O.            Kollam, Kerala, India Pin-691583         </div> <div style="text-align: center; margin-top: 10px;">  </div>	<ul style="list-style-type: none"> <li>• M/s KITCO prepared the DPR for short term measures and submitted to KSPCB for approval on 20.07.2018.</li> <li>• Approval obtained from KSPCB for DPR short term measures on 07.01.2019</li> <li>• <b>Points stands complied .</b></li> </ul> <p><b><u>Short term Measures</u></b></p> <p><b><u>Garland Drain-</u></b> Current status</p> <ul style="list-style-type: none"> <li>• Construction of garland drain completed around new ETP.</li> <li>• Completed 92 % of garland drain around old IOP/ETP pond.</li> <li>• Time frame for completion of garland drain around old IOP/ETP is April 2024.</li> </ul> <p><b><u>Land Remediation of Test Patch area(1R) inside KMML -</u></b> Current Status</p> <ul style="list-style-type: none"> <li>• Three parties quoted the e-tender.</li> <li>• E-tender evaluation completed and work order will be issued to the lowest bidder M/s P.T. Jayapal.</li> <li>• Execution of the work will be started on the first week of April 2024.</li> <li>• Target date is June 2024</li> </ul> <p><b><u>Solid waste management in KMML (Insitu/Exsitu storage).</u></b></p> <ul style="list-style-type: none"> <li>• As an alternative/ cost effective</li> </ul>



method, the containment of iron oxide in Geotubes was proposed by KMML.

- The new technology involves dewatering and storage of solid waste using GEOTUBES which was presented to KSPCB in the meeting held on 10.12.2018
- **Work can be started only with the technical concurrence of CPCB/ KSPCB.**
- **KMML is awaiting CPCB approval for the trial.**
- **The new technology of Geotubes involves dewatering and storage of iron oxide using Geotubes from the elevated new iron oxide pond.**
- **Target date 10 months from order**

#### Long Term Measure

- KMML projects dept invited tender and opened in September 2019 for Acid Regeneration Plant Technology Modification and only one party quoted.
- Tender was closed on December 2019 and after evaluation of the proposal, the file was put up to 243<sup>rd</sup> Board Meeting of the company held on 21.05.2020.
- As by the Board Meeting the file was put to the Government on 01.06.2020 for getting final sanction.
- As per the direction given by the Government of Kerala Retendering done on June 2021.
- Global retender was invited from Technology providers for the process modification of

  
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		<p>existing Acid Regeneration Plant on 10.06.2021</p> <ul style="list-style-type: none"> <li>The offer submitted by M/s INDROX GLOBAL PVT LTD was evaluated and approved in the 250<sup>th</sup> Board Meeting of the Company held on 15.01.2022 and submitted for Government approval.</li> <li>A meeting was convened under the chairmanship of Hon'ble Minister for Industries, Law &amp; Coir on 09.06.2022 and in the meeting, it was decided to work out the price reasonableness &amp; submit report to Government of Kerala.</li> <li><b>Accordingly FEDO had done the cost analysis study and the report got submitted to Government for approval to place order. File is under process for final sanction.</b></li> </ul>
2 & 3	<p>There is no necessity for transporting the waste from KMML to KEIL at Kochi, since the wastes are non-hazardous in nature as studied and reported by NEERI as per the HWMH rules.</p>	<p>Disposal of iron oxide to Ms/ KEIL stands discontinued from 07.08.2014. The iron oxide generated and stored inside KMML premises can be effectively utilized for the value addition products</p>
4	<p>The material produced by KMML is non radioactive in nature as per the report of AERB. However, KMML shall scrupulously implement those recommendations of the AERB for storage of tailings of mineral separation.</p>	<p>The sand tailings generated at the Mineral Separation unit is disposed only as per the direction of AERB.</p>
5	<p>i. KMML is directed to prepare an appropriate scientific scheme for remediation of contaminated soil or ground water as recommended by NEERI through an expert/contractor with specific time frame and submit the same to the KSPCB for approval, within three months from the date of Judgment (31.08.2017) and complete the necessary project within the time frame specified subject to the approval from KSPCB.</p>	<p><b><u>Land Remediation of Test Patch area (1R) inside KMML</u></b></p> <ul style="list-style-type: none"> <li><b>Three parties quoted the e-tender.</b></li> <li><b>E-tender evaluation completed and work order will be issued to the lowest bidder M/s P.T. Jayapal.</b></li> <li><b>Execution of the work will be started on the first week of April 2024.</b></li> </ul>

*Chandran*

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		<ul style="list-style-type: none"> <li>• Target date is June 2024</li> </ul>
	ii. KMML shall continue to supply adequate potable water to the people residing in and around its industrial premises until the projects of soil remediation and ground water remediation is completed fully.	<b>KMML is supplying about 7 to 8 Lakhs liters/day drinking water of potable quality to the local residents and shall continue to supply as directed.</b>
6	i. The soil/water remediation process as suggested by NEERI is the independent responsibility of KMML. KMML is directed to deposit a sum of Rs. 1 Crore under the principle of "polluter pays" in favour of Chairman, KSPCB, who shall keep the said amount in a separate account named as "Environment relief fund for remediation of Chavara region due to pollution caused by KMML". The said amount to be managed by the Chief Secretary, Govt. of Kerala and Chairman, KSPCB and utilize the remediation and/or distribution to affected persons either as per the direction of NGT or as per the decision of the State Government.	<b>DD for Rs. 1 Crore is remitted in the name of Chairman, KSPCB on 21.09.2017.</b>  As per Hon'ble NGT case in EA 07/2023 in OA 290/2023 a "Health status assessment of people residing around Kerala Minerals and Metals Ltd. Chavara, Kollam" study has been conducted by 'Department of Community Medicine Government Medical College, Thiruvananthapuram. The report is now available with Statutory and Government bodies.
	ii. KMML shall file their periodical compliance reports to the registry of NGT, Southern zone once in three months beginning with quarter ending on 30.11.2017 followed by quarter ending with 28.02.2018, 31.05.2018 and 31.08.2018 by the 10 <sup>th</sup> of every succeeding month. KMML shall display the quarterly compliance report on their website also.	Quarterly report on status of compliance on the directions of NGT shall be submitted to NGT and shall be displayed in KMML website as directed.

**FOR THE KERALA MINERALS AND METALS LIMITED**

**MANAGING DIRECTOR**

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