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Jairam Ramesh
Minister of Environment and Forests
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India

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Dear Minister

Amnesty International is writing to thank you for making the reports of the Orissa State Pollution Control Board's (OSPCB) site visits to Lanjigarh, on 25 April and 17 and 18 May 2011, publicly available on your Ministry's website in response to concerns raised by us and in media reports relating to threat of leakages from the 28-hectare red mud pond at Lanjigarh, Orissa, operated by Vedanta Resources plc's subsidiary, Vedanta Aluminium Limited.

The covering note issued by your Ministry as well as the OSPCB inspection reports state that there was no breach of the red mud pond. The OSPCB inspection report based on site visits carried out 17 and 18 May 2011 (Annexure 1) however noted that, on 16 May, water from the central collection pit next to the red mud pond overflowed from the pit and passed into the nearby pond. The OSPCB Inspection Report, based on a site visit on 25 April 2011 (Annexure 2), is less clear on what occurred on 5 April 2011 but stated that "Sample of water collected from the water pond located downstream of red mud pond has a pH of 8.5 which is high but is below the prescribed threshold of 9. The rise in pH is attributable to overflow from the collection pit during the thunder storm that took place on 5 April 2011." We would appreciate further information and clarification on the following issues:

1. With this red mud pond becoming almost full (since the construction and use of the 60-hectare second red mud pond is being held up), have your Ministry and the OSPCB approved the increase in the height of the dyke wall by three metres to increase the storage capacity of red mud in the pond? As the original Environmental Impact Assessment reports for the refinery or its proposed expansion had not envisaged this move, what assessments have now been undertaken on the possible negative impacts of any increase in capacity?
2. During its site visit on 25 April 2011, was the OSPCB informed by Vedanta Aluminium that water had overflowed from the collection pit on 5 April 2011? Was such an overflow reported during the site visit (on 25 April 2011) or prior to the visit (if so, when)?
3. If the overflow was not reported by the company, how did the OSPCB ascertain that an overflow had occurred from the collection pit on 5 April 2011?
4. Can you please confirm if any other representations were made by the company with respect to the red mud pond? If so, what were these?
5. What was the pH of the pond located downstream of the red mud pond (whose pH was found to be 8.5 on 25 April 2011) in any prior inspections undertaken over the last three months?
6. The OSPCB stated in its conclusions, in its first inspection report (Annexure 2), that "It must be ensured that under no circumstances, any leachate/water collected in the central collection pit is passed to the outside areas". However, in its second inspection report (Annexure 1), the OSPCB found that storm water had overflowed from the central collection pit on 16 May 2011. This was

ascribed to one of pumps near the central collection pit not working. What measures has the OSPCB taken to enforce its prior direction that “under no circumstances, any leachate/water collected in the central collection pit is passed to the outside areas”?

7. Have additional pumps been provided near the central collection pit as per the recommendation in the second inspection report (Annexure 1)?
8. Has the construction of additional collection pits and an overflow weir been completed (as reported in Annexure 2)?
9. It appears from the information contained in its Inspection Reports that OSPCB arrived at its findings after carrying out tests and speaking to staff employed by Vedanta Aluminium. Can you please confirm if the OSPCB officials interviewed any of the local communities living next to the red mud pond and/or any of the individuals who had reported seeing the breaches and water from the red mud pond overflowing onto adjacent areas?
10. Did the OSPCB test the pH of the water in the central collection pit on 25 April and/or 17 or 18 May during its inspections?
11. How did the OSPCB ascertain that the water that overflowed from the central collection pit on 16 May 2011 pit was storm water rather than alkaline water (i.e. that it had not come into contact with any leachate that had passed from the toe drain into the central collection pit)?
12. Did the OSPCB test the walls of the red mud pond during any of its site visits and/or the pH of the soil in areas next to the red mud pond?
13. In its first inspection report (Annexure 2) based on a site visit undertaken on 25 April 2011, the OSPCB has stated that “There is reportedly a tectonic fault under the red mud pond, which could be responsible for some seepage to the toe train. The unit has now taken steps to trap the leachate that might escape through the fault”. We would appreciate further details on the tectonic fault, who has ‘reported’ the fault and the OSPCB’s assessment of the implications of having a tectonic fault under a large facility storing red mud. Is there a risk of red mud seeping into the ground as a result of this fault and what are the measures that have been taken by the unit to trap the leachate that might escape through the fault?
14. Considering the gravity of the concerns around spills or overflows from the red mud pond and the considerable anxiety that local communities are experiencing about the danger of overflows in the monsoon period, why was the monitoring done only by the OSPCB’s regional office at Rayagada and in the case of the second inspection report, only by one official rather than a team made up of senior scientists from OSPCB’s office and the Ministry’s Regional office at Bhubaneswar?
15. What steps have the OSPCB or the local authorities taken to communicate the findings of the Inspection Reports to local communities living adjacent to the red mud pond? Since the OSPCB found that water from the central collection pit had overflowed into the nearby pond and considering the anxiety that local communities are suffering in relation to possible spills from the red mud pond, it is essential that there be full disclosure of the findings, possible impacts and corrective measures that are being taken to prevent any such overflow in the future.
16. In the event of a spill or overflow from the red mud pond, what is the plan that has been developed by Vedanta Aluminium and the local authorities to deal with such an emergency? Please let us know what measures and systems are in place to deal with a spill. Have the details of such a plan been shared with local communities?

Amnesty International remains concerned that despite findings of an overflow from the collection pit on two occasions within a two month period, neither the OSPCB nor the Ministry have detailed what steps will be taken to ensure ongoing monitoring of the current situation at the red mud pond during the ongoing monsoon season.

It is also notable that despite reports that local communities are experiencing considerable anxiety about the overflows from the red mud pond and that though the OSPCB itself stated that water had overflowed from the central collection pit, these findings have not been shared with local communities.

One of the most significant concerns raised by the local communities, who had opposed the Vedanta Aluminium's proposal for five-fold expansion of the refinery, was the risks posed by the refinery's waste disposal system including its red mud pond.

It is essential that the findings of the OSPCB are shared in an accessible manner with local communities and that public meetings are conducted to clarify the risks of any spills or leakages from the red mud pond and what measures are in place to prevent any such leakages. Communities also need to be provided with full information on any plan outlining measures, which will be taken by the company and the local authorities, should a spill occur to protect local communities from the negative impacts which may occur.

Given the proximity of the red mud pond to the local communities and water bodies and the risks involved, Amnesty International would also urge the Ministry to carry out an independent engineering audit to provide reassurance that the red mud pond is operating in compliance with standards consistent with India's environmental protection laws and international standards. In the interim, it is essential that there be ongoing monitoring by the OSPCB of the integrity of the red mud pond during the monsoon season.

Please note that Amnesty International is also approaching the company directly to address matters raised in the inspection reports.

We also look forward to your response and receiving further information on the issues highlighted above.

Yours Sincerely

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