

**OFFICE OF THE PRINCIPAL CHIEF CONSERVATOR OF FORESTS (HEAD OF FOREST FORCE), MAHARASHTRA STATE, NAGPUR**

ADDITIONAL PRINCIPAL CHIEF CONSERVATOR OF FORESTS AND NODAL OFFICER, MAHARASHTRA STATE, NAGPUR,

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**Sub:-** Proposal for seeking prior approval of the Central Government under Section 2 (i) (ii) of the Van (Sanrakshan Evam Samvardhan) Adhiniyam, 1980 in favour of JSW Energy PSP Two Limited for non-forestry use of 243.74 ha. (Shahapur Division 181.45 ha and West Nasik Division 62.29 Ha) of forest land (reserved forest, protected forest and private forest) for Bhavali Pumped Storage Project (1500 MW) in Thane & Nasik District in the State of Maharashtra (Online proposal No. FP/MH/HYD/153240/2022)– reg.

No. Desk-17/FCA-S1/PID-153240/Thane/ 90 /2025-26

Nagpur – 440 001, Date :- 10/04/2026

To,

The Additional Chief Secretary (Forests),  
Revenue & Forest Department,  
Mantralaya Mumbai -32

- Ref:- 1. The Government of India, MoEF&CC, New Delhi letter No. File No. 8-06/2025-FC, dated 17/03/2026  
2. The Chief Conservator of Forests (T), Thane letter No. Desk-10/FCA/A-20/CR-80/24-25/03/26-27, dated 10/04/2026.

The Government of India, Ministry of Environment, Forests and Climate Change, New Delhi vide letter under reference No.1 raised query on 02 points. Accordingly, the Chief Conservator of Forests (T), Thane vide letter under reference no.2 has submitted compliance report for the same as follows:-

Sr. no	Query	Compliance
i	As per the component-wise breakup of the forest land proposed for diversion, 40.91 ha of forest land has been proposed for muck dumping and job facilities. The State Government shall explore the possibility of shifting of such non-site specific activities on Non-forest lands	<p>The DCF, Shahapur &amp; CCF (T), Thane on 07/04/2026 &amp; 10/04/2026 has submitted compliance report as follows:-</p> <p><b><u>Justification for Location of Dumping &amp; Job Facility Areas</u></b></p> <p>The user agency has submitted that the Bhavali Pumped Storage Project (PSP) is inherently site-specific in nature, as pumped storage schemes are governed by stringent topographical, geological, hydrological and engineering requirements.</p> <p>Shifting of the dumping and job facility areas is not feasible due to the site-specific nature of the project in view of following constraints:</p> <ul style="list-style-type: none"><li>- Detailed reconnaissance of the lower reservoir project area indicates that the surrounding region is predominantly forest land.</li><li>- The nearest potential non-forest/Non-Tribal private land identified is located at a distance of more than 75km away and that too outside Thane district.</li></ul>

- Shifting dumping areas to locations 75 km away would require additional access roads, significantly increasing the forest land requirement for roads, which may become comparable to or even exceed the dumping area requirement itself. For example, shifting of dumping site even 15 km will increase the diversion of forest land in road component by approx. 50 Ha.
- Additionally, long-distance transportation of muck would lead to higher fuel consumption, increased emissions, disturbance to forest areas and wildlife and additional safety risks. It would also adversely affect construction efficiency due to increased cycle time and repeated handling of material, thereby impacting the construction schedule & Project viability. The detailed studies on environmental impact of distant Dumping area was submitted vide EDS reply by Nodal Office letter dtd. 19/01/2026

In view of above, shifting of dumping and job facility areas is not feasible. However, the User Agency reviewed in detail various options to further optimize forest land requirement for the same. Through revised construction methodology, phased utilization of infrastructure, adoption of engineered stabilization and compaction measures, it is now proposed to reduce the Dumping and job facility area of 40.91 ha to 23.122 ha which is about 17.788 ha (43.5%) reduction in forest area.

The reduced area of Dumping sites is as follows:

Site	Earlier proposed			Revised Proposal			Reduction (ha)		
	Reserved Forest (ha)	Private Forest (ha)	Total Forest Area (ha)	Reserved Forest Area (ha)	Private Forest Area (ha)	Total Forest Area (ha)	Reserved Forest Area	Private Forest (ha)	Forest Land (ha)
D-1	4.455	13.88	18.335	0	7.916	7.916	4.455	5.964	10.419
D-2	22.575	0	22.575	15.206	0	15.206	7.369	0	7.369
<b>Total</b>	<b>27.03</b>	<b>13.88</b>	<b>40.91</b>	<b>15.206</b>	<b>7.916</b>	<b>23.122</b>	<b>11.824</b>	<b>5.964</b>	<b>17.788</b>

While revising the muck dumping area requirement, special emphasis was given to reduction of Reserve forest area. As a result, of the total 17.788 Ha area reduced, 11.824 ha (66.5%) is Reserved Forest and 5.964 ha. (33.5%) is Private Forest area. **Annexure-1**

It is further submitted that:

- The muck disposal areas are directly linked to tunnel portals, dam excavation zones and underground works. Location of these facilities in close proximity to the excavation sites is essential for:
  - Minimize environmental impacts on ecology
  - Improve construction efficiency and reduce duration of forest disturbance
  - Reduce haulage distance of excavated material
  - Minimizing Safety Risks
  - Reducing Social Impact
  - Ease of environmental monitoring and

	<p style="text-align: center;">compliance:</p> <p>Of the total 6.45 MCM excavation, 3.61 MCM (56%) will be reused, while 2.84 MCM (44%) will be disposed of at the proposed dumping sites.</p> <p>The proposed muck disposal sites are located in areas having low vegetation density and have been selected to avoid dense forest patches. A comprehensive and approved Muck Management Plan has been prepared, incorporating engineering stabilization measures and biological reclamation, ensuring environmental protection, slope stability and long-term restoration of the sites.</p> <ul style="list-style-type: none"> <li>- Also, the User Agency kindly submitted that the Expert Appraisal Committee (River Valley &amp; Hydroelectric Projects), MoEF&amp;CC, conducted site visit on 2nd &amp; 3<sup>rd</sup> Jan 2025. The findings of the site visit were discussed amongst the Hon'ble EAC members under Additional Agenda Item 22.4 in the 22nd EAC Meeting held on 10<sup>th</sup> Jan., 2025. The Committee recommendations as per the Minutes of the Meeting are reproduced hereunder.</li> </ul> <p><i>“the relocation of muck disposal site may not be insisted on while considering the proposal for clearance since the muck disposal site was found to have been selected properly. Further, ecologically better sites were not appeared available in nearby areas. Any relocation at this stage might lead to much changes and may lead to more adverse consequences. However, safety measures as contained in EMP and in other documents should be adhered into”.</i></p> <p>Hence, the User Agency requested that the dumping areas shall be stabilized and restored in accordance with the approved Muck Management Plan and handed over to state Forest Department. The User Agency have also submitted an undertaking confirming that the Muck disposal site will be properly stabilized and scientifically reclaimed with vegetation after completion of disposal activities and will not be used for any Non-forest activities.</p>
<p>ii As per the component-wise break-up, 0.77 ha of forest land has been proposed for the approach road to the upper dam and 39.162 ha for the approach road to the lower dam. The State Government shall re-examine the requirement of forest land for these roads, reassess and optimize the requirement of forest land for construction of the roads with regard to the gradient and width of road, and</p>	<p>The DCF, Shahapur &amp; CCF (T), Thane on 07/04/2026 &amp; 10/04/2026 has submitted compliance report as follows:-</p> <p>The user agency has submitted that access roads are essential for connectivity between various project components such as dam sites, tunnel portals, underground works and construction facilities during the execution &amp; operational stage.</p> <p>The road network was originally planned considering the</p>

further explore the possibility of realigning the road to non-forest land.

requirements of construction methodology, heavy equipment transportation, hill road gradients, turning radius at bend and long-term operational accessibility.

Further, the alignment of roads is significantly influenced by site topography and terrain conditions. The project area lies in steep hilly terrain with across head of approximately 450 m. Hill roads cannot be constructed in straight alignment which necessitates the proposed road length & area.

#### **Optimization of Project Road Area**

In compliance with the observations the road alignment, construction methodology and access planning for project components were reviewed in detail with the objective of further minimizing the forest land requirement.

Accordingly, the following optimization measures have been undertaken:

- Optimization of carriage way width
- Reduction in Surface Road Footprint through underground access

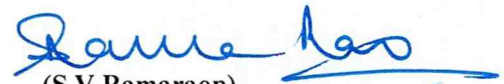
Based on these considerations, the forest land requirement for Roads in Lower reservoir area is reduced from 39.162 ha to 19.381 Ha. **Annexure-1**

The User agency accommodating the above changes in layout and realign their construction planning & methodology, resulted in overall reduction in forest area from 243.74 ha. to 207.171 ha. i.e. 36.59 ha. forest area is now proposed for reduction. The resulting area statement and map indicating. the details of overall area change is enclosed as **Annexure -2**

The user agency has submitted an undertaking and mentioned that the resulting updated KML file and required documents will be submitted along with FC Stage I compliance. **Annexure -3**

This is for your information and further needful action.

Encl : As above

  
(S.V.Ramaraop)

**Addl. Principal Chief Conservator of Forests  
& Nodal Officer**

Copy to the Chief Conservator of Forests (T), Thane for information.

Copy to the Chief Conservator of Forests (T), Nashik for information.

Copy to the Deputy Conservator of Forests, Shahapur Forest Division, Shahapur for information.

Copy to the Deputy Conservator of Forests, West Nashik Forest Division for information.

Copy to the Authorized Signatory, JSW Energy PSP Two Limited at JSW Centre, Bandra Kurla Complex Bandra (East), Mumbai-400051 for information.