PART-IV

(To be filled by Nodal Officer or Principal Chief Conservator of Forests (Head of Forest Force)

(Detailed opinion and specific recommendation of the State Forest Department for acceptance or otherwise of the proposal with remarks)

Sub.:- Proposal for prospecting (Research) for 121.83 ha. forest land under Forest (Conservation) Act-1980 for Laser Interferometer Gravitational Wave Observatory in India (LIGO) in village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli by taking 150 Bore holes in 0.375 ha. forest area. The details of land proposed for diversion is as under-

Sr. no.	Item of Works	District/ Tahsil	Village	Comptt No.	Gut No.	Area (in ha)	Legal Status
1	Boreholes (150 nos.)	Hingoli/ Aundha (nagnath)	Dudhala,	620,621, 621A	435,434, 406,407, 391	86.97	Reserved Forest
			Anjanwada	615C, 616	42	28.86	
			Nandgaon	625C	65,75	4.15	
			Sawali (B)	623	294	1.85	
Total Forest Area						121.83	

Specific recommendation of Principal Chief Conservator of Forests (HoFF) MS Nagpur is attached on page no.

(G Sai Prakash)

Additional Principal Chief Conservator of Forests & Nodal Officer, Maharashtra State, Nagpur.

Date: "2406/2017 Place: Nagpur

<u>Proposal for prospecting (Research) for 121.83 ha. forest land under Forest (Conservation)</u> <u>Act-1980 for Laser Interferometer Gravitational Wave Observatory in India (LIGO) in</u> <u>village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli</u> <u>by taking 150 Bore holes in 0.375 ha. forest area.</u>

Specific Recommendation of Principal Chief Conservator of Forests, (Head of Forest Force) Maharashtra State, Nagpur with regards to acceptance or otherwise of the proposal supported by reasons.

 The proposal for approval for prospecting (Research) for 121.83 ha forest land under Forest (Conservation) Act-1980 for Laser Interferometer Gravitational Wave Observatory (LIGO) in village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli by taking 150 Bore holes in 0.375 ha. Reserve forest land. The area statement is shown as under-

Sr. no.	Item of Works	District/ Tahsil	Village	Comptt No.	Gut No.	Area (in ha)	Legal Status
1	Boreholes (150 nos.)	Hingoli/ Aundha (nagnath)	Dudhala,	620,621, 621A	435,434, 406,407, 391	86.97	Reserved Forest
			Anjanwada	615C, 616	42	28.86	
			Nandgaon	625C	65,75	4.15	
			Sawali (B)	623	294	1.85	
Total Forest Area						121.83	

The proposal has been initiated by the Chief Administrative Officer, Government of India, Department of Atomic Energy (DCS & EM). The Union Cabinet chaired by Hon'ble Prime Minister has given approval on 17.02.2016 for setting up mega science project called Laser Interferometer Gravitational Wave Observatory Project [LIGO- India Project] in India. This project is under joint collaboration with Laser Interferometer Gravitational Wave Observatory (LIGO), USA and it is funded by Department of Atomic Energy (DAE) and Department of Science & Technology (DST) of Government of India. The LIGO-India shall be a unique facility in the world along with US Detectors for unraveling some greatest mysteries of the universe called gravitational-wave. In this regard, a MoU has been singed in March, 2016 in US among the US National Science, Foundation, DAE and DST in the presence of Hon'ble, Prime Minister of India. The proposed project will bring unprecedented opportunities for Scientists and Engineers to dig deeper into the realm of gravitational wave and take global leadership in this new astronomical frontier. LIGO, India project will also bring considerable opportunities in cutting edge technology for the Indian Industry, which will be engaged in the construction of 8 km long beam tube at Ultra-High Vacuum on a leveled terrain. Thus, the project will motivate Indian students and young scientists to explore newer frontiers of knowledge, and will add further impetus to scientific research in the country. The total 150 bore holes are proposed within forest area which is required for prospecting (research) in 0.375 ha. Reserve Forest which will temporary be affected.

- 2) The area belongs to Eco-value class-III and having density 0.1. open forest.
- 3) The Divisional Forest Officer, Hingoli Forest Division, Hingoli has certified that no suitable alternate non forest land is available other than forest land. Therefore the demand of forest land required is the barest minimum.
- 4) The area involved in the project does not form part of any existing National Park, Wildlife Sanctuary and Nature Reserve as certified by the Divisional Forest Officer, Hingoli Forest Division, Hingoli
- 5) The Assistant Director, Department of Archaeology, Mumbai has certified that the area involved does not affect any monument site of cultural, historical, religious, archeological or recreational importance. & The Divisional Forest Officer, Hingoli Forest Division, Hingoli has certified that proposed project is not likely to affect any monumental site of cultural, historical, religious, archeological or recreational importance.
- 6) There is no violation of Forest (Conservation) Act 1980, as certified by the Divisional Forest Officer, Hingoli Forest Division, Hingoli.
- 7) The Divisional Forest Officer, Hingoli Division, Hingoli has certified that the proposed project is beyond 10 km of the boundaries of the protected area.
- 8) The Divisional Forest Officer, Hingoli Division, Hingoli has certified that there is no cutting and felling of trees.
- 9) The user agency has submitted the certificate of Collector, Hingoli under Schedule Tribes and Other Traditional Forest Dweller's (Recognition of Forest Rights) Act 2006 issued vide letters No.2018/land/Acq.602, dt.17/01/2018 and No.2017/land/Acq.561, dt.10/11/2017 in prescribed format (From I) & (Form II) as per Government of India guidelines dt. 5/7/2013 respectively.
- 10) Since the instant proposal pertains only to prospecting for affecting the area of 0.375 ha. only temporarily, the condition of taking up compensatory afforestation and payments of Net Present Value seems to be not applicable at this stage. However if the exploration leads to finding Laser Interferometer Gravitational Wave Observatory in India (LIGO), it will necessitate submission of proposal under Forest (Conservation) Act-1980 and these conditions shall become applicable.
- 11) As regards the working period for prospecting/drilling, decision may be taken at Government level.

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In view of this, the proposal is recommended for approval under section 2 (ii) subject to the following conditions:-

- i) The legal status of the forest land required will remain unchanged.
- ii) Construction of temporary dwelling / hutments etc. for labourers will not be allowed in the forest areas.
- iii) Adequate precautions shall be taken to safeguard the adjoining areas from explosives and it shall not be stored in the forest area.
- iv) The User Agency will not dump the overburden on the forest land.
- v) The user agency should clearly understand that this permission is being granted only for prospecting of 150 borehole. The proposal for road, building, beam tube and Laser Interferometer Gravitational Wave Observatory (LIGO) will be considered independently later on merit.
- vi) All other conditions as may be mandatory under relevant Acts, Rules and guidelines shall be complied with by the user agency.

HPP

Principal Chief Conservator of Forests (Head of Forest Force) Maharashtra State, Nagpur

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, First Floor, 'B' Wing, Van Bhavan, Civil Lines, Nagpur-440001.

Tel no. (0712) 2530166, 2556916, Fax no. (0712) 2550675 E-mail- apccfnodal@mahaforest.gov.in

Sub.:- Proposal for prospecting (Research) for 121.83 ha. forest land under Forest (Conservation) Act-1980 for Laser Interferometer Gravitational Wave Observatory in India (LIGO) in village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli by taking 150 Bore holes in 0.375 ha. forest area.

491 No. : Desk-17/NC/I/I.D-/ /16-17 Nagpur - 440 001, Dated : 02/06/2018

To

The Secretary (Forests), Revenue and Forests Department, Mantralaya, Mumbai-32

The Chief Administrative Officer, Government of India, Department of Atomic Energy (DCS & EM) has submitted the proposal for prospecting (Research) for 121.83 ha. forest land under Forest (Conservation) Act-1980 for Laser Interferometer Gravitational Wave Observatory in India (LIGO) in village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli by taking 150 Bore holes in 0.375 ha. forest area. The location of project area is as given below

Sr. no.	Item of Works	District/ Tahsil	Village	Comptt No.	Gut No.	Area (in ha)	Legal Status
1	Boreholes (150 nos.)	Hingoli/ Aundha (nagnath)	Dudhala,	620,621, 621A	435,434, 406,407, 391	86.97	Reserved Forest
			Anjanwada	615C, 616	42	28.86	
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			Sawali (B)	623	294	1.85	/
Total Forest Area						121.83	/

The proposal has been initiated by the Chief Administrative Officer, Government of India, Department of Atomic Energy (DCS & EM). The Union Cabinet chaired by Hon'ble Prime Minister has given approval on 17.02.2016 for setting up mega science project called Laser Interferometer Gravitational Wave Observatory Project [LIGO- India Project] in India. This project is under joint collaboration with Laser Interferometer Gravitational Wave Observatory (LIGO), USA and it is funded by Department of Atomic Energy (DAE) and Department of Science & Technology (DST) of Government of India. The LIGO-India shall be a unique facility in the world along with US Detectors for unraveling some greatest mysteries of the universe called gravitational-wave. In this regard, a MoU has been singed in March, 2016 in US among the US National Science, Foundation, DAE and DST in the presence of Hon'ble, Prime Minister of India. The proposed project will bring unprecedented opportunities for Scientists and Engineers to dig deeper into the realm of gravitational wave and take global leadership in this new astronomical frontier. LIGO, India project will also bring considerable opportunities in cutting edge technology for the Indian Industry, which will be engaged in the construction of 8 km long beam tube at Ultra-High Vacuum on a leveled terrain. Thus, the project will motivate Indian students and young scientists to explore newer frontiers of knowledge, and will add further impetus to scientific research in the country. The total 150 bore holes are proposed within forest area which is required for prospecting (research) in 0.375 ha. Reserve Forest which will temporary be affected.

Following documents as prescribed in Government of India Circular, No. F.No.5-3/2007/FCdt.19/8/2010 and as per the instrucations contained in Government of India Gazette REGD No.D.L-33004/99 published vide dt.14/3/2014 are enclosed in three copies.

- 1) Prescribed Form C, in accordance with the provision under the amended Forest (Conservation) Rules, as per amendment published in Gazette of India dated 14/3/2014.
- 2) Area Statement,
- 3) Index map in suitable scale,
- 4) The area belongs to Eco-value class-III and having density 0.1. open forest.
- 5) The Divisional Forest Officer, Hingoli Forest Division, Hingoli has certified that no suitable alternate non forest land is available other than forest land. Therefore the demand of forest land required is the barest minimum.
- 6) The area involved in the project does not form part of any existing National Park, Wildlife Sanctuary and Nature Reserve as certified by the Divisional Forest Officer, Hingoli Forest Division, Hingoli
- 7) The Assistant Director, Department of Archaeology, Mumbai has certified that the area involved does not affect any monument site of cultural, historical, religious, archeological or recreational importance. & The Divisional Forest Officer, Hingoli Forest Division, Hingoli has certified that proposed project is not likely to affect any monumental site of cultural, historical, religious, archeological or recreational importance.
- There is no violation of Forest (Conservation) Act 1980, as certified by the Divisional Forest Officer, Hingoli Forest Division, Hingoli.
- 9) The Divisional Forest Officer, Hingoli Division, Hingoli has certified that the proposed project is beyond 10 km of the boundaries of the protected area.
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- 12) Since the instant proposal pertains only to prospecting for affecting the area of 0.375 ha. only temporarily, the condition of taking up compensatory afforestation and payments of Net Present Value seems to be not applicable at this stage. However if the exploration leads to finding Laser Interferometer Gravitational Wave Observatory in India (LIGO), it will necessitate submission of proposal under Forest (Conservation) Act-1980 and these conditions shall become applicable.
- 13) As regards the working period for prospecting/drilling, decision may be taken at Government level.

In view of this, the proposal is recommended for approval under section 2 (ii) subject to the following conditions:-

- i) The legal status of the forest land required will remain unchanged.
- ii) Construction of temporary dwelling / hutments etc. for labourers will not be allowed in the forest areas.
- iii) Adequate precautions shall be taken to safeguard the adjoining areas from explosives and it shall not be stored in the forest area.
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- v) The user agency should clearly understand that this permission is being granted only for prospecting of 150 borehole. The proposal for road, building, beam tube and Laser Interferometer Gravitational Wave Observatory (LIGO) will be considered independently later on merit.
- vi) All other conditions as may be mandatory under relevant Acts, Rules and guidelines shall be complied with by the user agency.

It is, therefore, requested that Government of India may kindly be moved for approving the Proposal for prospecting (Research) for 121.83 ha. forest land under Forest (Conservation) Act-1980 for Laser Interferometer Gravitational Wave Observatory in India (LIGO) in village Dudhala, Anjanwada, Nandgaon Sawali (B) Tal. Aundha (nagnath) District, Hingoli by taking 150 Bore holes in 0.375 ha. forest area under Forest (Conservation) Act, 1980.

Encl. :- Proposal 3 copies

Addl. Principal Chief Conservator of Forests & Nødal Officer, Maharashtra State, Nagpur

Copy to The Chief Conservator of Forests (T), Aurangabad for information . Copy to The Divisional Forest Officer, Hingoli Forest Division, Hingoli for information. Copy to The Chief Administrative Officer, Government of India, Department of Atomic Energy

(DCS & EM) for information.

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PART-IV

(To be filled by Nodal Officer or Principal Chief Conservator of Forests (Head of Forest Force)

(Detailed opinion and specific recommendation of the State Forest Department for acceptance or otherwise of the proposal with remarks)

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		X and O states	Anjanwada	615C, 616	42	28.86	
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Specific recommendation of Principal Chief Conservator of Forests (HoFF) MS Nagpur is attached on page no.

(G Sai Prakasti)

Additional Principal Chief Conservator of Forests & Nodal Officer, Maharashtra State, Nagpur.

Date: /06/2017 Place: Nagpur