

# State Environment Impact Assessment Authority, M.P.

(Ministry of Environment, Forest and Climate Change, Government of India)

## **Environmental Planning & Coordination Organization**

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To, Engineer-in chief Department of water Resources, Tulsi Nagar Bhopal (MP) -462003 No.: 2350 ISEIAA/
Date: 21.8.2.2.

Sub:-Case No.7224/2020: Prior Environment Clearance for proposed Kotha Barrage Major Irrigation Project at Village - Kotha, Tehsil - Kurwai, District- Vidisha (MP) Gross Command Area- 39000ha; Cultureable command area (CCA): 35000 ha Catchment Area- 8711 sq.m.Height of Barrage- 15.6 M by Project Administrator, Office of Project Administrator, Kotha Barrage Project Implementation Unit, Ganjbasoda, Dist. Vidisha, MP,through Engineer-in chief Department of water Resources, Tulsi Nagar Bhopal (MP) -462003 Email - piukothabarrage@gmail.com, Phone - 07594 - 222942 Environmental Consultant Voyants Solutions Pvt. Ltd., Gurgaon

Ref: Your application dtd. 13.05.20 received in SEIAA office on 12.06.2020

With reference to the above, the proposal has been appraised as per prescribed procedure & provisions under the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E), dated 14<sup>th</sup> September 2006 and its amendments, on the basis of the mandatory documents enclosed with the application viz., Form I, prefeasibility report, ToR, EIA Report, ppt. and additional clarifications furnished in response to observations by the State Expert Appraisal Committee (SEAC) and State Environment Impact Assessment Authority (SEIAA) constituted by the competent Authority.

- i. The Kotha Barrage Major Irrigation project is located on river Betwa in upper middle Betwa sub-basin in district Vidisha, Madhya Pradesh. The river sub basin is a part of Yamuna basin. The proposed Barrage site shall be across Betwa River near village Kotha in Kurwai Tehsil of Vidisha district.
- ii. The proposed project is green field project and shall be conceived with a view to harness Betwa River for providing irrigation facility to 5500 ha during Kharif and 20000 ha during Rabi with 127.50 % annual irrigation intensity.
- iii. Proposed barrage shall be across Betwa River near village Kotha in Kurwai Tehsil of Vidisha district, M.P., and is about 8 km from Kurwai and 5 km from Mandi Bamora on Ganj Basoda – Bina road.

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- iv. As per EIA Notification of September 2006 and subsequent amendments, Irrigation Projects, listed at item 1(c) of Schedule, having culturable command area (CCA) greater than or equal to 10,000 ha and less than 50,000 ha are considered as category B1 project; and are therefore be appraised at State level.
- v. No National Park, Sanctuary, Defense Establishments, Archeological Monuments, Notified Eco-sensitive areas or protected area under Wildlife (Protection) Act exists within the project area or within 10 km distance from it.
- vi. TOR was issued by MoEF & CC vide their letter No. J-12011/05/2016-IA-I (R), dated 9th December, 2016, prior to amendment of 14/08/2018 in EIA Notification of September 2006. Earlier CCA of > 10,000 ha was Category A.
- vii. Betwa River originates in the Raisen district of Madhya Pradesh near Barkhera village south-west of Bhopal at an elevation of about 576 masl. The river drains gross, intercepted and net catchment of 8771 sq. km, 6867.95 sq.km and 1843.05 sa.km respectively, at the project site.
- viii. The project shall encompass the following components.
  - 576 m long barrage having 32 bays, 15m clear span each, separated by 3m thick piers.
  - The crest level of each bay 384.5masl and pond level at 396.00masl
  - 32 fixed wheel vertical lift gates (15000 mm x 11500 mm).
  - 11.50 km long and 1.60m diameter right rising main (26m lift).
  - 8.50 km long and 1.60m diameter left rising main (31m lift).
  - Distribution network upto 1.00 ha chak.
- ix. Presently the command area is being cultivated in Rabi and Kharif crop seasons. Crop intensity during Kharif and Rabi being 37.8 % and 62.2 % respectively. The Annual Crop intensity has been assessed as 127.5% of the CCA with Rabi 100% (20000 ha) and Kharif 27.5% (5500 ha).
- x. The project has been conceived with a view to utilize 103.50 MCM and harness it for providing irrigation facility to 5500 ha during Kharif and 20000 ha during Rabi with 127.50 % annual irrigation intensity. Crop water requirement has been assessed as 102.36 MCM.
- xi. Public Hearing was held on 10.07.2019, in village Kakarua at Annapurna warehouse, Tehsil Kurwai, District Vidisha under the chairmanship of Additional District Magistrate, Vidhisha District. The main issues were about adequate compensation and employment to the PAF as per their skill which was readdressed by the project proponent.
- xii. The total land requirement is 1359 ha which is comprised of 678 ha revenue land and 681 ha private land respectively. Owing to acquisition of land 27 villages shall be partially affected. There shall be 638 project-affected families (Titleholders) whose land shall be acquired of which none shall be displaced. The land acquisition shall be carried out as per RFCTLARRA 2013. INR 14158 lakhs provided under R&R Plan. No diversion of forest land is required for project.
- xiii. In irrigation schemes, air & noise pollution occurs mainly during project construction phase. The major sources of air pollution during construction phase are: Pollution due to fuel combustion in various equipment. Emission from various construction

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plants. Fugitive emissions from material handling and transportation. During operation phase, no major impacts are envisaged on air quality. For control of air & noise pollution PP has proposed the following:-

- · Dust mask will also be provided to the workers.
- Proper regular maintenance of machineries will be done.
- Speed of the vehicles will be kept within the prescribed limits.
- Trucks/ dumpers will not be over loaded.
- Copious sprinkling of water at the work site and haul roads shall be carried out and hooded trucks shall be used.
- · Wet drilling shall be adopted.
- · Periodical monitoring of ambient air quality
- · The DG set should be fitted in acoustic enclosures.
- DG sets should not be located on downstream of prominent and first prominent wind direction. The emission norms prescribed by the CPCB should be adhered.
- The norms prescribed by the CPCB in respect of fixing the minimum stack height for generator, should be strictly complied with
- xiv. The flows downstream of the dam shall be reduced to the volume (103.50 MCM) stored and diverted for consumptive use. Minimum flow of 20% of inflow shall be ensured during June to October. For the non-monsoon months, average monthly flows have been worked out and 15% of the average monthly flows in different non-monsoon months have been reserved for environmental and ecological purposes
- xv. Generation of debris (8.35 lakh cum) from excavation of which 7.68 lakh cum muck shall be consumed and balance 0.67 lakh cum to be disposed in embankment adjacent to masonry/concrete structure, key walls etc.
- xvi. Solid waste generated from temporary and permanent colonies in construction as well as operation phase requires special management to disposed of as warranted under the new Solid Wastes Management Rules, 2016. Following mitigation measures shall be adopted for waste management:
  - Solid waste generated from temporary and permanent colonies in construction as well as operation phase requires special management to disposed of as warranted under the new Solid Wastes Management Rules, 2016.
  - Solid waste generated in the project complex/ project colony/ labour colony, shall be managed and handled in accordance with the duties set forth under clause 4 (1) through 4(3) and clause 20 of SWM Rules, 2016, in respect of landfill.
  - The waste oil and oil contaminated wastes are to be sold off to approved waste oil recyclers
- xvii. The sewage waste shall be disposed after treatment through STP. The effluent to be discharged should conform to the Standard norms.
- xviii. Deposition of sediment in reservoir and reduction in its capacity, thus affecting the water available for the designated use. There shall be recharge of ground water from reservoir (4.17MCM). For maintaining the water availability PP has proposed as follows:-
  - The Catchment Area Treatment (CAT) plans with objective to addresses issues such as prevention of gully erosion, enhancing the forest cover for increasing soil holding capacity; and arresting total sediment flow in the reservoir and flowing waters.

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- 1560 ha have been proposed to be treated under the CAT plan. This area includes 1145 ha area of catchment which shall be treated by biological / engineering measures and 415 ha area under private land treatment within the free draining catchment.
- Conjunctive use of ground water in command by developing tube wells is recommended. A provision of INR 1364 lakhs made under Catchment Area Treatment
- xix. Irrigation in command area leads Land degradation in command area. Impairment of water Quality due to use of fertilizers/insecticides. There shall be recharge of ground water (5.54 MCM) from field application. To overcome the problems PP has proposed following measures along with provision of INR 12442 lakhs made under CAD&WM Plan:-
  - · Micro-irrigation through sprinkler.
  - · Construction of field channels and field drains.
  - Participatory irrigation management through stake holders or farmers organization (WUA).
  - · Limited use of pesticide and fertilizers.
  - · Conjunctive use of ground water in command

### xx. Fisheries Conservation & Management Plan

- a. Fish community will be affected due to habitat alteration in downstream as well as upstream section.
- b. The conservation of fishes under such conditions is one of important task because they typically use different habitats along the river stretch for spawning, feeding, shelter and growth.
- c. It is proposed that the reservoir of the proposed dam be stocked with fingerlings.
- d. Fisheries department is responsible for fisheries development and conservation in the state, therefore, stocking of fingerlings and management of reservoir fisheries in the proposed reservoir will be executed by the Department of Fisheries, Government of Madhya Pradesh and funds for the same shall be provided by the project proponent as follows:-

Particular	Quantity	Rate	Amount (Rs lakh)	Funding Agency
Jungle clearance in	1 Job	L.S.	5.00	P.P.
	1 Job	L.S.	10.00	Fisheries Dept.
Construction of Peripheral Rearing	5.5	20 lakh/ha	110.00	P.P.
	6,80,000	1.0 lakh/ ha	6.80	Fisheries Dept.
	3	25000/No	28.25	Fisheries Dept.
	453	500/No	2.27	Fisheries Dept.
-	1	25 lakh/No	25.00	Fisheries Dept.
	453	1250/No	5.66	p.p.
8. Training to fishermen 453 1250/NO			192.98	
	Jungle clearance in reservoir Fish Landing Centre Construction of	Jungle clearance in reservoir  Fish Landing Centre 1 Job  Construction of Peripheral Rearing Area  Fish Seed Stocking 6,80,000  Boats 3  Nylon Nets 453  Motor boat 1  Training to fishermen 453	Jungle clearance in reservoir  Fish Landing Centre  Construction of Peripheral Rearing Area  Fish Seed Stocking  Boats  Nylon Nets  Motor boat  Training to fishermen  Training to fishermen  1 Job  L.S.  20 lakh/ha  20 lakh/ha  1 Job  L.S.  20 lakh/ha  20 lakh/ha  21 lakh/ha  25 lakh/ha  25 lakh/No  125 lakh/No  125 lakh/No	Jungle clearance in reservoir   1 Job   L.S.   5.00         Fish Landing Centre   1 Job   L.S.   10.00       Construction of Peripheral Rearing Area   Fish Seed Stocking   6,80,000   1.0 lakh/ ha   6.80       Boats   3   25000/No   28.25       Nylon Nets   453   500/No   2.27       Motor boat   1   25 lakh/No   25.00       Training to fishermen   453   1250/No   5.66

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- e. The Indian Major Carps Catla, (Catla catla) Rohu, (Labeo rohita) and Mirgal, (Cirrhinus mirgala) are the choice of species as they are reproduced easily in hatcheries
- xxi. There is power requirement in the pipe canal system of Project is 5.07 MW (Left 2.72 MW + Right 2.35 MW).
- xxii. Disaster resulting from dam break/ failure has been considered and dam break analysis by using BOSS DAMBRK model has been conducted. Evolution of disaster management plan dwells on various aspects such as provision of evacuation paths, setting up of alarms and warning systems, establishing communicating system besides delineating an Emergency Response Organization with an Effective Response System.
- xxiii. Green belt is proposed to be developed within the project area around reservoir periphery, along the network of approach roads, residential areas and other working areas restored. Indigenous tree species are proposed to be planted. The area for green belt development around reservoir rim shall be about 22 ha for which a provision of Rs. 55.20 Lakh @Rs 1.84 lakh/ha has been earmarked. Total cost of project INR 750.75 crores with B.C. Ratio 2.08:1
- xxiv. For safeguarding the overall environment of the project area and infra structure development, education, public health and sanitation and drinking water facilities, the Project Proponent shall undertake CER initiative (Rs 751 lakhs) in project affected areas. The total budget allocated for implementing the various activity and programme envisaged under CER in affected area around the project I given in table below:-

Description	Quantity	Unit	Rate (INRLakh)	Amount (INR Lakh)
Health Care				05.00
Supply of hospital equipment to CHC	1	Job	L.S.	25.00
Infrastructure Development			1	500.00
Construction of bridges on Keotan River to facilitate affected villages.	02	No.	250.00	500.00
Strengthening of bridges /roads.	03	No.	20.00	60.00
Approach roads to barrage to facilitate Betwa Crossing	1.5	km	40	60.00
Skill Development and Training				
Development of model farm for training of operation of pressurized irrigation system along with necessary arrangements.	1	No.	80.00	80.00
Operation and maintenance cost system for five years		-	LS	25.50
				750.7
				751.

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Benefit of the project: Additional irrigation potential shall be created in 20000 ha area, Better living Standards for famers of command area, Employment opportunities/to locals in project work and fisheries, Access to improved infrastructure facilities, Recreation and tourism potential may boost Improvement in environment through implementation of CAT, Command Area Development. Compensatory Afforestation, Green belt Development and different other plans. Better opportunities for cattle rearing. Increase in groundwater level.

Based on the information submitted at Para i to xxiv above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 630<sup>th</sup> meeting held on 10.08.2020 and decided to accept the recommendations of 444<sup>th</sup> SEAC meeting held on dtd. 03.07.20.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA notification dtd. 14<sup>th</sup> September 2006 & its amendments for the proposed Kotha Barrage Major Irrigation Project at Village - Kotha, Tehsil - Kurwai, District- Vidisha (MP) Gross Command Area- 39000ha; Cultureable command area (CCA): 35000 ha Catchment Area-8711 sq.m.Height of Barrage- 15.6 M by Project Administrator, Office of Project Administrator, Kotha Barrage Project Implementation Unit, Ganjbasoda, Dist. Vidisha, MP,through Engineer-in chief Department of water Resources, Tulsi Nagar Bhopal (MP) - 462003, subject to the compliance of the Standard Conditions and the following additional Specific Conditions as recommended by SEIAA & SEAC in its meetings.

## A. Specific Conditions as recommended by SEIAA

- The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- 3. The inputs given by the participants during Public hearing should be properly redressed. All the promises and assurances made during the public hearing shall be fulfilled completely by the water resources department GoMP. The implementation of R & R Plan to be closely monitored to ensure that all project affected families (PAFs) get adequate & timely compensation.
- 4. Resettlement & Rehabilitation plan be implemented in consultation with the water resources department as approved by the State Govt
- 5. Besides the agricultural land, the rehabilitation of public buildings, infrastructures, monument etc. falling in the submergence area should also be included in the rehabilitation plan.
- A monitoring Committee for R & R shall be constituted which must include representatives of project affected persons including form SC/ST community and at least a woman beneficiary.
- A grievances redress mechanism is to be devised by WRD GoMP and put in place so that aggrieved PAFs and other stakeholders may approach the Authority easily for resolution of any dispute/conflict.
- 8. The implementation of Local Area Development Plan (LADP) to be closely monitored.

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- 9. This being a seasonal stream/ river, a minimum environmental flow of 30 % in monsoon season should be released for downstream users.
- 10. Proposed Bio-diversity Conservation & Management Plan in EMP report should be implemented with State Forest Department. The allocated budget for this purpose shall be fully utilized and not to be diverted for any other purpose.
- 11. The catchment Area Treatment (CAT) Plan as proposed in EMP report shall be strictly implemented in consultation with Madhya Pradesh State Forest Department. Major works shall be completed before impounding of reservoir. The financial allocation for CAT Plan implementation shall be fully utilized and not to be diverted for any other purpose. Catchment Area Treatment Plan as has been proposed should be completed in five years.
- 12. To enhance the natural environmental quality & aesthetics of project site, greenbelt, as proposed in the EMP Report shall be undertaken in 20 ha of area. Allocated grant for this purpose shall be fully utilised and not to be diverted for any other purpose.
- 13. Fishery conservation & management plan as proposed shall be implemented in consultation with the Fisheries Department, Government of Madhya Pradesh.. The stocking density of the reservoir shall be around 300 fingerlings per ha. Allocated grant for this purpose shall be fully utilised and not to be diverted for any other purpose.
- 14. Occurrence of stagnant pools/slow moving water channels during construction and operation of the project may provide breeding source for vector mosquitoes and other parasites. The river should be properly channelized so that no small pools and puddles are allowed to be formed. Even after taking precaution, due to unforeseen situations, breeding of mosquito and resultant malaria or mosquito borne diseases can increase. If such a situation arises, it will be the responsibility of project authorities to take all steps i.e. residual insecticidal spray in all the project area and surrounding 3 km. Area keeping the flight range of mosquitoes in consideration. Also medical assistance to be provided to the affected people at the cost of the developer and appropriate health benefits may be initiated with the help of State Health Department.
- 15. If the water of reservoir is used for drinking water supply, it should be done after conventional treatment.
- 16. Regular monitoring of water quality (Surface and Ground) including heavy metals shall be undertaken in the project area and around the project area to ascertain the change, if any, in the water quality due to leaching of contaminants, if any, from the increased use of chemical fertilizers and pesticides.
- 17. As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the project.
- 18. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1St May 2018, as applicable, regarding Corporate Environment Responsibility for which budgetary allocation of Rs. 7.51 Crore has been made. PP should ensure the implementation of CER activities to the extent of Rs. 7.51crore as committed during presentation to the extent on regular basis in consultation with District Collector.

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19. PP should ensure to submit half yearly compliance report and CER activity report with photographs of plantation in MP-SEIAA. If PP is failed to upload or submit two consecutive half yearly compliance reports of EC conditions to concerned authority (SEIAA and Regional Office, MoEF&CC, Gol, Bhopal) than prior environmental clearance issued to PP will automatically be treated as cancelled/ revoked as per OM No. 930/SEIAA/2019 dated 30.05.2019 issued by MPSEIAA.

## B. Specific Conditions as recommended by SEAC

I. Statutory compliance:

i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project

ii. The project proponent shall obtain clearance from the National Board for Wildlife, if

applicable.

iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)

iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee

v. NOC shall be obtained from National Commission of Seismic Design Parameters

(NCSDS) of CWC.

vi. Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crore.

## II. Air quality monitoring and preservation

Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.

Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply

prescribed standards.

Necessary control measures such as water sprinkling arrangements, etc. be taken up to arrest fugitive dust at all the construction sites.

# III. Water quality monitoring and preservation

Conjunctive use of surface water to be planned in the project to check water logging as well as to increase crops productivity. The field drains shall be connected with natural drainage system.

Remodeling of existing natural drains (link drains) and connecting them with irrigated land through constructed field drains, collector drains, etc. are to be ensured on priority

Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is iii. commissioned; cofferdam should not create any adverse impact on water environment

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including the rock mass and muck used for the Cofferdam.

As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the

Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet be submitted to the Regional Office, MoEF & CC and to the

CWC on weekly basis

Mixed irrigation shall be practiced and necessary awareness be given to all the farmers and trained in the use of such systems. Proper crops selection shall be carried out for

making irrigation facility more effective.

On Farm Development (OFD) works like landscaping, land leveling, drainage facilities, field irrigation channels and farm roads, etc. should be taken up in phased manner prior to the start of irrigation in the entire command area. The Command Area Development Plan should be strictly implemented as proposed in the EIA/EMP report.

### IV. Noise monitoring and prevention

All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986.

The ambient noise levels should conform to the standards prescribed under E(P)A

Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time .

## V. Catchment Area Treatment Plan

Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.

VI. Waste management

i. Muck disposal (8.35 lakh cum) be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized quickly.

ii. Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the

EIA/EMP reports. Efforts be made to avoid one time use of plastics.

# VII. Green Belt, EMP Cost, Fisheries and Wildlife Management

i. Based on the recommendation of Cumulative Impact Assessment and Carrying capacity study of river basin or as per the ToR conditions or minimum 15% of the average flow of four consecutive leanest months, whichever value is higher, shall be released as environmental flow.

ii. Detailed information on species composition particular to fish species from previous study/literature be inventorised and proper management plan shall be prepared for insitu conservation in the streams, tributaries of river and the main river itself for which

adequate budget provision be made and followed strictly.

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- iii. Wildlife Conservation Plan prepared for both core and buffer zones shall be implemented in consultation with the local State Forest Department.
- iv. To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department.
- v. Compensatory afforestation programme shall be implemented as per the plan approved.
- vi. Fish ladder/pass as envisaged in the EIA/EMP report shall be provided for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness.

### VIII. Public hearing and Human health issues

- Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt.
- ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
- iii. Preventive measures viz. fuming and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases
- iv. Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- v. Labour force to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.
- vi. Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.
- vii. Emergency preparedness plan be made for any eventuality of the dam failure and shall be implemented as per the Dam Break Analysis.

## IX.Corporate Environment Responsibility

- A budgetary provision of Rs. 16,412.5 Lakh is made for Environmental Management Plan as capital cost and Rs 193.50 lakh as recurring cost.
  - Out of which Rs. 37 Lakhs as capital and 6.0 lakhs as recurring cost provided for Green Belt Development Plan in EMP.
  - No muck disposal shall be done outside of the project site; Rs. 28.0 Lakh is made for Muck Management Plan in the EMP.
  - Provision of Rs 1364.0 Lakh is made for Catchment Area Treatment Plan in EMP. Rs 193.0 Lakh is made for Fisheries Management Plan in EMP.
  - Provision of Rs 12,442.0 Lakh is made for Command Area Development Plan in EMP.
- ii. Under CER Rs 751.0 Lakh is envisaged for proposed various activities.
- iii. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- iv. Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation

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- v. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- vi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- vii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year-wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- viii. Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.
- ix. Multi Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.
- x. Formation of Water User Association/Co-operative be made by involvement of the whole community be ensured for discipline use of available water for irrigation purposes.

#### X. Miscellaneous

- i. The project proponent shall make public, the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company
- v. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- vii. The project proponent shall abide by all the commitments and recommendations made

- in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

#### Standard Conditions:

- 1. The Regional Office of MoEF, Gol, Bhopal & MPPCB shall monitor compliance of the stipulated conditions. A complete set of documents including Environment Impact Assessment Report, Environmental Management Plan and Monitoring Plan should be given to Regional Office, MoEF, Gol, Bhopal & MPPCB. The project proponent shall provide full cooperation during their inspection and all required documents/data to the
- 2. The responsibility of implementation of environmental safeguards and RR plan rests fully with the Water Resources Department GoMP and Government of Madhya Pradesh. The WRD Government of Madhya Pradesh should also monitor implementation of EMP at regular intervals preferably at the level of Principal
- 3. Necessary livelihood plan for oustees is to be prepared, if found necessary, in consultation with State Government Departments concerned. The Water Resources Department Government of Madhya Pradesh should submit compliance on this components & also while submitting six monthly compliance report to MoEF, Gol, Regional Office, Bhopal.
- 4. The monitored data for criteria pollutant levels, namely; SPM, RSPM, SO2, NOx (ambient levels) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the dam site in the public
- 5. The equipment likely to generated high noise levels during construction period or otherwise shall have to meet the ambient noise level standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000 as amended from time to time under the Environment Protection Act (EPA), 1986. Workers shall be provided with ear plugs / muffs.

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- 6. The Project Proponent has to submit half yearly compliance report of the stipulated terms and conditions in the Prior Environmental Clearance, including the results of monitored data in hard and soft copy to the Regulatory Authority, respective Zonal Office of CPCB and the SPCB and Regional Office of MoEF, GoI at Bhopal on 1st June and 1st December of each calendar year.
- 7. Adequate financial provision should be made in the total budget of the project for implementation of the above suggestion safeguard measures. The funds earmarked for environmental protection measures shall be kept in separate account and shall be fully utilized for the said purpose and not to be diverted for other purpose. Year wise expenditure shall be reported to the MoEF, GoI, Regional Office located at Bhopal, CPCB & MPCB. In case of revision of the project cost due to price level change the cost of EMP shall also be updated proportionately and revised upwardly.
- 8. Water User Associated (WUA) Co-operative should have to be formed for efficient water use. Involvement of the community for disciplined and wise use of available waters should be ensured through training programme / effective interactive sessions.
- 9. On-farm development (OFD) works are to be completed by the project proponent simultaneously and before the commencement of irrigation. WUA's (Water Users Associations) should be made functional to undertake the OFD works. Special & critical monitoring of progress to be undertaken by the Water Resources Department GoMP to ensure that OFD works are completed along with main canal networks.
- 10. The MP SEIAA or any other competent authority reserves the right to alter/modify or add additional, safeguard measures subsequently, if found necessary and to take action, including revoking of the clearance under provisions of the environment (Protection) Act 1986 to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- 11. The Prior Environmental Clearance letter is valid for a period of 10 years from the date of issue of this letter for commissioning of the project.
- 12. A copy of the Prior Environmental Clearance issued by MP SEIAA shall be submitted by the Project Proponent to the Heads of the Local Bodies, Panchayat / Zila Parishad / Municipal Bodies as applicable, local NGO, if any, in addition to the associated Government Department from whom any suggestion / representations were received while processing the proposal and those responsible for controlling the proposed project, who in turn has to display the same for 30 days from the date of receipt. The clearance letter shall also be put on website by the project proponent.
- 13. State Pollution Control board / committee shall display a copy of the clearance letter at the regional office, district industries centre and collector's/tehsildar's office for 30 days.
- 14. The Project Proponent shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the State Level Environment Impact Assessment Authority (SEIAA) website at www.mpseiaa.nic.in and copy the same shall be forwarded to the Regional Office, MoEF&CC, Gol, Bhopal.

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- 15. After 5 years of the commissioning of the project a study shall be undertaken regarding impact of the project on the environment and downstream ecology. The study shall be undertaken by an independent agency to be decided in consultation with the Ministry / authority.
- 16. A multi disciplinary committee (MDC) for monitoring the implementation of environmental safe guards during construction shall be constituted by the project proponent (PP) in consultation with the state environment ministry as early as possible. A panel may be proposed by the PP and submitted to ministry. The Project Proponent shall organize six monthly meetings of the committee and submit the monitoring report to the ministry.
- 17. The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the Regional Office of MoEF.
- 18. Any other clearance required from any other organization / department should be obtained before commencement of works and commissioning of the project, as applicable.
- 19. Any appeal against this prior environmental clearance shall lie with the Green Tribunal, if necessary, within a period of 30 days from the date of issue, as prescribed under Section 10 of the National Green Tribunal Act 2010.

/ SEIAA/ 2020

Dated \$1.8. 2000 91

(Tanvi Sundriyal) **Member Secretary** 

Copy to:-

Endt No.

- (1). Principal Secretary, Urban Development & Environment Deptt. 3rd Floor, Mantralaya Vallabh Bhawan, Bhopal.
- Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.
- Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- (4). The Collector, Distt-Vidisha (M.P.).
- (5). The Principal Chief Conservator of forest, Ground floor Satpuda Bhawan, Bhopal (M.P)
- Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi - 110 003
- Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.

(8). Guard file.

(Dr. Sanjeev Sachdev) Officer-in-Charge

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