



**State Environment Impact Assessment Authority, M.P.**  
**(Government of India, Ministry of Environment, Forest & Climate Change)**

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No: 1462 /SEIAA/2019

Date: 03.7.19

To,  
Executive Engineer,  
Water Resources Department,  
Water Resources Division No. 1,  
Sagar, (M.P.)-470001

**Sub:- Case No. - 5583/2017:** Prior Environment Clearance for Kadan Medium Irrigation Project at Village Ekpana Basona, Distt. - Sagar, (M.P.) CCA – 9990 ha Gross Command area: 13500 ha; Live storage capacity - 40.05 MCM; Gross Storage- 42.66 Mcum; Submergence due to Project- 754.78 ha; Catchment Area up to Dam site- 181.25 sq km; by Executive Engineer, Water Resources Department, Water Resources Division No.1, Sagar, (M.P.) Ph- 07582-223809 Email: [eewrdo1sgr@gmail.com](mailto:eewrdo1sgr@gmail.com) Env. Consultant: - R.S. Envirolink Technologies Pvt.Ltd., Gurgaon

**Ref:** Your application dtd. 10.07.17 received in SEIAA office on 30.10.2017

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, pre-feasibility 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 project proposes construction of a 23.70m high dam across Kadan River in Dhasan Ken Basin near Ekpana Basona village and planned to cater irrigation water to 9,990 ha of CCA in 49 villages of Sagar, Malthon and Rahatgarh tehsils of Sagar district.
- (ii) The total catchment area of the project is 181.25 sq.km. The project is envisaged to have a live storage capacity of 40.05 MCM, of which, 0.5 MCM is reserved for drinking water and 0.5 MCM is reserved for e-flow.
- (iii) The project pertains to Item No. 1(c) category 'B' of the EIA Notification 2006 schedule and in terms of Notification dated, 25<sup>th</sup> June, 2014, as the CCA of the project is less than 10000 ha.
- (iv) The project has a command area of 9,990 ha, therefore as per EIA notification of September 2006 and a recent amendment (August 14, 2018), it is a Category B2 project (Medium irrigation project having CCA > 2000 ha and < 10000 ha)". And Being a B2 Category project, it does not require an EIA report and is exempt from

Public Hearing; it require submission of EMP only However, Scoping Clearance of the project was taken as Category B1 (prior to August 2018 amendment).

- (v) There is no wildlife sanctuary, National park (DFO letter dtd. 26.05.17) or interstate boundaries (PWD letter dtd. 19.05.17) within 10 km of the project area hence general conditions are not attracted.
- (vi) The total land requirement for proposed project is 754.78 ha; out of which, 439.32 ha is culturable land (private land), 248.76 ha is forest land and 66.70 ha is revenue land.
- (vii) For diversion of forest land 248.76 ha PP has obtained Stage I Forest Clearance from MoEF&CC vide their Letter No. F. No. 8-11/2018-FC dated 18/06/2018 .Entire 248.76 ha of forest land is Reserve Forest.

All the vegetation on 248.76 ha land will be cleared for construction of project component. Against the diversion of forest land PP has proposed 1832 trees will be felled.

This is a permanent impact and can only be compensated by Compensatory Afforestation, which an already been approved as part of Stage I Forest Clearance.

**Private Land Acquisition Status - Copy of Notification u/s 19, 21 & 24 -**

- For acquisition of private land, notification u/s 11, 19 and 21 has been issued for entire private land of 439.32 ha covering 9 villages
  - Section 24 award is completed for 5 out of 9 villages
  - An amount of Rs. 89 crore has already been deposited with the government by project authorities.
- (viii) Total 9 villages are coming under submergence, of which, 1 village named Khanpur is coming under full submergence.
- (ix) There are 216 project affected families (527 PAPs), who are identified as the families whose land and/or houses will be acquired for the project. 5 ha land area is identified near village Silera for resettlement. 204 families from 5 villages will be resettled in the pre-identified location near village Silera, whereas, 12 families are those who have constructed house for looking after their agricultural fields and are residing at some other location, therefore, these 12 families will not be resettled. The rehabilitation and resettlement plan for the project affected families has been formulated as per the provisions of The Right to Fair Compensation and Transparency in Land Acquisition, Rehabilitation and Resettlement Act, 2013 (RFCT\_LARR). Financial requirement for implementation of the Rehabilitation and Resettlement plan and infrastructural facilities is Rs 6.01 Crore.

S. No.	R&R Components	Cost (Rs in crore)
1	Rehabilitation Grant	2.4639
2	Infrastructure in Resettlement Area	3.0500
3	Monitoring and Evaluation	0.5000
	Total	6.0139

The Resettlement and Rehabilitation plan of the proposed Kadan Medium Irrigation project has been approved by the Commissioner, District Sagar.

- (x) Since the project will benefit 49 villages therefore in interest of large scale benefit to the neighbouring as well as adjoining villages, people from project affected villages are willing to relocate.

They will be relocated outside the submergence area in one of the affected village i.e. Silera. Therefore, they will not be moving at a far distance and therefore, there won't be much of a change in their livelihood or surrounding environment.

Affected villagers are expecting that there will be much better infrastructural facilities like, drinking water, drainage system, education, health care etc. in the rehabilitated site.

Most of the affected villages indulge in dairy farming and have good number of livestock population therefore they expect sufficient area for not only construction of house but construction of animal shed as well.

- (xi) The crop intensity has been adopted as 100% during Rabi season only, with 3.5 cumec design discharge.
- (xii) Agriculture is the main occupation in the area and they have very fertile soil but due to limited extraction of ground water and low rainfall, there is acute shortage of water especially during Rabi season. Lack of irrigation facility results in low income from crop production.
- (xiii) The major sources of air pollution during construction phase are: Pollution due to fuel combustion in various equipment, emission from various construction plants, fugitive emissions from material handling and transportation. During operation phase, no major impacts are envisaged on air quality. For control of air pollution PP has proposed as follows:
- For all major construction activities, curtaining of the site will be done to protect the surrounding areas from dust emissions.
  - In addition, regular sprinkling of the water will be done on construction sites for dust suppression.
  - All construction equipment/machinery will be properly maintained and tuned to minimize emissions.
  - Mobile DG sets shall be used for lighting only during construction phase and they should meet emission and noise standards as per guidelines/standards issued by CPCB.
  - The entire contractor's vehicle should have valid PUC certificate and same condition may be enforced on transporters bringing in material for construction.
  - Road damage caused by sub-project activities will be promptly attended to with proper road repair and maintenance work.
  - Excessive soil on paved areas will be sprayed (wet) and/or swept and unpaved areas will be sprayed and/or mulched.
  - All the construction workers and other staff, who get directly exposed to dust, should necessarily be provided with dust masks.
  - In addition, the project authorities will work closely with representatives from the community living in the vicinity of project area to identify areas of concern and to mitigate dust-related impacts effectively.
- (xiv) Sources of noise will be the vehicles and equipment for excavation and construction. Impacts will remain limited to the work area mainly where large-scale construction activity will progress. Impact will not be significant for the locals as they are generally sufficient distance away from the work area and noise will attenuate substantially at their locations. During operation phase, no major impacts are envisaged. Following mitigation measures will be implemented to minimize the impact of high noise:
- Contractors will be required to maintain proper functioning of equipment and comply with occupational safety and health standards. DG sets will have a valid Type Approval Certificate and Conformity of Production certificate as per CPCB guidelines.
  - All the construction equipment will be required to use available noise suppression devices and properly maintained mufflers.

- Workers in high noise area will be provided with ear muffs and their use will be monitored. Workers exposure (time duration) to high noise will also be controlled.
- Minimize the use of noise producing equipment during night hours to avoid the disturbance to locals and wild animals of surrounding area.
- Monitoring of noise levels will be conducted during construction phase of the project. In case of exceeding of pre-determined acceptable noise levels by the machinery; will require the contractor(s) to stop work and remedy the situation prior to continuing construction.
- Vehicles to be equipped with mufflers recommended by the vehicle manufacturer.

(xv) **Impact due to runoff from construction sites are as follows:**

- Water used in construction activities leads to wastewater generation with high suspended solids.
- Effluents due to washing from truck or equipment etc. would have high concentration of oil and grease.
- Quantum of wastewater from such activities can impact the nearby water bodies if surface run off with high suspended solid is washed into them.
- However, keeping in view the type of project, only small quantity of water would be used in the construction activities as work mainly pertains to the laying of pipeline.

(xvi) **Mitigation Measures for runoff from construction sites:**

- Conservation of water should be implemented at construction sites to minimize the generation of wastewater.
- Adequate care should be taken so that excess suspended solids in the wastewater are removed before these are disposed into water body or over land.
- However, keeping in view the type of project, only small quantity of water would be used in the construction activities as work mainly pertains to the laying of pipeline.

(xvii) No adverse impact on any downstream users is expected as sufficient discharge will be available downstream of dam.

(xviii) Total excavated surplus material requiring disposal is estimated as 1121403.01 m<sup>3</sup>. For construction of the earthen dam, material will be sought from Borrow areas located under proposed submergence area; surplus muck will be used for refilling and reclamation of land of borrow sites. Additional muck, if any, requiring disposal will be put in suitable low lying areas in the surrounding. The extra muck shall be laid in the undulating area of the connected villages with the consent of concerning Gram-panchayat or Janpad Panchayat.

(xix) Construction activities are associated with 3 types of waste generation: Construction and Demolition Waste, Hazardous Waste, Municipal Solid Waste from labour camp s/colonies etc. Following mitigation measures has been proposed for waste management:

- Collection of Municipal Solid Wastes.
- Segregation of Municipal Solid Wastes.
- Storage of Municipal Solid Wastes.
- Transportation of Municipal Solid Wastes.
- Processing of Solid Wastes.
- Disposal of Municipal Solid Wastes.

(xx) CAT Plan has been formulated for the catchment of Kadan river from its source till the diversion site of Kadan medium irrigation project. The catchment area is **181.25**

**sq km.** Silt Yield Index (SYI) method has been used for the preparation of CAT plan. Various data used for the study are slope, soil, land use/ land cover, drainage and current management practices. Under the plan, various biological and engineering treatment measures has been suggested for severe and very severe erosion prone areas. The estimated cost of implementation of CAT plan is Rs. 78.50 lakh

- (xxi) Disaster Management Plan has been prepared to deal with dam break event; with a budget of Rs. 60.00 lakh to cover the cost of alert system, communication system, emergency response organization, public information system, maintenance period, etc
- (xxii) Agriculture is the main occupation in the area and they have very fertile soil but due to limited extraction of ground water and low rainfall, there is acute shortage of water especially during Rabi season. Lack of irrigation facility results in low income from crop production. In search of livelihood and better job opportunities people migrate towards the cities of Madhya Pradesh and Gujarat.
- (xxiii) The 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 like crushing and aggregate processing plant, batching plant and workshops.
- (xxiv) Area estimated for green belt development in different patches is about 50 ha and a total of about 45000 saplings will be planted. Plantations work will be completed in 2 years time (30000 in first year and 15000 in second year including causality replacement) and will be maintained for five years by project authorities.
- (xxv) **Benefit of the project:** Control flood waters to protect people and property. Adequate supply of water for irrigation and house hold consumption during dry spells in Saga region. Improve crop production by providing irrigation to crop land. Agriculture extension and horticulture development. Permanent waterfront for wildlife. Recreation like fishing, camping and water sporting in the reservoir.

Based on the information submitted at Para i to xxv above and others, the State Level Environment Impact Assessment Authority (SEIAA) considered the case in its 556<sup>th</sup> meeting held on 13.06.2019 and decided to accept the recommendations of 373<sup>rd</sup> SEAC meeting held on dtd. 24.05.19.

Hence, Prior Environmental Clearance is accorded under the provisions of EIA notification dtd. 14<sup>th</sup> September 2006 & its amendments for the proposed **Kadan Medium Irrigation Project at Village Ekpana Basona, Distt. - Sagar, (M.P.) CCA – 9990 ha Gross Command area: 13500 ha; Live storage capacity - 40.05 MCM; Gross Storage- 42.66 Mcum; Submergence due to Project- 754.78 ha; Catchment Area up to Dam site- 181.25 sq km; by Executive Engineer, Water Resources Department, Water Resources Division No. 1, Sagar, (M.P.)** 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**

1. 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.
2. 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.

3. It was observed by the authority the calculated compensation under R/R seems inadequate hence authority advised WRD to look into the matter and explore the possibility of giving compensation to affected people equivalent to their properties so that proper justice can be given.
4. A monitoring Committee for R & R shall be constituted which must include representatives of project affected persons including from SC/ST community and at least a woman beneficiary.
5. 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.
6. The implementation of Local Area Development Plan (LADP) to be closely monitored.
7. This being a seasonal stream/ river, a minimum environmental flow of 30 % in monsoon season should be released for downstream users.
8. Proposed Compensatory Afforestation programme in 50ha shall be taken-up in consultation with State Forest Department. The allocated grant for this purpose shall be fully utilized and not to be diverted for any other purpose. For compensatory afforestation programme, preference shall be given to native species.
9. 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.
10. For prevention of soil erosion PP has proposed The catchment Area Treatment (CAT) Plan 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.
11. 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.
12. 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.
13. 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.
14. If the water of reservoir is used for drinking water supply, it should be done after conventional treatment.

15. 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.
16. Conjunctive use of surface water shall be planned to check water logging as well as to increase productivity.
17. Consolidation and compaction of the generated muck should be carried-out in the muck dumping site. The entire muck should be utilized for service road and inspection path, formation of embankment, filling trenches, land levelling and construction of CD works etc. The muck disposal sites shall be reclaimed /restored with vegetation once the capacity is utilized.
18. The periodical soil health shall be verified in command area during operation phase to ensure the maintenance of soil fertility.
19. PP should ensure to compliance the condition laid down the forest clearance approval issued by MoEF & CC, Gol.
20. PP should ensure to submit half yearly compliance report and CSR 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**

### **(A) PRE-CONSTRUCTION PHASE**

21. During any construction/plant erection activity, curtaining of site should be carried out to protect nearby areas.
22. Adequate arrangement to prevent incidence of any endemic health problem due to water /soil borne diseases shall be provided.
23. Adequate provisions for re-vegetation, dressing, resurfacing of burrow pits etc. should be ascertained for protecting soil erosion due to runoff during rain.
24. Burning of firewood/fuel by the construction workers for their cooking may have minor impact on the local air quality, which however can be avoided with provision of alternate cooking fuel such as kerosene or LPG gas.
25. For dust mitigation measures following measures shall be adopted:
  - Roads leading to or at construction sites must be paved and blacktopped (i.e. metallic roads).
  - No excavation of soil shall be carried out without adequate dust mitigation measures in place.
  - No loose soil or sand or Construction & Demolition Waste or any other construction material that causes dust shall be left uncovered.
  - Wind-breaker of appropriate height minimum 03 meters shall be provided.
  - Water sprinkling system shall be put in place.
  - Dust mitigation measures shall be displayed prominently at the construction site for easy public viewing.
  - Construction material and waste should be stored only within earmarked area and road side storage of construction material and waste shall be prohibited.

- No uncovered vehicles carrying construction material and waste shall be permitted.
  - Construction and Demolition Waste processing and disposal site shall be identified and required dust mitigation measures be notified at the site.
26. PP will obtain other necessary clearances/NOC from respective authorities.
27. Provisions shall be made for the housing of construction/plant erection labor within the site with all necessary infrastructure and facilities such as mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. The housing may be in the form of temporary structure to be removed after completion of the period.

**(B) CONSTRUCTION PHASE**

28. PPE's such as helmet, welding shield, ear muffs etc should be provide to the workers during construction/plant erection activities.
29. Fire extinguishers should be provided on site during construction/ plant erection period.
30. Water sprinkling arrangements shall be made to suppress the fugitive emissions and shall ensure that the ambient air quality is well within the prescribed norms by MoEF & CC / CPCB/MPPCB.
31. All the electrical appliances and digging should be minimum 15 meters away from any permanent structure. Properly tuned construction machinery and good condition vehicles with mufflers (low noise generating and having PUC certificate) should be used and turned off which not in use.
32. Properly tuned construction machinery and good condition vehicles with mufflers (low noise generating and having PUC certificate) should be used and turned off which not in use.
33. DG sets shall be provided with acoustic enclosures to maintain the noise level within the prescribed limits.
34. Waste construction material should be recycles as far as possible and remaining should be disposed off at a designated place in consultation with the local authority.
35. Plantation in patches in suitable land all around the project boundary shall be carried out using tall saplings of minimum 2 meters height of species which are fast growing with thick canopy cover preferably of perennial green nature. As proposed in the landscape plan & EMP. PP will also make necessary arrangements for the causality replacement and maintenance of the plants.
36. MSW of various labors generated during construction/plant erection activities should be disposed off at a designated place in consultation with the local authority.
37. Waste oil & grease generated from the pumps and standby DG sets should be disposed off in accordance with the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 after obtaining authorization.
38. The soil removed during the excavation will be stacked separately and will be used for the green belt development only.
39. It is proposed by PP that plantation in 10 hectare in several patches in non forest waste land will be done subject to availability of suitable land.

**(C) POST CONSTRUCTION/OPERATIONAL PHASE**

40. Plantation shall be carried out by the PP as per submitted plan in the command area or on available degraded land, muck disposal site, Rehabilitaion areas, park at camp, reservoir rim and in the compensatory afforestation at Village Fulwari and Shahgarh.



41. In the post-irrigation phase, farmers tend to use more fertilizers and pesticides these may result in soil and water pollution. Hence, it should be essential to use the fertilizers and pesticides in a judicious manner without causing soil and water pollution.

Awareness program shall be conducted and experts should interact with the local people who will guide them on the quantity and proper application of fertilizer and Pesticides.

42. Efficient irrigation systems should be promoted in the command area as Social Responsibility by the trained staff of the department.
43. Periodic soil/water testing shall be carried out in the command area and report to be submitted to Ministry of Agriculture with essential remarks.
44. Use of Solar Energy with LED light arrangement in the pump house, site, office building should be promoted in the project area where ever possible.
45. An energy audit for energy conservation can be performed in pump site, office building, to reduce energy expense and carbon footprints.
46. All leakages will be cleaned out in the pump house to prevent wastage of water with the prescribe procedures in the regular intervals.
47. The public toilets should be made in optimum numbers so that entire command area and site should be open defecation free (ODF).
48. The project authorities should comply with the provisions made in the Water (Prevention & control) of Pollution Act 1974, and amended, Construction and Demolition Waste Management Rules, 2016, Solid Waste Management Rules, 2016, etc.
49. Necessary consents shall be obtained from MPPCB and the air/water pollution control measures have to be installed as per the recommendation of MPPCB.
50. Log-books shall be maintained for disposal of all types hazardous wastes and shall be submitted with the compliance report.
51. The project authorities should comply following provisions/ conditions made in the Construction and Demolition Waste Management Rules, 2016.

#### **(D) ENTIRE LIFE OF THE PROJECT**

52. A budgetary provision of Rs. 6257.00 Lakhs is made for Environmental Management Plan out of which Rs 26.00 lakhs has made for Green Belt Development Plan in the EMP.
53. A Budget of Rs. 40.00 Lakhs is made for Biodiversity Conservation Plan in the EMP.
54. No muck disposal shall be done outside of the project site. Rs. 300.00 Lakh is made for Muck Management Plan in EMP.
55. For Catchment Area Treatment Plan Rs 78.50 Lakhs and Rs 62.50 Lakhs is made for Fisheries Management Plan in EMP.
56. A separate bank account should be maintained for all the expenses made in the EMP activities by PP for financial accountability and these details should be provided in Annual Environmental Statement.
57. All commitments pertaining to public hearing shall be mandatory on part of PP.
58. The environment policy should be framed as per MoEF&CC guidelines and same should be complied and monitored through monitoring cell. In case the allocated

EMP budget for mitigative measures to control the pollution is not utilized fully, the reason of under utilization of budgetary provisions for EMP should be addressed in annual return.

59. As proposed, the green belt development / plantation activities should be completed within the first three years of the project and the proposed species should also be planted in consultation with the forest department.
60. In case of any, change in scope of work, technology, modernization and enhancement of capacity/ built-up area/ project area shall again require prior environmental clearance as per EIA notification, 2006.
61. PP shall be responsible for discrepancy (if any) in the submissions made by the PP to SEAC & SEIAA.
62. The validity of the EC shall be as per the provisions of EIA Notification subject to the following: Expansion or modernization in the project, entailing capacity/ built-up area/ project area, addition with change in process and or technology and any change in product - mix in proposed project shall require a fresh Environment Clearance.

### **Standard Conditions:**

1. Adequate arrangements for providing free fuel like kerosene/wood/LPG shall be made at the project cost for the labors engaged in the construction work so that indiscriminate felling of trees is prevented.
2. Consolidation and compilation of the muck should be carried-out in the muck dump sites and the dump sites should be above high flood level. Restoration of construction area including dumping sites of excavated materials shall be ensured by leveling, filling up of borrow pits, landscaping etc. The area should be properly treated with suitable plantation.
3. 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 officials.
4. Action plan with respect to suggestion/improvement and recommendations made and agreed during public hearing consultation shall be submitted to the Regional Office, MoEF, Gol, Bhopal, MPPCB within six months.
5. 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 Secretary.
6. 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.
7. PP should ensure implementation of all activities / mitigative measures / safeguards proposed in the Environmental Impact Assessment (EIA) report and Environmental

Management Plan (EMP) approved by SEAC and other reports from time to time must.

8. The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically.
9. The monitored data for criteria pollutant levels, namely; SPM, RSPM, SO<sub>2</sub>, NO<sub>x</sub> (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 domain.
10. The sewage or waste water should be properly collected, treated so as to conform to the standards prescribed by MoEF & CPCB. The treated effluents conforming to the prescribed standards shall be re-circulated and reused for horticulture / plantation.
11. 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.
12. 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, Gol at Bhopal on 1st June and 1st December of each calendar year.
13. A separate Environmental Management Cell with suitable qualified personnel shall be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.
14. 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, Gol, 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.
15. 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.
16. 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.
17. Details of land holding of project affected persons whose land is being acquired shall be submitted to MoEF&CC, Gol, Regional Office. The R & R benefits for the land losing households will be as per the National Rehabilitation and Resettlement Policy, 2007 or as per the State Rehabilitation and Resettlement Policy, whichever is more beneficial to the project affected villages. The R & R issues shall be completed before

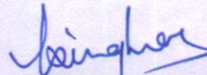
commissioning of the project. In case latest Act of 2014 is applicable, the same Act is to be followed.

18. 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.
19. 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.
20. 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.
21. 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.
22. 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](http://www.mpseiaa.nic.in) and copy the same shall be forwarded to the Regional Office, MoEF&CC, Gol, Bhopal.
23. 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.
24. 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.
25. Occupational health and safety measures for the workers including identification of work related health hazards, training on malaria eradication, HIV, and health effects on exposure to water borne diseases shall be carried out. Periodic monitoring for the workers shall be conducted and records maintained including health records of the workers. Awareness programme for workers on impact on their health and precautionary measures like use of personal equipments etc. shall be carried out periodically. Review of impact of various health measures shall be conducted followed by follow up action wherever required.

26. The Project Proponent shall provide proper arrangement for the disposal of hazardous waste (if any) and obtain authorization under Hazardous Waste (Management Handling & Transboundary Movement) Rules from MPPCB.
27. The above conditions will 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 and the Public Liability Insurance Act, 1991 along with amendments and rules.
28. 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.
29. Any other clearance required from any other organization / department should be obtained before commencement of works and commissioning of the project, as applicable.
30. Concealing factual data or submission of false / fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.
31. 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.

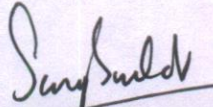
Endt No. <sup>1463</sup> / SEIAA/ 2019

Dated 03.7.19

  
 (Jitendra Singh Raje)  
 Member Secretary

Copy to:-

- (1). Principal Secretary, Urban Development & Environment Deptt. 3<sup>rd</sup> Floor, Mantralaya Vallabh Bhawan, Bhopal.
- (2). Secretary, SEAC, Research and Development Wing Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony Bhopal-462016.
- (3). Member Secretary, Madhya Pradesh Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal-462016.
- (4). The Collector, Distt- Sagar (M.P.).
- (5). The Principal Chief Conservator of forest, Ground floor Satpuda Bhawan, Bhopal (M.P)
- (6). Shri Rajiv Kumar Sukalika Engineer-in-Chief, Water Resources Department, Tulsi Nagar, Bhopal, MP
- (7). Director, I.A. Division, Monitoring Cell, MoEF, Gol, Ministry of Environment & Forest Indira Paryavaran Bhawan, Jor Bagh Road, New Delhi – 110 003
- (8). Director (S), Regional office of the MOEF, (Western Region), Kendriya Paryavaran Bhawan, Link Road No. 3, Ravi Shankar Nagar, Bhopal-462016.
- (9). Guard file.

  
 (Dr. Sanjeev Sachdev)  
 Officer-in-Charge