The 452nd meeting of the State Level Environment Impact Assessment Authority was convened on 28.06.2017 at the Authority's Office in Environmental Planning and Co-Ordination Organization (EPCO), Paryavaran Parisar, Bhopal. The meeting was chaired by Shri Waseem Akhtar, Chairman, SEIAA. The following members attended the meeting:-

1 Shri H.S. Verma

Member

2. Shri Anupam Rajan

Member Secretary

A. Following Case related to Govt/Public undertaking Sector have been considered on priority basis as per the Office Memorandum of MoEF, GoI issued vide dtd. 04.11.2008, para 3(1).

S.No.	Case No.	Category	No. & date of latest SEAC Meeting
1.	5511/2017	1(c)	294th SEAC meeting dtd 23.06.17

- 1. Case No. 5511/2017: Prior Environment Clearance for proposed "Chhaigaon Makhan Lift Irrigation Scheme" at Tehsil Khandwa, Dist. Khandwa, (M.P.) Liftting Point: Indira Sagar Main Canal from R.D. 22- R.D. 36 km., CCA 35000 ha., by Chief Engineer, NVDA Sanawad, Indira Sagar Project(Canal), Sanawad, Distt. Khandwa, (M.P.) Env. Consultant: R.S. Envirolink Technologies Pvt. Ltd. Gurgaon.
 - (1) This is lift Irrigation project with Net CCA of 35000 ha. The water shall be lifted from the existing source and transported to the command area through Pipes using pressurized micro irrigation system therefore, no submergence is proposed in the project. Hence by virtue of the nature of the project and as per MoEF notification SO 3067 (E) dated 01/12/2009, it falls under category— B and pertains to Item No. 1(c) of the EIA Notification & its amendments.
 - (2) Chaigaon Makhan Micro Lift Irrigation Scheme water will be lifted from ISP Main Canal at RD 26.9 Km to meet irrigation water requirement for 35000 ha (CCA).
 - (3) The main objective is to provide irrigation facilities to the water-scarce areas in upper reaches of Pandhana and Khandwa tehsils of Khandwa District where the level of irrigation is much less as compared to that of national average. To cater irrigation water to about 35,000 ha of CCA in 58 villages of 2 tehsils of Khandwa district and to reduce extraction of ground water for irrigation which is causing water level depletion.
 - (4) The case was discussed in SEAC meetings 287th SEAC meeting dated 25.02.2017,292nd dated 16.06.2017 & 294th SEAC meeting dated 16.06.2017 and recommended for grant of prior EC subject to 15 special conditions.
 - (5) The case was discussed in depth and it is noted that :-

(i). There is no interstate boundary (EE, PWD, Khandwa letter dtd 25.01.17) or wildlife sanctuary, National park, etc. within 10 km of the project area (DFO letter dtd. 25.01.17). Hence general conditions are not attracted.

(Anupam Rajan) Member Secretary

H.S.Verma) Member

(ii). For laying of pipe line, the temporary land requirement is approximately 45ha. The entire micro irrigation system along with transmission lines required has been aligned in such a way, that it doesn't pass through any forest area. Therefore, no diversion of forest land is required for the project.

For construction of pump houses, Break pressure tank and distribution chamber of the project, total land requirement has been worked as 7.2 ha; out of which 6.2 ha is government land and 1ha is private land. Private land will be purchased directly from owners.

The pipe shall be laid 1.00 m below average ground level and land will be restored immediately on completion of the work, wherever, the pipeline will pass through private land, temporary land acquisition will be done as per Bhumigat Pipeline and Cable Avam Duct Adhiniyam, 2012.

- (iii). Public hearing was held on 12.05.2017 at Panchayat Bhawan, Chhaigaon Makhan, Tehsil Khandwa, District Khandwa under the Chairmanship of concerned District Additional Collectors. During the public hearing, there was unanimity for the implementation of the project. Some individuals have put forth certain suggestions like plantation should be taken up as per norms of environment department.
- (iv). Project is designed for a discharge of 12.46 cumec with total annual utilization of 142.44 MCM. Two Rising Mains of total length of 19 km 10.2 km and 8.8 km and distributaries are 51 Km.
- (v). The power requirement of the proposed project optimized to 25.44 MW. it would not be exceed 25.53 MW for 15 year
- (vi). Muck will be generated due to laying of underground pipeline. Based on the project design muck generation calculations were done in detail. Volume of trench is calculated based on pipe dia (OD), 1 M cover, trench width of 0.3m on each side Swell factor is taken as 25%; refilled volume is calculated and balance is the quantity of muck requiring disposal. Total quantity of muck for disposal is calculated as 2.9 lakh cum.

PP has proposed the material dug out from the land of private cultivators will be spread on the cultivator's field after their consent. The extra muck shall be laid in the undulating area of the connected villages with the consent of concerning Gram-Panchayat or Janpad Panchayat.

(vii). No forest land required for transmission lines. 78 towers are planned to be erected and land would be required for the tower foundations. Each tower foundation is designed on 150 sq.m. of land, therefore total land for 78 towers work out to be 1.17 ha or approximately 1.20 ha. As per the Indian Telegraph Act, 1885; land for transmission tower is taken temporarily. The foundations are underground and only small pillars project over ground, rest of the area is used for its original purpose.

(viii). For Management of Pipeline Leakage and Bursting PP has proposed the following:-

(Anupam Rajan) Member Secretary

(H.S.Verma) Member

- a. The entire system is managed by SCADA (Supervisory Control and data Acquisition)
- b. To prevent back pressure in case of electricity failure, depending upon surge analysis, single or combination of protection devices like One Way Surge Tank, Air Cushion Valves and Standing Pipes shall be used.
- c. If any leakage/theft/bursting occurs; valves will automatically close
- d. In the worst case scenario, the maximum volume of residual water, works out as 37,329 m³ only.
- e. Impact will be local flooding in few hectares only; which is also likely to be drained off quickly as most of the pipeline is aligned at the watershed boundary.
- f. A provision of two nos of chassis mounted dewatering pumps of adequate capacity has been made for the purpose of clearing the water logged areas during emergency.
- g. A budgetary provision of Rs. 30 lakh and recurring cost of Rs 15 lakh for five years have been made for the same.
- (ix). Anti Corrosion measures. (Epoxy paint internally and guniting at outside is proposed where the pipeline is underground. Pipeline exposed to the atmosphere will be painted by epoxy paint both inside and outside to prevent the corrosion.
- (x). PP has proposed following Preventive Measures for Silting in Pipeline:
 - a. The lifting of water is envisaged from the running canal where the water is relatively silt free because the canal off takes from a large reservoir
 - Rising Main and Gravity Distributaries comprise of the mild steel and Distribution Network (Disnet) up to 2.5 ha chak is of High Density Polyethylene (HDPE).
 - c. The pipeline of entire distribution system will have a velocity ranging from 0.8 m/s to 2.1 m/s which is more than self-cleansing velocity of 0.6 m/s (Ref: Manual of Water Supply and treatment, CPHEEO)
 - d. In addition, scour valves will be provided at suitable locations i.e. lower level of the pipeline to flush the sediment/silt with water to the nearest nalla/stream.
- (xi). Adequate stack height of DG sets, regular check up of vehicular emissions, water sprinkling to avoid fugitive dust, etc. have been proposed as mitigation measures
- (xii). For monitoring, of the site PP has proposed SCADA system if feasible; CCTV should also be installed at vulnerable points for effective visual coverage of the project site.
- (xiii). Micro irrigation by lift irrigation is being introduced on large scale involving pumping and conveying water through pipe line. Thus farmers will be trained to adopt new technology by organizing awareness and training camps at village Water User Association (WUA), Panchayat

(Anupam Rajan) Member Secretary (H.S.Verma) Member

and Jan Pad level. In awareness camps there will be emphasis on limited use of chemical fertilizers and increased use of bio fertilizers. A lump sum amount of Rs. 300 lakh has been provided for the same.

(xiv). To improve green cover, it is proposed that plantation in 100 ha in several patches in non forest waste land will be done subject to availability of suitable land. The species to be planted in consultation with local villagers and will be site specific. The plantations will be maintained for 5 years & after that handed over to Panchayat for management. The plantations will be done by forest wing of NVDA, forest department or local Panchayats. A provision of Rs. 450 lakh has been made for the same which includes Rs 300 lakh as Capital cost and Rs 150 lakh as maintenance/recurring cost spread over 5 years.

In view of above, it is decided to accept the recommendations of 294th SEAC meeting dtd 23.06.17 with 15 special conditions and accord prior Environmental Clearance to proposed "proposed "Chhaigaon Makhan Lift Irrigation Scheme" at Tehsil - Khandwa, Dist. Khandwa, (M.P.) Liftting Point: Indira Sagar Main Canal from R.D. 22- R.D. 36 km., CCA – 35000 ha., by Chief Engineer, NVDA Sanawad, Indira Sagar Project(Canal), Sanawad, Distt. -Khandwa, (M.P.) Env. Consultant: R.S. Envirolink Technologies Pvt. Ltd. Gurgaon subject to following specific conditions:-

- (i). It shall be binding on the part of Project Proponent to ensure the compliance of directions / orders / any other directions issued by Hon'ble High Court / NGT/ any other Court from time to time.
- (ii). 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 Narmada Valley Development Authority, GoMP.
- (iii). Besides the agricultural land, the rehabilitation of public buildings, infrastructures, monument etc. falling in the command area should also be ensured.
- (iv). A grievances redressal mechanism is to be devised by NVDA GoMP and put in place so that aggrieved stakeholders may approach the Authority easily for resolution of any dispute/conflict.
- (v). An Environmental Cell should be setup to monitor the implementation of Environmental Management Plan and submission of six monthly compliance reports. The committee should ensure that the allocated grant for various purposes included in EMP should be utilized for that purpose fully and should not be diverted for any other purpose.
- (vi). Proposed Voluntary Afforestation programme should be taken-up in consultation with State Forest Department. The allocated grant for this purpose should be fully utilized and not to be diverted for any other purpose. For afforestation programme, proper selection of species including trees with canopy, fruit bearing trees and grasses should be planted as proposed in EMP. Preference should be given to native species. Irrigation facilities should be ensured and proper care should be taken to raise the plantation. The six monthly compliance report should include plantation with number, species and survival raise etc.

(Anupam Rajan) Member Secretary (H.S.Verma) Member

- (vii). Occurrence of stagnant pools during construction and operation of the project may provide breeding source for vector mosquitoes and other parasites. 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. insecticidal spray in all the project area and surrounding 3 km area keeping the flight range of mosquitoes in consideration. Also medical assistance should 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.
- (viii). Regular monitoring of water quality (Surface and Ground) including heavy metals shall be undertaken in the project area and in the adjoining project area to ascertain the change, if any, in the water quality due to leaching of contaminants, from the increased use of chemical fertilizers and pesticides.
- (ix). In the process of excavation for laying large quantities of muck will get accumulated in the entire length of rising, gravity and distribution mains. Appropriate measures for muck management / disposal should be ensured. The excavated materials should be properly used in the construction of patrolling road and could be distributed to the cultivators on their consent.
- (x). PP must ensure to use solar energy where ever possible.
- (xi). To reduce the noise pollution at intake point, special canopy (covering) be devised over the pumps & DG set.
- (xii). A special control room should be set up at an appropriate location for disaster management, water leakage detection, periodical ecological monitoring and for proper management of the entire distribution and pumping systems. Chassis mounted dewatering pumps should be kept ready to deal with any localized drainage congestion.

Vote of Thanks on Completion of SEIAA Tenure

The Authority's term of three years will be completed on 30th June 2017. It's been a positive and noteworthy tenure where balance was kept to promote development and keep the environment intact. Though it was a tough job but my compliment to Mr Anupam Rajan, ED EPCO , Mr Ajatshatru Shrivastav and Mrs Dipali Rastogi Ex ED EPCO and their EPCO team for a stupendous task they have performed under trying circumstances. I am also thankful to Mr HS Verma, Member MPSEIAA for applying all his experience and scientific temper while appraising the projects. It may not be out of place to give full marks to the accredited consultants for presenting their projects in an organised manner. The interaction was to the extent lively and gave scope to the consultants to make presentations in tune with the stipulations of the EIA notifications. In the process everyone involved, learnt a lot and tried to make presentations to near perfection. Our SEAC teams did a wonderful job in not only appraising the projects in time but also rigorously evaluated the EIAs for giving recommendations to SEIAA. Our thanks to both the Chairman and the Committee members of SEAC alongwith the staff of MPPCB specially Mr A.A. Mishra, Dr. Avinash Karera and Mr Abhay Saxena. In the end my very special thanks to the team EPCO for steering the tough task with timely perfection. My sincere thanks to the EPCO team : Dr. Vinita Vipat, Dr. U.M. Shukla, Dr. R.K. Jain, Dr. Sanjeev Sachdev, Shri Alok Nayak, Shri Rayi Chaturvedi all their project

> (Anupam Rajan) Member Secretary

(H.S.Verma) Member

staff. Their efforts are significant from managing about 5000 cases in the last three years. I myself is satisfied with the decision making so as the progress of the State is not hampered keeping in mind the stipulations of the notifications issued by MoEF and CC from time to time.

I personally would like to welcome the next Chairman and his team whenever it is constituted and wish them the best. We tried to complete all such cases as possible but some cases have remained unresolved due to time constraint and not fully matured for giving environmental clearance. I would request the Member Secretary SEIAA to present these cases before the next Authority for appraisal.

Meeting ended with a vote of thanks to the Chair.

(Anupam Rajan) Member Secretary

(H.S.Verma) Member (Waseem Akhtar) Chairman

Page 6 of 6