

GMR Warora Energy Limited
(Formerly Enco Energy Limited)



Site Office:
Plot No. B1 & B2,
Mohabala MIDC Growth Centre,
Post and Tehsil Warora
Dist. Chandrapur,
Maharashtra 442 907
CIN U40100MH2005PLC155140
www.gmrgroup.in

Ref: GMR/GWEL/EC/16-17/ 219

Date: 18.01.2017

To,
The Regional Officer,
Maharashtra Pollution Control Board
Mahavir Tower, 1st Floor, Mul Road
Chandrapur - 442401, Maharashtra

Subject: EC Compliance Report of 2 x 300 MW (Phase -1 & 2) coal based thermal power plant in MIDC Warora Industrial Area, Chandrapur.

Ref.: 1. MoEF, Environment Clearance Letter J-13011/2/2008-IA.II (T) DATED 19th MAY, 2008
2. MoEF, Environment Clearance Letter J-13011/2/2008-IA.II (T) DATED 4th JUNE, 2009
3. MoEF, Environment Clearance Letter J-13012/75/2008-IA.II (T) DATED 25th MAY, 2010

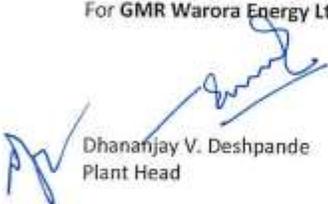
Dear Sir,

With reference to the above, we are pleased to submit the copy of the half yearly Environment Clearance compliance report of Phase 1 & 2 units for the period from July 2016 to December 2016.

We request you to please acknowledge the receipt of the same.

Thanking you,

Kind Regards,
For **GMR Warora Energy Ltd**



Dhananjay V. Deshpande
Plant Head

Encl.: As Above

CC: The Chairman, MPCB, Mumbai, Maharashtra
CC: The Chairman, Central Pollution Control Board, Parivesh Bhawan, CBD-cum-Office Complex
East Arjun Nagar, DELHI - 110 032, INDIA

Registered Office:
701/704, 7th Floor, Naman Centre,
A-Wing, BKC (Bandra Kurla Complex),
Bandra, Mumbai 400 051
Corporate Office:
302, Airport Building
New Shakti Bhawan,
Opposite Terminal 3, IGI Airport,
New Delhi-110037

COMPLIANCE REPORT

As per conditions stipulated in

ENVIRONMENT CLEARANCE

Unit—1: ISSUED BY MOEF VIDE LETTER No J-13011/2/2008-IA.II (T) DATED 19th MAY, 2008

and LETTER No J-13011/2/2008-IA.II(T) DATED 4th JUNE, 2009

Unit—2: ISSUED BY MOEF VIDE LETTER No J-13012/75/2008-IA.II (T) DATED 25th MAY, 2010

Of

MINISTRY OF ENVIRONMENT & FOREST, NEW DELHI

Compliance Period: JULY 2016 TO DECEMBER 2016

For

600 MW (2 x 300 MW) COAL BASED THERMAL POWER PLANT

of

GMR Warora Energy Limited,

Plot No B-1 | MIDC Growth Centre | PO – Warora |

Dist – Chandrapur | Maharashtra-442 907 |

**ENVIRONMENT CLEARANCE COMPLIANCE REPORT FOR UNIT-I:
ISSUED BY MOEF VIDE LETTER NO J-13011/2/2008-IA.II (T) DATED 19TH MAY,
2008**

S. No	Terms and Conditions	Compliance Status
1	The total land requirement for the project shall be restricted to 114 ha	Complied
2	Sulphur and ash contents in the coal to be used in the project shall not exceed 0.5% and 44% respectively	Sulphur Analysis in coal is being carried out & it was found 0.35% & ash is maintained as per prescribed norms.
3	A bi-flue stack of 220 m height with continuous online monitoring Equipments for SO _x , NO _x and particulate matter shall be provided. Exit velocity of flue gases shall not be less than 25 m/sec	A bi-flue stack of 275 m height with continuous online monitoring Equipments for SO _x , NO _x and particulate matter provided. Exit velocity of flue gases is being maintained above 25 m/sec.
4	High efficiency Electrostatic Precipitator (ESPs) shall be installed to ensure that particulate emission does not exceed 100 mg/Nm ³	ESPs has been installed with more than 99% efficiency to maintain the emission of particulate matter below 50 mg/Nm ³ . Please see Annexure - 1
5	Fly ash shall be collected in dry form and its 100% utilization shall be ensured from day one. Bottom ash shall be disposed in conventional slurry mode in the ash pond.	We have constructed 3 Nos. of Fly ash silo with the capacity of 1500 MT each. Fly Ash is being used by cement industries for cement manufacturing.
6	Ash pond shall be lined with suitable impervious lining. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached	Bottom of the ash pond compacted at high dry density soil and provided with 600mm impervious clay lining. Sides of the ash pond lined with HDPE lining and tiles. Ash pond provided with garland drains to collect run-off water and seepages if any from the pond. Ash water recovery system (i.e The supernatant is collected and treated in settling tank and routed to ash handling system.).
7	Adequate dust extraction system such as cyclones/ bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided	Adequate dust extraction system such as bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas Installed and in operational.
8	Water requirement shall not exceed 830 m ³ /hr	Water requirement is not exceeding the prescribed limit

9	Closed cycle cooling system with cooling towers shall be provided. The effluent shall be treated to conform to the prescribed norms	<p>Complied.</p> <p>Induced draft cooling tower (IDCT) is being constructed. Amendment to shift from Natural draft cooling tower (NDCT) to IDCT, MOEF (Gol). Vide letter no. J-13012/75/ 2008-1A.II (T), dated 30th November, 201.</p> <p>ETP is in operation and Effluent are treated as per the prescribed norms.</p>
10	The treated effluents conforming to the prescribed standards shall be re-circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon for storm water. Arrangements shall be made so that effluents and storm water do not get mixed	The treated effluents conforming to the prescribed standards recirculated and reused within the plant. Arrangement made to ensure no discharge outside the plant boundary except during monsoon. Storm water and effluent drains are separate and not mixing.
11	A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation	<p>Sewage Treatment Plant with the capacity of 25 KLD has been installed.</p> <p>Treated water from STP is being use in green Belt development/ plantation.</p>
12	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained and six monthly reports shall be furnished to the Regional Office of this Ministry	Regular Monitoring of ground water in and around the ash pond area is being monitored and analysis results of the same are also submitted to MPCB on quarterly basis.
13	Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished	Rain Water harvesting plan is approved.
14	A green belt of adequate width and density shall be developed around the plant periphery covering about 42 ha of project area preferably with local species	<p>Complied</p> <p>Please see Annexure - 2</p>

15	Leq of Noise levels emanating from turbines shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as steam & gas turbines, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non-noisy/less noisy areas	Being complied. Noise levels emanating from turbines are controlled and are within limit. Personal protective Equipments like earplugs/ear muffs etc. are provided for people working in the high noise area. Periodic medical checkup conducted for workers engaged in noisy areas such as turbine area, air compressors etc. Audiometric record maintained.
16	A plan for conservation of fauna reported in the study area shall be prepared in consultation with state forests and wildlife depart within 3 months and shall be implemented immediately	GIB and other Schedule-1 wildlife conservation plan for EMCO Energy Ltd for Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur via letter No:Desk-5/survey/Land/2128/ 2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/ 13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 received from Divisional Forest officer-Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA)Savings Bank A/c No: SB 01025218 Corporation bank,Lodhi Road, New Delhi IFSC Code- CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-AD HOC COMPENS".Lakhs in CAMPA.
17	Regular monitoring of ground level concentration of SO ₂ , NO _x , Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage, these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Six monthly reports shall be submitted to the Regional Office of this Ministry at Bhopal.	Regular Monitoring of ground level concentration of SPM, No _x , PM _{2.5} & PM ₁₀ and Hg is being carried out in the impact zone and records maintained. Results of the same are well within limits. Monitoring reports are also submitting to the board on regular basis.
18	Appropriate safeguard measures shall be taken to guard against fire hazards in coal storage area. DMP shall be prepared to handle such situation.	Fire Hydrant system and water monitors installed around coal stack yard. The system is always in pressurized condition through Fire water pump house. DMP is in place.

19	The Project proponent shall advertise in at least 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 seven days from the date of the clearance letter, informing that the project has been accorded EC and copies of clearance letter are available with the state pollution control board/committee and may be also be seen at website of the MoEF at http://envfor.nic.in	Complied
20	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards	Environment Management Cell has been set up with qualified staff for implementation of the condition of EC/ CTE and CTO.
21	Half yearly report on the status of implementation of the stipulated conditions and environmental safeguards shall be submitted to this Ministry/ Regional Office/CPCB/SPCB	We are submitting compliance reports to the Board on six monthly basis.
22	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring	Noted
23	Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry	We have allocated separate budget for Environment budget for implementation of environmental protection measures along with item-wise break-up. We are not using these budget for other purpose other than Environment Management.

**COMPLIANCE TO EC CONDITIONS FOR UNIT-I PROJECT
ISSUED BY MOEF VIDE LETTER No J-13011/2/2008-IA.II(T) DATED 4th JUNE, 2009**

Sr.No	Terms and Conditions	Action to be Taken
1	An amount of Rs. 1.6 Crores as capital and Rs. 30 Lakhs as recurring expenditure per annum should be earmarked for taking up activities under CSR.	Being Complied
2	Copy of conservation plan of fauna in the study area, reported to be prepared, should be submitted to the Ministry within 15 days of the issue of this letter.	GIB and other Schedule-1 wildlife conservation plan for EMCO Energy Ltd for Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur via letter No:Desk-5/survey/Land/2128/ 2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/ 13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 received from Divisional Forest officer- Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA) Savings Bank A/c No: SB 01025218 Corporation bank, Lodhi Road, New Delhi IFSC Code-CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-AD HOC COMPENS". Lakhs in CAMPA.
3	First aid and sanitation arrangements shall be made for the drivers and the contract workers during construction phase.	Full-fledged medical Centre with experienced MBBS Doctor and Paramedic Staff has been deputed in the plant.

4	<p>Regular monitoring of ground level concentration of SO₂, NO_x, Hg, SPM and RSPM shall be carried out in the impact zone and records maintained. If at any stage, these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.</p>	<p>Regular Monitoring of ground level concentration of SPM, Nox, PM2.5 & PM10 and Hg is being carried out in the impact zone and records maintained. Results of the same are well within limits.</p> <p>Please See Annexure - 1</p> <p>Monitoring reports of are also submitting to the board on regular basis.</p>
5	<p>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.</p>	<p>Complied</p>
6	<p>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. It shall be sent to the Regional office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels, namely SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectorial parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>The criteria pollutant levels, namely SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) are being monitored and displayed at the main gate of the company in the public domain.</p> <p>Web link for the same is http://gmrgroup.in/energy-gmr-warora-power-project.aspx</p>

7	<p>The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by email) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.</p>	<p>Being complied. Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well by mail) are being submitted to the respective regional office of MoEF, the respective Zonal office of CPCB, SPCB.</p>
8	<p>Project proponent will upload the compliance status in their website and update the same from time to time at least six monthly basis. Criteria pollutants levels (stack and ambient levels of NOx) will be displayed at the main gate of the power plant.</p>	<p>The criteria pollutant levels, namely SPM, RSPM, SO2, NOx (ambient levels as well as stack emissions) are being monitored and displayed at the main gate of the company.</p> <p>Web link for the same is http://gmrgroup.in/energy-gmr-warora-power-project.aspx</p>

**COMPLIANCE TO EC CONDITIONS FOR UNIT-II PROJECT
ISSUED BY MOEF VIDE LETTER No J-13012/75/2008-IA.II (T) DATED 25th MAY, 2010**

Sr.No	Terms and Conditions	Compliance Status
1	The undersigned is directed to refer to letter dated 26.09.2009 on the subject mentioned above. The Ministry of Environment & Forests has examined the application.	Noted
2	It has been noted that the proposal is for expansion by addition of 1x300 MW (Phase-11) Coal Based Thermal Power Plant in MIDC - Warora Industrial Area, in Chandrapur Distt., in Maharashtra. Environmental clearance for Phase-1 was accorded on 19.05.2008. The site is located at about 40 km from Chandrapur town. Land requirement will be 114.0 ha for both Phases (1&11). Expansion is proposed within the same premises. Coal requirement will be 1.34 MTPA, which will be sourced from WCLISECL. Coal linkage has been approved. Water requirement will be 920 cum/hr (9.02 Cusec). Source of water will be Wardha Rivr for which allocation by the concerned department in the State Govt. has been obtained. NOC from AAI for erection of 275 m stack has been obtained. Nearest village is Naydev located 500 m away from the site. Nimsada village is located 1.2 km in the north east. Shegaon R:F and Kawadepur R.F are located at 5.8 Km in south and 6.7 Km in north east respectively. There are no national parks, wildlife sanctuaries, bio-sphere reserve I tiger reserves, heritage sites etc. within 10 km of the site. Fly ash at about 0.94 MTPA will be generated, which will be supplied to M/s ACC Cement. Public hearing for the project is not required as the unit is located in the Notified Industrial Area. Cost of the project will be Rs. 1500.0 Crores.	Noted
3	The project has been considered in accordance with the provisions of the EIA notification issued by the Ministry of Environment & Forests vide S.O. 1533 (E). dated September 14, 2006.	Noted
4	Based on the information submitted by you, as at Para 2 above and others, the Ministry of Environment and Forests hereby accords environmental clearance to the above project under the provisions of EIA notification dated September 14, 2006, subject to the compliance of the following Specific and General conditions:	

A. Specific Conditions.

	<p>(i) Environmental clearance is subject submission of a time bound implementation of a wildlife conservation plan particularly with respect to protection of great Indian Bustard and other Schedule-1 species, to be prepared in consultation with the office of the Chief Wildlife Warden concerned and the Wildlife Institute of India.</p> <p>The plan shall have an in-built monitoring mechanism and annual audit, report of which shall be submitted to the Regional Office of the Ministry and concerned department in the state government.</p>	<p>GIB and other Schedule-1 wildlife conservation plan for EMCO Energy Ltd for Rs. 24.91 Lakhs has been prepared by Divisional Forest officer, Chandrapur via letter No:Desk-5/survey/Land/2128/2013-14, dated 19.03.2014 as per guidelines of Ministry of Environment and forest, New Delhi on the basis of plan sanctioned by P.C.C.F.(Wildlife), M.S, Nagpur. Ref No:-Desk-WL/22(6)/CR69/5370/13-14, Nagpur Dated 07.03.2014. As per demand letter No: Desk-5/Survey/Land/2268 dated 26/03/2014 recieved from Devisional Forest officer-Chandrapur, EMCO Energy Ltd. deposited the amount of Rs. 24.91 in Ad-hoc Compensatory Afforestation Fund Management & Planning Agency (CAMPA) Savings Bank A/c No: SB 01025218 Corporation bank, Lodhi Road, New Delhi IFSC Code- CORP0000371 through RTGS on date 08/07/2014. The UTR no. for the payment done is "BRN-RTGS-UTIBH14189021366-AD HOC COMPENS". Lakhs in CAMPA.</p>
	<p>(ii) It shall be ensured that the natural drainage in the region is not disturbed due to activities associated with operation of the plant.</p>	<p>The natural drainage in the region is not disturbed due to activities associated with operation of the plant and complied.</p>
	<p>(iii) Provision for installation of FGD shall be provided. High Efficiency Electrostatic Precipitators (ESPs) shall be installed to ensure that particulate emission does not exceed 50 mg/Nm³. Adequate dust extraction system such as cyclones/bag filters and water spray system in dusty areas such as in coal handling and ash handling points, transfer areas and other vulnerable dusty areas shall be provided.</p>	<p>Provision for installation of FGD-Complied. ESPs has been installed with more than 99% efficiency to maintain the emission of particulate matter below 50 mg/Nm³.</p> <p>Adequate dust extraction system installed in coal bunker and dry fog type dust suppression system provided at wagon tippers, coal stock piles, crusher house, transfer houses and complied.</p>

	<p>(iv) 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. It shall simultaneously be sent to the Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; SPM, RSPM (PM2.5 & PM10), SO2, NOx (ambient levels as well as stack emissions) shall be displayed at a convenient location near the main gate of the company in the public domain.</p>	<p>Compliance report is uploaded on the website of the company. Refer web link: http://gmrgroup.in/energy-gmr-warora-power-project.aspx</p> <p>Monitoring of the criteria pollutants in ambient air as well as for stack emissions done and its display at main gate of the plant done.</p> <p>Please See Annexure - 1</p>
	<p>(v) No irrigation and drinking water requirements out of the Barrage / reservoir shall be diverted for the power plant.</p>	<p>Plant is getting water from MIDC, Warora. Irrigation and drinking water requirements out of barrage/reservoir is not diverted.</p>
	<p>(vi) No ground water shall be extracted for use in operation of the power plant even in lean season.</p>	<p>Ground water is not extracted for use in operation of the power plant. Plant is receiving water from MIDC Warora</p>
	<p>(vii) Hydro-geological study of the area shall be reviewed annually and results submitted to the Ministry and concerned agency in the State Govt. In case adverse impact on ground water quantity and quality is observed, immediate mitigating steps to contain any adverse impact on ground water shall be undertaken.</p>	<p>Complied</p>
	<p>(viii) Minimum required environmental flow suggested by the Competent Authority of the State Govt. shall be maintained in the Channel/ Rivers even in lean season.</p>	<p>Plant is getting water from MIDC, Warora. Minimum required environmental flow suggested by the irrigation department is being maintained in the channel rivers even in lean season.</p>
	<p>(ix) Rainwater harvesting should be adopted. Central Groundwater Authority/ Board shall be consulted for finalization of appropriate rainwater harvesting technology within a period of three months from the date of clearance and details shall be furnished.</p>	<p>Rain Water harvesting plan is approved. Contract awarded for execution.</p>
	<p>(X) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.</p>	<p>Soil for leveling of the site is generated within the site and the natural drainage system of the area is protected and improved</p>

	<p>(xi) Utilization of 100% Fly Ash generated shall be made from 4th year of operation of the plant. Status of implementation shall be reported to the Regional Office of the Ministry from time to time.</p>	<p>Effective Utilization of Fly ash is in place and same is being consumed by the nearby cement plants for cement manufacturing.</p>
	<p>(xii) Fly ash shall be collected in dry form and storage facility (silos) shall be provided. Unutilized fly ash shall be disposed off in the ash pond in the form of slurry form. Mercury and other heavy metals {As, Hg, Cr, Pb etc.) will be monitored in the bottom ash as also in the effluents emanating from the existing ash pond. No ash shall be disposed off in low lying area.</p>	<p>We have constructed 3 Nos. of Fly ash silo with the capacity of 1500 MT each.</p> <p>Fly Ash is being used by cement industries for cement manufacturing.</p>
	<p>(xiii) Ash pond shall be lined with HDP/ LDP lining or any other suitable impermeable media such that no leachate takes place at any point of time. Adequate safety measures shall also be implemented to protect the ash dyke from getting breached.</p>	<p>Bottom of the ash pond compacted at high dry density soil and provided with 600mm impervious clay lining. Sides of the ash pond lined with HDPE lining and tiles. Ash pond provided with garland drains to collect run-off water and seepages if any from the pond. Ash water recovery system (i.e The supernatant is collected and treated in settling tank and routed to ash handling system).</p>
	<p>(xiv) For disposal of Bottom Ash in abandoned mines (if proposed to be undertaken) it shall be ensured that the bottom and sides of the mined out areas are adequately lined with clay before Bottom Ash is filled up. The project proponent shall inform the State Pollution Control Board well in advance before undertaking the activity.</p>	<p>Noted</p>
	<p>(xv) Closed cycle cooling system with natural draft cooling towers shall be provided. The effluents shall be treated as per the prescribed norms.</p>	<p>Induced draft cooling tower (IDCT) is being constructed. Amendment to shift from Natural draft cooling tower (NDCT) to IDCT, MOEF (GoI). Vide letter no. J-13012/75/ 2008-1A.II (T), dated 30th November, 201.</p> <p>ETP is in operation and Effluent are treated as per the prescribed norms.</p>

	<p>(xvi) Shelter Belt consisting of 3 tiers of plantations of native species around plant and at least 100 m width shall be raised. Wherever 100 m width is not feasible a 50 m width shall be raised and adequate justification shall be submitted to the Ministry. Tree density shall not less than 2500 per ha with survival rate not less than 70 %. To meet the expenditure of development of this, Shelter Belt, a Green Endowment Fund shall be created out of EMP budget and status of implementation shall be submitted to the Regional Office of the Ministry from time to time.</p>	<p>Complied</p>
	<p>(xvii) A good action plan for R&R (if applicable) with package for the project affected persons be submitted and implemented as per prevalent R&R policy within three months form the date of issue of this letter.</p>	<p>Project is in industrial area of MIDC, Warora. Hence this condition is not applicable</p>
	<p>(xviii) An amount of Rs 12.0 Crores shall be earmarked as one time capital cost for CSR programme. Subsequently a recurring expenditure of Rs 2.5 Crore per annum shall be earmarked as recurring expenditure for CSR activities. Details of the activities to be undertaken shall be submitted within one month along with road map for implementation.</p>	<p>Being Complied</p>

	<p>(xix) As part of CSR programme the company shall conduct need based assessment for the nearby villages to study economic measures with action plan which can help in upliftment of poor section of society. Income generating projects consistent with the traditional skills of the people besides development of fodder farm, fruit bearing orchards, vocational training etc. can form a part of such programme. Company shall provide separate budget for community development activities and income generating programmes. This will be in addition to vocational training for individuals Imparted to take up self-employment and jobs. In addition to above a special scheme for upliftment of SC/ST's and marginalized farmers population in the study area out of CSR programme shall be formulated and submitted to the Ministry within six months along with firm commitment of implementation. The scheme shall have an in-built monitoring mechanism.</p>	<p>Activities being taken up for the upliftment of SC/ST's and marginalized farmers and poor section of the society.</p> <p>Please see annexure - 3</p>
<p>B. General Conditions:</p>		
	<p>(i) The treated effluents conforming to the prescribed standards only shall be re circulated and reused within the plant. There shall be no discharge outside the plant boundary except during monsoon. Arrangements shall be made that effluents and storm water do not do not get mixed.</p>	<p>The treated effluents conforming to the prescribed standards recirculated and reused within the plant. Arrangement has been made to ensure zero discharge outside the plant boundary except during monsoon. Storm water and effluent drains are separate and not mixing.</p>
	<p>(ii) A sewage treatment plant shall be provided and the treated sewage shall be used for raising greenbelt/plantation.</p>	<p>Sewage Treatment Plant with the capacity of 25 KLD has been installed.</p> <p>Treated water from STP is being use in green Belt development/ plantation.</p>
	<p>(iii) Adequate safety measures shall be provided in the plant area to check/minimize spontaneous fires in coal yard, especially during summer season. Copy of these measures with full details</p>	<p>Fire Hydrant system and water monitors installed around coal stack yard. The system is always in pressurised condition through Fire water pump house.</p>

	along with location plant layout shall be submitted to the Ministry as well as to the Regional Office of the Ministry.	
	(iv) Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS shall be made in the plant area in consultation with Department of Explosives, Nagpur. Sulphur content in the liquid fuel will not exceed .0.5%. Disaster Management Plan shall be prepared to meet any eventuality in case of an accident taking place due to storage of oil.	Storage facilities for auxiliary liquid fuel such as LDO and/ HFO/LSHS made in the plant area in consultation with Department of Explosives, Nagpur. Storage license obtained. Sulphur content in the liquid fuel is not exceeding .0.5%. Disaster Management Plan is prepared to meet any eventuality in case of an accident taking place due to storage of oil.
	(v) Regular monitoring of ground water level shall be carried out by establishing a network of existing wells and constructing new piezometers. Monitoring around the ash pond area shall be carried out particularly for heavy metals (Hg, Cr, As, Pb) and records maintained and submitted to the Regional Office of this Ministry. The data so obtained should be compared with the baseline data so as to ensure that the ground water quality is not adversely affected due to the project.	Regular Monitoring of ground water in and around the ash pond area is being monitored and analysis results of the same are also submitted to MPCB on regular basis.
	(vi) First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase	Full-fledged medical Centre with experienced MBBS Doctor and Paramedic Staff are deputed in the plant.
	(vii) Noise levels emanating from turbines shall be so controlled such that the noise in the work zone shall be limited to 75 dBA. For people working in the high noise area, requisite personal protective equipment like earplugs/ear muffs etc. shall be provided. Workers engaged in noisy areas such as turbine area, air compressors etc shall be periodically examined to maintain audiometric record and for treatment for any hearing loss including shifting to non noisy/less noisy areas	Being complied. Noise levels emanating from turbines are controlled and are within limit. Personal protective Equipments like earplugs/ear muffs etc. provided for people working in the high noise area. Periodic medical checkup conducted for workers engaged in noisy areas such as turbine area, air compressors etc. Audiometric record maintained.

	<p>(viii) Regular monitoring of ground level concentration of SO₂, NO_x, PM 2.5 & PM10 and Hg shall be carried out in the impact zone and records maintained. If at any stage these levels are found to exceed the prescribed limits, necessary control measures shall be provided immediately. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry. The data shall also be put on the website of the company.</p>	<p>Monitoring of ground level concentration of SPM, Nox, PM2.5 & PM10 and Hg is being carried out in the impact zone and records maintained. Levels are found within limits. Periodic reports submitted to the regional office of this ministry.</p>
	<p>(ix) 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, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.</p>	<p>Complied</p>
	<p>(x) The project proponent shall advertise in at least 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 seven days from the date of this clearance letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the State Pollution Control Board/Committee and may also be seen at Website of the Ministry of Environment and Forests at http://envfor.nic.in.</p>	<p>Complied. Published in Local Newspaper-hidwada and lokmat on 30th may, 2010. copy of the same is already submitted with first half yearly report vide letter no. EMCO/SITE/MoEF/001, 28th August, 2010</p>
	<p>(xi) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad I Municipal Corporation. urban local Body and the Local NGO, if any, from whom suggestions/representations, if any, received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent</p>	<p>Plant is located in notified industrial area (MIDC), Clearance letter is uploaded on the website of the company. Copy of Environmental clearance letter is uploaded at http://gmrgroup.in/energy-gmr-warora-power-project.aspx</p>

	(xii) A separate Environment Management Cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.	Environmental Management cell has been established since January, 2010 and is taking care of implementation of the stipulated environmental safeguards.
	(xiii) The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well by e-mail) to the respective Regional Office of MOEF, the respective Zonal Office of CPCB and the SPCB.	Being complied. Six monthly reports on the status of compliance of the stipulated EC conditions including results of monitoring data (both in hard copies as well by mail) are being submitted to the respective regional office of MoEF, the respective Zonal office of CPCB, SPCB
	(xiv) The environment 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 respective Regional Offices of the Ministry by e mail.	Being complied. The environment statement for each financial year was submitted.
	(xv) The project proponent shall submit six monthly reports on the status of the implementation of the stipulated environmental safeguards to the Ministry of Environment and Forests, its Regional Office, Central Pollution Control Board and State Pollution Control Board. The project proponent shall upload the status of compliance of the environment of the environmental clearance conditions on their website and update the same periodically and simultaneously send the same by e-mail to the Regional Office, Ministry of Environment and Forests.	Complied. Compliance report is uploaded on the website of the company. Refer weblink http://gmrgroup.in/energy-gmr-warora-power-project.aspx
	(xvi) Regional Office of the Ministry of Environment & Forests will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report and Environment Management Plan along with the additional information submitted from	EIA including EMP report is already submitted along with first half yearly report

	time to time shall be forwarded to the Regional Office for their use during monitoring.	
	(xvii) Separate funds shall be allocated for implementation of environmental protection measures along with item-wise break-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	We have allocated separate budget for Environment budget for implementation of environmental protection measures along with item-wise break-up. We are not using these budget for other purpose other than Environment Management.
	(xviii) The project authorities shall inform the Regional Office as well as the Ministry regarding the date of financial closure and final approval of the project by the concerned authorities and the dates of start of land development work and commissioning of plant.	Date of Financial closure of the project: October 2009. Final approval by the Concerned authorities: 1) Letter of support from Govt. of Maharashtra dated 1st May 2007 is already submitted with First Compliance report. 2) Environment clearance letter MoEF submitted. 3) Date of start of land development work: June 2010. 4) Unit#1 COD- March 2013. 5) Unit#II COD- Sep 2013
	(xix) Full cooperation shall be extended to the Scientists/Officers from the Ministry I Regional Office of the Ministry at Bangalore I CPCB/ SPCB who would be monitoring the compliance of environmental status.	Being Complied
5	The Ministry of Environment and Forests reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the Ministry. The Ministry may also impose additional environmental conditions or modify the existing ones, if necessary.	Noted
6	The environmental clearance accorded shall be valid for a period of 5 years to start operations by the power plant.	Noted
7	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	Project Authority has given undertaking for comply the conditions.

	clearance and attract action under the provisions of Environment (Protection) Act, 1986	
8	In case of any deviation or alteration in the project proposed including coal transportation system from those submitted to this Ministry for clearance, a fresh reference should be made to the Ministry to assess the adequacy of the condition(s) imposed and to add additional environmental protection measures required, if any.	Project Authority has given undertaking for comply the conditions.
9	The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the PublicLiability Insu.r.ance Act, 1991 and its amendments.	Project Authority has given undertaking for comply the conditions.
10	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred, within 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.	Noted



Annexure – 1

**Air Pollution Control Devices
– ESP & Bag Filters**



Coal Handling Plant With Covered Conveyor Belt



ANNEXURE 2:**AMBIENT AIR QUALITY MONITORING RESULTS**

Switch Yard Area				
Month	SO2 (µg/m3)	NO2 (µg/m3)	PM10 (µg/m3)	PM2.5 (µg/m3)
April -16	12.41	16.05	70.13	26.13
May-16	8.66	12.05	44.88	19.00
Jun-16	8.76	11.94	67.13	26.75
Jul-16	9.16	12.41	51.88	23.00
Aug-16	9.89	12.63	53.75	26.63
Sep-16	11.66	14.25	67.63	27.88
Oct-16	11.46	13.89	69.25	28.00
Nov-16	12.20	8.89	36.00	21.63
Dec-16	12.09	7.46	35.13	22.75

Reservoir Area				
Month	SO2 (µg/m3)	NO2 (µg/m3)	PM10 (µg/m3)	PM2.5 (µg/m3)
April -16	11.60	15.13	68.38	25.13
May-16	8.01	11.29	40.00	15.88
Jun-16	8.99	12.53	66.50	27.13
Jul-16	9.14	12.70	55.00	25.38
Aug-16	11.35	13.88	57.25	27.50
Sep-16	11.15	13.60	61.13	27.75
Oct-16	10.73	13.33	64.88	27.13
Nov-16	12.81	9.36	35.88	22.63
Dec-16	12.50	8.98	34.75	21.88

CHP Area				
Month	SO2 (µg/m3)	NO2 (µg/m3)	PM10 (µg/m3)	PM2.5 (µg/m3)
April -16	13.41	16.96	78.13	32.50
May-16	9.48	12.61	47.88	21.88
Jun-16	11.95	14.90	77.25	35.63
Jul-16	11.58	14.91	66.25	29.50
Aug-16	13.75	16.05	66.63	32.25
Sep-16	13.71	16.41	78.38	33.25
Oct-16	13.23	15.79	73.63	31.50
Nov-16	13.93	10.80	44.00	24.88
Dec-16	13.75	10.26	43.00	25.88

STACK EMISSION RESULTS

Unit -1				
S. No.	Month	PM (mg/Nm3)	SO2 (mg/Nm3)	NOx (mg/Nm3)
1	April	38	536	110
2	May	Shut Down	Shut Down	Shut Down
3	June	31	505	95
4	July	24.5	433.5	107
5	August	31	502	107
6	September	32.5	496	101.5
7	October	34.5	469	104
8	November	31	490	100
9	December	30.5	493.5	94.5

Unit -2				
S. No.	Month	PM (mg/Nm3)	SO2 (mg/Nm3)	NOx (mg/Nm3)
1	April	44	542	114
2	May	Shut Down	Shut Down	Shut Down
3	June	37	531.5	105
4	July	32.5	451	107
5	August	32	490	93
6	September	35.5	505	102
7	October	35	474.5	103
8	November	31	489	92.5
9	December	30.5	485.5	97.5

Water Consumption (2016-2017)

S. No.	Month	Industrial cooling spraying in mine pits or boiler feed	Domestic purpose	Processing whereby water gets polluted and the pollutants are easily biodegradable.	Total
1	April	26910	3779	351020	381709
2	May	18556	2606	242049	263211
3	June	59649	8376	778061	846086
4	July	51422	7221	670744	729387
5	August	53844	7561	702341	763746
6	September	50990	7160	665117	723268
7	October	52490	7371	684682	744543
8	November	51637	7251	673555	732443
9	December	56470	7930	736598	800998



Online monitoring Results Display Board at Plant Main Gate

Annexure 4

1. HIGHLIGHTS:

Community service activities were initiated in Warora, Maharashtra in April, 2010. Since then many activities were taken in the location. However, the Highlights of CSR activities taken up from October 2016 to December 2016 are as follows.

Education

- 6 E – Learning centers in govt. school, 5 After School Learning Centers, 2 Kid Smart Centre, 3 Navodaya coaching started in the villages. These initiatives are benefitting 594 students directly.
- Felicitation, School Competitions and Day celebrated in all ZP Schools.
- 3 Pratibha Center benefitting nearly 280 youths.
- TOMS shoes distributed to 2837 students of 12 villages.
- Sanitation Kit distributed to 8 Z.P. School benefitting nearly 600 students.
- School bus service is in operation and serving 118 students from three villages.

Health, Hygiene and Sanitation

- Mobile Medicare Unit is serving for 60+ aged people and covering 30 villages. MMU treated over 14252 old aged people in past Six months.
- Total 6 clinics are functioning in Warora. These clinics treated 10,617 patients in past 3 months.
- 22 awareness programs organized on the issues of nutrition, health, hygiene and sanitation in the community. This benefitted 970 adolescent girls, women and youth.
- 14 Special health camp organized on gynecology, eye, Orthopedic, and general health camps organized in villages. This benefitted 1,094 women.
- 4 Special moment programs organized at Nutrition centers that benefitted 310 women.
- Fogging machine is operating in 8 villages and GWEL field hostel and covering all villagers. The machine is operating every week in one village and field hostel.
- Swachh Bharat Abhiyan Launched in 5 villages.

Empowerment and Livelihoods

- Increased focus on agricultural productivity by providing trainings on IPM and establishing organic crop demonstration at 379 farmer's field.
- 1524 farmers oriented on improved agriculture practices.
- Organized trainings to women on tailoring through 3 tailoring centers. 45 women trained in basic tailoring and in that's 56 women have pass out.
- 3 Self-employed courses organized at vocational training center, Warora. 72 students competed courses successfully.
- 64 youths sponsored for vocational training course on Welding, Basic Electrical and Volvo operator at GMRVF's training center, Hyderabad & Delhi.
- Facilitated SHGs to take up IGA and 852 women and farmers from 26 SHGs started IGA.
- 6 Libraries are continued in 6 villages; served more than 10,688 people in past Six months.
- 45 Animal Health camp organized in past 6 months in 30 villages benefitted nearly 6000 animals.
- 208 employees participated in different programs of Foundation and contributed 537 hours for the social cause.

DETAILED REPORT

2. BACKGROUND INFORMATION:

The GMR EMCO Energy Ltd, Warora (600 MW Thermal Power Plant) is located at Naidev Gram Panchayat of Warora Tehsil of Chandrapur district in Maharashtra. Below map (Map 1) depicts the CSR villages and plant location. GMR VF works in 8 villages intensively and covers more than 12,000 populations. However, GMRVF operated Mobile Medicare Unit (MMU), covers 30+ villages and reaching to more than 35000 populations.

The CSR villages covered by GMRVF are Naidev, Nimsada, Dahegaon, Dongargaon, Chinora, Marda, Charur Khati & Majra. All these villages are located within 5 to 8 km radius of the Power Plant location.

A needs analysis conducted initially using Participatory Rural Appraisal techniques in these villages, that indicated a huge gap in the quality of services provided by Government Schools and Anganwadis. The health

services are inaccessible to the communities and there is a lack of income generation opportunities especially for youth and women. Agriculture is the major livelihood in all these villages. A small percentage of people (< 5%) are engaged in service related livelihoods. To address these issues, GMRVF initiated its activities from April 2010. Currently a team of 5 staffs are working exclusively for the implementation of CSR activities at Warora location. GMRVF Foundation staff team comprises of 1 Program Leader, 2 Program Associates, and 2 Program Assistants.



Map -1 : Location Map of GMR EEL in Warora

3. DETAILED OF PROGRAM ACTIVITIES

Education

A. Support to Govt. Schools

- 1. School Competition:** During the period, school competitions organized in all ZP schools on the occasion of Childrens' Day and Energy Week celebration. The competition organized for class 1 to 7 students. All students participated in the competitions and total 30 students achieved 1, 2 and 3 positions in 4 types of competitions Drawing, Fancy Dress, Science Exhibition & singing competition.

2. Donation of Books to all villages: To promote quality education GMRVF donated the books for 9th & 10th class student on the occasion of Joy of Giving Week program. The books was donated to school student in presence of Plant Head Mr. Dhananjay Deshpande, Mr. Manoj Mishra, Mr. Abhay kumar Choudhari, Mr. Atul Kulshreshtra, Mr. Abhishek Guha & others GMREEL officials were present in this program. This program has benefitted total 97 students of 4 villages.



3. Toms Shoes Distribution Program: TOMS shoes distribution program organized 12 villages and shoes were distributed to all children of age group 3 to 17 years. Total 2837 students from Dongargaon, Dahegaon, Chinora, Nimsada, Naidev. Marda, Wanoja, Shembal, Ekona, Vanoja, Karanji, Panjurni, Tulana and Charoor Khati villages received the shoes.



4. Sanitation Kit Distribution Program : GMRVF distributed sanitation kit to all 8 Z.P. Schools under the preventive health related activity. The distribution were made in presence of Panchayat Members, Teachers & student. This activity will benefit nearly 600 students of 8 ZP schools and help to improve hygiene and sanitation in the school premises.

5. Art & Craft and Vedic Math Program : GMRVF have organized Art & Craft and Vedic Maths classes at Z.P. School Charur Khati and Dahegaon on 5-6 Oct. 2016 during the Joy of Giving celebration week. Employees from GWEL facilitated the classes voluntarily and guide to all student about how to make various model and practice vedic maths.

6. Sport Kit Distribution: To promote youth related activities and bring youths in the development process and engage them in sports activities, various sports items were distributed to youth group of Charur Khati. The activity conducted on 15 Oct in presence of Mr. Akbar Ali and Gram Panchayat Leaders. Nearly 70 girls and boys will benefit from the activity.

B. Direct support to the children

1. After School Learning Centers (ASLC): There are total 5 ASLCs are in operation in five villages. These centres were opened to improve education quality amongst the students from class 1st - 7th. At present there are 255 students enrolled in 5 ASLCs and out of which average 241(94%) students have attended the classes regularly. The classes in each ASLC are organized using joyful teaching & learning methods and covered three subjects. In addition to this daily one activity is conducted in each ASLC as per schedule so as to promote creativity in children.

2. Capacity Building of ASLC & E-Centre Volunteers: In order to increase the effectiveness in service delivery, we have organized 5 trainings of ASLCs and E-Centers

volunteers during this reporting period. Total 9 volunteers benefitted from the training. The experienced trainer from Block Resource Center, Govt. Education Department, Warora invited to guide volunteers on the Joyful Learning method, its importance, roles & responsibilities of teachers, students & Child Rights and CCE system.

3. **Kid Smart Center (KSC) Chinora:** GMRVF in collaboration with IBM, launched KSC, a technology-enabled initiative to enhance learning outcomes of school children at Chinora and Dongargaon. There are 120 children from Std. I to VIII have been enrolled in these centers and learning different subjects through multi-media learning resources.



4. **Pratibha Center:** Pratibha Center is running in Chinora, Dahegaon & Charur Khati villages for the students in or above 10th class. The center is preparing them for various competitive exams. Special classes of English speaking are organizing for 100 youths in two villages so as to help youth is preparing for various competitive exams. Monthly test and counselling sessions were organized in each village to test the knowledge level and motivated for competitive exams. Total 280 youths have appeared in test and attended the counselling sessions.



5. **School Bus Service for Students:** GMRVF is providing school bus services for the children who fail to afford travel cost from village to school and because of this they drop out from the education. The bus service is provided for primary and high schools students studying away village. The bus service is benefitting total 110 students from three villages (Dongargaon, Dahegaon and Charoor Khati).

C. Awareness programs for children including the celebration of National Days

1. **Science Exhibition:** The exhibition was organized at ZP school Charur Khati on 2 Nov so as to motivate the children, parents and teachers on innovations and improve their thinking capacity. The GMRVF team in each village has welcomed each student by distributing chocolate. Nearly 120 children, 6 Teachers and 10 prominent village leaders and panchayat leaders participated in the program.



D. Any other location specific initiatives

1. **E- Education and Learning Centers:** GMRVF is running six E - Education and learning centers in 5 villages with the objective to provide basic computer education to the schoolchildren of the villages. These centers are running in school campus at the school timing. All ZP school have integrated E - Learning in their curriculum and allotted 1 hour time for E-Education in daily timetable. Total 519 students enrolled in the centers and observed average 90% attendance in daily classes.

- 2. School Awareness Program:** The awareness program was organized in 6 ZP schools i.e. Dahegaon, Dongargaon, Chinora, Nimsada, Marda and Charur Khati. The sessions at schools organized on Malaria, water and sanitation and different vector borne diseases spread due to mosquitoes. The sessions organized on July & Aug. Total 380 students participated in these sessions and benefitted from the programs.
- 3. Preparation for Navodaya Entrance Exams:** Navodaya School started at Chinora from Sept 16. The purpose of classes was to motivate and prepare children for the Navodaya entrance exams. Total 29 students from Std V prepared and guided for Navodaya entrance exams.

Health, Hygiene and Sanitation:

A. Protective Health Care

- 1. Health clinics :** GMRVF is operating 7 primary health clinics in all seven project affected villages. These clinics are providing basic health check-up and medicines to villagers free of cost. Qualified doctor visit the clinics twice in a week and treat patient. Total 10,617 patients have benefitted by clinics during the reporting period.
- 2. Mobile Medicare Unit (MMU):** The MMU (Mobile Medicare Unit) at Warora is offering treatment and counselling services to the elders in 30 villages surrounding GWEL Plant. The MMU goes to each village on a weekly basis and offers treatment and counselling services to elders. The MMU is equipped with all basic healthcare facility and team of Doctor, Nurse, Pharmacist and supervisor attend the patients & distribute medicines free of cost. Total 14,252 old aged people treated during reporting period.
- 3. Nutrition Centers :** Realizing the importance of proper nutrition during pregnancy and lactating stage for the health of both mother and child, nutrition centers were started in 6 villages. Chiki, dates, banana, and apple etc. are provided to 54 enrolled women on daily basis. Apart from this, the centers also provide services such as health check-ups, weight measurements, building awareness on health related issues etc.
- 4. Special Health Camp:** 6 special health camps organized in 6 villages for Pregnant and Lactating mothers. These camps organized to achieve the objective of 100% safe delivery to all beneficiaries of nutrition center. Experienced Gynaecologist with her team conducted health check-up and counsel for proper pre and postnatal care to 275 women in past six months. Apart from this, 7 general health camps, 1 orthopedic camp, eye testing camp organized at Wanoja village which benefitted 819 people.



A. Preventive health care

1. **Fogging Operation:** To control mosquitoes and other harmful insects, fogging operation initiated in four villages namely Dongargaon, Dahegaon, Naidev, Nimsada, Charur Khati and Chinora including field hostel of GWEL. The fogging is conducting once in a week in each village and field hostel. All panchayats are contributing diesel / kerosene on regular basis to conduct fogging in their village, while other resources like operator, petrol, anti-larval liquid etc are provided by GMRVF.

2. **Swacchata Abhiyan:** Swachhata Abhiyan of GWEL and GMRVF initiated on the eve of Gandhi Jayanti on 1st Oct 16 at Dahegaon. The program is expanded now expanded to other villages during this quarter. The Swachhata program at Charur Khati started from 19 Nov, while at Chinora and Dongargaon it started on 9th & 13 Dec respectively. The Swachhata Program at Dahegaon launched by Mr. Dhananjay Deshpande (Plant Head), Mr. Manoj Mishra and Mr. Atul Kulshrestha, GWEL which is now continued in five village namely Dahegaon, Nimsada, Charur Khati, Chinora & Dongargaon villages.



3. Health Awareness Session

a. with Youth: 3 awareness sessions organized for youths at all villages. The topics covered in these sessions were HIV/AIDS, its causes and preventive measures. Total 89 youths and girls participated and benefitted from these sessions.

b.with Adolescent Girls and SHG Women: 14 awareness sessions organized at all village on personal hygiene, sanitation, HIV/AIDS, STI, RTI, Uterus Cancer, Sickle Cell Anemia, Hemoglobin, Breast Cancer and nutrition etc. More than 800 girls and women participated in the program and benefitted. Members from GWEL Samridhi Ladies club organized sessions of Breast Cancer in 5 villages and delivered the talk on the subject.

c. Immunization Program: 5 Immunization programs organized at all Anganwadi center with an intention to cover 100% immunization of children and aware mothers and women on various health related issues. 81 women including children participated and benefitted from the program.

d. Celebration of Special Moments at Nutrition Center: 4 programs organized at 4 villages in past Six months. The programs were intended to bless the child and mother leaving the centre on completion of six months after delivery. Apart from this, other women from village were also invited in the Nutrition Center and were sensitized on various women issues. Over 310 women participated and benefitted from these programs.

EMPOWERMENT AND LIVELIHOODS

1. Vocational Training

- a. **Vocational Training Centre (VTC), Warora:** To train the local youth in market relevant trades, GMRVF, Warora initiated vocational training with 3 self-employment courses. Total 72 youths successfully completed the course since April 16 and another 49 are enrolled currently undergoing training.

Name of the course	No. of batches		No. Trained				No. Settled			
	Upto last year	During this period	Upto last year		**During the reporting period		Upto last year		**During the reporting period	
			M	F	M	F	M	F	M	F
Mobile Repairing	4	2	66	0	26	0	36	0	18	0
Home Appliance Repairing	3	2	70	0	43	0	41	0	33	0
Two Wheeler Repairing	0	1	0	0	3	0	0	0	1	0

- b. **Vocational Training at GMRVF CEL Delhi &Hyderabad:** Total 64 youths from project-affected villages were sponsored for different vocational courses at GMRVF CEL Hyderabad and CEL Delhi. Out of 27 youths 1 youth Cargo Supervisor, 6 youths for welding, 8 youths for basic electricals, 6 Dry Walls and False Ceiling and 6 youths for excavator operator have joined the course.

2. **Tailoring Centre:** There are 3 tailoring centers operating in 3 villages in Warora. The tailoring center have trained total 56 women in past 6 months. There are currently 2 centers running at Dongargaon and Naidev villages and 22 women enrolled and learning basic tailoring skills in these tailoring centers.

3. **SHG Meetings and SHG MIS:** GMRVF is supporting 84 SHGs (1084 women) in 6 villages at Warora. All SHGs have saved more than Rs. 85 lakhs and all groups are linked with banks. Out of 88 groups, 25 groups linked with Maharashtra State Rural Livelihood Mission (MSRLM) and got Cash Credit Limit of Rs. 2 Lakhs to take up different group level activities. There are nearly 450 members from 26 groups linked with GMRVF income generation activity and doing various IGA such as poultry farming & washing powder making.

4. SHG - Income Generation Activities:

- a. **Washing Powder:** 4 women from Marda and Chinora villages are continuing washing powder business. The entrepreneur women have sold nearly 1200 kg of powder in past Six months and earned nearly Rs 800 to 1000 in every week.

- b. Poultry Forming :-** GMRVF and GWEL is constantly working towards empowering community. In line to this, this year GMRVF has identified 180 women from 20 Self Help Groups from 6 villages to take up Poultry Farming as income generation activity. Total 1800 chicks with feeds were distributed to 180 women. And to take care of bird GMRVF has organized through health check camp of poultry birds and helped women in immunization of all birds so as to ensure zero mortality and full growth of birds.



5. Agriculture Development:

Crop Demonstration:

- a. Farmers Training:** Total 36 trainings on organic cultivation and improved agriculture organized in 6 villages for farmers. Over 1524 farmers attended the training sessions and adopted improved agricultural practices in crop demonstrations.
- b. Formation of GCS Bank:** Considering the success of GCS banks in other villages, efforts have been made to form more GCS banks in Naidev and Charur Khati village. Series of meetings organized with farmers and explained the entire concept of GCS bank and importance of seed bank in find solution of seed sustainability. Two more GCS bank formed in Naidev and Charur Khati villages with the objective to take up organic cultivation and solve the seed problem in their village.
- c. Seed Distribution by GCS Bank:** This year GCS banks from five villages have reached to nearly 379 farmers. GMRVF and GCS bank have made joint efforts to reach this numbers. The seed distributed in six villages on 9 &10 June and all seeds handed over to GCS bank of respective villages so as to same can be distributed to farmers. During Kharif 16, GCS banks covered 289 farmers (289 acres) with cotton seeds and soybean seeds to 90 farmers (45 acres).



- 6. Community Libraries :** GMRVF runs daily six libraries one in each village, which operates from 09.00 to 11.00 in the morning and 4.00 to 6.00 PM in the evening. The libraries have variety of books from children to elders. Daily newspapers, weekly employment paper and monthly magazines are also available for reading. In Six months, over 10,688 people used the library facilities from 6 villages.

7. Other location specific initiatives

- i. **Animal Health Camp:** Special Animal Health Check-Up Camp were organized at nearly 30 villages July to Dec 16. Different qualified veterinary doctors from Warora were invited to conduct the thorough health check –up of animals in different villages. Over 6000 animals treated in 45 camps and received free medicines.
- ii. **Blood Donation Camp :-** GWEL &GMRVF have organised Blood Donation Camp at Naidev village on 9 Dec 16. A renound cheritable Blood Bank from Nagpur facilitated the camp. HDFC bank Warora, have also joined the hand to oragnized this event. Total 61 peoples donated bloods in the program.
- iii. **Inauguration of Kitchen Shed & Community Toilet:** GWEL have inaugurated the newly constructed kitchen shed at Shiv Temple Dongargaon and also did the Bhoomi Poojan of community toilet at Dongargaon on 13 Dec 2016. In this program Shri Manoj Mishra and Shri Atul Kulshrestha from GWEL participated and handed over the facility to Gram Panchayat.



EMPLOYEE INVOLVEMENT:

GMRVF has created several opportunities for EEL colleagues to participate in community development programs. The details of community development activities taken up by EEL colleagues are given below in table:

Summer of Employee Involvement:

Number of employee involvement programs	21
Number of employee/family members involved	208
Number of person hours spent	537
Number of people benefited	1906



