



MB POWER (MADHYA PRADESH) LIMITED
BACKFILLING & RECLAMATION OF ABANDONED MINE VOID
OF JAMUNA OCM, JAMUNA KOTMA AREA

SCOPE OF WORK

1.0 INTRODUCTION

MB Power (Madhya Pradesh) Limited (hereinafter referred to as MBPMPL) has set up a 2 X600 MW coal based Thermal Power Plant (Phase – I) at Jaithari, District Anuppur, Madhya Pradesh. As result of coal combustion for power generation, our plant produces Fly Ash 5000 – 6000 MT and Bottom Ash 1000 – 1200 MT on daily basis. Our plant is well equipped with 5 Nos. Ash Silos for collecting & loading dry fly ash in bulkers & conditioned fly ash in dumpers and with 3 Nos. Hydrobins for collecting & loading bottom ash in dumpers.

2.0 SCOPE OF WORK

The work includes mainly: -

- 2.1 Disposal of ash from plant silos, hydrobins and ash pond to abandoned mine void of Jamuna OCM – jamuna Kotma area, District Anuppur, Madhya Pradesh through properly covered trucks/dumpers (Hyvas) with 400 GSM HDPE tarpaulin sheet or mechanically covered as per MPPCB requirement (decision of package in-charge would be binding on vendor with respect to covering of dumpers/ Hyvas) to avoid spillage of ash and to prevent fugitive dust emission, as per environment norms of MPPCB, CPCB, MoEF&CC etc. The trucks/dumpers should be covered Tare weight and net weight shall be done at Weight Bridges inside the plant. Payment (bill/invoice) will be processed as per weighment records obtained from the said Weigh Bridge.
- 2.2 Contractor shall have sufficient numbers of trucks/dumpers (Hyvas- approved carrying capacity of Hyva should be 25MT minimum or as advised by EIC) for transportation of **a minimum quantity of 15000MT or 30000MT conditioned ash during the billing period i.e., Fortnightly or Monthly with a minimum average quantity of 1000 MT/ day round the clock (24 X 7).** (The quantity of ash mentioned here is only an indicative and can vary with the plant operations). Contractor shall have to always ensure engagement of requisite resources for transportation/disposal of allotted quantity of ash on day-to-day basis.
- 2.3 In case, contractor fails to lift and transport minimum average quantity i.e. 1000MT of ash/ day due to reasons attributable to them, LD @ 1.5 times the Transportation rate multiplied by shortfall quantity on that particular billing period shall be applied. LD calculated with such methodology will be added up during the billing period and shall be deducted from the RA bills. However, LD shall not be applicable during the mobilization period mentioned in LOI/ Work Order. No idle charges shall be paid on account of this event.

- 2.4 Fly ash loaded inside the trucks/dumpers should be properly levelled by keeping adequate free board and should be covered with prescribed tarpaulin sheet to avoid overflow/spillage/air borne of ash during transportation, before leaving the plant. Tare weight and net weight shall be done at Weigh Bridges inside the plant. Payment (bill/invoice) will be processed as per weighment records obtained from the said Weigh Bridges.
- 2.5 In case of any enroute spillage during transportation of ash, contractor shall ensure that spilled ash is collected and transported to the disposal/usage site immediately as per guidelines of MPPCB, CPCB, MoEF&CC etc. **If the contractor refuses for proper covering of Hyvas or fails to collect & clean the spillage ash within 2 hours of spillage, a suitable amount of penalty (Rs. 5000/- to 50000/-) per instance shall be imposed to contractor or as directed by Engineer in-charge.**
- 2.6 Contractor shall ensure proper arrangements for robust dust suppression system as per prudent practice to compile with the guidelines/norms of MoEF&CC, CPCB, MPPCB, SECL, DGMS and any other concerned agencies by using adequate number of mist guns, sprinklers (alongwith requisite accessories) to maintain appropriate moisture level to prevent drying out of dumped/stacked ash & potentially creating dust that could migrate off-site and also during hauling, dumping, dozing, levelling, compaction (by dozing) etc. of ash inside the void of abandoned mine. Contractor shall also require to deploy atleast two water tankers for sprinkling water on the road used for transportation, round the clock.
- 2.7 Contractor shall be responsible for construction & maintenance of approach road(s) inside & outside (if required) the abandoned mine void. Contractor shall be responsible to arrange the requisite quantity of soil for such works either from inside of the mine area (predesignated location of SECL) or from outside of mine area without any extra charges from MBPMPL.
- 2.8 Contractor shall be responsible for construction of approach road for the proper lifting of ash from ash pond (inside plant). Contractor shall be allotted required quantity of soil by the MBPMPL for construction of approach road in ash pond inside the plant and contractor shall be responsible for excavation & transportation of such soil from predesignated location. No extra cost shall be borne by MBPMPL for such works.
- 2.9 Contractor shall be responsible construction of 750 MM high earth retaining wall (if required) on peripheral of the void of abandoned mine to channelize rainwater in order to prevent flow of surface soil & ash. No extra charges will be paid for the construction of such retaining wall(s).
- 2.10 Contractor shall be solely responsible to create drainage network for existing mine water as well as storm water during rain. Contractor shall ensure construction of new as well as cleaning & repair (if required) of existing peripheral drain for abandoned mine void before starting dumping of ash inside it. No extra charges will be paid for this work.
- 2.11 Contractor shall have to ensure installation of hard barricading/fencing on the vulnerable locations to prevent entry of cattle/livestock inside the disposal area during execution period. No extra charges shall be paid by MBPMPL for such works.
- 2.12 Contractor shall be solely responsible for the liaison with all stakeholders, local public, local administration, traffic police, SECL, concerned and any other government department, media

etc. for the smooth operations of ash disposal work. If the ash disposal work suffers due to bad report/relationship of the contractor or its partner(s), associate(s), staff, workers etc. then the contractor will be penalized with a matching amount of unit rate of disposal of ash under this contract and the same will be calculated on hourly basis.

- 2.13 Contractor shall be responsible for the dewatering of accumulated mine/storm water, if any, before the start of ash filling in the void of abandoned mine. No extra charges will be paid for this work. Contractor shall also be responsible to dewater mine/storm water as and when accumulates during disposal of ash. Contractor shall have to deploy dewatering pump(s) of minimum 50 HP (along with one standby pump of the same capacity) and all accessories to dewater the mine/storm water upto redesignated location of SECL.
- 2.14 Contractor shall be informed 15 days prior to the Annual Over-hauling and time to time maintenance of the plant and reduction in generation of ash by MBPMPL. No idle charges will be paid to the contractor during the period of overhauling & maintenance of the plant and contractor would be liable to claim the actual quantity (less than the minimum agreed quantity) during reduced generation of ash.
- 2.15 Contractor shall be responsible for evacuation of hydrobins and silos on the daily basis within stipulated time-period.
- 2.16 Before undertaking any activity awarded vide this contract, the contractor shall be responsible to finalize the top level upto which ash is to be filled in consultation with MBPMPL package incharge.
- 2.17 Contractor shall appoint adequate experienced staff who should be well versed with prevailing/ applicable statute, acts, guidelines, norms etc. of the concerned departments like; MoEF&CC, CPCB, MPPCB, SECL, WRD, DGMS, CIL, IBM, MoC etc. of union as well as state Governments and of regional stakeholders or other interested agencies. Penalties levied by such departments/stakeholders/agencies on account of negligence of contractor & its partner(s), associate(s), staff, workers etc. shall be recovered from the contractor.
- 2.18 Contractor shall be solely responsible to provide lodging & boarding, medical facilities, local conveyance etc. to it's partner(s), associate(s), staff members, workers etc. as per prevailing/applicable labour laws of the land.
- 2.19 Contractor shall ensure that no biomass or biodegradable material should be buried under the ash. Contractor shall be responsible to completely scrapped off biodegradable material and to disposed off such materials to the pre-designated location outside the working area. Such disposal shall be in conformity of guidelines of MoEF&CC, CPCB, MPPCB, SECL, WRD, DGMS, CIL, IBM, MoC etc issued time to time.
- 2.20 Contractor shall ensure adequate compaction of each layer (not more than 0.5m thick) of ash by dozing itself.
- 2.21 Contractor shall have to provide & lay a 700 mm thick layer of overburden on the top of back filled area of mine void. Contractor shall have to excavate, transport requisite quantity of overburden from the predesignated location upto mine void and shall have to doze, spread,

level, compact (by dozing) etc. after back filling of mine void with ash. Contractor shall have to lay the layer of overburden in such a manner that its surface should be convex (surface shall have gentle slopes towards each nook & corner from its center) or else as advised by SECL.

- 2.22 Contractor shall have to provide & lay a minimum 300 mm thick (adequate compaction by dozing) soil cover on the top of the overburden layer to promote vegetation growth. Contractor shall have to excavate, transport the requisite quantity of soil from the predesignated location upto mine void and shall have to doze, spread, level, compact etc. over the layer of overburden.
- 2.23 Contractor shall also be responsible for the plantation/vegetation of prescribed species (if required).
- 2.24 Electricity shall be provided at the nearest point by SECL on a chargeable basis as per SECL rule & regulation. Contractor shall have to make necessary arrangements as per requirement for tapping, transmission, metering, utilisation etc. as per SECL requirement otherwise the Contractor have to make his own arrangements for the same.
- 2.25 Contractor shall maintain the minimum three months working capital at any point of time during execution/operations.
- 2.26 Any other points not mentioned herein this scope of work but contained in guidelines of MOEF&CC, CPCB, MPPCB, CIL, DGMS etc. & time to time amendments thereof and MOU executed between SECL & MB Power for backfilling & reclamation of Abandoned mine void shall be treated as part of this scope and above said documents to be integral part of contract. *(Copy of MOU will be provided to the interested bidders only after their inquiry)*
- 2.27 After complete reclamation of the site the contractor shall have to install signboard indicating that the abandoned mine void has been reclaimed with ash.
- 2.28 All workings for backfilling of flyash including haul road maintenance shall be carried out in accordance with the provision of coal mines regulation 2017 and DGMS circulars issued for the purpose.
- 2.29 Any other cost viz. cleaning & maintenance of public road(s) and its allied infrastructure(s) outside the mine area, which may be incurred due to the filling of fly ash in mine void shall also to be borne by the contractor.

3.0 GENERAL INSTRUCTIONS:

Contractor shall strictly abide the following:

- 3.1 All the tippers/trucks/dumpers responsible for carrying ash shall obtain Pollution Under Control (PUC) certificate and other requisite certificate from appropriate authority. All the vehicle drivers shall have a valid **heavy motor driving** license issued by an appropriate authority.
- 3.2 All partner(s), staff members, workers, associate(s) etc. of the contractor shall be vaccinated with two doses of COVID vaccine. And shall follow COVID protocol wherever applicable.
- 3.3 Speed limits shall be strictly enforced – inside the plant, mine area and thickly populated area the speed limit should not exceed 20 KMPH and outside of plant 30 KMPH under any circumstance or the speed limits as specified by the authority (ies).

- 3.4 The contractor shall have to ensure that all Trucks/Dumpers (Hyvas) engaged for transportation of FlyAsh from its thermal power stations to Jamuna OCM are fitted with GPS device and shall be monitored properly.
- 3.5 Appropriate measures shall be taken to prevent any entry of cattle/livestock inside the disposal area during backfilling operations.
- 3.6 No nuisance/inconvenience shall be caused to the public due to operational activities and manpower.
- 3.7 Loading, unloading & transportation of ash shall be strictly as per RTO/Govt. rules & regulations.
- 3.8 Adequate supervision shall be carried out to check & implement the minimum speed limit.
- 3.9 No harm and theft shall be caused to SECL properties. No trespassing shall be carried out by contractor's manpower and machineries in the SECL mines area other than allocated area.
- 3.10 Contractors shall strictly follow the route as specified by MBPMPL or SECL or RTO/GoMP.
- 3.11 Contractors should make arrangements (two stages) for washing /cleaning of wheels of the vehicles before deployed for fly ash transportation/coming on road.
- 3.12 Transportation of flyash through thickly populated areas should be avoided as far as possible.
- 3.13 General awareness/ training programmes be organised regularly for tanker operating staff like drivers and cleaners on the impact of hazards of fly ash.
- 3.14 Constant vigil shall be kept at the ash loading point, vehicles carrying the ash and en-route to ensure that no spilling of ash and pollution takes place during handling and transportation of ash.
- 3.15 In no case any unauthorized driver of the tipping trucks or operator of pay loaders/equipment shall be permitted in the mine premises.
- 3.16 In no case the coal production from the mine shall be allowed to be hampered by the ash filling operation.
- 3.17 During summer month extra care shall be taken to control fugitive dust.
- 3.18 The void of abandoned mine shall have to be filled up only by following the progressive land filling methods from bottom to top with adequate compaction and water sprinkling instead of haphazard dumping in the proposed disposal site.
- 3.19 The contractor shall have to submit a list of all the staff and workers engaged in backfilling operations of mine void to MB Power before commencing of the fly ash dumping.
- 3.20 No addition or alteration to the size of the body or any such tipping truck/dumper shall be carried out, without prior approval of MB Power.
- 3.21 The truck/dumper shall be loaded only up to the maximum carrying capacity and shall not be overloaded under any circumstances.
- 3.22 No manual workers shall be engaged by contractor for loading/unloading of the truck/dumper, under any circumstances whatsoever.

- 3.23 SECL shall provide space for temporary camping (free of cost) or vacant quarters/buildings/houses (on rent) in its township for the residential purpose of the employees, workers etc. of the contractor, if available within the mine area in close vicinity to the mine void otherwise the Contractor have to make his own arrangements for the same.
- 3.24 SECL shall provide space for temporary workshops and parking of equipment, trucks/dumpers (Hyvas) to the contractor, if available within mine area in the close vicinity of mine void otherwise the Contractor have to make his own arrangements for the same.
- 3.25 SECL shall allow electricity connection from the near termination point to the Contractor on a chargeable and need basis for back filling operations and allied works & facilities if available nearby the mine premises otherwise the Contractor have to make his own arrangements for the same.
- 3.26 SECL shall allocate mine water from predesignated mine void filled with mine water round the clock water for sprinkling to keep Fly Ash moistened during all the operations of back filling to the contractor. The contractor shall be responsible for drawing water from the mine void to the dumping site by laying proper pipeline and sprinkling system.
- 3.27 SECL shall provide round-the-clock access to the employees and workers of the contractor to carry out backfilling operations.

4.0 Safety or Precautionary Measures:

- 4.1 Contractor shall have to provide footwears, DGMS approved helmets, dust masks, florescent jackets and other protective equipment to their manpower engaged in the works of back filling of mine void as prescribed by the prevailing statute, rules & regulation etc., at their own cost.
- 4.2 Contractors shall have to exercise necessary safety precautions as prescribed by the prevailing laws, statutes and regulations at the times to prevent accidents and for the protection of persons (including employees) and property. In case of accident, Contractor shall be solely responsible for compliance with all the requirements imposed by the Workmen's Compensation Act or any other relevant law in force and indemnify MB Power against claim on this account, if any.
- 4.3 All the necessary equipment such as Trucks/Dumpers (Hyvas), Poclain(s), Dozer(s) small vehicle(s) etc. in good and safe condition having valid fitness certificate(s), Permit(s)/Licenses etc. {wherever applicable} and in respect of which the required taxes/fees have been deposited to the concerned authority and which are properly covered by insurance, shall be engaged by the MB Power for the said back filling operations.
- 4.4 Contractor shall have to take appropriate measures such as sign boards, fencing, security guards (wherever required) to prevent human trespassing, entry of cattle/livestock inside the mine void and allied working area during execution period, at their own cost.
- 4.5 Contractor shall ensure that dump slope monitoring of slope stability is planned designed and worked as determined by scientific study.

- 4.6 Contractor shall have to take appropriate measures to avoid any kind of nuisance/inconvenience to the public due to back filling operations.
- 4.7 Contractor shall always exercise reasonable precaution towards the safety of employees in the performance of his/their agreement and shall comply with all applicable provisions of the safety laws drawn up by the State or Central Government or Municipalities and other authorities in India.
- 4.8 Contractor shall comply with the provision of the safety handbook as approved and amended from time to time by the Government of India. In case of any accident arising in the course of execution of said work and/or arising out of non-compliance of any of the conditions of this agreement or due to any deviation from the SOP, Contractor shall be solely responsible for any consequences that shall follow. Contractor shall familiarize themselves with and be governed by all laws and rules of India and local statutes and orders and regulation applicable to his/their work.
- 4.9 If any complaint received for any unauthorized dumping of ash in the vicinity except the pre-designated site allocated to the vendor for backfilling, MB Power (Madhya Pradesh) Limited (MBPMPL) shall take a lawful/statutory action against the agency/ vendor/ firm and subsequently black list the agency/ vendor/ firm. In such case(s) if any penalty imposed by statutory body against MBPMPL, the same shall be recovered from the agency/ vendor/ firm or they shall be liable for payment of such penalties during execution of the said work or after completion of the work.
- 4.10 GPS tracking system with alert mechanism is to be adopted by agency/ vendor/ firm for deviation in all trucks engaged in transporting ash from Thermal Power plant to approved Mines to ensure zero mishandling/ illegal trafficking enroute. The GPS tracking details / access to vehicle tracking shall be submitted to MBPMPL periodically as & when there are addition of new vehicle or password is changed.
- 4.11 Submission of GPS Tracking Report of each trip of vehicles transporting Conditioned Fly Ash from Remote Silos (Loading station) to the designated dumping location shall be mandatory alongwith RA bills, failing which bills shall not be processed for payment. Charges per vehicle per month for API integration shall be deducted from the Contractor's bill. GPS of the ash transporting vehicles must work for 24 X 7; If GPS of ash transporting vehicle is not enabled, loading shall not be provided.
- 4.12 A logbook of the vehicle entry & exit details and quantum of fly ash being transported shall be recorded & maintained both at the source of generation and disposal point by the agency/ vendor/ firm. Monthly records along with material balance at generation & disposal points of individual sites shall be duly certified by the agency/ vendor/ firm and furnish it to MBPMPL with RA bill.
- 4.13 In case the contractor/ vendor fails to lift/ transport the minimum committed quantity due to any reasons attributed to them then LD clause shall be applied on that particular billing period.