

A. Conditions to be imposed in the environmental clearance for sand mining projects.(Minor mineral less than 5 ha.)

- 1) It shall be ensured that sand mining does not in any way disturb the flow pattern of the river water.
- 2) Sand quarrying shall not be carried out in streams within 1/5 of the width of the stream bed from the bank.
- 3) Sand mining shall not be carried out within 200 m of any existing structure such as bridges, dams, weirs, intake structure (s) either for irrigation or drinking water purposes, or any other cross drainage structure.
- 4) Sand mining operations shall not affect the existing sources for irrigation or drinking water or industrial purpose.
- 5) Vehicles hired for transportation of sand from the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 6) The depth of the sand mining shall not exceed 3 m. water level whichever is less.
- 7) Permission from the Competent Authority shall be obtained for drawl of ground water, if any, required for the project.
- 8) The vehicles shall not be overloaded and shall be covered with Tarpaulin.
- 9) Conservation measures shall be taken for protection of flora and fauna.
- 10) Personnel working in the project shall be provided with requisite safety devices such as masks, gloves etc.
- 11) The proponent shall take necessary measures to ensure no adverse impacts due to mining operations on the Human Habitation existing nearby.
- 12) The water spray should be operated on the village road to control dust emission while transportation of sand.
- 13) The natural sand dune should not be leased out.
- 14) All necessary statutory clearances shall be obtained before start of mining operations.
- 15) No mining shall be carried out in the vicinity of natural /manmade archeological sites.
- 16) The area from which the sand has been extracted be leveled and free of any foreign debris or materials.
- 17) The surface of stockpile and sand processing areas outside the river bed to be scarified to a depth of 50 cm, graded evenly and the top soil previously stored, returned to its original depth over the area.
- 18) A separate corpus should be created for reclamation and rehabilitation of the mined out area.
- 19) A river bed rehabilitation plan should be submitted.
- 20) The SEIAA, Odisha may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to

alter/modify the above conditions or stipulate any further condition in the interest of environment protection.

- 21) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

B) Conditions to be imposed in the environmental clearance for stone quarry/granite stone/ boulder mining projects etc. (With depth of mining activity 6 mtrs of more)

- 1) Mining activity shall be carried out as per approved mining plan prepared for this project.
- 2) No mining shall be carried out in the vicinity of natural/manmade archeological sites.
- 3) It shall be ensured that quarrying is not carried out within 500m of structures, bridges, dams, weirs, ground water extraction points, water supply head works, extraction points for irrigation and any other cross drainage structures.
- 4) It shall be ensured that quarrying shall not be carried out below ground water table under any circumstances. If ground water table occurs/ intervenes within the permitted depth, then also quarrying shall be stopped.
- 5) At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area at the time of closure of the operation of quarry.
- 6) Wet drilling method is to be adopted to control dust emissions. Delay detonators and shock tube initiation system for blasting shall be used so as to reduce vibration and dust.
- 7) Drilling and blasting (wherever required) shall be done only either by licensed explosive agent only the proponent after obtaining required approvals from Competent Authorities.
- 8) The explosives shall be stored at site as per the conditions stipulated in the permits issued by the licensing Authority.
- 9) Blasting shall be carried out in a such a manner that the splinters generated shall not fall beyond the mining lease area. Blasting shall be carried out after announcing to the public adequate through public address system to avoid any accident.
- 10) Greenbelt shall be developed along the boundary of mining lease area, with the native tree species.
- 11) Fugitive dust emissions from all the sources should be controlled regularly.
- 12) Water spraying arrangement on haul roads, should be provided and properly maintained.
- 13) Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- 14) The following measures are to be further implemented to reduce air pollution during transportation of mineral:-
 - Roads shall be graded to mitigate the dust emission.
 - Over filling of tippers and consequent spillage on the roads shall be avoided. The trucks shall be covered with tarpaulin.

- 15) The following measures are to be implemented to reduce Noise Pollution:-
 - (i) Proper and regular maintenance of vehicles and other equipment.
 - (ii) Limiting time of exposure of workers to excessive noise.
 - (iii) The workers employed shall be provided with protection equipment and earmuffs etc.
 - (iv) Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
- 16) Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
- 17) Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.
- 18) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- 19) The project proponent shall take all precautionary measures during mining operation for conservation of flora and fauna.
- 20) Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and trans-boundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by SPCB, Odisha.
- 21) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban Local Body and the Local NGO.
- 22) The proponent shall obtain all other mandatory clearances from respective departments.
- 23) The proponent should re-vegetate indigenous plants which were removed from the areas for the mining as far as on reasonably practical.
- 24) The area should be prepared in such a way as to stimulate/ensure the regrowth of vegetation.
- 25) A separate corpus should be located for reclamation and rehabilitation of the mined out area.
- 26) The SEIAA, Odisha may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 27) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

C. Condition to be imposed in the environmental clearance for stone quarry / granite stone / boulder mining projects etc. (With depth of mining activity less than 6 meters. (Minor mineral less than 5 ha.)

- 1) The PP shall ensure that shall be no mining activity beyond 6m below ground level. Mining shall be as per the Development plan prepared for this project.
- 2) No mining shall be carried out in the vicinity of natural / manmade archeological sites.
- 3) It shall be ensured that quarrying is not carried out within 500m of structures, bridges, dams, weirs, ground water extraction points, water supply head works, extraction points for irrigation and any other cross drainage structures.
- 4) It shall be ensured that quarrying shall not be carried out below ground water table under any circumstances. If ground water table occurs/intervenes within the permitted depth, then also quarrying shall be stopped.
- 5) At the end of mine closure, the Proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area at the time of closure of the operation of quarry.
- 6) Wet drilling method is to be adopted to control dust emissions. Delay detonators and shock tube initiation system for blasting shall be used so as to reduce vibration and dust.
- 7) Drilling and blasting (wherever required) shall be done only either by licensed explosive agent only the proponent after obtaining required approvals from Competent Authorities.
- 8) The explosives shall be stored at site as per the conditions stipulated in the permits issued by the licensing Authority.
- 9) Blasting shall be carried out after announcing to the public adequate through public address system to avoid any accident.
- 10) Greenbelt shall be developed along the boundary of mining lease area, with the native tree species.
- 11) Fugitive dust emissions from all the sources should be controlled regularly.
- 12) Water spraying arrangement on haul roads, should be provided and properly maintained.
- 13) Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- 14) The following measures are to be further implemented to reduce air pollution during transportation of mineral:-
 - Roads shall be graded to mitigate the dust emission.
 - Over filling of tippers and consequent spillage on the roads shall be avoided. The trucks shall be covered with tarpaulin.
- 15) The following measures are to be implemented to reduce Noise Pollution:-
 - (i) Proper and regular maintenance of vehicles and other equipment.

- (ii) Limiting time of exposure of workers to excessive noise.
 - (iii) The workers employed shall be provided with protection equipment and earmuffs etc.
 - (iv) Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
- 16) Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
 - 17) Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.
 - 18) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
 - 19) The project proponent shall take all precautionary measures during mining operation for conservation of flora and fauna.
 - 20) Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and trans-boundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by SPCB, Odisha.
 - 21) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila Parisad/Municipal Corporation, Urban Local Body and the Local NGO.
 - 22) The proponent shall obtain all other mandatory clearances from respective departments.
 - 23) The proponent should re-vegetate indigenous plants which were removed from the areas for the mining as far as on reasonably practical.
 - 24) The area should be prepared in such a way as to stimulate / ensure the regrowth of vegetation.
 - 25) A separate corpus should be located for reclamation and rehabilitation of the mined out area.
 - 26) The SEIAA, Odisha may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
 - 27) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

D. Condition to be imposed in the environmental clearance for Decorative stone mining projects with depth of mining activity less than 6 meters. (Minor mineral less than 5 ha.)

- 1) The PP shall ensure that there shall be no mining activity beyond 6m below ground level. Mining shall be as per the Development Plan prepared for this project.
- 2) No mining shall be carried out in the vicinity of natural /manmade archeological sites.
- 3) It shall be ensured that quarrying is not carried out within 500m of structures, bridges, dams, weirs, ground water extraction points, water supply head works, extraction points for irrigation and any other cross drainage structures.
- 4) It shall be ensured that quarrying shall not be carried out below ground water table under any circumstances. If ground water table occurs/intervenes within the permitted depth, then also quarrying shall be stopped.
- 5) At the end of mine closure, the Proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area at the time of closure of the operation of quarry.
- 6) Greenbelt shall be developed along the boundary of mining lease area, with the native tree species.
- 7) Fugitive dust emissions from all the sources should be controlled regularly.
- 8) Water spraying arrangement on haul roads, should be provide and properly maintained.
- 9) Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- 10) The following measures are to be further implemented to reduce air pollution during transportation of mineral:-
 - Roads shall be graded to mitigate the dust emission.
 - Over filling of tippers and consequent spillage on the roads shall be avoided. The trucks shall be covered with tarpaulin.
- 11) The following measures are to be implemented to reduce Noise pollution:-
 - (i) Proper and regular maintenance of vehicles and other equipment.
 - (ii) Limiting time of exposure of workers to excessive noise.
 - (iii) The workers employed shall be provided with protection equipment and earmuffs etc.
 - (iv) Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
- 12) Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.

- 13) Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.
- 14) The project proponent shall obtain necessary prior permission of the competent authorities for drawl of requisite quantity of water (surface water and groundwater), if any, required for the project.
- 15) The project proponent shall take all precautionary measures during mining operation for conservation of flora and fauna.
- 16) Waste oils, used oils generated from the EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and trans-boundary movement) Rules, 2008 and its amendments thereof to the recyclers authorities by SPCB, Odisha.
- 17) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParisad/ Municipal Corporation, urban Local Body and the Local NGO.
- 18) The proponent shall obtain all other mandatory clearances from respective departments.
- 19) The proponent should re-vegetate indigenous plants which were removed from the areas for the mining as far as on reasonably practical.
- 20) The area should be prepared in such a way as to stimulate/ensure the regrowth vegetation.
- 21) A separate corpus should be located for reclamation and rehabilitation of the mined out area.
- 22) The SEIAA, Odisha may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter/modify the above conditions or stipulated any further condition in the interest of environment protection.
- 23) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.

E Condition to be imposed in the environmental clearance for Decorative Stone mining projects with depth of mining activity 6 meters or above (Minor mineral less than 5 ha.)

- 1) Mining activity shall be carried out as per approved mining plan prepared for this project.
- 2) No mining shall be carried out in the vicinity of natural/manmade archeological sites.
- 3) It shall be ensured that quarrying is not carried out within 500m if structures, bridges, dams, weirs, ground water extraction points, water supply head works, extraction points for irrigation and any other cross drainage structures.
- 4) It shall be ensured that quarrying shall not be carried out below ground water table under any circumstances. If ground water table occurs/intervenes within the permitted depth, then also quarrying shall be stopped.
- 5) At the end of mine closure, the proponent shall immediately remove all the sheds put up in the quarry and all the equipment in the area at the time of closure of the operation of quarry.
- 6) Greenbelt shall be developed along the boundary of mining lease area, with the native tree species.
- 7) Fugitive dust emissions from all the sources should be controlled regularly.
- 8) Water spraying arrangement on haul roads, should be provided and properly maintained.
- 9) Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.
- 10) The following measures are to be further implemented to reduce air pollution during transportation of mineral:-
 - Roads shall be graded to mitigate the dust emission.
 - Over filling of tippers and consequent spillage on the roads shall be avoided. The trucks shall be covered with tarpaulin.
- 11) The following measures are to be implemented to reduce Noise pollution:-
 - (i) Proper and regular maintenance of vehicles and other equipment.
 - (ii) Limiting time of exposure of workers to excessive noise.
 - (iii) The workers employed shall be provided with protection equipment and earmuffs etc.
 - (iv) Speed of trucks entering or leaving the mine is to be limited to moderate speed of 25 kmph to prevent undue noise from empty trucks.
- 12) Measures should be taken to comply with the provisions laid under Noise Pollution (Regulation and Control) (Amendment) Rules, 2010 issued by the MoEF, Govt. of India.
- 13) Topsoil, if any, shall be stacked properly with proper slope with adequate measures and should be used for plantation purpose.

- 14) The project proponent shall obtain necessary prior permission of the competent authorities for drawal of requisite quantity of water (surface water and groundwater), if any, required for the project.
- 15) The project proponent shall take all precautionary measures during mining operation for conservation of flora and fauna.
- 16) Waste oils, used oils generated from EM machines, mining operations, if any, shall be disposed as per the Hazardous Wastes (Management, Handling, and trans-boundary movement) Rules, 2008 and its amendments thereof to the recyclers authorized by SPCB, Odisha.
- 17) A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, ZilaParisad/Municipal Corporation, Urban Local Body and the Local NGO.
- 18) The proponent shall obtain all other mandatory clearances from respective departments.
- 19) The proponent should re-vegetate indigenous plants which were removed from the areas for the mining as far as on reasonably practical.
- 20) The area should be prepared in such a way as to stimulate/ensure the regrowth of vegetation.
- 21) A separate corpus should be located for reclamation and rehabilitation of the mined out area.
- 22) The SEIAA, Odisha may revoke or suspend the order, if implementation of any of the above conditions is not satisfactory. The SEIAA, Odisha reserves the right to alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
- 23) Concealing the factual data or failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 1986.