

**COMPENDIUM OF OFFICE MEMORANDA
AND CIRCULARS UNDER ENVIRONMENT
IMPACT ASSESSMENT NOTIFICATION, 2006
AND SUBSEQUENT AMENDMENTS
(From December, 2014 to January, 2019)**



GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE

Indira Paryavaran Bhavan, Jor Bagh Road,

NEW DELHI – 110003

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No.J-11013/36/2014-IA-I

Government of India
Ministry of Environment, forests and Climate Change
IA Division

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi-110 003

Dated the 10th December, 2014

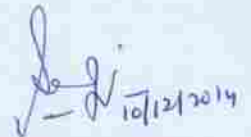
OFFICE MEMORANDUM

Subject: Exemption from Public Consultation for the projects/ activities located within the Industrial Estates/ Parks.

Reference this Ministry's earlier Office Memorandum of even number dated 16.05.2014 on the subject mentioned above.

2. This Ministry has received representations from various Industrial Associations on the above said Office Memorandum. These representations have been considered by the Ministry. Based on the consideration, the undersigned has been directed to clarify that the exemption from public consultation, as provided for under para 7(i) III. Stage(3)(i)(b) of EIA Notification, 2006 is available to the projects or activities or units located within the Industrial Estates or Parks, which were notified prior to 14.09.2006, i.e. the EIA Notification, 2006 coming in to force.

3. This issues with the approval of the competent authority.



(Dr. Satish C. Garkoti)
Director

1. Chairperson/ Member Secretaries of all the SEIAAs/SEACs
2. Chairman of all the Expert Appraisal Committees
3. Dr. T. Chandni, Director
4. Dr. Saroj, Director
5. Dr. V. P. Upadhyay, Director
6. Dr. M. Hota, Director
7. Dr. P.B. Rastogi, Director
8. Sh. B.B. Burman, Director
9. Sh. Lalit Bakolia, Additional Director
10. S.O. IA-I(for record)

Copy for information:

1. PPS to Secretary(E&F)
2. PPS to AS(SS)
3. PS to JS(MKS)
4. Website, MoEF&CC
5. Guard File

No. J-11011/15/2012-IA. II (M)
Government of India
Ministry of Environment & Forests Climate Change

Office Memorandum

Dated: 20.03.2015

Subject: Valid and subsisting Environment Clearance.

The Ministry has received reference on the applicability of the provision of requirement of Environment Clearance (EC) at the time of renewal of lease, even if a valid and subsisting environment clearance is held by a Project Proponent (PP), at the point of time the PP seeks renewal of the mining lease.

After due consideration and examination of relevant judicial pronouncements and the OMs issued in this regards, it is clarified that the Project Proponent which has a valid and subsisting EC for their mining project either under EIA Notification 1994 or EIA Notification 2006, will not be required to obtain fresh EC at the time of renewal of the lease. This is subject to the maximum period of validity of the EC being for mining lease for 30 years.



(Dr. U. Sridharan)
Scientist 'F'

To,

1. All officer of IA Division
2. Chairpersons/Member Secretaries of all SEIAA/SEACs
3. Chairman, CPCB
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy to:

1. PS to MoS (I/C)
2. PPS to Secretary (EFCC)
3. PS to JS(MKS)
4. Website, MoEFCC
5. Guard File

F.No. J-11013/41/2006-IA.II(I) (Part)
Government of India
Ministry of Environment, Forest and Climate Change
IA Division

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi-110 003

Dated the 30th March, 2015

OFFICE MEMORANDUM

Subject: Consideration of development projects located within 10km of National Park and Sanctuaries seeking environmental clearance under EIA Notification, 2006 – OM issued by IA Division providing clarification - reg.

Reference this Ministry's OM of even No. dated 20.08.2014 on the subject mentioned above.

2. The matter has been examined by the Ministry and it has been decided to withdraw the above said Office Memorandum. The procedure for consideration of the proposal for grant of environment clearance which are located within 10 km of National Parks and Sanctuaries shall be dealt in accordance with OM No. J-11013/41/2006-IA-I(I) dated 02.12.2009.

3. This issues with the approval of Competent Authority.


(Dr. Satish C. Garkoti)
Scientist 'F'

To

All the officers of IA Division

Copy to:

1. PS to MEF&CC
2. PPS to Secretary(EF&CC)
3. PPS to DGF&SS
4. PPS to ADG(WL)
5. JS(MKS)
6. JS(BS)
7. IG(WL)

No.1-20/2014/WL (Pt)
Government of India
Ministry of Environment, Forest and Climate Change
(Wildlife Division)

Indira Paryavaran Bhawan,
Jorbagh Road,
New Delhi,

Dated: 1st May, 2015

OFFICE MEMORANDUM

Sub: Consideration of development projects located within 10km of National Park and Sanctuaries seeking environment clearance under EIA Notification, 2006 - O.M. issued by IA Division providing clarification -reg.

Consequent upon the withdrawal of OM No. J-11013/41/2006-IA-II (I) (Part) dated 20th August 2014, vide OM No. F.No. J-11013/41/2006-IA.III(I) (Part), dated 30th March 2015 issued by IA Division; OM No. 1-20/2014 WL dated 26th September 2014 issued by Wildlife Division is here by withdrawn.

2. Henceforth, the procedure for grant of Wildlife Clearance for development projects located outside the National Parks and Sanctuaries shall be dealt with in accordance with the OM No. J-11013/41/2006-IA.II(I) dated 2nd December 2009.


(S.P.Vashishth)

Dy. Inspector General of Forests
Tele: 011-24695355

Enclosure: Office Memorandum dated: 30th March 2015

Distribution(with a request to give it wide publicity):

1. The Principal Secretaries
All States/UTs Forest Departments.
2. The Principal Chief Conservator of Forests
And Chief Wildlife Wardens
All States /UTs Forest Departments

Copy to :

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- iv) PPS to ADG(WL)
- v) PPS to ADG(FC)
- vi) PPS to Member Secretary, NTCA
- vii) PPS to JS(IA)
- viii) PPS to JS (AS)

F. No. 19-2/2013-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Aliganj, Jor Bagh Raod
New Delhi-110 003

Dated: 09th June, 2015

OFFICE MEMORANDUM

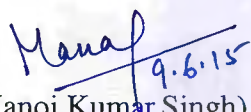
Sub: Clarification regarding Gazette Notification No. S.O. 3252 (E) dated 22.12.2014 on applicability of Environment Clearance-reg.

Vide Gazette Notification No. S.O. 3252 (E) dated 22.12.2014, the Ministry of Environment, Forest and Climate Change has exempted the School, College and Hostel for educational institution from obtaining prior Environment Clearance under the provisions of the EIA Notification, 2006 subject to Sustainable Environmental Management.

The Ministry is in receipt of representation from various educational institutions regarding issuing clarification on status of universities, and other educational institutions. The matter has been further examined in the Ministry and it is clarified that the Notification No. S.O. 3252 (E) dated 22.12.2014 provides exemption to buildings of educational institutions including universities from obtaining prior Environment Clearance under the provisions of the EIA Notification, 2006 subject to sustainable environmental Management. In case of medical universities/institutes the component of Hospitals will continue to require prior Environment Clearance.

The Guidelines to be followed for building projects to ensure sustainable environmental management in pursuance of Notification No. S.O.3252 (E) of 22nd December 2014 under EIA Notification 2006 are at Annexure-I.

This issues with the approval of the Competent Authority.


(Manoj Kumar Singh)
Joint Secretary

Copy to:-

1. All the officers of IA Division
2. The Chairperson/Member Secretaries of all the SEIAAs/SEACs.
3. The Chairman of all the Expert Appraisal Committees
4. The Chairman, CPCB
5. The Chairpersons/Member Secretaries of all SPCBs/UTPCCs.
6. IT Consultant, MoEFCC for uploading into the website.

Copy for information:

1. PS to MOS (Independent Charge).
2. PPS to Secretary (EF&CC).
3. All Divisional Head.
4. Website, MoEF&CC
5. Guard File.

**GUIDELINES TO BE FOLLOWED FOR BUILDING AND CONSTRUCTION PROJECTS
TO ENSURE SUSTAINABLE ENVIRONMENTAL MANAGEMENT
IN PURSUANCE OF NOTIFICATION No. S.O. 3252 (E) OF 22nd DECEMBER, 2014
UNDER ENVIRONMENT IMPACT ASSESSMENT NOTIFICATION, 2006**

[INDUSTRIAL SHED AND EDUCATIONAL INSTITUTIONS]

The Notification dated 22nd December, 2014 has taken out the industrial shed*, school, college, hostel for educational institution from the requirement of prior Environment Clearance (EC) under EIA Notification, 2006 and stipulated that such buildings shall ensure sustainable environmental management, solid and liquid waste management, rain water harvesting and may use recycled materials such as fly ash bricks. These Guidelines will be applicable to all buildings and constructions which come under the ambit of Notification No. S.O. (E) 3252 of 22nd. December 2014. To ensure sustainable environment management these guidelines as suited will be applicable on the projects under Item 8 (a) of EIA Notification in addition to the conditions stipulated in the EC.

Land, Air, Noise, Water, Energy, Biological, Socio-economic, and Solid & other Waste Management are the main environment facets to be considered in relation to pre, during & post building construction, therefore, it is necessary to ascertain the baseline data of these environmental facets.

The project proponent should file the information about description of project as per points described below prior to start of the project. Information pertaining to compliance on other points be filed at six monthly interval to the respective State Pollution Control Board and the Regional Office of the Ministry of Environment, Forests and Climate Change.

The compliance of the following will be ensured by the respective State Pollution Control Board before giving 'Consent-to-Operate' to industries and by the Local Urban Bodies and the Development Authorities while giving the 'Occupancy Certificate' to the buildings and constructions. These Certificates should be submitted by the above authorities to the Regional Office of MoEFCC. Ministry of Environment, Forest and Climate Change can assess/evaluate/monitor the compliance of conditions enumerated in the Guidelines through verification by Regional Offices or deputed organisations / person.

S. No.	Environmental Parameters	Implementation and monitoring parameters to be included in local by-laws.
a.	Pre-requisites	Brief description of the project 01.Name of the Project, Survey number, Village, Taluka, District, State to be mentioned with Google Earth Image and GPS Co-ordinates of the plot to be submitted. 02.Location & distance from nearby landmark places / services to be mentioned. 03.Total Built-up area (FSI and Non- FSI) should be mentioned with detailed calculations certified by local planning and sanctioning authority. 04.Form 1, Form 1A and Consolidated statement as per Environment Notification dated September 14, 2006 to be submitted to local planning and sanctioning authority, Regional Office, MoEFCC and SPCB
b.	Environment Impacts on Project Land	05.The building layout, set-back/side margin, podium, basement ventilation etc. is prepared based on local building bye-laws and is approved by local competent authorities. The Project Proponent shall obtain all necessary clearance/ permission from all relevant agencies including Town Planning Authority before commencing the work. 06.Provisional fire NOC to be obtained from local CFO (Chief Fire Officer) 07. "Consent-to-Establish and Consent-to-Operate" shall be obtained as required from State Pollution Control Board as provided in the Air (Prevention and Control of Pollution) Act, 1981 and Water (Prevention and Control of Pollution) Act, 1974 08.The project proponent shall put in place a credible enforcement mechanism for compliance of energy conservation measures with its allottees, as projected, in perpetuity. This would be monitored by the designated Energy Conservation/ efficiency Authority in the State. 09.Soil and ground water samples will be tested to ascertain that there is no



threat to ground water quality by leaching of heavy metals and other toxic contaminants.

10. Top fertile soil to be preserved and to be later used in landscape.
11. The excavation/demolition debris must be disposed off in designated landfill areas or to be used within site for levelling purpose. Under no circumstance, the debris will be disposed in river bed/lakes etc.
12. Undertaking to be given by project proponent that occupancy will be given only after drainage and water connections are in place.
13. Dust/smoke prevention measures such as wheel washing, water sprinkler, screening, barricading and debris chute must be installed.
14. This should comply with the provisions of eco-sensitive zone regulations, coastal zone regulations, heritage areas (identified in the master plan or issued separately as specific guidelines), water body zones (in such zones, no construction is permitted in the water-spread and buffer belt of 30 m minimum around the FTL [full tank level]), various hazard prone area regulations, and others if the site falls under any such area.
15. The site planning should take into account heat island effect, size and density of the built-up areas cause heat island effect, wherein higher air temperatures are created in the dense urban areas as against the low-rise surrounding built-up areas. The solar access in the morphology of clusters can be understood in terms of utilization of direct (and not reflected or diffused) solar radiation, mainly for day lighting and heat gain. This defines the minimal distances between the buildings and the relations between built-up volume and open spaces.
16. The proportion of open spaces and built-up edges should be designed such that it ensures winter solar access and summer ventilation.

c. Water

17. Proponent shall obtain permission for ground water withdrawal from State Ground Water Authority.
18. Storm water control and its re-use as per CGWB and BIS standards for various applications.
19. The natural flow of existing storm water channel should not be altered or diverted.
20. Keeping in view the use of large quantities of water in curing, measures for reducing water demand during construction should be followed. Curing water should be sprayed on concrete structures; free flow of water should not be allowed for curing. After liberal curing on the first day, all concrete structures should be painted with curing chemical to save water. Concrete structures should be covered with thick cloth/gunny bags and then water should be sprayed on them. This would avoid water rebound and will ensure sustained and complete curing. Ponds should be made using cement and sand mortar to avoid water flowing away from the flat surface while curing.
21. The developer should ensure groundwater and municipal water meet the water quality norms as prescribed in the Indian Standards for various applications (Indian Standards for drinking [IS 10500-1991], irrigation applications [IS 11624-1986]).
22. The use of potable water during construction should be minimized.
23. Separation of grey and black water should be done by the use of dual plumbing line for separation of grey and black water.
24. Source of water to be identified.
25. Water treatment measures such as filtration, softeners, RO etc should be implemented.
26. Low flow fixtures and sensors to be used to promote water conservation.
27. Water meters to be installed to monitor consumption of water.
28. Water balance table/chart should be prepared.

d. Waste Water Treatment

29. Sewage treatment plant of capacity capable of treating 100% waste water to be installed on site.
30. Tertiary treatment such as dual media filter, activated carbon filter and ozonization/ chlorination to be provided so that the treated water

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		characteristics are as per Central Pollution Control Board (CPCB) norms.
		31.If STP and pump room are installed in basement, adequate ventilation as per NBC air changes norms should be provided.
		32.Treated waste water to be recycled for flushing and gardening.
e.	Drainage Pattern	<p>33.Excess treated water disposal plan to be submitted.</p> <p>34.Total paved area of the site under parking, roads, paths or any other use should not exceed 25% of the site area or net imperviousness of the site not to exceed the imperviousness factor as prescribed by the NBC 2005 (BIS 2005b), whichever is more stringent.</p> <p>35.The final disposal point for excess treated water discharge will be municipal sewer for areas where sewerage network is present.</p> <p>36.In areas where sewerage network is absent, the excess treated water can be used for agriculture or can be disposed off as per CPCB rules.</p> <p>37.Storm water disposal plan to be submitted.</p> <p>38.The final disposal point for storm water will be municipal storm drain for areas where storm water network is present.</p> <p>39.In areas where storm water network is absent, the storm water surface runoff can be disposed off in nearby natural water streams/ nallas.</p>
f.	Ground Water	<p>40.Hydro-geological survey for ground water analysis shall be submitted.</p> <p>41.Aquifer capacity and Ground water yield shall be determined.</p> <p>42.Rain water harvesting plan shall be submitted indicating the number of recharge pits and bores and total rain water to be harvested.</p> <p>43.Rain water to be harvested and as a safety precaution, rainwater on-line filters be provided as per NBC norms.</p>
g.	Solid Waste Management	<p>A} During construction phase:</p> <p>44.Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. The Rules on the Solid Waste Management including Construction Waste issued by the MoEFCC as amended will be applicable.</p> <p>45.Construction spoils, including bituminous material and other hazardous materials, must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.</p> <p>46.Any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approvals of the State Pollution Control Board.</p> <p>47.Miscellaneous site debris such as broken tiles etc shall be used on site for leveling /backfilling purpose.</p> <p>48.Packaged STP /mobile toilets shall be provided for labour camp.</p> <p>49.Polymer bags used for cement and gypsum shall be handed over to authorized recyclers.</p> <p>50.Cardboard boxes and other packaging material will be handed over to authorized recyclers.</p> <p>B} Post construction phase:</p> <p>51.Organic waste composter (OWC) or Vermiculture pits shall be installed on site for biodegradable waste treatment (capacity calculated at 0.3kg/tenement/day) The manure generated shall be used for landscaping.</p> <p>52.The non-biodegradable waste or e-waste shall be handed over to authorized recyclers.</p> <p>53.STP sludge shall be removed using filter press or centrifuge mechanism. The dried sludge cakes shall be used as manure in landscaping.</p> <p>54.Minimize waste generation; streamline waste segregation, storage, and</p>

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disposal; and promote resource recovery from waste.

55. Resource recovery from waste: Employ resource recovery systems for biodegradable waste as per the Solid Waste Management and Handling Rules, 2000 of the MoEFCC. Make arrangements for recycling of waste through local dealers.

56. Use of covering sheets should be done for trucks to prevent dust dispersion from the trucks and washing of tyres when trucks with soil / debris coming on road.

57. Hazardous Waste Management: Products, such as paints, cleaners, oils, batteries, and pesticides that contain potentially hazardous ingredients require special care when being disposed. Improper disposal of household hazardous wastes can include pouring them down the drain, on the ground, into storm sewers, or in some cases putting them out with the trash.

The hazardous wastes from construction and demolition activities are centering oil, formwork oil, tar and tar products (bitumen, felt, waterproofing compounds, etc.), wood dust from treated wood, lead containing products, chemical admixtures, sealants, adhesive solvents, Explosives and related products and equipment used in excavation, acrylics, and silica, etc.

h. Air Quality
and Noise
Levels.

A} During construction phase:

58. The diesel required for operating DG sets shall be stored in underground tanks and clearance from Chief Controller of Explosives shall be taken, as applicable.

59. Ambient noise levels should conform to residential standards both during day and night as per Noise Pollution (Control and Regulation) Rules, 2000. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/ SPCB.

60. Burning of waste to be banned.

61. The construction site DG to be maintained regularly so that the smoke emission and noise levels are as per permissible norms.

62. Regular P.U.C check for all construction machinery coming on site be done.

63. Noise cancellation and insulation devices such as mufflers, barricades etc to be used to avoid noise propagation to adjoining areas.

B} Post construction phase:

64. DG to be regularly maintained so that the smoke emission and noise levels are as per permissible norms. It shall be at least 6 meters away from the boundary.

65. Air quality monitoring to be done quarterly.

66. STP and water pumps, air blowers etc should be installed with noise cancellation devices or suitable acoustical enclosures to be given so that the noise levels as per NBC norms are maintained.

C} During Construction & Operation

67. The provisions of the Air (Prevention and Control of Pollution) Act, 1981 (14 of 1981) and the rules made thereunder be complied for control of noise pollution during construction and operation.

68. Setting up the barriers: National Building Code 2005 suggests that design solutions such as barrier blocks should be used to reduce external LA10 noise levels to at least 60-70 dB (A) at any point 1.0 m from any inward looking façade. Green belts and landscaping could act as an effective means to control noise pollution. In case of railway tracks, a minimum distance of 50m to 70m may be provided between the buildings and the tracks.

i. Energy

69. Appropriate processes and material be used to encourage reduction in carbon foot print.

70. Use of glass be reduced by up-to 40% to reduce the electricity consumption and load on air-conditioning. If necessary, use high quality double glass with special reflective coating in windows.

71. Solar water heater to be provided adequately.

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72. Common area lighting should be Solar / LED.
73. Install energy meters to monitor overall consumption, and timer-switch for all common area lighting, and other consumption of measurable energy.
74. Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 3rd November, 2009.
75. Wherever possible recycled materials having low embodied energy be used.
76. Use of light coloured, reflective roofs having an SRI (solar reflectance index) of 50% or more should be promoted. The dark coloured, traditional roofing finishes have SRI varying from 5% to 20%.
77. Optimize use of energy systems in buildings that should maintain a specified indoor environment conducive to the functional requirements of the building by following mandatory compliance measures (for all applicable buildings) as recommended in the Energy Conservation Building Code (ECBC) 2007 of the Bureau of Energy Efficiency, Government of India. The energy systems include air conditioning systems, indoor lighting systems, water heaters, air heaters, and air circulation devices.
78. Use the concept of passive solar design of buildings using architectural design approaches that minimize energy consumption in buildings by integrating conventional energy-efficient devices, such as mechanical and electrical pumps, fans, lighting fixtures, and other equipment, with the passive design elements, such as building orientation, landscaping, efficient building envelope, appropriate fenestration, increased day lighting design, and thermal mass.
79. The building should be oriented optimally based on Sun-path and engineering analysis to curtail excessive solar radiations.
80. Lighting systems should comply with the ECBC 2007 and applicable to interior spaces of buildings, exterior building features, including facades, illuminated roofs, architectural features, entrances, exits, loading docks, and illuminated canopies, exterior building grounds etc. except emergency lighting and lighting in dwelling units.
81. All the point light sources installed in the building for general lighting shall be LEDs or LEDs or equivalent. All the linear light sources installed in the building for general lighting shall be T-5 or at least 4 Star BEE rated TFLs or equivalent. The installed interior lighting power shall not exceed the LPD (Lighting Power Density) value as recommended by ECBC 2007.
82. Automatic Lighting shutoff control be installed: Interior lighting/Exterior Lighting systems shall be equipped with an automatic control device in accordance with ECBC 2007. Occupancy sensors that shall turn the lighting off within 30 minutes of occupant leaving the space. It should also have option for manual turning on lights when the space is occupied. ECBC requires controls in day lit areas that are capable of reducing the light output from luminaries by at least half and Controlling of exterior lighting with photo-controls where lighting can be turned off after a fixed interval.
83. The tapping of renewable sources of energy for lighting, heating, cooling and ventilation needs, deserve special attention. For captive solar power generation, a minimum of 15 percent of sanctioned load is the requirement.
84. Solar photovoltaic (SPV) systems are direct energy conversion systems that convert solar radiation into electric energy. SPV systems should be installed to reduced use of conventional sources of energy. Roof tops of buildings as well as other exposed areas such as of parking shades should be utilized for installation of SPV systems.
85. Hot water requirement in buildings should be met through use of various types of solar water heating systems, viz. flat plate collector: single glazed double glazed; evacuated tube collectors; and Water heating with solar concentrators.
86. The Project Proponent should ensure regular energy audit.
- i. To validate the predicted energy consumption, thermal comfort, and visual comfort criteria by an energy auditor approved by the BEE, Government of India.
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		<p>ii. To ascertain continued safety in the operation of the electrical and mechanical systems of the building through proper maintenance by the owner or the occupants.</p> <p>87. This will be ensured in the contract document by providing for the commissioning of all electrical and mechanical systems by the respective supplier or builder. Moreover, the respective facility management group, assigned by the owner or the occupants themselves, will carry out the maintenance facilities.</p> <p>88. Energy conservation measures like installation of CFLs/LEDs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Used CFLs and TFLs should be properly collected and disposed off /sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible.</p>
j.	Traffic Movement System	89. Width of driveways, parking provision, ramp width and slope to be kept as per local bye laws.
k.	Provisions for Differently able	<p>90. The Project Proponent should provide at least the minimum level of accessibility for persons with disabilities.</p> <ul style="list-style-type: none"> • Ensure accessibility and usability of the facilities in the building by employees, visitors and clients with disabilities. • Ensure access to facilities and services by adopting appropriate site planning to eliminate barriers as per the recommended standards (NBC 2005 [BIS 2005f]). • Layout and designing of interior and exterior facilities as per principles of universal design such as prescribed by the National Building Code of India, building management policies and procedures, provision of auxiliary aids & appliances, and staff training in disability awareness.
l.	Green Belt/Green Cover	<p>91. Provide minimum 1 tree for every 80 sq.mt of plot area.</p> <p>92. Wherever trees are cut or transplanted, compensatory plantation in the ratio of 1:3 to be done in the premise.</p> <p>93. Native species of trees to be planted.</p> <p>94. Vegetation to provide as shading and promote evaporative cooling. In hot and dry climates, evaporative cooling through appropriately sized wet surfaces or fountains have a desirable effect. It should be planned for maximum benefit.</p> <p>95. The project should have detail proposal for tree plantation, landscaping, creation of water bodies etc along with a layout plan to an appropriate scale.</p>
m.	Disaster/Risk Assessment Plan	<p>96. Fire tender movement plan to be submitted.</p> <p>97. Firefighting system to be provided as per the fire NOC.</p> <p>98. Turning radius to be kept as per Fire NoC or as prescribed in the local by-laws.</p> <p>99. Public address system to be installed as per the Fire Safety norms.</p> <p>100. Place of assembly to be indicated.</p>
n.	Socio Economic Impact and CSR	<p>101. Biodegradable and non-biodegradable waste bins to be provided for every household to promote waste segregation at source.</p> <p>102. Importance of environment and various environment drives to be initiated.</p> <p>103. Importance of maintenance of environment infrastructure to be showcased by issuing pamphlets etc.</p> <p>104. Provision for health care, medical kit, crèche, First-Aid room shall be given during construction phase for the construction workers.</p> <p>105. Adequate shelter for resting hours, crèche, clean and potable drinking water to be provided to construction workers.</p> <p>106. All local labour welfare laws must be complied.</p> <p>107. Concerns of the communities being affected by the Project are to be responded on priority, and all possible CSR is to be rendered to make the responses effectively beneficial..</p>

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| o. Environment Management Plan (EMP) | <p>108. Detailed environment management plan comprising of estimated capital cost and O&M cost for the following environment infrastructure should be submitted:</p> <ul style="list-style-type: none">a. Sewage Treatment Plantb. Landscapingc. Rain Water Harvestingd. Power backup for environment infrastructure.e. Environment Monitoringf. Solid Waste Managementg. Solar and Energy Conservation <p>109. Environment Monitoring Cell with defined functions and responsibility shall be set up and its details be submitted.</p> |
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END NOTE:

Industrial Shed*: The word 'industrial shed' implies building (whether RCC or otherwise) which is being used for housing plant and machinery of industrial units and shall include godowns and buildings connected with production related and other associated activities of the unit in the same premise.

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F. No. Z-11013/8/2016-IA.II (M)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003

Dated: 15 -03-2016

Office Memorandum

Subject: Clarification regarding considering of EC projects for mining of minor mineral-Amendments in the EIA Notification, 2006 dated 15.01.2016 and Constitution of DEIAA/DEAC-regarding

The Ministry of Environment, Forest and Climate Change has notified the amendments in the EIA Notification, 2006, vide SO No. 141 (E) on 15.01.2016, for minor minerals. The Ministry, for the first time, has delegated the Authority of Environmental Clearance up to 5 hectare of individual mining lease of minor minerals and 25 hectares in clusters to the District Environment Impact Assessment Authority (DEIAA) headed by the District Magistrate/District Collector. A District Expert Appraisal Committee (DEAC) has also been constituted under the chairmanship of the Executive Engineer, Irrigation Department to assist the DEIAA. Further, the Ministry, vide Gazette Notification dated 20.01.2016, has also constituted DEIAAs/DEACs.

2. The Ministry is receiving a number of communications requesting clarification regarding the processing of the EC proposals for mining of minor minerals which were received in the SEIAA/SEAC before the issue of the above said notifications.

3. The matter was examined in the Ministry and accordingly the undersigned is directed to clarify that the category B2 Projects, which now as per notification dated 15.01.2016 and 20.01.2016 has to be appraised at the level of DEAC and EC to be granted by DEIAA for mining of minor minerals; where SEAC has recommended the cases for Environmental Clearance are to be processed at the level of SEIAA for grant of Environmental Clearance.

4. This issues with the approval of the Competent Authority.



(Dr. U. Sridharan)
Director (S)

To,

1. The Chairman SEIAAs/SEACs
2. The Member Secretary SEIAAs/SEACs
3. The Chairman DEACs/DEIAAs
4. The Member Secretary DEACs/DEIAAs
5. MoEFCC's Website

F. No. J-11013/36/2014-IA-I
Government of India
Ministry of Environment, Forest & Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road
New Delhi- 110003.

Dated: 4th April 2016

Office Memorandum

Subject: Exemption from Public Consultation for the projects/activities located within the Industrial Estate/Parks-reg.

In Original Application (O.A.) No. 157 (THC) / 2013 (Society for Environmental Protection Vs. Union of India & Ors) before Hon'ble National Green Tribunal (Western Zone), Pune, in its order dated 14th March 2016 has ordered that " ... We have seen from the provisions of Environment Clearance Regulations, 2006, the Schedule appended to the Rules enumerates several projects and activities which require prior clearance and there is a tabular form showing the size of the industry and the threat or damage it is likely to cause to the environment. Therefore, we do not find there should be any difficulty in modifying or superseding O.M. dated 10th December, 2014 because all that MoEF&CC is required to do is to specify which of the industries depending upon the nature of industrial activity require prior permission etc; such of the unit which could be exempted ...".

2. The concept of Public Hearing was introduced for the first time in the Environment Impact Assessment *vide* Notification S.O. 60 (E) dated 27.01.1994 and subsequently formalized *vide* Notification S.O. 318 (E) dated 10.04.1997 making amendment in the Environment Impact Assessment Notification, 1994. Whereas, the Industrial Estates were added in the Schedule to the EIA Notification mandating the requirement of environmental clearance *vide* notification S.O. 801 (E) dated 7.07.2004. In between, the above two notifications, another notification No. S.O. 737 (E) dated 1st August, 2001 introducing the concept of exemption from public hearing for certain category of projects and activities in the process of environmental clearance was published. The said notification reads as "However, Public Hearing is not required in respect of (i) small scale industrial undertakings located in (a) notified / designated industrial areas / industrial estates or (b) areas earmarked for industries under the jurisdiction of industrial development authorities; (ii) widening and strengthening of Highways; (iii) mining projects (major minerals) with lease area up to twenty-five hectares, (iv) units located in Export Processing Zones, Special Economic Zones and (v) modernization of existing irrigation projects." The provisions of this notification were reflected as Para 7 of the new EIA Notification, 2006 with some more additions.

3. The Hon'ble NGT, Western Zone, Pune based on the interpretation of the provision of Para 7 (i) III. Stage (3) (i) (b) of the EIA Notification, 2006 given by the Ministry *vide* O.M. No. J-11013/ 36 / 2014- IA-I dated 16th May 2014 ordered on 8th August 2014 in above O.A. that exemption from public consultation will be available to only those industrial units which are coming up in industrial estates which have got environmental clearance under EIA Notification, 2006. The O.M. dated 16th May 2014

Contd 2/-

issued by the Ministry, was reviewed in the Ministry in the light that the EIA Notification 2006 on this subject provides for exemption from public consultation for the industries coming up in industrial areas, means that those industrial areas must be in existence on the day of EIA Notification, 2006, as is the case of other category of projects and activities which have got this exemption under Para -7 of the EIA Notification, 2006. The Ministry clarified the status as per the provisions vide O.M. No. J-11013/ 36 / 2014- IA-I dated 10th December 2014. The above O.M. dated 10th December 2014 was also challenged before the Hon'ble High Court of Madras, in W.P. No. 3514 of 2015; Hon'ble Court ordered on 10.09.2015 that "... we are thus of the view that the impugned notification / Office Memorandum cannot be faulted and if there is any individual grievance qua any particular nature existing, it is always open to the petitioner to move the NGT with requisite material. The writ petition accordingly stands dismissed with aforesaid observations."

4. The above O.A. (157 (THC) / 2013) was instituted against EC given to a Thermal Power Plant of 6 x 276 MW over an area 546.55 ha of land in which public hearing was exempted as the said TPP was in industrial area.

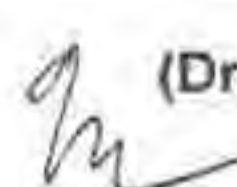
5. The industrial estate in EIA Notification, 2006 in Schedule at Item 7 (c) provides that industrial estates with an area greater than 500 ha and housing at least one Category B industry will be Category A, and industrial estate of area greater than 500 ha. and not housing any industry belonging to Category A and B is Category B. Industrial estate of area below 500 ha and not housing any industry of Category A or B does not require prior environmental clearance under EIA Notification, 2006. If the area is less than 500 ha but contains building and construction projects greater than 20000 sq. mt. and development area more than 50 ha. it will be treated as activity listed at S.No. 8 (a) or 8 (b) in the Schedule as the case may be.

6. It is evident from the Notification of 2001 as mentioned above and provisions at item 7 (c) of EIA Notification, 2006 regarding size of the industrial estates, the intent of the Notification has been to grant exemption from public consultation for small industrial units located in industrial estates of 500 to 1000 ha. area. The industrial units or activities itself located on an area of 500 ha in industrial estate or regions of 10000 ha. has not been in the intent to be granted exemption from public consultation. So a Thermal Power Plant, Cement Plant, or Integrated Steel Plant even if located in notified Industrial Regions / Zones cannot be granted exemption from the public consultation, as that is not the intent of the EIA Notification, 2006.

7. It is accordingly clarified that the category of projects and activities mentioned in the Annexure of this O.M. will require Public consultation in the process of Environment Impact Assessment and environmental clearance irrespective of its location in or outside a notified industrial area / estate / region.

8. The O.M. No. J-11013/ 36 / 2014- IA-I dated 16th May 2014 and dated 10th December 2014 will stand modified to the extent of this O.M.

This issues with the approval of the Competent Authority.


(Dr. Satish C. Garkoti)
Scientist 'F'

Distribution :

1. Chairman of All the Expert Appraisal Committees

3. All officers of Impact Assessment Division, MoEFCC

Copy for information:

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3. PPS to SS(SK)
4. PS to JS (MKS)
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6. Website, MoEFCC
7. Guard File

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Projects or Activities where Public consultation will be required as a part of the Environment Impact Assessment Process even if they are located in notified industrial areas / regions / zones / EPZ

S.N. in Schedule of EIA Notification, 2006	Project or Activity
1 (d)	Thermal Power Plants
1(e)	Nuclear power projects and processing of nuclear fuel
2 (a)	Coal washeries
2(b)	Mineral beneficiation
3 (a)	Metallurgical industries(ferrous & non ferrous)
3 (b)	Cement plants
4 (a)	Petroleum refining industry
4 (b)	Coke oven plants
4 (c)	Asbestos milling and asbestos based products
4 (f)	Skin / hide processing including tanning industry
5 (g)	Distilleries
5 (i)	Pulp paper paper industry
5 (j)	Sugar Industry

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F. No. 22-27/2015-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
All Ganj, Jor Bagh Road
New Delhi- 110003.

Dated the 12th April, 2016

OFFICE MEMORANDUM

Subject: Notifications Issued by the Ministry of Environment, Forest and Climate Change vide S.O. No. 1141 (E) dated 29.04.2015 and S.O. No. 2571 (E) dated 31.08.2015 under the provisions of the EIA Notification 2006 regarding extension of Validity of Environmental Clearance-Clarification regarding.

The undersigned is directed to inform that in respect of the subject mentioned above, the Ministry has decided to clarify the applicability of the Notifications as under:

- (i) The Environmental Clearance of the projects which had not completed five (5) years on the date of publication of Notification i.e. 29.04.2015, their validity will stand automatically extended to seven (7) years.
- (ii) The Environmental Clearance of the projects which have completed five (5) years on the date of publication of Notification i.e. 29.04.2015 and the project proponents submitted application for extension of their validity within the validity period of five (5) years, the validity of such environmental clearances will also be extended to seven (7) years.
- (iii) The Environmental Clearance of the projects which have completed five (5) years on the date of publication of Notification i.e. 29.04.2015 and application of seeking extension of validity has not been submitted within the validity period by the project proponent, their extension of validity will be decided on case to case basis.

This issues with the approval of the Competent Authority.


(Dr. Satish C. Garkoti)
Scientist 'F'

To

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAAs / SEACs
3. Chairman, CPCB
4. Chairpersons / Member Secretaries of all SPCBs / UTPCCs

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6. Guard File

F. No. 22-27/2015-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
All Ganj, Jor Bagh Road
New Delhi- 110003.

Dated the 12th April, 2016

OFFICE MEMORANDUM

Subject: Notifications Issued by the Ministry of Environment, Forest and Climate Change vide S.O. No. 1141 (E) dated 29.04.2015 and S.O. No. 2571 (E) dated 31.08.2015 under the provisions of the EIA Notification 2006 regarding extension of Validity of Environmental Clearance-Clarification regarding.

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This issues with the approval of the Competent Authority.


(Dr. Satish C. Garkoti)
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J-11013/5/2010-LA.II-(I)
Government of India
Ministry of Environment, Forest and Climate Change

Indira Paryavaran Bhawan
Aligarj, Jor Bagh Road
New Delhi- 110003

Dated the 20th May, 2016

OFFICE MEMORANDUM

Subject: Consideration of projects for environmental clearance based on Comprehensive Environmental Pollution Index (CEPI) – Lifting of Moratorium in respect of industrial cluster/ area of Chandrapur (MIDC Chandrapur, Tadali, Ghuggus, Ballapur), Maharashtra – regarding.

The Ministry of Environment, Forest and Climate Change *vide* Office Memorandum of even No. dated 13.01.2010 had imposed a moratorium up to 31.08.2010 on consideration of projects for environmental clearance to be located in 43 critically polluted area/ industrial clusters indentified by Central Pollution Control Board. The details of the industrial clusters / areas were further specified in the Office Memorandum dated 15.03.2010. It was envisaged that during the period of moratorium, time bound action plans will be prepared by the respective SPCBs / PCCs for improving the environmental quality in these industrial clusters/ areas. The action plans so prepared would be finalized by CPCB. The period of moratorium was extended beyond 31.08.2010 from time to time.

2. The status of preparation of action plans was reviewed in the Ministry of Environment, Forest and Climate Change from time to time, based on the inputs received from Central Pollution Control Board (CPCB). In accordance with the information received from the Central Pollution Control Board that the respective SPCBs and the local stakeholders had initiated work on implementation of the submitted action plans in respect of the industrial areas / clusters namely (i) Tarapur (Maharashtra), (ii) Pattencherru-Bollaram (Andhra Pradesh), (iii) Coimbatore (Tamil Nadu), (iv) Vapi (Gujarat), (v) Mandi-Govindgarh (Punjab), (vi) Agra (Uttar Pradesh), (vii) Aurangabad (Maharashtra), (viii) Bhavnagar (Gujarat), (ix) Cuddalore (Tamil Nadu), (x) Dombivalli (Maharashtra), (xi) Ludhiana (Punjab), (xii) Navi Mumbai (Maharashtra), (xiii) Varanasi-Mirzapur (Uttar Pradesh), (xiv) Angul Talchar (Orissa), (xv) Faridabad (Haryana), (xvi) Ghaziabad (Uttar Pradesh), (xvii) Indore (Madhya Pradesh), (xviii) Junagadh (Gujarat), (xix) Noida (Uttar Pradesh), (xx) Panipat (Haryana), (xxi) Badravati (Karnataka), (xxii) Mangalore (Karnataka), (xxiii) Greater Kochi (Kerala), (xxiv) Singrauli (Madhya Pradesh Part and Uttar Pradesh Part), (xxv) Ib Valley (Orissa), (xxvi) Jharsuguda (Orissa), (xxvii) Bhiwadi (Rajasthan), (xxviii) Dhanbad (Jharkhand), (xxix) Manali (Tamil Nadu), (xxx) Ahmedabad (Gujarat), (xxxi) Korba (Chhattisgarh), (xxxii) Asansole (West Bengal), (xxxiii) Haldia (West Bengal), (xxxiv) Howrah (West Bengal), (xxxv) Vishakhapatnam (Andhra Pradesh) and (xxxvi) Kanpur (U.P.) the Ministry of Environment, Forest and Climate Change lifted the moratorium on consideration of projects for environmental clearance in the above mentioned Thirty Six (xxxvi) industrial clusters/ areas *vide* Office Memoranda of even no. dated 26th October, 2010, 15th February, 2011, 31st March 2011, 23rd May, 2011, 5th July, 2011 and

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17th September, 2013. In the remaining Seven identified industrial clusters, namely, (i) Ankleshwar (Gujarat), (ii) Pali (Rajasthan), (iii) Vatva (Gujarat), (iv) Vellore (Tamil Nadu), (v) Najafgarh Drain Basin (UT Delhi) (vi) Chandrapur (Maharashtra) and (vii) Jodhpur (Rajasthan) the moratorium was decided to be extended till further orders vide OM of even No. dated 17.09.2013.

3. The CPCB conducted monitoring in the Chandrapur (Maharashtra) Critically Polluted Areas (CPA) during February- March, 2016 and re-assessed the CEPI score. The CPCB, *vide* its communication, dated April 18, 2016 informed MoEFCC about the revised CEPI score based on the monitoring conducted during February-March, 2016.

4. The evaluation of the CEPI score in the Chandrapur (Maharashtra) is 54.42, as compared to the CEPI score assessed by CPCB in 2013 (81.90). It has also been intimated that the action plan formulated for Chandrapur is at various stages of implementation.

5. In view of the re-assessment of CEPI score and taking into consideration that action plans for improving environment quality take time to yield results, it has been decided to lift the moratorium on the consideration of projects for environmental clearance in respect of projects to be located in the Chandrapur (Maharashtra), where CEPI score is below 70 as compared to the CEPI score of 2013 (81.93), subject to the following conditions:

- (i) CPCB and the SPCB will immediately put the approved action plan on their website along with implementation status.
- (ii) The SPCB to ensure that any new project / activity or any expansion or modernization of existing project or activity or any change in product mix is in line with the overall approved action plan of the CPA.
- (iii) The implementation of action plan of CPA to be reviewed by the Chairman, SPCB on quarterly basis and report sent to CPCB by the 7th day of the month succeeding the end of quarter. It would be insured that there is no slippage either in terms of time frame or the activities to be completed relating to the action plan.
- (iv) Monitoring in CPA be got done by SPCB through a third party on annual basis for computing CEPI. The monitoring be done during December-February and the report sent to CPCB by April. CPCB, in turn, to submit its report to MoEFCC.
- (v) Monitoring in CPA be got done by CPCB through a third party on biennial basis for computing CEPI and report submitted to MoEF for taking an appropriate view.
- (vi) The EAC/ SEAC will take extra precaution during appraisal of projects to be located in these areas and prescribe the requisite stringent safeguard measures, so that the environmental quality is not deteriorated further in the CPA.

If at any time it comes to the notice of CPCB that action plan in the CPA is not being implemented properly or the CEPI index in CPA is showing an increasing trend, it will immediately bring the factual position to the notice of MoEFCC and MoEFCC would consider taking an appropriate view in the matter which may include re-imposition of moratorium.

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6. In respect of Six remaining CPAs, namely Ankaleshwar (Gujarat), Pali (Rajasthan), Vatva (Gujarat), Vellore (Tamil Nadu), Najafgarh Drain Basin (UT Delhi) and Jodhpur (Rajasthan) the moratorium will continue till further orders.

This issues with the approval of the Competent Authority.


(Dr. S.C. Garkoti)
Scientist 'F'

To:

1. All the Officers of IA Division
2. Chairpersons / Member Secretaries of all the SEIAAs/SEACs
3. Chairman, CPCB
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs.

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7. Website, MoEFCC
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11

No. J-11015/109/2013-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhavan,
Jor Bag Road, Aliganj
New Delhi-110 003

Dated the 12th January, 2017

OFFICE MEMORANDUM

Subject: Validity of Terms of Reference (TORs) prescribed under EIA Notification, 2006 for undertaking detailed EIA and EMP studies for developmental projects requiring environmental clearance and other related issues-clarification regarding.

Reference: Office Memoranda No. J-11013/41/2006-IA-II (I) (Pt.), dated 22.08.2014; 08.10.2014 and 07.11.2014.

The Ministry of Environment, Forest and Climate Change *vide* Office Memoranda No. J-11013/41/2006-IA-II (I) (Pt.) dated 22.08.2014; 08.10.2014 and 07.11.2014 prescribed a time limit for validity of Terms of Reference (TORs) for a period of three years for submission of EIA and EMP reports after public consultation and also that this period would be extendable to fourth year, based on proper justification and recommendation of the EAC/SEAC, as the case may be. Thus an outer limit of four years for validity of TORs has been prescribed for any developmental project, except River Valley and HEP Projects, where the outer limit validity of TOR is five years.

2. The para 2 (ii) of OM No. J-11013/41/2006-IA-II (I) (Pt.) dated 22.08.2014, mentioned that *"This period of validity could be extended by the Regulatory Authority concerned by a maximum period of one year provided an application is made by the applicant to the Regulatory Authority, atleast three months before the expiry of validity period, together with an updated Form-I, based on proper justification and also recommendation of the EAC/SEAC"*.


3. The matter has been examined in the Ministry and it has been decided that if the project proponent make the application for extension of the

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validity of TORs before its expiry, it should be considered and accordingly para 2(ii) of OM No. J-11013/41/2006-IA-II (I) (Pt.) dated 22.08.2014, may be amended and read as,

"This period of validity could be extended by the Regulatory Authority concerned by a maximum period of one year provided an application is made by the applicant to the Regulatory Authority before the expiry of validity period, together with an updated Form-I, based on proper justification and also recommendation of the EAC/SEAC".

4. The other stipulations stated in OM dated 22.08.2014 will continue to apply.
5. This issues with the approval of the Competent Authority.


(Satish C. Garkoti)
Scientist 'F'

Copy to:

1. All the officers of IA Division
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/ Member Secretaries of all the SEIAAs/SEACs
4. Chairman, CPCB
5. Chairpersons/ Member Secretaries of all SPCBs/ UTPCCs

Copy for information:

1. PS to MEFCC
2. PPS to Secretary(EFCC)
3. PPS to SS(RRR)
4. PS to JS(MKS)
6. PS to JS (GB)
7. Website, MoEFCC
8. Guard File



F. No.J-13011/ 18/2014-IA.I (T)
Government of India
Ministry of Environment, Forest & Climate Change
(IA-I Division)

Indira Paryavaran Bhawan,
3rd Floor, Vayu Wing,
Jor Bagh Road, New Delhi-110003

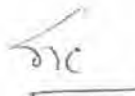
Dated: 15th March, 2017

Office Memorandum

Sub: -Delinking of Environment Clearance for Thermal Power Plants from the Stage-I FC of linked captive coal block.

Ministry of Environment Forest & Climate Change (MoEF&CC) vide OM No. J-11013/41/2006-IA.II (I) dated 19.04.2012 has, inter-alia, provided that EC of Thermal Power Projects (TPPs) would be issued only after EC and Stage-I FC of linked coal mine. However, this condition was dispensed with for Ultra Mega Power Plants (UMPPs) vide OM No. J-11013/41/2006-IA.II (I) dated 30.12.2013 and the same was reiterated vide OM No. Z-11013/01/2016-IA.I dated 5.4.2016 with the condition that the coal block does not fall under the category of inviolate area and the bid coordinator/SPV should immediately after allocation of coal block initiate the process of securing EC/FC for the coal block instead of waiting for the process to be initiated by the successful bidder.

2. Time and again, Ministry of Power has been requesting to extend this dispensation given to UMPPs to all the TPPs in order to expedite clearances of TPPs and to bring investment in this sector.
3. The Ministry has considered and examined the request of Ministry of Power at length. Now, in supersession of the OM No. J-11013/41/2006-IA.II (I) dated 30.12.2013, OM No. Z-11013/01/2016-IA.I dated 5.4.2016 and in partial modification of para 7 of O.M. No. J-11013/41/2006-IA.II (I) dated 19.04.2012, it is now decided that EC for the TPPs including UMPP can be considered and issued without linking it with prior EC and FC Stage-I for the linked coal blocks subject to fulfillment and firm commitment in respect of the followings:
 - i. The TPP has firm coal block;
 - ii. The coal block does not fall under the category of inviolate area;
 - iii. The project proponent of Thermal Power Plant or the Bid Coordinator/SPV as in case of Ultra Mega Power Project shall initiate process of securing EC/FC for the Coal Block on its allocation; and


J. C. Jaiswal

- iv. The Project Proponent shall provide all relevant information with reference to coal characteristics like Gross Calorific Value, moisture, sulphur, ash, volatile matter, fixed carbon, location of mine and any other parameter as decided by MoEF&CC.

This issues with the approval of the Competent Authority.


(Dr. S. Kerketta)
Director
☎: 24695314

To

All officers of I.A. Division

Copy to:

- (i) PS to MEF&CC
- (ii) PPS to Secretary (E,F&CC)
- (iii) PPS to SS
- (iv) PPS to JS (MKS) & JS (GB)
- (v) All SEIAAs/ SEACs
- (vi) Website of MoEF&CC
- (vii) Guard File

No. J-11013/41/2006-IA.II(I)
Ministry of Environment, Forest and Climate Change
Government of India
(Impact Assessment Division)

Paryavaran Bhawan
Jorbagh Road
New Delhi-110003

Dated: 7th July, 2017.

OFFICE MEMORANDUM

The Ministry is in receipt of references seeking clarification on the applicability of Environment Impact Assessment Notification, 2006 on Solar Photo Voltaic (PV) Power Projects; Solar Thermal Power Plants; and Development of Solar Parks.

2. The status on non-applicability of Environment Impact Assessment Notification, 2006 on Solar Photo Voltaic (PV) Power Projects has been clarified by O.M. No. J-11013/41/2006-IA.II(I) dated 13th May 2011. Similarly, the status on non-applicability of EIA Notification, 2006 has been clarified vide Ministry's O.M. No. J-11013/41/2006-IA.II(I) dated 30th June 2011. This notification also stipulates the general environmental norms to be followed by such projects.

3. The matter of applicability of item 8(a), 8(b) and 7(c) of the Schedule of EIA notification, 2006 on the projects of Solar Photo Voltaic (PV) Power Projects, Solar Thermal Power Plants and Development of Solar Parks has been further examined in the Ministry. It is clarified that the provisions of the Environment Impact Assessment Notification, 2006 is not applicable to the above projects subject to such projects following the environmental and statutory stipulations made in the above O.M. dated 30th June 2011.

4. It is also clarified that the disposal of Photo Voltaic Cells attracts the provisions of the Hazardous and Other Waste (Management and Trans-Boundary Movement) Rules, 2016.

5. The development of Solar Parks shall attract the provisions of the Water (Prevention and Control of Pollution) Act, 1974 and the Air (Prevention and Control of Pollution) Act, 1981.

This issues with the approval of Competent Authority


(Sharath Kumar Pallerla)
Director
sharath.kr@gov.in

Copy to:

1. The Secretary, Ministry of New and renewable Energy, Block No. 14, CGO Complex, Lodi Road, New Delhi - 110003
2. The Secretary, Department of Environment, Government of Rajasthan, Secretariat, Jaipur
3. Shri. Bibhu Bishwal, Vice President, Saurya Urja Company of Rajasthan Limited, 701-703, 7th Floor, Kailash Tower, Near Apex mall, Lalkothi, Tonk Road, Jaipur - 302015

No. J-11013/41/2006-IA-II (I) (Part)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Dated: 29th August, 2017.

OFFICE MEMORANDUM

Subject: Terms of Reference for EIA/EMP studies for the projects/activities requiring Environmental Clearance under the EIA Notification, 2006 - Extension of validity period - regarding.

In order to streamline the process and provide greater clarity in issuing Terms of Reference (ToRs) for undertaking EIA/EMP studies for the projects/activities requiring Environmental Clearance under the EIA Notification, 2006, the following decisions have been taken with immediate effect:


- (i) The validity of ToRs for projects/activities (except for River Valley and HEP Projects), for submission of EIA/EMP reports shall be three years.
- (ii) The validity of ToRs for River Valley and HEP Projects, for submission of EIA/EMP report shall be four years.
- (iii) The above validity period can be extended by the concerned Regulatory Authority for a maximum period of one year without referring the proposal to the EAC/SEAC concerned, provided an application is made by the applicant before expiry of the validity period, together with an updated Form-1 and proper justification and there is no change in terms and conditions of the ToRs. After the lapse of validity, such extension will need EAC/SEAC consideration.
- (iv) Thus, an outer limit of validity of ToRs shall be 4 years for all the projects/activities and 5 years for River Valley and HEP Projects.
- (v) The ToRs will specifically mention the date of expiry of validity.
- (vi) Extension of validity of ToRs beyond the outer limit of four years for all projects/activities, and five years for River Valley and HEP projects, shall not be allowed/considered by the Regulatory Authority.
- (vii) The baseline data used for preparation of EIA/EMP reports may be collected at any stage, irrespective of the request for ToR or the issue thereof. However, such a baseline data and the public consultation should not be older than 3 years, at the time of submission of the proposal, for grant of Environmental Clearance, as per ToRs prescribed.

- (viii) Public consultation shall be conducted during the validity of the ToRs. The public consultation conducted after the expiry of ToRs shall not be accepted by the Regulating Authority.
- (ix) In case the proposal for Environmental Clearance along with EIA/EMP reports based on the ToRs prescribed, is not submitted within the validity period of ToRs, and/or not complying with the above conditions, the process shall be started *de novo*. The already collected baseline data may be re-used, provided it is not more than 3 years old and duly recommended by EAC/SEAC in their due diligence.
- (x) In case, any proposal for ToR is delisted for want of additional information within the time period, as stipulated by the Ministry, the same can be listed again after the requisite information is submitted.

2. This Office Memorandum is issued in supersession of the earlier OMs of this Ministry as under:

- i) No. J-11013/ 41/2006-IA-II (I) dated 22.03.2010;
- ii) No. Z-11012/1/2013-IA-I (Part) dated 19.11.2013;
- iii) No. Z-11012/1/2013-IA-I (part) dated 12.12.2013;
- iv) No. J-11013/ 41/2006-IA-II (I) dated 22.08.2014;
- v) No. J-11013/ 41/2006-IA.II (I) dated 08.10.2014;
- vi) No. J-11013/41/2006-IA.II(I) dated 07.11.2014; and
- vii) No. J-11015/109/2013-IA.II(M) dated 12.01.2017

3. This issues with the approval of the competent authority.


 (Sharath Kumar Pallerla)
 Scientist 'F'

Copy to:

- 1. All the officers of IA Division
- 2. Chairperson/Member Secretaries of all the SEIAAs/SEACs
- 3. Chairman of all the Expert Appraisal Committees
- 4. Chairman, CPCB
- 5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information:

- 1. PS to Minister for Environment, Forest and Climate Change
- 2. PPS to Secretary(EF&CC)
- 3. PPS to AS(AKJ) / AS (AKM)
- 4. PPS to JS(GB) / JS(JT)
- 5. Website, MoEF&CC
- 6. Guard file

No. J-11013/6/2010-IA.II (Part)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi-110003

Dated: 7th September, 2017.

CIRCULAR


Subject: Environmental Clearance to the expansion projects / activities under the EIA Notification, 2006 - Certified Compliance Report regarding

This is in continuation to this Ministry's Circular No.J-11011/618/2010-IA(II)(I) dated 30/05/2012 wherein it was directed that for consideration of Environmental Clearance (EC) to all expansion projects activities Under the Environment Impact Assessment Notification, 2006, the project proponent shall submit the certified compliance report on the conditions stipulated in the ECs to the existing projects/activities, through the Regional Offices of the Ministry of Environment, Forest and Climate Change.

2. Now it has been decided that in order to get the certified compliance report on time, the Member Secretary of the sectoral Expert Appraisal Committee (EAC) shall make a request to the concerned Regional office of the Ministry at the time of issue of ToR for the said project.

3. Regional Offices of the Ministry are requested to submit certified compliance report within one month of receipt of such requests from the Member Secretary of the sectoral EAC. In case the inspection is not carried out within one month, the certified compliance report from the concerned Regional Offices of Central Pollution Control Board (CPCB) or the Member Secretaries of the respective State Pollution Control Boards shall also be accepted for deliberations by the sectoral EAC.

4. This issues with approval of the Competent Authority.


(Sharath Kumar Pallerla)
Scientist 'F'

To:

1. All the APCCFs of RO, MoEFCC
2. All the officers of IA Division
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. Chairman of all the Expert Appraisal Committees
5. Chairman, CPCB
6. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

o/c

Copy for information:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble Minister of State for Environment, Forest and Climate Change
3. PPS to Secretary(EF&CC)
4. PPS to AS(AP) / AS (AKM) / AS (AKJ)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file

F.No.L-11011/77/2017-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3
Dated: October, 2017

Circular

Sub: Prior Environmental Clearance for manufacturing of Insecticides - Compliance of the directions of the National Green Tribunal - reg.

The Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior environmental clearance for all the projects/activities listed in the Schedule to the Notification. Pesticide is one of the items included in the Schedule, and thus requiring prior environmental clearance.

Hon'ble National Green Tribunal, Principal Bench at New Delhi vide their order dated 27th July, 2017 in Original Application No.116 of 2017 in the matter of 'Karukampally Vijayan Biju Vs Union of India & Ors' has directed as under:-

'We direct and hold that the expression 'pesticides' squarely takes within its ambit and scope the expression 'insecticides' as well. Resultantly, all the manufacturers of insecticides and particularly the private respondents are liable to take prior EC in terms of the Notification of 2006.'

'We direct MoEF&CC to issue a public notice and a general circular to all the Pollution Control Boards and other competent authorities informing them about this judgement of the Tribunal and providing a period of six weeks to the private respondents and all other manufacturers of insecticides to apply for obtaining the EC for manufacturing of such insecticides. If such applications are filed within the specified time, MoEF&CC shall process the same and pass appropriate orders expeditiously.'

In compliance of the above directions of the Hon'ble Tribunal, all the manufacturers of insecticides are hereby directed to apply for obtaining the environmental clearance for manufacturing of insecticides. In case of failure, this Ministry and all other concerned authorities shall take appropriate action in accordance with law against such manufacturers of insecticides.

Relat
18/10/17
(Gyanesh Bharti)

Joint Secretary to the Government of India

Copy for necessary action to:-

1. The Chairman/Member Secretary of all SEIAAs
2. The Chairman/Member Secretary all State/UT Pollution Control Boards/Committees

ADP
18/10/17
20/10/2017

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi-110003.
Tel. 011-24695319

Date: 23rd October, 2017.

CIRCULAR

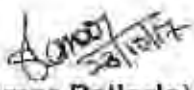
Sub: Consideration of Category "B" proposals at the Central level in the absence of duly constituted State Level Environment Impact Assessment Authority (SEIAA) or State Expert Appraisal Committee (SEAC), etc.

As per para 4(iii) of the Environment Impact Assessment (EIA) Notification, 2006 all projects or activities covered under Category B in the Schedule, in the absence of duly constituted SEIAA or SEAC, in the respective States/UTs shall be considered at the central level.

2. For consideration of such proposals, the following clarifications are issued for compliance with immediate effect: -

- i) If the SEIAA/SEAC is constituted before the Expert Appraisal Committee (EAC) meeting wherein the proposal (Terms of Reference(TOR)/Environment Clearance (EC) is listed as an agenda item for consideration, then the proposal, be not appraised by the EAC and it shall be transferred online to the concerned SEIAA/SEAC.
- ii) In cases of ToR issued at the central level due to non-existence/functioning of SEIAA/SEAC, proposals for Environment Clearance shall be submitted to SEIAA/SEAC only if constituted in the meantime. If any such proposal is submitted at the central level, the concerned Member Secretary shall transfer it online to the SEIAA/SEAC.
- iii) In cases, the proposal is appraised by the EAC due to non-existence of SEIAA/SEAC, then irrespective of whether recommended, deferred or additional information sought, it will continue to be appraised and decided at the central level, even if the SEIAA/SEAC is constituted later on.
- iv) The concerned Member Secretary, while transferring the proposal online to the SEIAA/SEAC, shall inform the Project Proponent also online in this regard.

This issue with the approval of Competent Authority.


(Sharath Kumar Pallerla)
Scientist 'F'

Distribution

1. Chairman & Member Secretaries of EAC of all sectors
2. Chairman & Member Secretaries of all the SEIAA/SEACs
3. Chairman, CPCB
4. Chairman & Member Secretaries of all SPCBs/UTPCCs
5. All Addl. PCCFs I/c Regional office
6. All the officers of IA Division

Copy to:

1. PS to Hon'ble Minister, EF&CC
2. PS to Hon'ble Minister for State, EF&CC
3. PPS to Secretary, EF&CC
4. PPS to AS (AP) / AS (AKM) / AS (AKJ),
5. PPS to JS(GB) / JS (JT),
6. Website of MoEF&CC,
7. Guard file

No.J-11013/71/2016-IA.I(M)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road,
New Delhi – 110003

Dated: 25th October, 2017

CIRCULAR

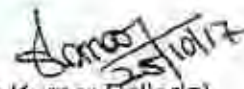
Subject: Compliance to the recommendations of the CAG – Reg.

It is to inform that CAG has carried out a Performance Audit of Impact Assessment (IA) Division and submitted a report on environment clearance and post clearance monitoring (Report No.39 of 2016). Copy of the Report has already been circulated and it is also available on the website of C&AG. In this report a number of recommendations have been given for further streamlining the functioning of IA Division.

2. In view of the above, all Member Secretaries / Directors / Joint Directors working in IA Division are requested to adhere to the following recommendations of performance audit with immediate effect.

- i. Revalidation of data with respect of grant of ToR / EC to be carried out on regular basis with NIC.
- ii. While scrutinizing the EIA Reports, may ensure that they are as per the ToR, comply with the generic structure, baseline data is accurate and concerns raised during the public hearing are adequately addressed.
- iii. The EIA Reports / EC letters should clearly mention cost of activities under EMP and ESR along with the timelines for their implementation.
- iv. EMP/EC conditions should be more specific for the area to be developed under Green belt and species to be planted in consultation with Forest / Agriculture Department along with post EC Third Party evaluation.
- v. Copy of EC letter to these projects should be endorsed to CGWA to ensure monitoring of ground water extraction.
- vi. While appraising the EC application, the name and number of posts to be engaged by the proponent for implementation and monitoring of environmental parameters be specified.
- vii. While prescribing the conditions of EC please mention installation of monitoring stations and frequency of monitoring of various environment parameters in respect of air, surface water, ground water noise etc.

- viii. While scrutinizing the EC application, should ensure that the EIA Report is prepared by accredited consultant having no conflict of interest with any Committee processing the case.
- ix. The conditions of EC should be compatible with the nature and type of project in order to avoid non- uniformity in similar kinds of projects.
- x. The EIA Report should clearly mention activity wise EMP and ESC cost details and should depict clear break-up of the capital and recurring costs along with the timeline for incurring the capital cost. The basis of allocation of EMP and ESC cost should be detailed in the EIA Report to enable the comparison of compliance with the commitment by the Central and State monitoring agencies. The capital and revenue expenditure amount to be spent on EMP and CSR cost should be distinctly specified in the EC letter. It should be ensured that there is a time bound action plan for fulfilling the EMP commitment mentioned in the EIA Report to the EC letter.
- xi. On maintenance of separate account for EMP and ESC, EC conditions should be more specific like opening a separate bank account and accounting format with specific heads of accounts in order to provide financial accountability by project proponents. This should be made compulsory part of the Annual Environment Statement.
3. This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Director / Scientist 'F'

To

1. All the officers of IA Division
2. Chairperson / Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble Minister of State for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKM) / AS(AKJ)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard file.

F. No. 3-50/2017-IA.III (Pt.)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-III Section)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi - 3

Dated: 28th December, 2017

CIRCULAR

Sub: Consideration of proposals for ex-post facto environmental clearance to the projects/activities involving violation of the EIA Notification, 2006 - reg.

The Ministry of Environment, Forest and Climate Change has issued a Notification S.O. 804 (E) dated 14th March, 2017 under the Environment (Protection) Act, 1986 to appraise the projects, which have started the work without taking prior environmental clearance in terms of the provisions of the EIA Notification, 2006.

2. In pursuance of the said Notification, this Ministry has received a number of proposals for Terms of Reference/Environmental Clearance relating to different sectors, for consideration by the duly constituted Expert Appraisal Committee (EAC). In order to streamline and expedite these proposals in terms of the provisions of the Notification, following clarifications are issued for compliance with immediate effect:

- (a) After issue of the Ministry's Notification in March, 2017, some proposals were submitted directly for consideration of EC (in place of ToR), may be due to confusion and the least clarity during initial stages. Such proposals are also to be considered in order of their submission on the Ministry's portal.
- (b) As per the orders of the Hon'ble High Court, Madras in the Writ Petition No. 11189/2017 titled 'Puducherry Environment Protection Association Vs Union of India', public hearing needs to be conducted in all cases relating to different sectors, irrespective of the relevant provisions of the EIA Notification, 2006 in this regard. That would be stipulated as one of the conditions in the ToR to be issued in all such cases.
- (c) Respective sectors in IA Division to take follow up/further action on the recommendations of the EAC, deal with the court matters and other references (Parliamentary matters, VIP References, RTI matters etc.) pertaining to their sector.

3. All the Member Secretaries/ concerned officers handling different sectors IA Division are requested to take note of the above for compliance.

4. This issues with approval of the competent authority.


28/12/17
(Gyanesh Bharti)
Joint Secretary

To,

1. Member Secretary of all the Sectors
2. All Officers of IA Division

Copy to:

1. PPS to Secretary, EF&CC
2. PPS to AS(AKJ) / AS(AKM)
3. PS to JS(RKS) / JS(AB) / JS(JT)

Copy to:-

1. **The C.E.O., NABET Secretariat**
National Accreditation Board for Education & Training (NABET),
ITPI Building, 6th Floor, 4-A,
Ring Road, I P Estate,
New Delhi - 110002.
2. The Director (IA-Policy), MoEF&CC, New Delhi.
3. Joint Director (SC), Monitoring Cell.
4. Guard file/Monitoring file.

(Dr. S. Kerketta)
Director (IA.1)

F.No. 22-124/2017-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi-110003.
email: sharath.kr@gov.in


Date: 29th December, 2017.

Circular

Expert Appraisal Committees (EAC) are constituted for appraisal of projects or activities by the Ministry as per Environmental Impact Assessment (EIA) Notification, 2006. A site visit as a part of the appraisal process may be undertaken where it is considered necessary for reasons to be recorded by the Committee, with a prior approval of the Ministry.

It has been decided that henceforth Additional Secretary shall approve the constitution of the sub-committee out of EAC for the site inspection on the recommendation of EAC.

This issue with the approval of Competent Authority


(Sharath Kumar Pallerla)
Director / Scientist 'F'

To

1. All the officers of IA Division
2. Chairman of all the Expert Appraisal Committees
3. Chairman & Member Secretaries of all the SEIAA/SEACs
4. Chairman, CPCB
5. Chairman & Member Secretaries of all SPCBs/TRPCCs

Copy to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to Minister of State for Environment, Forest and Climate Change
3. PPS to Secretary, Environment, Forest and Climate Change
4. PPS to AS (AKJ) / AS (AKM)
5. PPS to JS(GB) / JS (JT),
6. Website of MoEF&CC,
7. Guard file

F.No.22-76/2017-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi – 3

Dated: 13th February 2018

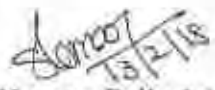
Office Memorandum

Sub: Applicability of EIA Notification 2006 for small scale units of manufacturing of Linear Alkyl Benzene Sulphonic Acid (LABSA) as B₂ Category regarding.

This is in continuation to the Ministry's OM vide J-13012/12/2013-IA.II(I) dated 24th December 2013 regarding guidelines for consideration of proposals for grant of environmental clearance under Environmental Impact Assessment(EIA) Notification 2006 and its amendments for categorization of category "B" projects/activities into B₁ and B₂ Category.

3 The matter has been examined in the ministry, it has been decided that all the small units (water consumption < 25 m³/day, fuel consumption < 25 TPD and not covered in the category of MAH units as per the Management, Storage and Import of Hazardous Rules, 1989) manufacturing of Linear Alkyl Benzene Sulphonic Acid (LABSA) will be treated as B₂ Category.

3. This issues with the approval of the competent authority.


(Sharath Kumar Pallerla)
Scientist "F"

To

All the officers of IA Division

Chairman, EAC (Industry-II)

All Chairman & member secretaries of SEIAA / SEAC

Copy to:

1. PS to Hon'ble Minister, EF&CC
2. PS to Hon'ble Minister for State, EF&CC
3. PPS to Secretary, EF&CC
4. PPS to AS (AKM) / AS (AKJ),
5. PPS to JS(GB) / JS (JT),
6. Website of MoEF&CC,
7. Guard file

F. No. 22-103/2017-IA.III

Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment (IA) Division

Indira Paryavaran Bhawan
Jor Bagh Road, Aligarj,
New Delhi - 110 003

Dated: 27.02.2018

OFFICE MEMORANDUM

Sub: Clarification regarding applicability of EIA Notification 2006 for coal tar pitch melting - reg.

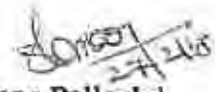
It is to inform that the Ministry is in receipt of a number of requests for clarification on the applicability of EIA Notification 2006 for coal tar pitch melting.

2. The matter was examined in the Ministry and it has been decided that the process of melting of coal tar pitch involves only physical change from solid (granular) form to liquid form and there are no emissions into the air and water.

3. In view of the above, it is informed that coal tar pitch melting does not attract the provisions of the EIA Notification 2006 as amended from time to time. However, other statutory clearances under Forest (Conservation) Act 1980, the Wildlife (Protection) Act 1972, the Water (Prevention and Control of Pollution) Act 1974, the Air (Prevention and Control of Pollution) Act 1981 and CRZ Notification 2016 may be obtained as applicable as per site conditions.

4. This issues with the approval of the competent authority.

Yours faithfully


(Sharath Kumar Pallerla)
Director (S)

Copy to:

1. All the officers of IA Division
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs

3. Chairman of all the Expert Appraisal Committees
4. Chairman, CPCB
5. Chairpersons/Member Secretaries of all SPCBs/UTPOCs

Copy for information:

1. PS to Minister for Environment, Forest and Climate Change
2. PPS to Secretary (EF&CC)
3. PPS to AS (AKJ) / AS (AKM)
4. PPS to JS (GB) / JS(JT)
5. Website, MoEF&CC
6. Guard file

F. No.Z-11013/22/2017-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi-110003

Dated: 15th March, 2018

OFFICE MEMORANDUM

Sub: Implementation of Notification S.O.1030 (E) dated 8th March, 2018 - reg.

The Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior environmental clearance to the projects/activities listed in the schedule to the said Notification. These projects/activities have been categorized under category 'A' or 'B' and require appraisal and approval by the respective regulatory authorities at the Central/State level.

2. The Ministry has issued a Notification number S.O.804(E) dated 14th March, 2017 under the Environment (Protection) Act, 1986 to appraise and regularize the projects, already taken up or under implementation without obtaining the prior environmental clearance in terms of the provisions of the EIA Notification, 2006 and thus identified to be in violation of the same. The Notification enables consideration of such proposals at Central level by providing one-time opportunity to submit the request in this regard within 6 months.

3. In order to streamline and expedite consideration of proposals, it has now been decided that the projects/activities covered under category 'B', shall be considered by the SEAC/SEIAAs in the respective States/UTs. The Ministry has issued another Notification number S.O.1030 (E) dated 8th March, 2018, amending the Notification dated 14th March, 2017 to that extent.

4. In order to operationalize the Notification number S.O.1030 (E) dated 8th March, 2018, following directions are being issued for compliance with immediate effect: -

- i. The proposals received up to 13th September, 2017 on the Ministry's portal, shall be considered by the EAC or the SEAC/SEIAA in the respective States/UTs, as the case may be, in order of their submission.
- ii. All the proposals of category 'B' projects/activities pertaining to different sectors, received within six months only i.e. up to 13th September, 2017 on the Ministry's portal, but yet not considered by the EAC in the Ministry, shall be transferred online to the SEAC/SEIAAs in the respective States/UTs.
- iii. The proposals submitted directly for consideration of EC (in place of ToR), shall also be considered on the same lines, in order of their submission on the Ministry's portal.
- iv. All the projects of category 'B' pertaining to different sectors, although considered by the EAC in the Ministry and accorded ToR, shall be appraised for grant of EC by the SEAC/SEIAAs in the respective States/UTs.

- v. All projects/activities of all sectors, shall be required to adhere to the directions of Hon'ble Madras High Court vide order dated 13th October, 2017 while upholding the Ministry's Notification dated 14th March, 2017.

Sharath Kumar Pallerla
15/3/18
(Sharath Kumar Pallerla)
Scientist "F" / Director

To,

1. The Chairman of all the SEAC/SELAA of States/UTs
2. The Member Secretary of all the SEAC/SELAA of States/UTs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ)/AS (AKM)
5. PS to JS (GB)/JS (JT)
6. All officers in IA Division
7. Website, MoEF&CC
8. Guard File

F. No.Z-11013/22/2017-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan,
Jor Bagh Road, New Delhi-3

Dated:16th March, 2018

OFFICE MEMORANDUM

Sub: Compliance of the order dated 14th March, 2018 of Hon'ble High Court of Judicature at Madras in WMP Nos.3361 and 3362 of 2018, and WMP No.3721 of 2018 in WP No.11189 of 2017 - reg.

The Ministry has issued a Notification number S.O.804(E) dated 14th March, 2017 under the Environment (Protection) Act, 1986 to appraise and regularize the projects, already taken up or under implementation without obtaining the prior environmental clearance in terms of the provisions of the EIA Notification, 2006 and thus identified to be in violation of the same. The Notification enables consideration of such proposals at Central level by providing one-time opportunity to submit the request in this regard within 6 months.

2. Pursuant to the Ministry's Notification number S.O.1030(E) dated 8th March, 2018 regarding consideration of proposals by the Expert Appraisal Committee or the SEAC/SEIAA depending upon the categorization of projects/activities (A or B) listed in the schedule to the Environment Impact Assessment Notification, 2006, the Ministry has issued Office Memorandum on 15th March, 2018 (copy enclosed) to operationalize the same.

3. Hon'ble High Court of Judicature at Madras vide Order dated 14th March, 2018 in WMP Nos.3361 and 3362 of 2018, and WMP No.3721 of 2018 in WP No.11189 of 2017, has directed as under:


"24. In this view of the matter, considering that sub-clause (i)(d) of Stage III of paragraph 7(i) of parent notification as contained in item No. 8(a) of the Schedule being housing projects, we deem it necessary to clarify that projects and project proponents falling under category alone shall be governed by the 'public consultation' clause in the parent notification.

25. With regard to the prayer of MOEF for extension of time for submission of proposals by project proponents, we are of the view that it will serve the ends of justice if time is extended by 30 (thirty) days from the date of delivery of this order in open court."

4. In view of the above orders of Hon'ble High Court, following directions are being issued for compliance with immediate effect: -

- i. The project proponent, who have not submitted the proposals within six months window i.e. up to 13th September, 2017 in pursuance of this Ministry's Notification S.O.804 (E) dated 14th March, 2017, are required to submit the proposals within 30 days, to the EAC for category A projects or the SEAC/SEIAA in the respective States/UTs for category B projects.

- ii. (The project proponent, who have submitted the proposals on the Ministry's portal after 13th September, 2017, are also required to submit the proposals afresh within 30 days, to the EAC for category A projects or the SEAC/SEIAA in the respective States/UTs for category B projects.
 - iii. The projects/activities pertaining to all sectors, shall be considered as per the directions of Hon'ble High of Judicature at Madras vide Order dated 14th March, 2018 in WMP Nos.3361 and 3362 of 2018, and WMP No.3721 of 2018 in WP No.11189 of 2017.
 - iv. The directions issued vide this Ministry's OM dated 15th March, 2018 shall continue to apply.
5. This issues with approval of the competent authority.


(Sharath Kumar Pallerla)
Scientist F/Director

To,

1. The Chairman of all the SEAC/SEIAA of States/UTs
2. The Member Secretary of all the SEAC/SEIAA of States/UTs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ)/AS (AKM)
5. PS to JS (GB)/JS (JT)
6. All officers in IA Division
7. Website, MoEF&CC
8. Guard File

Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment (IA) Division

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110 003

Dated: 02.04.2018

OFFICE MEMORANDUM

Sub: Clarification regarding applicability of EIA Notification 2006 for coal tar pitch melting - reg.

The Ministry is in receipt of a number of requests for clarification on the applicability of EIA Notification 2006 for coal tar pitch melting.

2. The matter was examined in the Ministry and it has been decided that the process of melting of coal tar pitch involves only physical change from solid (granular) form to liquid form and the process involves no emissions into the air.
3. In view of the above, it is informed that coal tar pitch melting does not attract the provisions of the EIA Notification 2006 as amended from time to time.
4. This OM is issued in supersession of the OM of even number dated 27.02.2018
5. This issues with the approval of the competent authority.


(Sharath Kumar Pallerla)
Director (S)

Copy to:

1. Chairman, CPCB
2. All the officers of IA Division
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. Chairman of all the Expert Appraisal Committees
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to Minister of State
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ) / AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file

F. No. 3-150/2017-IA-III
Government of India
Ministry of Environment, Forest and Climate Change
(IA- Division)

Indira Paryavaran Bhavan
3rd Floor, Vayu Wing,
New Delhi - 3

Date: 3rd April, 2018

OFFICE MEMORANDUM

Sub: Consideration of proposals for grant of ToR/EC to building construction projects – reg.

The Ministry of Environment, Forest and Climate Change in exercise of powers conferred by sub-section (1) and clause v of sub-section (2) of Section 3 of the Environment (Protection) Act, 1986 (29 of 1986), read with clause (d) of sub-rule (3) of rule 5 of the Environment (Protection) Rules, 1986 has published the provisions on "Integration of environmental conditions in building bye-laws" amending the Environment Impact Assessment Notification, 2006 vide Notification No. S. O. 3999 (E) dated 9th December, 2016. The Ministry, vide above Notification dated 9th December, 2016 has laid down the process and procedures along with the objective and monitorable environmental conditions to be followed at the level of Authority/Local Body for integrating the environmental clearance with building permission for different category of building/construction projects.

2. Hon'ble National Green Tribunal, Principal Bench at New Delhi vide order dated 8th December, 2017 in Original Application No.677 of 2016 (M.A. No.148/2017) in the matter of Society for Protection of Environment & Bio-diversity Vs MoEF&CC & others, challenging the Ministry's Notification dated 9th December, 2016, has directed this Ministry to re-examine its Notification dated 9th December, 2016 and take appropriate steps to delete, amend and rectify the clauses of the said Notification in light of this judgement.

Hon'ble Tribunal, vide the same order has also directed that till the time the Ministry comply with the above directions and notify the amended provisions of Regulations of 2006, it will not implement the impugned Notifications. However, once the amended regulations are notified, MoEF&CC/SEIAA/Local Authorities can give effect to that, without any further reference to the Tribunal.


3. This Ministry has filed a Civil Appeal No.2522/2018 in Hon'ble Supreme Court against the order dated 8th December, 2017 of Hon'ble Tribunal. Hon'ble Court, while hearing the matter on 23.03.2018, has directed as under:-

"It is agreed between the parties that there are pending applications before the Environmental Cell which may be forwarded to State Environment Impact Assessment Authority (SEIAA) or the Ministry of Environment, Forest and Climate Change, Indira Parayavaran Bhavan, New Delhi, as the case may be".

4. In the above context, following has been decided for compliance with immediate effect:-

- (i) All pending applications before the Environmental Cell shall be considered by the respective State Environment Impact Assessment Authority (SEIAA) in different States/UTs.
- (ii) All proposals relating to category A of item 8(b) of the schedule to the EIA Notification, 2006, received in the Ministry in pursuance of the Notification dated 9th December, 2016, but not appraised so far by the sectoral Expert Appraisal Committee (EAC) in the Ministry, shall be considered by the respective SEAC/SEIAA in different States/UTs.
- (iii) All building/construction projects/townships and area development projects, covered under item 8(a) &(b) of the schedule to the EIA Notification, 2006, shall continue to be dealt by the respective SEIAA/SEAC in different States/, as per the extant provisions contained in the EIA Notification, 2006.
- (iv) For the transferred applications, the SEAC/SEIAA shall consider the remaining process/stages other than those already completed at the MOEF&CC. The process/stages already completed at the MOEF&CC shall not be started de-novo by the SEAC/SEIAA.
- (v) The seniority of the applications being transferred to the SEAC/SEIAA shall be considered based on their date of application to the MOEF&CC.

5. This issues with approval of Competent Authority.


(Kushal Vashist)
Director

To,

The Chairmen/Member Secretaries, SEIAA/SEAC of All States/UTs.

Copy to:

PS to Hon'ble Minister EF&CC
PS to Hon'ble MoS, EF&CC
PPS to Secretary, MoEF&CC
PPS to AS (AKJ)/ AS(AKM)
PS to JS(GB)/ JS(JT)
All Concerned Officers of IA Division, MoEF&CC
NIC, MoEF&CC - For uploading on website
Notice Board

F. No. 22-8/2018-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi – 110003
sharath.kr@gov.in

Date: 20th April, 2018

OFFICE MEMORANDUM

Sub: Application for seeking prior environmental clearance for the projects / activities given in the schedule of EIA Notification, 2006 regarding.

The Environmental Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior environmental clearance for the projects / activities listed in the schedule to the said Notification. To facilitate the same, the EIA Notification, 2006 read with subsequent amendments, provides for submission of project details in the prescribed Forms (1/1M/1A) seeking Terms of Reference (ToRs) / Environmental Clearance (EC), as applicable, for certain category of projects.


2.0 The Project Proponents (PPs) are required to submit their proposals for ToR/ECs, on the portal of this Ministry/State level Environment Impact Committee (SEIAA), in different forms prescribed, as applicable. However, it has been observed that in cases where the Forms were not prescribed for seeking prior EC, the proposals are incomplete and lack clarity.

3. The matter has been examined in the Ministry, and in order to streamline the process of environmental clearances, it has been decided to follow the procedure as under:

- a. An application seeking Terms of Reference for preparation of an EIA Report in all the cases, as applicable, shall be made by the project proponent in the prescribed Form-1, as given in Appendix II after identification of prospective site(s) for the project and/or activities to which the application relates. The project proponent shall furnish a copy of the pre-feasibility report for the project along with the application in Form-1.
- b. An application seeking prior environmental clearance for the projects/activities listed in the schedule to the EIA Notification, 2006, henceforth, shall be made by the project proponent before commencing any construction activity, or preparation of land, or mining at the site, as given below:
 - i. For building/construction projects (item 8 of the Schedule), in the prescribed Form-1 given in Appendix I, along with Supplementary Form 1A as given in Appendix II, as prescribed in EIA Notification, 2006 and a copy of the detailed conceptual plan;

- ii. For mining projects of minor minerals up to five hectares under Category "B2" - In the prescribed Form-1M given in Appendix VIII, as prescribed in EIA Notification, 2006 along with a copy of Feasibility Report and the District Survey Report;
- iii. For all other projects - In the prescribed Form-2 enclosed with this OM along with copy of EIA/EMP report as per the generic structure given at Appendix-III of the EIA Notification, 2006. Summary of the Environmental Impact Assessment given in Appendix-IIIA, Risk Assessment Report, Copy of Feasibility Report or Detailed Project Report or Detailed Engineering Report, certification of compliance of earlier environmental clearance conditions in case of expansion proposals and final layout plan, as the case may be, and as per the requirement contained in the EIA Notification, 2006 and/or the Form-2 enclosed here,

This issues with the approval of Competent Authority.


 (Sharath Kumar Pallerla)
 Scientist "F" / Director

1. All the officers of IA Division
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees
4. Chairman, CPCB
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information:

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4. PPS to AS(AKJ) / AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file

Form-2**APPLICATION FOR PRIOR ENVIRONMENTAL CLEARANCE**

1	Details of Project				
a.	Name of the Project (s)	:			
b.	Name of the Company / Organisation	:			
c.	Registered Address	:			
d.	Legal Status of the Company	:			
e.	Joint Venture (Yes/No)	:			
	If Yes,				
	(i) No. of JV Partners (<i>Multiple Entries Allowed</i>)	:			
	Name of the JV Partner	Share of the JV Partner	Address of the JV Partner	Email Id of JV Partner	Mobile No. of JV Partner
2	Address for the correspondence				
a	Name of the applicant	:			
b	Designation (Owner / Partner / CEO)	:			
c.	Address				
d	Pin code				
e	e-mail				
f.	Telephone No.				
g.	Fax No.				
3	Category of the Project/Activity as per Schedule of EIA Notification, 2006				
a.	Project / Activity [1(a)(i) / 1(a)(ii) / 1(b) / 1(c) / 1(d) / 1 (e) / 2(a) / 2(b) / 3(a) / 3(b) / 4(a) / 4(b)(i) / 4(b) (ii) / 4(c) / 4(d) / 4(e) / 4(f) / 5(a) / 5(b) / 5(c) / 5(d) / 5(e) / 5(f) / 5(g) / 5(h) / 5(i) / 5(j) / 6(a) / 6(b) / 7(a) / 7(b)/ 7 (c) / 7 (d) / 7 (da) / 7 (e) / 7 (f) / 7 (g) / 7 (h) / 7 (i) / 8 (a) / 8 (b)]				
b.	Category (A/B ₁ /B ₂)	:			
	If B ₁ or B ₂				
	Reason for application at Central Level / State level (in case of B ₂ projects)	:			
	If Others				
c.	Please Specify	:			
d.	EAC concerned (for category A Projects only) (Coal Mining / Non-coal Mining / Thermal / River Valley & Hydro / Industry-I / Industry-II / Infrastructure-I / Infrastructure-II / Nuclear & Defence / CRZ	:			
e.	New / Expansion / Modernization / One Time Capacity expansion (only for Coal Mining) / Expansion under Para 7(ii) / Modernization under Para 7(ii) / Change of Product Mix under Para 7(ii))	:			
4	Location of the Project				
a.	Plot / Survey / Khasra No.	:			

b.	Village	:	
c.	Tehsil	:	
d.	District		
e.	State		
f.	Pin Code		
g.	Bounded Latitudes (North)		
	From	:	
	To	:	
h.	Bounded Longitudes (East)		
	From	:	
	To	:	
i.	Survey of India Topo Sheet No.	:	
j.	Upload Topo Sheet File (<i>Upload pdf only</i>)	:	
k.	Maximum Elevation Above Means Sea Level (AMSL)	:	
l.	Upload (kml) File (<i>Upload kml only</i>)	:	
m.	Distance of Nearest HFL from the project boundary within the study area	:	
n.	Seismic Zone (Zone: 1 / 2 / 3 / 4 / 5)	:	
5	Whether project is executed in multiple States (Yes / No)?		
	If Yes		
a.	Number of States in which Project will be Executed (e.g. 1,2,3,4,5,6)		
b.	Main State of the Project		
c.	Other State (<i>Multiple Entries Allowed</i>) (If the project to be executed, does not belong to any state, then state category could be selected as 'Other')		
	State	District	Tehsil
6	Details of Terms of Reference (ToR)		
a.	Whether ToR is mandatory for submitting application (Yes / No)?		
	If Yes		
b.	Date of issue of ToR / Standard ToR		
c.	MoEF&CC / SEIAA File No.		
d.	Upload ToR letter (PDF only)		
7	Details of Public Consultation		
a.	Whether the Project Exempted from Public Hearing (Yes/No)?		
	If yes,		
	Reason		
b.	Supporting Document (<i>upload pdf only</i>)		
c.	Whether details of Public Hearing available (Yes/No)?		
	If No,		
d.	Reason thereof		
	Supporting Document (<i>upload pdf only</i>)		
	If Yes,		
e.	Date of Advertisement of Public Hearing		

f.	Copy of advertisement in English (Upload PDF only)	:	
g.	Whether Public hearing was presided over by an officer of the rank of Additional District Magistrate or above (Yes/No)?	:	
	If yes		
h.	Designation of Presiding Officer (District Magistrate / District Collector / Deputy Commissioner / others - please specify)		
i.	Copy of duly signed Proceedings of Public Hearing in English (<i>Upload pdf only</i>)	:	
j.	Date of Public Hearing	:	
k.	Venue of Public Hearing:	:	
	Village		
	Tehsil		
	District		
	State		
l.	Distance of Public Hearing Venue from the Proposed Project (km)	:	
m.	No. of people attended	:	
n.	If the multiple public hearings conducted		
	Pl give the details of each PH as per (e) to (o) above		
8	Details of Project Configuration / Product (Multiple Entries Allowed)		
a.	Whether the project is New (Yes/No?)		
	If yes,		
b.	Project Configuration		
	Plant / Equipment / Facility	Configuration	Remarks if any
c.	Product	:	
	Product / Activity (Capacity / Area)	Quantity	Unit
			Mode of Transport / Transmission of Product
	- Unit:- (Tons per Annum(TPA), Mega Watt(MW), Hectares(ha), Kilo Litre per Day(KLD), Tons Crushed per Day(TCD), Cubic Meter per Day, Kilometers(Km), Million Liters per Day(MLD), Others) - Mode of Transport/Transmission of Product (Road, Rail, Conveyor Belt, Pipe Conveyor, Arial Ropeway, combination of two or three modes, Others)		
9	If Expansion / Modernisation / One Time Capacity expansion (only for Coal Mining) / Expansion under Clause 7(ii) / Modernisation under Clause 7(ii) / Change of Product Mix under Clause 7(ii))		
a.	Details of environmental clearance granted earlier		
	(i) Date of issue of environmental clearance	:	

	(ii)	MoEFCC / SEIAA File Number		
	(iii)	Upload EC Letter		
	b.	Details of certified report on compliance of earlier environmental clearance conditions		
	(i)	Details of Regional Office of MoEFCC / Zonal Office of CPCB / SPCB / UTPCC from which certified report on compliance of earlier environmental clearance conditions obtained	:	
	(ii)	Letter No	:	
	(iii)	Status of Compliance	:	
	(iv)	Certified report on compliance of earlier environmental clearance conditions (Including Monitoring Report) (<i>Upload pdf only</i>)	:	
	(v)	Date of site visit	:	
	c.	Details of Consent to Operate		
	(i)	Whether Consent to operate obtained (Yes/No)?		
		If yes,		
	(ii)	Upload Copies of all Consent to operate obtained since inception (<i>Upload pdf only</i>)		
	(iii)	Date of issue		
	(iv)	Valid up to		
	(v)	File No.		
	(vi)	Application No.		
	(vii)	Upload Copy of Consent to operate valid as on date (<i>Upload pdf only</i>)		
	d.	Details of Capacity Expansion (<i>Multiple Entries Allowed</i>)		
		Product / Activity (Capacity/Area)	Quantity From	Quantity To
				Unit
				Mode of Transport / Transmission of Product
		<ul style="list-style-type: none"> - Unit:- (Tons per Annum(TPA), Mega Watt(MW), Hectares(ha), Kilo Litre per Day(KLD), Tons Crushed per Day(TCD), Cubic Meter per Day, Kilometers(Km), Million Liters per Day(MLD), Others) - Mode of Transport/Transmission of Product (Road, Rail, Conveyor Belt, Pipe Conveyor, Arial Ropeway, combination of two or three modes, Others) 		
	e.	Details of Configuration (<i>Multiple Entries Allowed</i>)		
		Plant / Equipment / Facility	Existing Configuration	Proposed Configuration
				Final configuration after expansion
				Remarks if any
10	Project Cost			
	a.	Total Cost of the Project at current price level (in Lakhs)		:

	b.	Funds Allocated for Environment Management (Capital) (in Lakhs)	:					
	c.	Funds Allocated Towards ESC (Entrepreneur Social Responsibility) (in Lakhs)	:					
	d.	Funds Allocated for Environment Management Plan (EMP) (Recurring per Annum) (in Lakhs)	:					
11	Whether project attracts the General Condition specified in the Schedule of EIA Notification (Yes/No)? [provide name of WL/CPA/ESA/Inter-state boundary / International boundary and distance from the project]			:				
		If Yes						
	a.	Protected Area Notified Under the Wild Life(Protection) Act,1972	:					
	b.	Critically Polluted Areas as identified by the Central Pollution Control Board from Time to Time	:					
	c.	Notified Eco-Sensitive Areas	:					
	d.	Inter-State Boundaries and International Boundaries	:					
12	Whether projects attract the Specific Condition specified in the Schedule of EIA Notification (Yes/No)?			:				
		If Yes						
	a.	If any Industrial Estate / Complex / Export processing Zones / Special Economic Zones / Biotech Parks / Leather Complex with homogeneous type of industries such as Items 4(d), 4(f), 5(e), 5(f), or those Industrial estates with pre-defined set of activities (not necessarily homogeneous, obtains prior environmental clearance, individual industries including proposed industrial housing within such estates / complexes will not be required to take prior environmental clearance, so long as the Terms and Conditions for the industrial estate/complex are complied with (Such estates/complexes must have a clearly identified management with the legal responsibility of ensuring adherence to the Terms and Conditions of prior environmental clearance, who may be held responsible for violation of the same throughout the life of the complex/estate						
13	Raw Material / Fuel Requirement (Multiple Entries Allowed)							
	a.	Details of Raw Material / Fuel Requirement						
		Raw Material / Fuel	Quantity per Annum	Unit	Source (incase of Import, please specify country and Name of the port from which Raw Material / Fuel is received)	Mode of Transport	Distance of Source from Project Site (in Kilo meters) (In case of import, distance from the port from which the raw material / fuel is received	Type of Linkage (Linkage / Fuel Supply Agreement / e-auction / MoU / LOA / Captive / Open market / Others)
In case of expansion proposals, total requirement of raw material / fuel shall be given								

	<ul style="list-style-type: none"> - Unit:- (Tons per Annum(TPA), Mega Watt(MW), Hectares(ha), Kilo Litre per Day(KLD), Tons Crushed per Day(TCD), Cubic Meter per Day, Kilometers(Km), Million Liters per Day(MLD), Others) - Mode of Transport/Transmission of Product (Road, Rail, Conveyor Belt, Pipe Conveyor, Arial Ropeway, combination of two or three modes, Others) 						
	b.	Upload copy of Linkage / Fuel Supply Agreement / e-auction / Memorandum of Understanding / Letter of Allocation / Captive source / others.				:	
14	Baseline Data (Air / Water / Noise / Soil / Ground water table/ Others)						
	a.	Period of Base Line Data Collection					
		From (DD/MM/YYYY)				:	
		To (DD/MM/YYYY)				:	
	b.	Season (Summer / Pre-monsoon / Post-monsoon / Winter)				:	
	c.	No. of Ambient Air Quality (AAQ) Monitoring Locations				:	
	d.	Details of AAQ Monitoring (<i>Multiple Entries Allowed</i>)					
		Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
		<ul style="list-style-type: none"> - Criteria Pollutants: - (PM10, PM2.5, SO2, NOx, Others parameters specific to sector) - Unit: - (Micro Gram per Meter Cube, Nano Gram per Meter Cube, Mili Gram per Meter Cube, NA) 					
	e.	No. of Ground Water Monitoring Locations (<i>Multiple Entries Allowed</i>)				:	
	f.	Details of Ground Water Monitoring					
		Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
		Criteria Pollutants: - (pH, TSS, TDS, Total Hardness, Chlorides, Fluoride, Heavy Metals, other parameters specific to the sector) - Unit :- (mg/l, NA)					
	g.	No. of Surface Water Monitoring Locations				:	
	h.	Details of Ground Water Monitoring (<i>Multiple Entries Allowed</i>)					
		Criteria Pollutants	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
		- Parameter :- (pH, DO, BOD, COD, Others parameters specific to the sector)					

	- Unit :- (mg/l, NA)					
i.	No. of Ambient Noise Monitoring Locations				:	
j.	Details of Noise Monitoring (<i>Multiple Entries Allowed</i>)					
	Parameter	Unit	Maximum Value	Minimum Value	98 Percentile Value	Prescribed Standard
	- Parameter:- (Leq(Day), Leq(Night)) - Unit :- (A-weighted decibels(dB(A))					
k.	No. of Soil Monitoring Locations (<i>Multiple Entries Allowed</i>)				:	
	Parameter	Unit	Maximum Value	Minimum Value	98 Percentile Value	
	- Parameter :- (pH, N(Nitrogen), P(Phosphorus), K(Potassium), Electric Conductivity) - Unit :- (Millisiemens per Centimeter, Milligram per Litre, Percent, Centimeter per Second, Milliequivalents per 100 Gram, Milligram per Kilogram, Parts per Million, Kilogram per hectare, Others)					
l	Ground Water Table					
i	Range of Water Table Pre-Monsoon Season (Meters Below Ground Level (m bgl)):					
	From			:		
	To			:		
ii	Range of Water Table Post-Monsoon Season (Meters Below Ground Level (m bgl)):					
	From			:		
	To			:		
iii	Whether Ground Water Intersection will be there (Yes / No)?				:	
	If Yes,					
	(i) Upload Copy of Central Ground Water Authority Letter (<i>Upload pdf only</i>)				:	
	(ii) Letter No.				:	
	(iii) Date of issue				:	
15	Details of Water Requirement (During Operation) (<i>Multiple Entries Allowed</i>)					
a.	Details					
	Source	Quantity in KLD	Method of water withdrawal	Distance from Source	Mode of Transport	
	- Source: Surface / Ground Water / Sea / Others - Mode of Transportation: Pipeline / Canal / Others - Method of water withdrawal: Barrage / Weir / Intake well / Jackwell / Tube well / Open well / Others					
b.	Upload Copy of Permission from Competent Authority (<i>Upload pdf only</i>)					

c.	Letter No.	:	
d.	Date of issue	:	
e.	Permitted quantity	:	
f.	Whether Desalination is proposed (Yes/ No)	:	
	If Yes,		
	(i) Desalination capacity (KLD)	:	
	(ii) Quality of Brine (KLD)	:	
	(iii) Mode of Disposal of brine	:	
16	Waste Water Management (During Operation)		
	Type / Source	Quantity of Waste Water Generated (Kilo Litre per Day)	Treatment Capacity (Kilo Litre per Day)
a.	Total Waste Water Generation		:
b.	Total Discharged Water		:
c.	Total Reused Water		:
17	Solid Waste Generation Management (Multiple Entries Allowed)		
	Item	Quantity per Annum	Unit
	<ul style="list-style-type: none"> - Item:- (Industrial waste, Municipal Solid waste, Fly ash, Bottom Ash, Hazardous Waste (as per Hazardous and Other Waste Management Rules 2016), E Waste, Bio-Medical waste, Construction & Demolition waste, Plastic Waste, Others) - Unit:- (Tons, Kiloliter) - Mode of Disposal:- (Treatment, Storage and Disposal Facility(TSDF), Authorized Recyclers, Landfills, Sanitary Landfills, Others) 		
18	Air Quality Impact Prediction (Multiple Entries Allowed)		
	Criteria Pollutants	Unit	Baseline Concentration
	<ul style="list-style-type: none"> - Parameter:- (PM10, PM, SO2, NOx, Others parameters specific to the sector) - Unit :- (Microgram per Meter Cube, NA) 		

19	Power Requirement			
a.	Quantity (Kilo Volt Amps (KVA))	:		
b.	Source	:		
c.	Upload Copy of Agreement (<i>Upload pdf only</i>)	:		
d.	Standby Arrangement (Details of DG Sets)	:		
e.	Stack Height (in m)	:		
20	Land Ownership Pattern (Prior to the project proposal) in Ha			
a.	Forest land	:		
b.	Private Land	:		
c.	Government Land	:		
d.	Revenue Land	:		
e.	Other Land	:		
	Total land	:		
21	Present Land Use breakup in Ha			
a.	Agriculture Area	:		
b.	Waste/Barren Area	:		
c.	Grazing / Community Area	:		
d.	Surface Water bodies	:		
e.	Settlements	:		
f.	Industrial	:		
g.	Forest	:		
h.	Mangroves	:		
i.	Marine area	:		
j.	Others (Specify)	:		
	Total	:		
22	Land requirement for various activities (Multiple entries allowed) in Ha			
	Description of Activity / Facility / Plant / Others	Land requirement	Remarks	
	Green belt			
	Total			
	- Activity / Facility / Plant / Others include: Main Plant, Township, Greenbelt, Ash pond, Quarry area, OB dump Area, Safety zone, Tailing pond, Landfill, Water reservoir, De-salination plant, Area for solid waste management, Built-up area, others			
23	Ecological and Environmental Sensitivity (Within 10 Km):- <u>WLS-Wild Life Species; NPA-Notified Protected Area; ESAs-Eco Sensitive Areas; ESZs- Eco Sensitive Zones</u>			
a.	Details of Ecological Sensitivity			
	Details of Ecological Sensitivity	Name	Distance from the Project (Km)	Remarks

	- Details of Ecological Sensitivity:- (Critically Polluted Area, WLS, NPA, ESAs, ESZs, Corridors, Wildlife Corridors)			
b.	Whether NBWL recommendation is required (Yes/No)?			
	If yes			
	Upload NBWL recommendation in PDF			
c.	Details of Environmental Sensitivity			
	Details of Environmental Sensitivity	Name	Distance from the Project (Km)	Remarks
	- Details of Environmental Sensitivity:- (Forest, Archaeological Sites, Defence Installations, Others)			
d.	Whether NoC / Permission from the competent authority is required (Yes/No)?			
	If yes			
	Upload NoC / Permission from the competent authority in PDF			
24	Forest Land			
1	Whether any Forest Land involved (Yes/No)?			
	If Yes			
a.	Forests Clearance Status (In-Principle(Stage-I) Approval Obtained / Final (Stage-II) Approval Obtained / Forest Clearance Under Process(Stage-I) / Forest Clearance Under Process(Stage-II) / Application for Forest Clearance yet to be Submitted)			:
	If In-Principle (Stage-I) Approval Obtained,			
	(i) MoEFCC file number			:
	(ii) Date of In Principle (Stage-I) approval			:
	(iii) Area diverted			:
	(iv) Upload FC Letter (Upload pdf only and attach it as Annexure-FC letter)			:
	If Final (Stage-II) Approval Obtained,			
	(i) MoEFCC file number			:
	(ii) Date of Final Approval			:
	(iii) Date of In-Principle Approval			:
	(iv) Area diverted			:
	(v) Upload FC Letter (Upload pdf only and attach it as Annexure-FC letter)			
	If Forest Clearance under process (Stage-I),			
	(i) MoEFCC file number			:
	(ii) Area applied			:
	If Forest Clearance under process (Stage-II),			
	(i) MoEFCC file number			:

	(ii) Area applied	:	
b.	Legal Status of Forest Land (Reserved, Protected, Private, Village, Others)		
	If Others,		
	Please Specify Others	:	
25	Tree Cutting, if any		
a.	No. of Trees Cut for the Project (if Forestland not involved)	:	
b.	Details of Tree Cutting and Planting of Trees (<i>Upload.pdf Only</i>)	:	
26	Land Acquisition Status		
a.	Acquired Land		
b.	Land yet to be acquired		
c.	Status of Land acquisition if not acquired		
27	Rehabilitation and Resettlement (R&R)		
a.	No. of Villages		
b.	No. of Households		
c.	No. of PDFs (Project Displaced Families)		
d.	No. of PAFs (Project Affected Families)		
e.	Funds Allocated for R&R		
f.	Status of R&R (Completed / In-progress / Yet to start)		
28	Whether there is Presence of Schedule-I Species (Yes/No)?	:	
	If yes,		
a.	Details of Schedule-I Species	:	
b.	Whether conservation plan for Schedule-I Species has been prepared (Yes/ No)?	:	
	If Yes,		
	(i) Upload conservation plan (Upload only PDF)		
	(ii) Fund Provision made		
	(iii) Period of Implementation		
c.	Whether conservation plan for Schedule-I Species has been approved by competent authority (Yes/ No)?		
	(i) Upload copy of approval (Upload PDF Only)	:	
	(ii) Letter No.	:	
	(iii) Date of issue	:	
	(iv) Recommendations if any	:	
29	Whether there is Presence of Water Bodies in Core Area (Yes/No)?	:	
	If yes,		
a.	Details of Water Bodies in Core Area	:	
b.	Whether there is Diversion required (Yes/No)?		
	If yes,		

	c.	Details of diversion required				
	d.	Details of study conducted				
	e.	Whether permission has been obtained from competent authority (Yes/No)?				
		(i)	Upload copy of permission (Upload PDF Only)			
		(ii)	Letter No.			
		(iii)	Date of issue			
		(iv)	Recommendations if any			
30	Whether there is Presence of Water Bodies in Buffer Area (Yes/No)?				:	
		If Yes				
	a.	Details of Water Bodies in Buffer Area			:	
	b.	Direction of Water Bodies in Buffer Area (North / South / East / West / North East / North West / South East / South West)			:	
	c.	Distance of Water Bodies in Buffer Area (kilo meters)				
31	Manpower Requirement					
	a.	Permanent employment during construction			:	
	b.	Permanent employment during operation			:	
	c.	Temporary employment during construction			:	
	d.	Temporary employment during operation			:	
	e.	No. of working days			:	
	f.	Total manpower			:	
32	Green Belt in Ha					
	a.	In case of new projects			:	
	i.	Total Area of Green Belt				
	ii.	Percentage of Total Project Area			:	
	iii.	No. of Plants to be Planted			:	
	iv.	Funds Allocated for Plantation			:	
	v.	Upload Green Belt Plan (Upload PDF Only)				
	b.	Incase of expansion / modernization / change in product mix etc.				
	i.	Description	Existing	Proposed	Total	
		Total Area of Green Belt				
		Percentage of Total Project Area				
		No. of Plants				
		Funds Allocated				
	ii.	Upload Green Belt Plan (Upload PDF Only)				
33	Project Benefit (Multiple entry allowed)					

		Type of Project Benefits	Details of Project Benefit
(Project benefits shall include environmental, social and others)			
34	Whether the Project / Activity attracts the provisions of CRZ (Yes/No)?		
	If yes,		
	1	Project Details	
	a.	CRZ Classification: (CRZ I (A), CRZ I(B), CRZ II, CRZ III, CRZ IV (A), CRZ IV(B))	
	b.	Location type: (Non-Eroding Coast, Low and Medium Eroding Coast, High Eroding Coast)	
	c.	Details of Mangroves Land Involved, if Any	
	d.	Area of Mangroves Land (hectare)	
	e.	EIA (Terrestrial) Studies: (Carried Out, Not Carried Out)	
		<i>If Carried Out,</i>	
	1)	Summary Details of EIA (Terrestrial) Studies	
	2)	Upload Recommendation made in EIAs (Upload pdf only)	
	3)	Period of Study from (EIA Terrestrial)	
	4)	Period of Study to (EIA Terrestrial)	
		<i>If Not Carried out</i>	
		Give Reason	
	f.	EIA (Marine) Studies: (Carried Out, Not Carried Out)	
		<i>If carried out</i>	
	1)	Summary Details of EIA (Marine) Studies	
	2)	Upload Recommendation made in EIAs	
	3)	Period of Study from (EIA Marine)	
	4)	Period of Study to (EIA Marine)	
		<i>If Not Carried out,</i>	
		Give Reason	
	g.	Disaster Management Plan/National Oil Spill Disaster Contingency Plan (if Applicable)	
	2.	Description of the Project Under Consideration	
	a.	Type of Project: (Resort/Buildings/civic amenities, Coastal Roads/Roads on Stilt, Pipelines from Thermal power Blow Down, Marine Disposal of Treated Effluent, Facility for Storage of Goods/Chemicals, Offshore structures, Desalination Plant, Mining of Rare Earth/Atomic Minerals, Sewage Treatment Plants, Lighthouse, Wind Mills, Others)	
		<i>If Resort/Buildings/civic amenities,</i>	

		1)	Agency Name for Preparing CRZ Maps		
		2)	Total Area/Built-up Area (hectare)		
		3)	Height of Structure		
		4)	FSI Ratio		
		5)	The governing Town Planning Rules/Regulations		
		6)	Details of Provision of Car Parking Area		
		<i>If Coastal Roads/Roads on stilt,</i>			
		1)	Agency Name for Preparing CRZ Maps		
		2)	Area of Land Reclamation		
		3)	Estimated Quantity of Muck/Earth for Reclamation		
		4)	Carrying Capacity of Traffic		
		<i>If Pipelines from Thermal Power Blow Down,</i>			
		1)	Agency Name for Preparing CRZ Maps		
		2)	Length of Pipeline		
		3)	Length Traversing CRZ Area		
		4)	Depth of Excavation		
		5)	Width of Excavation		
		6)	Length of Pipeline from Seashore to Deep Sea		
		7)	Depth of Outfall Point from Surface of Sea Water		
		8)	Temperature of effluent above Ambient at Disposal Point		
		<i>If Marine Disposal of Treated Effluent,</i>			
		1)	Agency Name for Preparing CRZ Maps		
		2)	Location of Intake/Outfall		
		3)	Depth of Outfall Point		
		4)	Length of Pipeline		
		5)	Length Traversing CRZ Area		
		6)	Depth of Excavation		
		7)	Width of Excavation		
		8)	Length of Pipeline from Seashore to Deep Sea/Creek		
		9)	Depth of Outfall Point from Surface of Sea Water		
		10)	Depth of Water at Disposal Point		
		11)	Type of Disposal		
		<i>If Facility for Storage of Goods/Chemicals,</i>			
		1)	Agency Name for Preparing CRZ Maps		
		2)	Name and Type of Chemical		
		3)	End use of the Chemical		
		4)	No. of Tanks for Storage		

			5)	Capacity of tanks			
			<i>If offshore structures,</i>				
			1)	Agency Name for Preparing CRZ Maps			
			2)	Exploration or Development			
			3)	Depth of Sea Bed			
			4)	No. of Rigs/Platform			
			5)	Details of Group Gathering Stations			
			<i>If Desalination Plant,</i>				
			1)	Agency Name for Preparing CRZ Maps			
			2)	Capacity of Desalination			
			3)	Total Brine Generation			
			4)	Temperature of Effluent above Ambient at Disposal Point			
			5)	Ambient Salinity			
			6)	Disposal Point			
			<i>If Mining of Rare Earth/Atomic Minerals,</i>				
			1)	Agency Name for Preparing CRZ Maps			
			2)	Capacity of Mining			
			3)	Volume/Area to be mined			
			4)	Type of Mineral to be Extracted			
			5)	End use of the Mineral			
			<i>If Sewage Treatment Plants,</i>				
			1)	Agency Name for Preparing CRZ Maps			
			2)	Capacity			
			3)	Total Area of Construction			
			4)	Compliance of effluent parameters as laid down by CPCB/SPCB/other authorized agency			
			5)	Whether discharge is in sea water/creek? If yes,			
				Distance of Marine Outfall Point from Shore/from the tidal river bank			
				Depth of Outfall Point from Sea Water Surface			
				Depth of Sea at Outfall Point			
			<i>If Lighthouse,</i>				
			1)	Agency Name for Preparing CRZ Maps			
			2)	Total Area of Construction			
			3)	Height of the Structure			
			<i>If Wind Mills,</i>				

		1)	Agency Name for Preparing CRZ Maps		
		2)	Capacity (MW)		
		3)	Transmission Lines: (Overhead, Underground)		
		4)	Diameter of Windmill		
		5)	Length of Blade		
		6)	Speed of Rotation		
		7)	Height of the Structure		
			If Others,		
		1)	Agency Name for Preparing CRZ Maps		
		2)	Please Specify with salient features		
		3)	Upload relevant Document (<i>Upload pdf only</i>)		
	3.		Distance of Project (In Meters) from LTL/HTL to be Stated		
	a.		Clause of CRZ Notification Under which the Project is a Permissible/Regulated Activity		
	b.		Whether CRZ Map Indicating HTL, LTL Demarcation in 1:4000 Scales Prepared? (Yes/No)		
			<i>If Yes,</i>		
		1)	Distance of Project (in meters) from HTL to be Stated		
		2)	Upload Maps(<i>kml File</i>)		
		3)	Distance of Project(in meters) from LTL to be Stated		
		4)	Upload Maps (<i>kml File</i>)		
	c.		Whether Project Layout Superimposed on CRZ Map 1:4000 Scales?: (Yes/No)		
			<i>If Yes,</i>		
		1)	Upload Maps (<i>kml File</i>)		
	d.		Whether CRZ Map 1:25000 Covering 7 km Radius Around Project Site Prepared? (Yes/No)		
			<i>If Yes,</i>		
		1)	Upload Maps (<i>kml File</i>)		
	e.		Whether CRZ Map Indicating CRZ-I,II,III and IV Including Other Notified ESAs Prepared?: (Yes/No)		
			<i>If Yes,</i>		
		1)	Upload Maps (<i>kml File</i>)		
	f.		NOC from State Pollution Control Boards Obtained: (Yes/No)		
			<i>If Yes</i>		
		1)	Upload Copy of NOC (<i>Upload pdf only</i>)		
	g.		Details of Rain Water Harvesting System		

4.	Recommendation of State Coastal Zone Management Authority			
a.	Upload Copy of CZMA (<i>Upload pdf Only</i>)			
b.	State the Conditions Imposed			
c.	Social and Environmental Issues and Mitigations Measures Suggested Including but not Limited to R&R, Water, Air, Hazardous Wastes, Ecological aspects, etc. (Brief Details to be Provided)			
35	Sector Specific Details			
I	Whether the proposal is mining of minerals (coal / non-coal) project (Yes/No)?			
	If yes,			
1	No. of Mineral to be Mined (Multiple Entries Allowed)			
	Minerals To be Mined	Major or Minor Mineral		
2	Mine Capacity in ROM (Run of Mine)			
3	Upload 500 meters Cluster Certificate from State Mines and Geology in case of minor minerals (<i>Upload pdf Only</i>)			
4	Mining Plan			
a.	Approval Letter No.			
b.	Date of Approval			
c.	Upload Approved Letter (<i>Upload pdf only</i>)			
d.	Approved by State Mines & Geology Department / Indian Bureau of Mines / Ministry of Coal / Ministry of Mines / State Government / Atomic Mineral Directorate / Others)			
e.	If Others,			
	Please specify			
f.	Approved Mining Lease Area			
g.	Approved Capacity			
5	Technical Details			
a.	Total Geological Reserves (Million Ton)			
b.	Mineable Reserves (Million Ton)			
c.	Extractable Reserves (Million Ton)			
d.	Percent of Extraction (%)			
e.	Grade of Coal /Ore /Mineral			
f.	Stripping Ratio			
g.	Category of Gaseousness (Only for Coal Mining, Others may write Not applicable)			
h.	Average Gradient(Degree)			
i.	Maximum Thickness of Seams(meters) (Only for Coal Mining, Others may write Not applicable)			

	j.	Mining Method (Opencast / Underground / Mixed (Opencast + Underground) / Adit)				
	k.	Life of Mine (Years)				
6	Details of beneficiation (including crushing / screening/others)					
	a.	Whether it is proposed to install crusher within the mining lease area (Yes/No)?				
		If yes,				
	b.	No. of crushers				
	c.	Details of crusher (Multiple entries allowed)				
		Crusher ID	Capacity (in TPH)	Remarks		
	d.	Whether it is proposed to install beneficiation plant / Coal washery within the mining lease area (Yes/No)?				
		If yes,				
	e.	Beneficiation / washing Technology				
	f.	Capacity				
7	Details of Seams if applicable					
	a.	No. of seams				
	b.	Thickness of seams to be worked on				
	c.	Maximum Thickness of Seams(meters) (if not Applicable, may Write NA)				
8	Details of Mining Lease					
	a.	Details of Mining Lease				
	b.	Upload Letter of Intent (Upload pdf only)				
	c.	Date of Execution of Mining Lease with Reference Number				
	d.	Validity of Mining Lease				
	e.	Upload Copy of Executed Lease deed valid as on Date (Upload pdf only)				
	f.	Earlier Renewals (Multiple Entries Allowed)				
		Uploaded Copy of Earlier Lease	Date of Renewal			
9	OB (Over Burden) Management (Only if Mining Method: Opencast)					
	a.	Details of External Dumps				
		i) No. of OB Dumps				
		ii) Total Area (in Hectare)				
		iii) Height (in meter)				
		iv) Quantity (in Million Cubic meter)				

		v) No. of year back fill up																																		
	b.	Details of Internal Dump																																		
		i) No. of Internal Dumps																																		
		ii) Total Area (in Hectare)																																		
		iii) Height (in meter)																																		
		iv) Quantity (in Million Cubic meter)																																		
10		Details of Topsoil Management																																		
	a.	Quantity of Topsoil excavated during the entire life of the mine (in Million Cubic meter)																																		
	b.	Quantity of Topsoil proposed for utilization for reclamation during the entire life of the mine (in Million Cubic meter)																																		
	c.	Quantity of Topsoil proposed for utilization for other activities during the entire life of the mine (in Million Cubic meter)																																		
11		Detail of Final Mine Void (Only if Mining Method: Opencast)																																		
	a.	Area (in Hectare)																																		
	b.	Depth (in meter)																																		
	c.	Volume (in Million Cubic meter)																																		
12		Details of Quarry (Only if Mining Method: Opencast)																																		
	a.	Final Void of (hectare)																																		
	b.	At a Depth of (meter which is proposed to be converted into a Water Body.)																																		
	c.	Total Quarry Area (ha)																																		
13		Details of Transportation																																		
	a.	In Pit/Underground to Surface																																		
	b.	Surface to Siding/Loading																																		
	c.	Transportation / Conveyor Details																																		
14		Details of Land Usage (Pre-Mining)																																		
		<table border="1"> <thead> <tr> <th>Land Use</th> <th>Within ML Area (Hectare)</th> <th>Outside ML Area (Hectare)</th> <th>Total</th> </tr> </thead> <tbody> <tr> <td>Agriculture Land</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Forest Land</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Waste Land</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Grazing Land</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Surface Water Bodies</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Settlements</td> <td></td> <td></td> <td></td> </tr> <tr> <td>Others(Specify)</td> <td></td> <td></td> <td></td> </tr> </tbody> </table>	Land Use	Within ML Area (Hectare)	Outside ML Area (Hectare)	Total	Agriculture Land				Forest Land				Waste Land				Grazing Land				Surface Water Bodies				Settlements				Others(Specify)					
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16	Details of Land Usage (Pre-Mining)						
		Land Use	Within ML Area (Hectare)	Outside ML Area (Hectare)	Total		
		Agriculture Land					
		Forest Land					
		Waste Land					
		Grazing Land					
		Surface Water Bodies					
		Settlements					
		Others(Specify)					
		Others					
17	Details of Land Usage (Post-Mining)						
		Land Use	Plantation	Water Body	Public Use	Others	
		Excavation / quarry					
		Top Soil Storage					
		External OB dumps					
		Internal OB dumps					
		Roads					
		Built Up Area (Colony/Office)					
		Green Belt					
		Virgin Area					
		Other					
		Total					
18	Details of Reclamation (Only if Mining Method: Opencast) Total Afforestation Plan shall be Implemented Covering of Mining. This will include:						
	a.	External OB Dump (in hectare)					
	b.	Internal Dump (in hectare)					
	c.	Quarry (in hectare)					
	d.	Safety Zone (in hectare)				:	
	e.	Final Void of (hectare)				:	
	f.	At a Depth of (<i>meter which is proposed to be converted into a Water Body.</i>)				:	
	g.	Density of Tree Plantation per ha (in no.)				:	
	h.	Others in ha (such as Excavation Area along ML Boundary, along Roads and Infrastructure, Embankment Area and in Township Located outside the Lease etc.)					
	i.	Total afforestation plant (in hectare)					
19	Status of Progressive Mining Closure Plan (For Expansion Projects only)						

	a.	Implementation of Various Activities as per Approved Progressive Mine Closure Plan (in Bar Chart) (pdf) (<i>Upload pdf only</i>)						
	b.	Any Deviation from the Approved Progressive Mine Closure Plan						
	c.	Total Area Excavated (in hectare)						
	d.	Total Area Backfilled after Excavation (in hectare)						
	e.	Total Area Reclaimed (in hectare)						
20	Actual Coal/Ore Production vis-a-vis sanctioned capacity Since inception (Multiple Entries Allowed)							
	Financial Year	Sanctioned Capacity as per EC (MTPA)	Sanctioned capacity as per CTO	Sanctioned capacity as per approved Mining Plan	Actual Production	Excess Production Beyond the EC / CTO / Mining Plan Sanctioned Capacity (MTPA)		
II	Whether proposal is for Thermal Project (including captive power plant and Waste Heat Recovery Plant) (Yes/No)?							
	If yes,							
1	Specifications of the Plant							
	a.	Technology proposed (Supercritical, Sub-Critical, CFBC, AFBC, PFBC, IGCC, Incineration, Pyrolysis, Gasification, Bio-methanation, Others)					:	
	b.	Plant Load Factor (%)					:	
	c.	Station Heat Rate (Kcal/Kwh)					:	
	d.	Steam Rate/Flow Rate					:	
	e.	Boiler Temperature					:	
	f.	Boiler Pressure					:	
	g.	Type of Stack (Single flue / Bi-flue / Tri-Flue)					:	
	h.	No. of Stacks					:	
		Stack ID	Stack height (m)	Stack Diameter at exit (m)	Exit velocity of stack gas (m/s)	Exit temperature of stack gas (°C)		
2	Details of fuel linkage (please specify if multiple linkages are involved)							
	a.	Type of linkage (Linkage / Fuel Supply Agreement / e-auction / MoU / LOA / Captive / Open market / Others)						
	b.	Quantity of linkage granted						
	c.	Date of Linkage						
	d.	Duration of linkage						
3.	Details of Transportation of fuel							

		Details / Mode	Distance (km)	Quantity (TPA)	
		Rail			
		Road			
		Pipeline			
		Conveyor			
		Other mode (Please specify)			
	4.	Details of Fuel Characteristics			
	a.	Gross Calorific Value (Kcal/Kg)			
	b.	Ash content (%)			
	c.	Sulphur Content (%)			
	d.	Moisture (%)			
	e.	Mercury (mg/kg)			
	f.	Fixed Carbon (%)			
	g.	Volatile Matter (%)			
	5.	Details of Cooling system			
	a.	Type of cooling system: Air cooled/Water cooled			
	b.	Type of draft: Natural draft/Forced draft			
	c.	Type of air circulation: Parallel flow/ Counter flow			
	d.	Cycles of Cooling (COC):			
	e.	Water requirement for cooling (m ³ /day):			
	f.	Boiler blow down temperature:			
III	Whether proposal is for River Valley & Hydroelectric Project (Yes/No)?				
	If Yes,				
	1.	Sub Sector: (Multipurpose Project / Hydroelectric Project / Irrigation project)			
	2.	Name of the River			:
	3.	Whether Cumulative Impact Assessment and Carrying Capacity Study of River Basin Carried Out? (Yes/No)			:
		If Yes			:
	a.	Status of Cumulative Impact Assessment and Carrying Capacity Study of River Basin: (Recommended / Not Recommended,)			:
		If Recommended			
	b.	Details of Cumulative Impact Assessment and Carrying Capacity Study of River Basin			:
	c.	Upload Relevant Document (<i>Upload pdf only</i>)			:
	4.	Type of Project: (Construction of Dam Barrage / Run of the River / Lift Irrigation Scheme)			:
	5.	Dam Height (meter) if applicable			:
	6.	Dam Length (meter) if applicable			
	7.	Total Submergence Area (hectare)			:

8.	Details of Gross Command Area (GCA) (hectare)			:	
9.	Details of Irrigable Command Area (ICA) (hectare)			:	
10.	Details of Culturable Command Area (CCA) (hectare)			:	
11.	Total Command Area (hectare)			:	
12.	Powerhouse Installed Capacity			:	
	a.	Type of Powerhouse: (Underground / Surface)			
	b.	Capacity (megawatts)			
	c.	No. of Tunnels			
	d.	No. of Units			
	e.	Bank of River: (Left /Right / Both)			
13.	Generation of Electricity Annually				
	a.	Quantity of Generation of Electricity Annually (in Giga Watt Hours (GWh))			
	b.	Water availability at various percentages			
		Percentage	Water availability (Cusecs)	Dependable year	Remarks
		At 50%			
		At 75%			
		At 90%			
	c.	Machine Availability (%)			
	d.	Cost of Electricity Generation (in INR)			:
	e.	Internal Rate of Return (%)			:
	f.	Year of achievement of Internal Rate of Return			:
14.	Catchment Area Treatment Plan (Upload PDF)				
15.	Muck Management Plan				
	a.	Upload Muck Management Plan in PDF			
	b.	Total Excavation Muck (Cubic Meter)			
	c.	Utilized for Construction (Cubic Meter)			
	d.	No. of Muck Disposal sites			
	e.	Total Muck Disposal Area (Ha)			
16.	Fishery Development and Management Plan				
	a.	Upload Fishery Development and Management Plan in PDF			
	b.	No. of Fingerlings			
	c.	No. of Fish Species			
	d.	Name of the umbrella Fish Species (Scientific Name)			
17.	Status of Environmental Flow				

		Season	Average Inflow (in Million Cubic Meter)	Percent of Flow
		Lean		
		Non-Lean		
		Monsoon		
		Non-Monsoon		
	18.	Free Flow Stretch (km)		
	19.	Approval of Central Water Commission		
	a.	Approval Reference No.		
	b.	Date of Approval		
	c.	Upload Copy of Approval (<i>Upload pdf only</i>)		
	20.	Approval of Central Electricity Authority		
	a.	Approval Reference No.		
	b.	Date of Approval		
	c.	Upload Copy of Approval (<i>Upload pdf only</i>)		
	21.	Details of Cofferdam (upstream) if applicable		
	a.	Quantity of the material (m ³)		
	b.	Length of the dam (m)		
	c.	Quantity of muck to be used (m ³)		
	d.	Quantity of borrow material to be used (m ³)		
	e.	Decommissioning plan (upload in PDF)		
	22.	Details of Cofferdam (downstream) if applicable		
	a.	Quantity of the material (m ³)		
	b.	Length of the dam (m)		
	c.	Quantity of muck to be used (m ³)		
	d.	Quantity of borrow material to be used (m ³)		
	e.	Decommissioning plan (upload in PDF)		
IV	Whether the proposal is Infrastructure projects (Yes/No)			
	If yes?			
	1	Details of Building Construction		
	a.	Maximum Height of the Building (Meters)		
	b.	Total No. of Flats to be Build		
	c.	No. of Buildings		
	d.	Total plot area (sqm)		
	e.	Total built up area (sqm)		
	2	Foreshore Facilities And/or Marine Disposal		

	a.	Whether Project Involves Foreshore Activities and/or marine Disposal : (Yes/No)?			
		If Yes,			
	b.	Upload Shoreline Study (Upload pdf only)			
	c.	Type of Cargo			
	d.	Quantity of Cargo			
	e.	Control Measures of Cargo			
	f.	Dust Control Measures			
	g.	Quantum			
	h.	Quantity of Dredging (Cubic meter per day)			
	i.	Type of Dredging (Capital, Maintenance)			
	j.	Disposal of Dredge Material			
	k.	Details of Outfall Diffusers			
	m.	No. of Dilution Expected			
	n.	Distance at which the outlet will Reach Ambient Parameters			
	o.	Details of Monitoring at outfall			
	p.	Copy of NoC from PCB in case of Marine Disposal (Upload pdf only)			
3	Rain Water Harvesting				
	a.	No. of Storage			
	b.	Capacity			
	c.	No. of Recharge Pits			
	d.	Capacity			
4	Parking				
	a.	Details of 4-Wheeler/ 2-Wheeler Parking			
5.	Energy Saving Measures				
	a.	Source/Mode			
	b.	Percentage			
	c.	Quantity			
6.	Other Details				
	a.	Details of impact on Water Bodies and Drainage patters of catchment area, if any			
	b.	Details of Traffic Density Impact Assessment and Modelling Study (Upload pdf Only)			
	c.	In case of Underground Tunnel projects below the Forest Land – Subsidence Impact Study report (Upload pdf Only)			
7.	Type of Industries to be established with Industrial Estate as per their category A/B				
	Sl. No	Type of Industry	No. of Units	Category A/B	

	8.	Length of the alignment in case of highway projects			
	9.	Details Bridges/ROB/Interchanges, Flyovers, Vehicle Underpass and Pedestrian Underpass (in case of Highway Projects)			
	a.	Total No. of Bridges			
	b.	Total No. of ROB			
	c.	Total No. of Interchanges			
	d.	Total No. of Flyovers			
	e.	Total No. of Vehicle Underpass			
	f.	Total No of Pedestrian Underpass			
	g.	Details of other utilities rail and road corridors			
36	Details of Court Cases if any				
	a.	Whether there is any Court Cases pending against the project and/or land in which the project is proposed to be set up (Yes/No)? If Yes,			
	b.	Name of the Court (Districts Court / High Court / NGT / Tribunals / Supreme Court of India) <i>If name of Court: (Districts Court, High Court, NGT, Tribunals)</i>			
	c.	Name of the Sub-court			
	d.	Case No.			
	e.	Orders / Directions of the court, if any and its relevance with the proposed project			
	f.	Case Details			
	g.	Upload Court Order if any (<i>Upload pdf Only</i>)			
37	Details of direction issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act				
	a.	Whether any direction issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act (Yes/No)? If yes,			
	b.	Details of directions issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act			
	c.	Upload copy of directions issued under Environment (Protection) Act / Air (Prevention & Control of Pollution) Act / Water (Prevention & Control of Pollution) Act			
	d.	Compliance status of the directions			
38	Details of EIA Consultant				
	a.	Have you hired Consultant for preparing document (Yes/No)?			:

		If No,		
		(i) Reason for not engaging the Consultant	:	
		If Yes,		
		(i) Accreditation No.	:	
		(ii) Name of the EIA Consultant	:	
		(iii) Address		
		(iv) Mobile No.	:	
		(v) Landline No.	:	
		(vi) E-mail Id	:	
		(vii) Category of Accreditation (Eligible for Category A / Eligible for Category B)	:	
		(viii) Sector of Accreditation	:	
		(ix) Validity of Accreditation	:	
		(x) Upload Certificate of Accreditation certified by QCI/NABET (<i>Upload pdf Only</i>)	:	
39	Documents to be attached			
I	<i>If Project Type is New / Expansion / Modernization / one-time capacity expansion for coal mining:</i>			
	a.	Upload Copy of EIA/EMP Report		
	b.	Upload Copy of Risk Assessment Report		
	c.	Upload Copy of Feasibility Report/ Detailed Project Report(DPR) /Detailed Engineering Report /Detailed Conceptual Plan / Approved Mining Plan (in case of Mining proposals) (<i>Upload pdf only</i>)		
	d.	Upload Copy of Final Layout Plan (<i>Upload pdf only</i>)		
	e.	Upload Cover Letter (<i>Upload pdf only and attach it as Annexure-document of Cover letter</i>)		
	f.	Upload a copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency (<i>Upload pdf only and attach it as Annexure-authorization</i>)		
	g.	Upload copy of District Survey Report (for mining of minor minerals only)		
		Upload copy of Replenishment Study Report & Baseline Survey data (for river sand mining proposals only)		
	g.	Upload Additional File, if any (<i>Upload pdf only</i>)		
II	<i>If Project Type is other than New / Expansion / Modernization / one-time capacity expansion for coal mining: -</i>			
	a.	Upload Copy of Feasibility Report / Detailed Project Report(DPR) /Detailed Engineering Report /Detailed Conceptual Plan (<i>Upload pdf only</i>)		
	b.	Upload Copy of Final Layout Plan (<i>Upload pdf only</i>)		
	c.	Upload Cover Letter (<i>Upload pdf only and attach it as Annexure-document of Cover letter</i>)		

	d.	Upload a copy of documents in support of the competence/authority of the person making this application to make application on behalf of the User Agency <i>(Upload pdf only and attach it as Annexure-authorization)</i>		
	e.	Upload Additional File, if any <i>(Upload pdf only)</i>		
	f.	Upload Updated Form1 <i>(Upload pdf only)</i>		
40	Undertaking			
	a.	I hereby give undertaking that the data and information given in the application and enclosures are true to be best of my knowledge and belief and I am aware that if any part of the data and information found to be false or misleading at any stage, the project will be rejected and clearance given, if any to the project will be revoked at our risk and cost. In addition to above, I hereby give undertaking that no activity / construction / expansion has since been taken up		
	b.	Name	:	
	c.	Designation	:	
	d.	Company	:	
	e.	Address	:	

F. No.22-26/2018-IA.III

Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003

Dated: 26th April, 2018

OFFICE MEMORANDUM

Sub.: Display of Aadhar related information in online Environment Clearance portal- regarding.

It has been brought to the notice of the Ministry that many project proponents are uploading the Aadhar information on the online Environment Clearance portal.

2. As per the Aadhar (Enrolment and Update) Regulations, 2016, no Aadhar related information should be published, displayed or posted publicly by any person or agency.
3. In view of the above, the User Agencies/ Project proponents are hereby advised not to upload Aadhar card details, at the time of online application for Environment Clearance
4. This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Director

To

1. All the officers of IA Division
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees
4. Chairman, CPCB
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file

J-11011/321/2016- IA. II (I)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan, Jor Bagh Road,
Aliganj, New Delhi-110003

Dated: 27th April, 2018

OFFICE MEMORANDUM

Subject: Exemption from Public Consultation for the projects / activities located within the Industrial Estates / Parks - regarding

In order to facilitate understanding of the qualifying criterion providing exemption from public consultation for the projects or activities located within the industrial estates / parks, and to streamline the procedural requirements for environmental clearances to such projects/activities in terms of the provisions of the Environment Impact Assessment (EIA) Notification, 2006, following clarifications are being issued for compliance with immediate effect: -

- (i) The exemption from public consultation, as provided under para 7(i) III Stage (3)(i)(b) of EIA Notification, 2006, to the projects or activities located within the industrial estates or parks, if applicable as under:
 - (a) Which were notified by the Central Government or the State/UT Governments, prior to the said Notification coming into force on 14th September, 2006
 - (b) Which obtain prior environmental clearances as mandated under the EIA Notification, 2006 [item 7(c) of the schedule to the said Notification].
- (ii) The exemption from public consultation, as provided under para 7(i) III State (3)(i)(b) of the EIA Notification, 2006, is also applicable to the projects or activities (located within the industrial estates and parks), which were granted Terms of Reference (ToR/Standard ToR) prior to environmental clearances to such industrial estates/parks, subject to validity of the ToRs.




- (iii) The exemption from public consultation, as provided under para 7(i) III State (3)(i)(b) of the EIA Notification, 2006, shall not be applicable to the following projects or activities (located within the industrial estates / parks) listed as under:

Sl. No. in Schedule of EIA Notification, 2006	Project or Activity
1 (d)	Thermal power plants
1 (e)	Nuclear power projects and processing of nuclear fuel
2 (a)	Coal washeries
2 (b)	Mineral beneficiation
3 (a)	Metallurgical industries (ferrous and non-ferrous)
3 (b)	Cement plants
4 (a)	Petroleum refining industry
4(b)	Coke oven plants
4 (c)	Asbestos milling and asbestos based products
4 (f)	Skin/hide processing including tanning industry
5 (g)	Distilleries
5 (i)	Pulp & paper industry
5 (j)	Sugar industry

2. This OM is issued in supersession to the earlier OM's dated 16th May, 2014; 10th December, 2014; and 4th April, 2016.

This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Scientist 'F'/Director

To

1. All the officers of IA Division
2. Chairperson / Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees
4. Chairman, Central Pollution Control Board
5. Chairpersons / Member Secretaries of all SPCBs/UTPCCs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to Minister of State for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ) / AS (AKM)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard File

F.No.22-65/2017-IA.III

Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj
New Delhi – 110003

Dated: 1st May, 2018

Office Memorandum

Sub: Corporate Environment Responsibility (CER) – reg.

The Environment Impact Assessment (EIA) Notification, 2006, issued under the Environment (Protection) Act, 1986, as amended from time to time, prescribes the process for granting prior environment clearance (EC) in respect of certain development projects/activities listed out in the Schedule to the Notification.

2. Sustainable development has many important facets/components like social, economic, environmental, etc. All these components are closely inter-related and mutually re-enforcing. Therefore, the general structure of EIA document, under Appendix-III to the notification, prescribes inter-alia public consultation, social impact assessment and R&R action plan besides environment management plan (EMP).

3. Section 135 of the Companies Act, 2013 deals with Corporate Social Responsibility (CSR) and Schedule-VII of the Act lists out the activities which may be included by companies in their CSR Policies. The concept of CSR as provided for in the Companies Act, 2013 and covered under the Companies (Corporate Social Responsibility Policy) Rules, 2014 comes into effect only in case of companies having operating projects and making net profit as also subject to other stipulations contained in the aforesaid Act and Rules. The environment clearance given to a project may involve a situation where the concerned company is yet to make any net profit and/or is not covered under the purview of the aforesaid Act and Rules. In such cases, the provisions of aforesaid act and Rules will not apply.

4. In the past, it has been observed that different Expert Appraisal Committees / State Expert Appraisal Committees (EACs/SEACs) have been prescribing different formulation of the Corporate Environment Responsibility (CER) and no common principles are followed. Several suggestions have also been received in this regard which inter-alia states that Greenfield projects and Brownfield projects should be treated differently; no CER should be prescribed whereas there is no increase in air pollution load, R&R, etc., besides streamlining percentage of CER.

5. The Ministry has carried out a detailed stakeholder consultation which inter-alia included meeting with Ministry of Petroleum & Natural Gas, Ministry of Power, Chairmen EACs, FICCI, ASSOCHAM, Gujarat Chamber of Commerce and Industry amongst others.

6. In order to have transparency and uniformity while recommending CER by Expert Appraisal Committee (EAC) / State level Expert Appraisal Committee (SEAC) / District level Expert Appraisal Committee (DEAC), the following guidelines are issued:

- (I) The cost of CER is to be in addition to the cost envisaged for the implementation of the EIA/EMP which includes the measures for the pollution control, environmental protection and conservation, R&R, wildlife and forest conservation/protection measures including the NPV and Compensatory Aforestation, required, if any, and any other activities, to be derived as part of the EIA process.
- (II) The fund allocation for the CER shall be deliberated in the EAC or SEAC or DEAC, as the case may be, with a due diligence subject to **maximum percentage** as prescribed below for different cases:


S.No	Capital Investment / Additional Capital Investment (in Rs)	Greenfield Project - % of Capital Investment	Brownfield Project - % of Additional Capital Investment
I	II	III	IV
1.	≤ 100 crores	2.0%	1.0%
2.	> 100 crores to ≤ 500 crores	1.5%	0.75%
3.	> 500 crores to ≤ 1000 crores	1.0%	0.50%
4.	> From 1000 crores to ≤ 10000 crores	0.5%	0.25%
5.	> 10000 crores	0.25%	0.125%

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- (III) The activities proposed under CER shall be worked out based on the issues raised during the public hearing, social need assessment, R&R plan, EMP, etc.
- (IV) The proposed activities shall be restricted to the affected area around the project.
- (V) Some of the activities which can be carried out in CER, are infrastructure creation for drinking water supply, sanitation, health, education, skill development, roads, cross drains, electrification including solar power, solid waste management facilities, scientific support and awareness to local farmers to increase yield of crop and fodder, rain water harvesting, soil moisture conservation works, avenue plantation, plantation in community areas, etc.
- (VI) The entire activities proposed under the CER shall be treated as project and shall be monitored. The monitoring report shall be submitted to the regional office as a part of half-yearly compliance report, and to the District Collector. It should be posted on the website of the project proponent.
- (VII) The District Collector may add or delete the activities as per the requirement of the District.
- (VIII) The EAC can vary the above percentage of CER subject to proper diligence, quantification and justification. The EAC based on appraisal, should clearly suggest the activities to be carried out under CER.
- (IX) This CER is not applicable in name change, transfer and amendment involving no additional project investment. In case of amendment in EC involving additional expenditure, CER will be applicable only on the additional expenditure as per column-IV of the table given in para 6(II) above.

7. This issues in supersession of all earlier OMs and guidelines issued in this regard.

8. This issues with the approval of competent authority.


(Sharath Kumar Pallerla)
Director (IA-III-Policy)

- 1. Chairman, CPCB
- 2. Chairmen of all the Expert Appraisal Committees
- 3. Chairperson/Member Secretaries of all the SEIAA/SEACs
- 4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
- 5. All the officers of IA Division

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKJ) / AS(AKM)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard File.

F. No. 3-50/2017-IA.III(Pt.)
Government of India
Ministry of Environment, Forest and Climate Change
(IA-III Section)

Indira Paryavaran Bhawan
Jor Bag Road, New Delhi - 3
Dated: 30th May, 2018

OFFICE MEMORANDUM

Sub: Consideration of mining proposals involving violation of the EIA Notification, 2006 under the provisions of S.O. 804 (E) dated 14.03.2017 and subsequent amendments for ToR / EC -regarding.

In order to regularize the projects involving violation of EIA Notification, 2006, the Ministry of Environment, Forest and Climate Change has issued a Notification number S.O.804(E) dated 14th March, 2017 and S.O. 1030 (E) dated 8th March, 2018 under the Environment (Protection) Act, 1986 to appraise the projects that have not taken prior environment clearance in terms of provisions of Environment Impact Notification, 2006 amended from time to time. Such cases have been termed as cases of violation of said notification.

2. Meanwhile, Hon'ble Supreme Court, vide judgment dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. has passed a detailed order interpreting Section 21(5) of the MMDR Act and directing payment of 100% penalty for illegal mining operations with reference to the relevant statutes, which *inter-alia*, include the Environment (Protection) Act, 1986, the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Forest (Conservation) Act, 1980 and the Mines and Minerals (Development & Regulation) Act, 1957.

3. In pursuance of the Ministry's Notification referred to in para 1 above, the proposals involving violations of the EIA Notification, 2006 are to be appraised for grant of ToR/EC at the Central level or by the respective SEAC/SEIAA in different States/UT's levels depending upon the categorization of the project.

4. In pursuance of the above notifications, the ministry had invited proposals for regularization of violation during a specified time-window. Now, the Ministry has received a number of proposals for grant of Terms of Reference (ToR)/Environmental clearance(EC) to mining projects engaged in mining of major and minor minerals for regularization of the same.

5. In the above context, in order to additionally comply with the directions given by the Hon'ble Supreme Court as referred to in para 2 above, it has been decided to include the following additional conditions in ToRs/ECs to be issued for mining

projects under the provisions of S.O. 804 (E) dated 14.03.2017 and subsequent amendments:-

- i. The project proponent shall give an undertaking by way of affidavit to comply with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors. before grant of ToR/ EC. The undertaking *inter-alia* include commitment of the PP not to repeat any such violation in future.
- ii. In case of violation of above undertaking, the ToR/Environmental Clearance shall be liable to be terminated forthwith.
- iii. The Environmental Clearance will not be operational till such time the Project Proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.,
- iv. State Government concerned shall ensure that mining operation shall not commence till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of judgment of Hon'ble Supreme Court dated the 2nd August 2017 in Writ Petition (Civil) No. 114 of 2014 in the matter of Common Cause versus Union of India and Ors.
6. The direction issued vide this Ministry's OM dated 15th March, 2018 and 16th March, 2018 shall continue to apply.
7. This issues with approval of competent authority.


(Surender Kumar)
Advisor (IA)

To,

1. The Chairman of all the SEAC/SEIAA of States/UTs
2. The Member Secretary of all the SEAC/SEIAA of States/UTs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS for Environment, Forest and Climate Change
3. PPS to Secretary (EF&CC)
4. PPS to AS (AKJ)/AS(AKM)
5. PS to JS (GB)/JS(JT)
6. All officers in IA Division
7. Website, MoEF&CC
8. Guard File

No. Z-11013/49/2018-IA.II (M)
Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division

Indira Paryavaran Bhawan
Vayu Wing, 3rd Floor, Aliganj,
Jor Bagh Road, New Delhi-110 003

Dated: 18th June, 2018

OFFICE MEMORANDUM

Sub.: Clarification for carrying out the mining of minerals including overburden and dump mining as per the provisions of the Environment Impact Assessment (EIA) Notification, 2006 as amended from time to time-regarding

Please refer the communication of Department of Mines and Geology, Govt. of Rajasthan, vide Circular No. Karmank/Nide/P-2/Kas/Niyam/2017/393 dated 01.05.2018 which *inter-alia* has instructed to all concerned that no Special Permit/STP will be issued to transport the overburden until a clear cut guideline is issued by the MoEFCC.

2. The matter has been examined in the Ministry and it is submitted that mining projects including dump mining, overburden mining etc. do require the prior Environmental Clearance as per the provisions of Environment Impact Assessment (EIA) Notification, 2006. **Therefore it is clarified that as per the provisions of the EIA Notification, 2006, the mining projects stated in the schedule require prior environmental clearance irrespective of the size of the mine lease area and type of mineral including overburden and dump mining.**

3. This issue with the approval of Competent Authority.


(Surendra Kumar)
Adviser

To,

- 1). The Chairman of all the SEAC/SEIAA of States/UTs
- 2). The Member Secretary of all the SEAC/SEIAA of States/UTs
- 3). The Principal Secretary, Mines and Geology, all States/UTs
- 4). The Member Secretary, all SPCBs/PCCs
- 5). The Secretary, Department of Mines & Geology, Government of Rajasthan, Secretariat, Jaipur, Rajasthan (w.r.t. Circular no. Karmank/Nide/P-2/Kas/Niyam/ 2017/393, dated 01.05.2018)
- 6). All Regional offices of the MoEFCC

Copy for information to:-

- 1). PS to Hon'ble Minister for Environment, Forest and Climate Change
- 2). PS to Hon'ble MOS for Environment, Forest and Climate Change
- 3). PPS to Secretary (EF&CC)
- 4). PPS to AS (AKJ)/AS(AKM)
- 5). PS to JS(GB)/JS(JT)
- 6). All officers in IA Division
- 7). Guard File
- 8). MoEF&CC website


(Surendra Kumar)
Adviser

F.No. 22-65/2017-IA.III

**Government of India
Ministry of Environment, Forest and Climate Change
Impact Assessment Division**

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, New Delhi-110 003

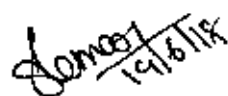
Dated: 19th June 2018

Circular

Subject: Imposition of Corporate Environment Responsibility (CER) -reg.

It is to inform that the Ministry of Environment, Forest and Climate Change has issued an Office Memorandum no.F.No.22-65/2017-IA.III, dated: 1st May, 2018 on Corporate Environment Responsibility (CER).

2. In view of the above it is hereby directed that the CER may be imposed on any Environmental Clearances issued after 1st May 2018 as per the norms of the above mentioned OM.
3. This issues with the approval of the Competent Authority.


(Sharath Kumar Pallarla)
Director (IA-Policy)

To

1. Chairperson /Member Secretaries of the all the Expert Appraisal Committees
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs
3. Chairperson/Member Secretaries of all the DEIAAs/DEACs

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file

F. No. 22-34/2018-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Aliganj, Jorbagh Road
New Delhi-110 003

Dated: 9th August, 2018

Office Memorandum

Sub.: Standardization of Environment Clearance conditions – reg.

The Ministry of Environment, Forest and Climate Change has notified the Environmental Impact Assessment (EIA) Notification, 2006 imposing certain restrictions and prohibitions on new projects or activities, or on the expansion or modernization of existing projects or activities based on their potential environmental impacts as indicated in the Schedule to the notification, being undertaken in any part of India, unless prior environmental clearance has been accorded in accordance with the provisions of the Environment (Protection) Act, 1986.

2.0 The process, *inter alia*, includes screening, scoping, public consultation and appraisal by Expert Appraisal Committee (EAC). Expert Appraisal Committee concerned shall make categorical recommendations to the regulatory authority concerned either for grant of prior environmental clearance on stipulated terms and conditions, or rejection of the application for prior environmental clearance, together with reasons for the same.


3.0 In order to bring uniformity on stipulated terms and conditions across the projects and sectors and as a general guidance to the EAC as well as project proponents, the Ministry has prepared standard conditions for the following sectors:

- i. Integrated Iron and Steel Plants
- ii. Coke Oven plants
- iii. Sponge Iron Plants
- iv. Induction Furnace and Rolling Mills
- v. Pellet Plants
- vi. Aluminium Smelters
- vii. Aluminium Refineries
- viii. Asbestos Based Industries
- ix. Mineral beneficiation plants
- x. Integrated cement plants
- xi. Standalone Cement Grinding Units with captive power plants
- xii. Standalone Cement Grinding Units without captive power plants

- xiii. Tanneries / Hide processing industries
- xiv. Paper and Pulp Industries
- xv. Open Cast Coal Mines
- xvi. Underground Coal Mines
- xvii. Coal Washeries
- xviii. Petroleum Refineries Industry, Petro Chemical Complexes and Petro Chemicals Products and Petro Chemical based processing.
- xix. Distilleries & Sugar
- xx. Pharmaceuticals and chemical industries
- xxi. Off-shore and On-shore oil and gas exploration, development and production
- xxii. Oil and gas transportation,
- xxiii. Isolated storage and handling of hazardous chemicals.
- xxiv. River Valley and Hydro-electric projects
- xxv. Industrial Estates

4.0 The standard EC conditions enclosed herewith shall be considered by Expert Appraisal Committee at the time of appraisal of the proposals. EAC after due diligence, can modify, delete and add conditions based on the project specific requirements. The recommended conditions by the EAC shall be brought in the minutes of the meeting of the Expert Appraisal Committee.

This issues with the approval of competent authority.


 (Shivarath Kumar Palleria)
 Director (IA-Policy)

To,

1. Chairman, CPCB
2. Chairmen of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAA/SEACs
4. Chairpersons/Member Secretaries of all SPCBs/UTPCCs
5. All the officers of IA Division

Copy for information to:

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2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKJ) / AS(AKM)
5. PPS to JS(GB) / JS(JT)
6. Website, MoEF&CC
7. Guard File.

ANNEXURE - I**Standard EC Conditions for Integrated Iron and Steel Plants****I. Statutory compliance:**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. 277 (E) dated 31st March 2012(Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants)as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants

released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The cameras shall be installed at suitable locations for 24X7 recording of battery emissions on the both sides of coke oven batteries and videos shall be preserved for at least one-month recordings.
- v. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- vi. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- viii. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- ix. Secondary emission control system shall be provided at SMS Converters.
- x. Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.
- xi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- xii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- xiii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- xiv. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
- xv. Land-based APC system shall be installed to control coke pushing emissions.
- xvi. Monitor CO , HC and O_2 in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
- xvii. Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.

- xviii. In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NOx control facility shall be provided to meet the prescribed standards.
- xix. The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.
- xx. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xxi. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.
- xxii. The project proponent shall install Dry Gas Cleaning Plant with bag filter for Blast Furnace and SMS converter. *(to be decided on case to case basis depending on type and size of plant)*
- xxiii. Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. *(case to case basis small plants: Manual; Large plants: Continuous)*
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The project proponent shall provide the ETP for coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) dated 31st March 2012 (Integrated iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time as amended from time to time;
- v. Adhere to 'Zero Liquid Discharge'
- vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- viii. Tyre washing facilities shall be provided at the entrance of the plant gates
- ix. CO₂ injection shall be provided in GCP of SMS to reduce pH in circulating water to ensure optimal recycling of treated water for converter gas cleaning.
- x. The project proponent shall practice rainwater harvesting to maximum possible extent.
- xi. Treated water from ETP of COBP shall not be used for coke quenching.
- xii. Water meters shall be provided at the inlet to all unit processes in the steel plants.
- xiii. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The project proponent shall provide TRTs to recover energy from top gases of Blast Furnaces.
- ii. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and non-recovery type coke ovens;
- iii. Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines.
- iv. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- v. Use hot charging of slabs and billets/blooms as far as possible.
- vi. Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C.
- vii. Explore feasibility to install WHRS at Waste Gases from BF stoves; Sinter Machine; Sinter Cooler, and all reheating furnaces and if feasible shall be installed.
- viii. Restrict Gas flaring to < 1%.

- ix. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- x. Provide LED lights in their offices and residential areas.
- xi. Ensure installation of regenerative type burners on all reheating furnaces.

VI. Waste management

- i. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.
- ii. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
- iii. Tar Shudge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).
- iv. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- v. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
- vi. Used refractories shall be recycled as far as possible.
- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- ix. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- x. The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanising, chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. Coal tar sludge / decanter shall be recycled to coke ovens.
- xi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA,III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head-quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (ii) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - II

Standard EC Conditions for Coke Oven Plants

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules- 1986 (G.S.R 277 (E) dated 31st March 2012 (applicable to Coke oven) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specifications through laboratories recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four

locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The cameras shall be installed at suitable locations for 24X7 recording of battery emissions on the both sides of coke oven batteries and videos shall be preserved for at least one-month recordings.
- v. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- vi. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- viii. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- ix. Secondary emission control system shall be provided at SMS Converters.
- x. Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.
- xi. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- xii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- xiii. The project proponent use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- xiv. Facilities for spillage collection shall be provided for coal and coke on wharf of coke oven batteries (Chain conveyors, land based industrial vacuum cleaning facility).
- xv. Land-based APC system shall be installed to control coke pushing emissions.
- xvi. Monitor CO, HC and O₂ in flue gases of the coke oven battery to detect combustion efficiency and cross leakages in the combustion chamber.
- xvii. Vapour absorption system shall be provided in place of vapour compression system for cooling of coke oven gas in case of recovery type coke ovens.

- xviii. In case concentrated ammonia liquor is incinerated, adopt high temperature incineration to destroy Dioxins and Furans. Suitable NO_x control facility shall be provided to meet the prescribed standards.
- xix. The coke oven gas shall be subjected to desulphurization if the sulphur content in the coal exceeds 1%.
- xx. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xxi. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.
- xxii. The project proponent shall install Dry Gas Cleaning Plant with bag filter for Blast Furnace and SMS converter. (to be decided on case to case basis depending on type and size of plant)
- xxiii. Dry quenching (CDQ) system shall be installed along with power generation facility from waste heat recovery from hot coke.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (Integrated Iron & Steel); G.S.R 414 (E) dated 30th May 2008 (Sponge Iron) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The project proponent shall provide appropriate ETP for effluents discharged from coke oven and by-product to meet the standards prescribed in G.S.R 277 (E) 31st March 2012 (applicable to Coke oven plants) as amended from time to time.
- v. Adhere to 'Zero Liquid Discharge'.
- vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.

- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. Treated water from ETP of COBP shall not be used for coke quenching.
- x. Water meters shall be provided at the inlet to all unit processes in the steel plants.
- xi. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. The project proponent shall provide TRTs to recover energy from top gases of Blast Furnaces.
- ii. Coke Dry Quenching (CDQ) shall be provided for coke quenching for both recovery and non-recovery type coke ovens.
- iii. Waste heat shall be recovered from Sinter Plants coolers and Sinter Machines.
- iv. Use torpedo ladle for hot metal transfer as far as possible. If ladles not used, provide covers for open top ladles.
- v. Use hot charging of slabs and billets/blooms as far as possible.
- vi. Waste heat recovery systems shall be provided in all units where the flue gas or process gas exceeds 300°C.
- i. Explore feasibility to install WHRS at Waste Gases from BF stoves; Sinter Machine; Sinter Cooler, and all reheating furnaces and if feasible shall be installed.
- ii. Restrict Gas flaring to < 1%.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide LED lights in their offices and residential areas.

- vii. Ensure installation of regenerative type burners on all reheating furnaces.

VI. Waste management

- i. An attrition grinding unit to improve the bulk density of BF granulated slag from 1.0 to 1.5 Kg/l shall be installed to use slag as river sand in construction industry.
- ii. In case of Non-Recovery coke ovens, the gas main carrying hot flue gases to the boiler, shall be insulated to conserve heat and to maximise heat recovery.
- iii. Tar Sludge and waste oil shall be blended with coal charged in coke ovens (applicable only to recovery type coke ovens).
- iv. Carbon recovery plant to recover the elemental carbon present in GCP slurries for use in Sinter plant shall be installed.
- v. Waste recycling Plant shall be installed to recover scrap, metallic and flux for recycling to sinter plant and SMS.
- vi. Used refractories shall be recycled as far as possible.
- vii. SMS slag after metal recovery in waste recycling facility shall be conditioned and used for road making, railway track ballast and other applications. The project proponent shall install a waste recycling facility to recover metallic and flux for recycle to sinter plant. The project proponent shall establish linkage for 100% reuse of rejects from Waste Recycling Plant.
- viii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- ix. Oil Collection pits shall be provided in oil cellars to collect and reuse/recycle spilled oil. Oil collection trays shall be provided under coils on saddles in cold rolled coil storage area.
- x. The waste oil, grease and other hazardous waste like acidic sludge from pickling, galvanising, chrome plating mills etc. shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016. Coal tar sludge / decanter shall be recycled to coke ovens.
- xi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Coke Oven plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely: PM_{10} , SO_2 , NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - III

Standard EC Conditions for Sponge Iron (DRI) Plants:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008 as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to

SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions, (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Provide pollution control system in the sponge iron plant as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- x. The project proponent shall ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation;
- xi. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 414 (E) dated 30th May 2008; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground

water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system on the DRI Kilns.
- ii. The dolochar generated shall be used for power generation.
- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016

- iv. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- i. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection

measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Sponge Iron plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - IV

Standard EC Conditions for Induction/ Electric Arc Furnace & Rolling Mills

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released

(e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- ix. The project proponent shall use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. The project proponent shall provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. The project proponent shall provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to IF/EAF) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. The project proponent shall provide the ETP for effluents of rolling mills to meet the standards prescribed in G.S.R/ 277 (E) 31st March 2012 (applicable to IF/EAF) as amended from time to time.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases of reheating furnaces.
- ii. Practice hot charging of slabs and billets/blooms as far as possible.
- iii. Ensure installation of regenerative type burners on all reheating furnaces.
- iv. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- v. Provide the project proponent for LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.

- ii. Oily scum and metallic sludge recovered from rolling mills ETP shall be mixed, dried, and briquetted and reused melting Furnaces
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- v. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or

shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - V**Standard EC Conditions Iron Ore Pelletisation Plants (including CPP):****I. Statutory compliance:**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. 277 (E) dated 31st March 2012 (applicable to pellet plants) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- iii. The project proponent shall install system carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to

SO₂ and NO_x emissions) within and outside the plant area (at least at four locations one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- viii. Recycle and reuse iron ore fines, coal and coke fines, lime fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after briquetting/ agglomeration.
- ix. Use leak proof trucks/dumpers carrying coal and other raw materials and cover them with tarpaulin.
- x. Provide covered sheds for raw materials like scrap and sponge iron, lump ore, coke, coal, etc.
- xi. Provide primary and secondary fume extraction system at all melting furnaces.
- xii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 277 (E) dated 31st March 2012 (applicable to pellet plants) as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The project proponent shall provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide the project proponent for LED lights in their offices and residential areas

VI. Waste management

- i. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- iii. Kitchen waste shall be composted or converted to biogas for further use *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the pellet plants shall be implemented.

I. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - VI

Standard EC Conditions for Aluminium Smelters

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R 742 (E) dated 30th August 1990 and thereafter amended vide G.S.R 46 (E) dated 3rd February 2006 (Aluminium); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants

released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- x. Provide covered sheds for raw materials like bauxite, coal, etc.
- xi. Adopt measures to recover fluoride gas from electrolytic cells and recycle the same in the process.
- xii. Practice use of low-sulphur tars for baking anodes.
- xiii. Adopt dry scrubbing combined with incineration in order to control emissions of tar and volatile organic compounds (VOCs). The waste heat shall be recovered from the flue gases of incinerator.
- xiv. Make efforts to increase the life of pot lining through better construction and operating techniques.
- xv. Recycle alumina dust collected in ESPs installed in calciner.
- xvi. Design the pot roofs with louvers and roof ventilators.
- xvii. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 742

(E) dated 30th August 1990 and further amended vide G.S.R 46 (E) dated 3rd February 2006 (Aluminium); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Reduce water consumption in bauxite beneficiation and alumina refinery by concentrating the solids in the tailings
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases.

- ii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. A plan for 100 % utilisation of red mud generated shall be implemented. Under the Plan, MOU shall be signed with potential buyers including cement companies for supply of red mud. (For new Projects)
- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. Oily scum and metallic sludge recovered from ETP shall be mixed, dried, and briquetted and reused.
- v. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.

- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide E.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium Industry shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely: PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - VII

Standard EC Conditions for Aluminium Refineries

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area).
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. 742 (E) dated 30th August 1990 and thereafter amended vide G.S.R. 46 (E) dated 3rd February 2006 (Aluminium); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants.

released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions.

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation.
- x. Provide covered sheds for raw materials like bauxite, coal, etc.
- xi. recycle alumina dust collected in ESPs installed in calciner.
- xii. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R 742 (E) dated 30th August 1990 and further amended vide G.S.R 46 (E) dated 3rd February 2006 (Aluminium); S.O. 3305 (E) dated 7th December 2013 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground

water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.

- iv. Adhere to 'Zero Liquid Discharge'
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Reduce water consumption in bauxite beneficiation and alumina refinery by concentrating the solids in the tailings
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The project proponent shall provide waste heat recovery system (pre-heating of combustion air) at the flue gases.
- ii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. The red mud generated from the project shall be stored in the red mud pond lined with impervious clay prior to use to prevent leakage, designed as per the CPCB guidelines with proper leachate collection system. Ground water shall be monitored regularly all around the red mud disposal area and report submitted to the Regional Office of the Ministry. Proper care shall be taken to ensure no run off or seepage from the red mud disposal site to natural drainage.

(For Expansion Projects)

(The red mud already generated from the existing plant shall be stored in the red mud pond lined with impervious clay prior to use to prevent leakage, designed as per the CPCB guidelines with proper leachate collection system. Ground water shall be monitored regularly all around the red mud disposal area and report submitted to the Regional Office of the Ministry. Proper care shall be taken to ensure no run off or seepage from the red mud disposal site to natural drainage. Plan shall be implemented for utilising the already generated red mud in a time bound manner)

- iii. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office.
- iv. Oily scum and metallic sludge recovered from ETP shall be mixed, dried, and briquetted and reused.
- v. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016
- vi. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-63/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- i. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out
- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Aluminium Industry shall be implemented.

I. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely: PM₁₀, SO₂, NOx (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - VIII

Standard EC Conditions for Asbestos Based Industries:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vii. The project proponent shall obtain a certificate from the supplier of Chrysotile fibre that it does not contain any toxic or trace metals. A copy of certificate shall be submitted to the Ministry of Environment and Forests.
- viii. The project proponent shall adhere to the prescribed BIS standards and laws regarding use and handling of asbestos, safety of employees etc. Raw materials like asbestos fibre and cement shall be transported in closed containers. Asbestos fibre shall be brought in pelletized form in impermeable bags and under compressed condition.
- ix. Only Chrysotile white asbestos fibre shall be used. Blue asbestos shall not be utilized as raw material in the manufacturing process.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 913 (E) dated 24th October, 1989 as amended time to time (Asbestos); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and

CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor fugitive emissions including asbestos fibre count in the plant premises at least once in every quarter through laboratories recognised under Environment (Protection) Act, 1986 or NABL accredited NIOH / ITRC / NCB or any other approved agency.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. The project proponent shall provide appropriate dust collectors to Fibre mill, Bag opening device (BOD), Cement and Fly ash silos. Bag filters followed by wet washer shall be provided at automatic bag opening machine, bag shredder, fibre mill and to cement silo to collect the dust and recycle the same into the process.
- vi. High Efficiency Particulate Air filters (HEPA) preceded by primary filters shall be installed on all asbestos contaminated areas.
- vii. Total dust emission limit of 2 mg/Nm^3 as notified under the Environment (Protection) Act, 1986 shall be complied. Adequate measures shall be adopted to control the process emission and ensure that the stack emission of asbestos fibre shall not exceed the emission limit of 0.2 fibre/cc. Asbestos fibre in work zone environment shall be maintained within 0.1 fibre/cc.
- viii. Provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- ix. Pollution control system in the steel plant shall be provided as per the CREP Guidelines of CPCB.
- x. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- xi. Channelize through hood with proper suction arrangement, bag filter and stack the fugitive emissions generated from hopper of Jaw crusher and pulverizer.
- xii. Separate truck parking area shall be provided and monitor vehicular emissions at regular interval.

- xiii. Bring the cement in closed tankers, fly ash in covered trucks and asbestos in impervious bags opening inside a closed mixer.
- xiv. The bags containing asbestos fibre including damaged bags, if any shall be stored in enclosed area.
- xv. Place the asbestos contaminated materials (non-encapsulated) for off-site removal in sealed packaging such as double sealed heavy duty (700 gauge) plastic bags, suitably labelled.
- xvi. Empty and damaged fibre bags shall be shredded into fine particles in a bag-shredder and recycled into the process.
- xvii. AC sheets shall be piled in wet condition only.
- xviii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport.
- xix. Proper housekeeping shall be maintained within the plant premises. Process machinery, exhaust and ventilation systems shall be laid in accordance with Factories Act. Better housekeeping practices shall be adopted for improvement of the environment within the work environment also. These include:
 - a. All monitoring transfer points shall be connected to dust extraction system.
 - b. Leakages or dust from machines and ducts shall be plugged.
 - c. Floor shall be cleaned by vacuum cleaner only and the dust collected shall be reused in the process.
 - d. Enclosed belt conveyor shall be used instead of manual transportation of asbestos within the premises.
- xx. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 913 (E) dated 24th October, 1989 as amended time to time (Asbestos); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The water drawl shall not exceed — (existing and the expansion project put together)
- v. Adhere to 'Zero Liquid Discharge'
- vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the plants.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. Waste heat shall be recovered from kiln and cooler.
- ii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- iii. Provide LED lights in their offices and residential areas.
- iv. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- v. Maximize utilization of alternate fuels and Co-processing to achieve best practice norms.

VI. Waste management

- i. The PP shall ensure that the entire solid waste generated including process rejects, cement, fly ash, dust from bag filters and empty asbestos bag shall be recycled back in the manufacturing process. There will be no solid waste disposal outside the plant premises. Asbestos fibres which cannot be further recycled due to contamination of

Iron dust shall be stored in HDPE lined secured landfill. The disposal facilities for asbestos waste shall be in accordance with the Bureau of Indian Standard Code.

- ii. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- iii. Kitchen waste shall be composted or converted to biogas for further use. *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. There shall be no manual handling/opening of asbestos fibre bags. The company shall install fully automatic asbestos fibre debagging system.
- ii. To educate the workers, all the work places where asbestos dust may cause a hazard shall be clearly indicated as a dust exposure area through the use of display signs which identifies the hazard and the associated health effects.
- iii. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iv. Regular medical examination of the workers and health monitoring of all the employees shall be carried out and if cases of asbestosis are detected, necessary compensation shall be arranged under the existing laws. The proponent shall create in-house facilities for spirometry test. A competent occupational health physician shall be appointed to carry out medical surveillance. Occupational health of all the workers shall be monitored for lung function test, Spirometry test, chest x-ray, sputum for acid-fast-bacilli (AFC) and asbestos body (AB), urine for sugar and albumen, blood tests for TLC, DLC, ESR, Hb and records maintained for at least 40 years from the beginning of the employment or 15 years after the retirement or cessation of employment whichever is later. Occupational Health Surveillance shall be carried out as per the directives of the Hon'ble Supreme Court including the recent Kalyaneswari case
- v. The project proponent shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- vi. 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.

- vii. The commitment made by the project proponent to the issues raised during Public Hearing shall be implemented by the proponent.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F. No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest /wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Asbestos Based Plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
 - i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - IX

Standard EC Conditions for Mineral Beneficiation Plants:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. Monitor fugitive emissions in the plant premises.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in reference to SO₂ and NOx emissions) within and outside the plant area at least at four locations (one within and

three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent use leak proof trucks/dumpers carrying ore and other raw materials and cover them with tarpaulin.
- vii. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- viii. Design the ventilation system for adequate air changes as per ACGIH document for all tunnels, motor houses, Oil Cellars.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The project proponent shall provide the slime disposal facility with impervious lining and collection wells for seepage. The water collected from the slime pond shall be treated and recycled.
- v. Adhere to 'Zero Liquid Discharge'
- vi. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016
- ii. Kitchen waste shall be composted or converted to biogas for further use *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt and EMP

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.

- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures: to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Mineral Beneficiation plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM_{10} , SO_2 , NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other

orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - X

Standard EC Conditions Integrated Cement Plants:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and 10th May, 2016 (Co-processing Cement); S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants

released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Recycle and reuse lime fines, coal fines and such other fines collected in the pollution control devices and vacuum cleaning devices in the process after agglomeration.
- x. Ensure covered transportation and conveying of ore, coal and other raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash;
- xi. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xii. Provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement)and subsequent amendment dated 9th May, 2016 (Cement)and 10th May, 2016(in case of Co-processing Cement)as amended from time to time; S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants)as amended from time to time) and connected to SPCB and CPCB online

servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to "Zero Liquid Discharge".
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Waste heat recovery system shall be provided for kiln and cooler.
- ii. The project proponent make efforts to achieve power consumption less than 65 units/tonne for Portland Pozzolana Cement (PPC) and 85 units/tonne for Ordinary Portland Cement (OPC) production and thermal energy consumption of 670 Kcal/Kg of clinker.

- iii. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- iv. Provide the project proponent for LED lights in their offices and residential areas.
- v. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.
- vi. maximize utilization of alternate fuels and Co-processing to achieve best practice norms

VI. Waste management

- i. Used refractories shall be recycled as far as possible.
- ii. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- iii. Kitchen waste shall be composted or converted to biogas for further use.*(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide P.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Cement plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely: PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.

- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XI**Standard EC Conditions for Cement Grinding Units with Captive Power Plants:****I. Monitoring of compliance**

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 (G.S.R. No. 612 (E) dated 25th S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to

SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Provide Low NO_x burners as primary measures and SCR /NSCR technologies as secondary measure to control NO_x emissions.
- xii. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xiii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiv. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants

III. Water quality monitoring and preservation

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers / sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide the project proponent for LED lights in their offices and residential areas.
- iii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.

VI. Waste management

- i. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.

- ii. Kitchen waste shall be composted or converted to biogas for further use *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA,III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other

purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.

- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XII

Standard EC Conditions for Cement Grinding Units without Captive Power Plants:

I. Statutory compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules, 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to

SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall provide leakage detection and mechanised bag cleaning facilities for better maintenance of bags.
- vii. Pollution control system in the cement plant shall be provided as per the CREP Guidelines of CPCB.
- viii. Sufficient number of mobile or stationery vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- ix. Ensure covered transportation and conveying of raw material to prevent spillage and dust generation; Use closed bulkers for carrying fly ash.
- x. Provide wind shelter fence and chemical spraying on the raw material stock piles; and
- xi. Have separate truck parking area and monitor vehicular emissions at regular interval.
- xii. Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land by the use of covered conveyor belts/railways as a mode of transport
- xiii. Ventilation system shall be designed for adequate air changes as per ACGIH document for all tunnels, motor houses, cement bagging plants

III. Water quality monitoring and preservation

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 612 (E) dated 25th August, 2014 (Cement) and subsequent amendment dated 9th May, 2016 (Cement) and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)
- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Adhere to 'Zero Liquid Discharge'.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off
- vii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- viii. Water meters shall be provided at the inlet to all unit processes in the cement plant.
- ix. The project proponent shall make efforts to minimise water consumption in the cement plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly.
- ii. Provide the project proponent for LED lights in their offices and residential areas.
- iii. Maximize utilization of fly ash, slag and sweetener in cement blend as per BIS standards.

VI. Waste management

- i. The waste oil, grease and other hazardous shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- ii. Kitchen waste shall be composted or converted to biogas for further use.(to be decided on case to case basis depending on type and size of plant)

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements/ deviation / violation of the environmental / forest / wildlife norms/ conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
 - i. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the cement plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- i. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.

- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XIII

Standard EC Conditions for Tanneries and Leather / Hide Processing Units Industries

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.

II. Air quality monitoring and preservation

- i. The project proponent shall install emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986.
- ii. The project proponent shall monitor fugitive emissions (for PM_{2.5}, PM₁₀, NH₃ and VOCs) in the plant premises at least once in a year through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall submit monthly summary report of monitoring of air quality / fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB in the six-monthly monitoring report.
- iv. The project proponent shall provide appropriate Air Pollution Control (APC) system for all the emission generating points so as to comply prescribed stack emission standards (if any stack is proposed).
- v. Adequate method shall be adopted to control odour and a report submitted to the Ministry's Regional Office.

- vi. The Company shall provide stacks of adequate height to the D.G. Sets along with acoustic enclosures for noise control as per guidelines. The DG Sets should comply with the norms notified.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system at discharge points for effluents with respect to standards prescribed in Environment (Protection) Rules 1986 and connect to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The effluent shall monitor manually with respect to standards prescribed in Environment (Protection) Rules 1986 at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers / sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iv. Ground water monitoring around the solid waste disposal site/secured landfill (SLF), if any, should be carried out regularly
- v. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. The project proponent provide the ETP for effluent to meet the standards prescribed under the Environment (Protection) Rules, 1986 as amended from time to time.
- vii. The project proponent allow the treated effluent to be discharged in the ambient environment only after exhausting options for reuse in order to minimise freshwater usage. (in case of the large scale tanneries in sensitive / critical areas-implement Zero Liquid Discharge)
- viii. Wastewater after primary treatment should be discharged into the CETP through a closed pipeline. **(it shall be applicable if tannery effluent is send to a CETP)**
- ix. At 100% utilisation of the processing capacity, the total effluent generated from the leather complex should not exceed stipulated limit. All tanneries located in the area should install required pre-treatment facilities in their tannery. The entire effluent generated (except chrome liquor) after pre-treatment, should be treated in the CETP and it shall meet the prescribed CETP standards. The final CETP design and recommended standards should be approved by a Govt. institute such as NEERI, CLRI, IITs, NITs **(it shall be applicable to tannery CETP)**

- x. Provide Sewage Treatment Plant for domestic wastewater in case there is no municipal sewer line to convey sewage for treatment at Municipality sewage treatment plant.
- xi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- xii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- xiii. Water meters shall be provided at the inlet to all unit processes in the steel plants.
- xiv. The project proponent shall make efforts for reduction in specific water and power consumption and increase in the recycling of the treated effluent.

IV. Noise monitoring and prevention

- i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Spent chrome liquor should be segregated at the tannery premises and collected separately and processed for recovery and reuse of chromium in the tanneries. The process adopted should be the one involving precipitation of chromium with the help of a suitable alkali. Design of the proposed continuous Chrome Recovery plant should be approved by a Govt. institute such as NEERI, CLRI, IITs, NITs.
- ii. In-house various salt control measures shall be adopted by tanneries: such as mechanical desalting of hide, counter current soaking and recycling of pickle liquor to reduce TDS.
- iii. The company shall dispose of solid waste in the secured double lined landfill site. The fleshings from the tannery shall be supplied to the manufacturers of dog chew and glue or properly dispose of in environment-friendly manner.
- iv. The waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016 and Solid Waste Management Rules, 2016.

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the tannery sector shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other

orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XIV

Standard EC Conditions for Paper and Pulp Industries:

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report, (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and the systems be calibrated according to equipment supplier's specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NOx in

reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions, (case to case basis small plants: Manual; Large plants: Continuous)

- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. The project proponent shall install high volume, low concentration NCG collection & destruction system to mitigate all malodorous gases emitted.
- vii. Emissions shall be controlled from chemical recovery section through primary and secondary venturi scrubbers.
- viii. Pollution control system in the pulp and paper plant shall be provided as per the CREP Guidelines of CPCB.
- ix. Sufficient number of mobile or stationary vacuum cleaners shall be provided to clean plant roads, shop floors, roofs, regularly.
- x. Wind shelter fence and chemical spraying shall be provided on the raw material stock piles.
- xi. In case of treatment process disturbances/failure of pollution control equipment adopted by the unit, the respective unit shall be shut down and shall not be restarted until the control measures are rectified to achieve the desired efficiency.
- xii. The company shall install Oxygen Delignification (ODL) Plant and shall maintain AOX below 1 kg/tonne of paper production
- xiii. Elemental Chlorine Free (ECF) technology shall be used and lime kiln shall be installed to manage lime sludge

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring with respect to standards prescribed in Environment (Protection) Rules 1986 vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories. (case to case basis small plants: Manual; Large plants: Continuous)

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The project proponent shall provide the ETP to meet the standards prescribed in vide G.S.R. No. 546 (E) dated 30th August 2008 as amended from time to time and S.O. 3305 (E) dated 7th December 2015 (Thermal Power Plants) as amended from time to time.
- v. Sewage Treatment Plant shall be provided for treatment of domestic wastewater to meet the prescribed standards.
- vi. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.
- vii. Tyre washing facilities shall be provided at the entrance of the plant gate(s).
- viii. Ensure that there is no black liquor spillage in the area of pulp mill, no use of elemental chlorine for bleaching in mill, installation of hypo preparation plant.
- ix. Ensure that no spillage of foam in chemical recovery plant, no discharge of foul condensate generated from MEE in the Chemical recovery process directly to ETP.
- x. The project proponent shall practice rainwater harvesting to maximum possible extent.
- xi. Water meters shall be provided at the inlet to all unit processes in the steel plants.
- xii. The project proponent shall make efforts to minimise water consumption in the steel plant complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Deinking sludge and fine sludge from ETP shall be disposed through TSDF.
- ii. Black Liquor shall be separately processed for recovery of energy and chemical in a Chemical Recovery Process.
- iii. Sufficient number of colour coded waste collection bins shall be constructed at shop floors in each shop to systematically segregate and store waste materials generated at the shop floors (other than Process waste) in designated coloured bins for value addition by promoting reuse of such wastes and for good housekeeping.
- iv. 100% utilization of fly ash shall be ensured. All the fly ash shall be provided to cement and brick manufacturers for further utilization and Memorandum of Understanding in this regard shall be submitted to the Ministry's Regional Office. (in case of CPP)
- v. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016
- vi. Kitchen waste shall be composted or converted to biogas for further use *(to be decided on case to case basis depending on type and size of plant)*

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant
- ii. The project proponent shall prepare GHG emissions inventory for the plant and shall submit the programme for reduction of the same including carbon sequestration including plantation.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. 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.

- iv. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- v. The proponent shall follow International Standards of safety for ClO₂ generation and storage system, and ozone plant, and certification on regular basis may be submitted. Provision for adequate safety for personnel in case of any accidental leakage should be in place

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- i. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- iv. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- v. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Pulp and Paper plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition

to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Air (Prevention & Control of

Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

STANDARD EC CONDITIONS FOR OPENCAST COAL MINES

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report, (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vi. Solid waste/hazardous waste generated in the mines needs to addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016

II. Air quality monitoring and preservation

- i. Continuous ambient air quality monitoring stations as prescribed in the statue be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.
- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water/mist sprinkling/rain gun etc

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shall be carried out in critical areas prone to air pollution (with higher values of $PM_{10}/PM_{2.5}$) such as haul road, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the Ambient Air Quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.

- iv. The transportation of coal shall be carried out as per the provisions and route envisaged in the approved Mining Plan or environment monitoring plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed so that the impact of sound, dust and accidents could be appropriately mitigated.
- v. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vi. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- vii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.

- vi. Catch and or garland drains and siltation ponds in adequate numbers and appropriate size shall be constructed around the mine working, coal heaps & OB dumps to prevent run off of water and flow of sediments directly into the river and water bodies. Further, dump material shall be properly consolidated/ compacted and accumulation of water over dumps shall be avoided by providing adequate channels for flow of silt into the drains. The drains/ ponds so constructed shall be regularly de-silted particularly before onset of monsoon and maintained properly. Sump capacity should provide adequate retention period to allow proper settling of silt material. The water so collected in the sump shall be utilized for dust suppression and green belt development and other industrial use. Dimension of the retaining wall constructed, if any, at the toe of the OB dumps within the mine to check run-off and siltation should be based on the rainfall data. The plantation of native species to be made between toe of the dump and adjacent field/habitation/water bodies.
- vii. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) after due treatment conforming to the specific requirement (standards).
- viii. Industrial waste water generated from CHP, workshop and other waste water, shall be properly collected and treated so as to conform to the standards prescribed under the standards prescribed under Water Act 1974 and Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time. Adequate ETP /STP needs to be provided.
- ix. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- x. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations, considering the presence of river/rivulet/pond/lake etc, shall be prepared and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the approved Mining Plan/EIA/EMP report and with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against intrush of surface water into the mine should be as per the approved Mining Plan and as per the permission of DGMS or any other authority as prescribed by the law.
- xi. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A revarian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels as per Noise Pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs

in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

- ii. Controlled blasting techniques shall be practiced in order to mitigate ground vibrations, fly rocks, noise and air blast etc., as per the guidelines prescribed by the DGMS.
- iii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. Mining shall be carried out as per the approved mining plan(including Mine Closure Plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iii. No mining shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980
- iv. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. The final mine void depth should preferably be as per the approved Mine Closure Plan, and in case it exceeds 40 m, adequate engineering interventions shall be provided for sustenance of aquatic life therein. The remaining area shall be backfilled and covered with thick and alive top soil. Post-mining land be rendered usable for agricultural/forestry purposes and shall be diverted. Further action will be treated as specified in the guidelines for Preparation of Mine Closure Plan issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.
- iii. The entire excavated area, backfilling, external OB dumping (including top soil) and afforestation plan shall be in conformity with the "during mining"/"post mining" land-use pattern, which is an integral part of the approved Mining Plan and the EIA/EMP submitted to this Ministry. Progressive compliance status vis-a-vis the post mining land use pattern shall be submitted to the MOEFCC/RO.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to

utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, along with fly ash for external dump of overburden, backfilling of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.

- v. Further, it may be ensured that as per the time schedule specified in mine closure plan it should remain live till the point of utilization. The topsoil shall temporarily be stored at earmarked site(s) only and shall not be kept unutilized. The top soil shall be used for land reclamation and plantation purposes. Active OB dumps shall be stabilised with native grass species to prevent erosion and surface run off. The other overburden dumps shall be vegetated with native flora species. The excavated area shall be backfilled and afforested in line with the approved Mine Closure Plan. Monitoring and management of rehabilitated areas shall continue until the vegetation becomes self-sustaining. Compliance status shall be submitted to the Ministry of Environment, Forest and Climate Change/ Regional Office.
- vi. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered/endemic flora/fauna, if any, spotted/reported in the study area. The Action plan in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt consisting of 3-tier plantation of width not less than 7.5 m shall be developed all along the mine lease area as soon as possible. The green belt comprising a mix of native species (endemic species should be given priority) shall be developed all along the major approach/ coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & it's RO on six-monthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-1A.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
 - iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
 - iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
 - v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
 - vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
 - vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
 - vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
 - viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
 - viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
 - ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
 - x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
 - xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
 - xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
 - xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the
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Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

STANDARD EC CONDITIONS FOR UNDERGROUND COAL MINES

I. Statutory compliance:

- i. The Environmental clearance shall be subject to orders of Hon'ble Supreme Court of India, Hon'ble High Courts, NGT and any other Court of Law, from time to time, and as applicable to the project.
- ii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- iii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iv. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vii. Solid waste/hazardous waste generated in the mines needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. to be carried out at least once in six months. Online ambient air quality monitoring station/stations may also be installed in addition to the regular air monitoring stations as per the requirement and/or in consultation with the SPCB.
- ii. The Ambient Air Quality monitoring in the core zone shall be carried out to ensure the Coal Industry Standards notified vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board. Data on ambient air quality and heavy metals such

as Hg, As, Ni, Cd, Cr and other monitoring data shall be regularly reported to the Ministry/Regional Office and to the CPCB/SPCB.

- iii. Transportation of coal, to the extent permitted by road, shall be carried out by covered trucks/conveyors. Effective control measures such as regular water sprinkling/rain gun/ mist sprinkling etc., shall be carried out in critical areas prone to air pollution with higher level of particulate matter all through the coal transport roads, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled regularly. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. Major approach roads shall be black topped and properly maintained.
- v. The transportation of coal shall be carried out as per the provisions and route proposed in the approved mining plan. Transportation of the coal through the existing road passing through any village shall be avoided. In case, it is proposed to construct a 'bypass' road, it should be so constructed that the impact of sound, dust and accidents could be appropriately mitigated.
- vi. Vehicular emissions shall be kept under control and regularly monitored. All the vehicles engaged in mining and allied activities shall operate only after obtaining 'PUC' certificate from the authorized pollution testing centres.
- vii. Coal stock pile/crusher/feeder and breaker material transfer points shall invariably be provided with dust suppression system. Belt-conveyors shall be fully covered to avoid air borne dust. Side cladding all along the conveyor gantry should be made to avoid air borne dust. Drills shall be wet operated or fitted with dust extractors.
- viii. Coal handling plant shall be operated with effective control measures w.r.t. various environmental parameters. Environmental friendly sustainable technology should be implemented for mitigating such parameters.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for its compliance.
- iii. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.

- iv. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- v. Ground water, excluding mine water, shall not be used for mining operations. Rainwater harvesting shall be implemented for conservation and augmentation of ground water resources.
- vi. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the mine. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side, stabilized with plantation so as to withstand the peak water pressure preventing any chance of mine inundation.
- vii. Garland drains (of suitable size, gradient and length) around the critical areas i.e. mine shaft and low lying areas, shall be designed keeping at least 50% safety margin over and above the peak sudden rainfall and maximum discharge in the area adjoining the mine sites. The sump capacity shall also provide adequate retention period to allow proper settling of silt material of the surface runoff.
- viii. The water pumped out from the mine, after siltation, shall be utilized for industrial purpose viz. watering the mine area, roads, green belt development etc. The drains shall be regularly desilted particularly after monsoon and maintained properly.
- ix. Industrial waste water from coal handling plant and mine water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made thereunder, and as amended from time to time. Oil and grease trap shall be installed before discharge of workshop effluent. Sewage treatment plant of adequate capacity shall be installed for treatment of domestic waste water.
- x. Adequate groundwater recharge measures shall be taken up for augmentation of ground water. The project authorities shall meet water requirement of nearby village(s) in case the village wells go dry due to dewatering of mine.
- xi. The surface drainage plan including surface water conservation plan for the area of influence affected by the said mining operations shall be prepared, considering the presence of any river/rivulet/pond/lake etc., with impact of mining activities on it, and implemented by the project proponent. The surface drainage plan and/or any diversion of natural water courses shall be as per the provisions of the approved Mining Plan/ EIA-EMP submitted to this Ministry and the same should be done with due approval of the concerned State/Gol Authority. The construction of embankment to prevent any danger against intrush of surface water into the mine should be as per the approved mining plan and as per the permission of DGMS.
- xii. The project proponent shall take all precautionary measures to ensure reverian/ riparian ecosystem in and around the coal mine upto a distance of 5 km. A reverian /riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. Adequate measures shall be taken for control of noise levels below 85 dB(A) in the work environment. Workers engaged in underground mining operations, operation of HEMM, etc. shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms/guidelines in this regard. Progress in usage of such accessories to be monitored. Adequate awareness programme for users to be conducted.
- ii. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis.

V. Mining Plan

- i. Mining shall be carried out under strict adherence to provisions of the Mines Act 1952 and subordinate legislations made there-under as applicable.
- ii. No change in mining method *i.e.* UG to OC, calendar programme and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC).
- iii. Mining shall be carried out as per the approved mining plan (including mine closure plan) abiding by mining laws related to coal mining and the relevant circulars issued by Directorate General Mines Safety (DGMS).
- iv. Underground work place environmental conditions shall be rendered ergonomic and air breathable with adequate illumination in conformance with DGMS standards.
- v. No mining activity shall be carried out in forest land without obtaining Forestry Clearance as per Forest (Conservation) Act, 1980 and also adhering to The Scheduled Tribes and Other Traditional Forest Dwellers (Recognition of Forest Rights) Act, 2006 read with provisions of Indian Forest Act, 1927.
- vi. Efforts should be made to reduce energy and fuel consumption by conservation, efficiency improvements and use of renewable energy.

VI. Land reclamation

- i. Digital Survey of entire lease hold area/core zone using Satellite Remote Sensing survey shall be carried out at least once in three years for monitoring land use pattern and report in 1:50,000 scale or as notified by Ministry of Environment, Forest and Climate Change(MOEFCC) from time to time shall be submitted to MOEFCC/Regional Office (RO).
- ii. Post-mining land be rendered usable for agricultural/forestry purposes and shall be handed over to the respective State Government, as specified in the Guidelines for Preparation of Mine Closure Plan, issued by the Ministry of Coal dated 27th August, 2009 and subsequent amendments.

- iii. Regular monitoring of subsidence movement on the surface over and around the working areas and its impact on natural drainage pattern, water bodies, vegetation, structure, roads and surroundings shall be continued till movement ceases completely. In case of observation of any high rate of subsidence beyond the limit prescribed, appropriate effective mitigation measures shall be taken to avoid loss of life and materials. Cracks should be effectively plugged in with ballast and clay soil/suitable material.
- iv. Fly ash shall be used for external dump of overburden, backfilling or stowing of mine as per provisions contained in clause (i) and (ii) of subparagraph (8) of fly ash notification issued vide SO 2804 (E) dated 3rd November, 2009 as amended from time to time. Efforts shall be made to utilize gypsum generated from Flue Gas Desulfurization (FGD), if any, alongwith fly ash for external dump of overburden, backfilling or stowing of mines. Compliance report shall be submitted to Regional Office of MoEF&CC, CPCB and SPCB.
- v. A separate team for subsidence monitoring and surface mitigation measures shall be constituted and continuous monitoring & implementation of mitigation measures be carried out.
- vi. Thorough inspection of the mine lease area for any cracks developed at the surface due to mining activities below ground shall be carried out to prevent inrush of water in the mine.
- vii. Native tree species shall be selected and planted over areas affected by subsidence.
- viii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Green Belt

- i. The project proponent shall take all precautionary measures during mining operation for conservation and protection of endangered flora/fauna, if any, spotted/reported in the study area. Action plan, in this regard, if any, shall be prepared and implemented in consultation with the State Forest and Wildlife Department.
- ii. Greenbelt, consisting of three-tier plantation, of width not less than 7.5 m, shall be developed all along the mine lease area in a phased manner. The green belt comprising of a mix of native species shall be developed all along the major approach roads/ coal transportation roads.

VIII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored.
- ii. The Project Proponent shall undertake Occupational Health survey for initial and Periodical medical examination of the workers engaged in the Project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS Circulars. Besides carrying out regular periodic health check-up of their workers, 20% of the workers engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any.

- iii. Personnel (including outsourcing employees) working in dusty areas shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.
- iv. Skill training as per safety norms specified by DGMS shall be provided to all workmen including the outsourcing employees to ensure high safety standards in mines.
- v. Effective arrangement shall be made to provide and maintain at suitable points conveniently situated, a sufficient supply of drinking water for all the persons employed.
- vi. Implementation of Action Plan on the issues raised during the Public Hearing shall be ensured. The Project Proponent shall undertake all the tasks as per the Action Plan submitted with budgetary provisions during the Public Hearing. Land oustees shall be compensated as per the norms laid out R&R Policy of the Company/ or the National R&R Policy/ R&R Policy of the State Government, as applicable
- vii. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- vii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- viii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- ix. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- x. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

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- xi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
 - xii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
 - xiii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

STANDARD EC CONDITIONS FOR COAL WASHERY

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan / Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority.
- vi. Solid waste/hazardous waste generated in the washery needs to be addressed in accordance to the Solid Waste Management Rules, 2016 / Hazardous & Other Waste Management Rules, 2016.
- vii. Coal beneficiation practices shall be carried out under strict adherence to provisions of the Factories Act, 1957 and subordinate legislations made there under.

II. Air quality monitoring and preservation

- i. Adequate ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely particulates, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive receptors in consultation with the State Pollution Control Board. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc. carried out at least once in six months.
- ii. Continuous ambient air quality monitoring stations as prescribed in the statute be established in the core zone as well as in the buffer zone for monitoring of pollutants, namely PM₁₀, PM_{2.5}, SO₂ and NO_x. Location of the stations shall be decided based on the meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the State Pollution Control Board. Online ambient air quality monitoring stations may also be installed in addition to the regular monitoring stations as per the requirement and/or in

consultation with the SPCB. Monitoring of heavy metals such as Hg, As, Ni, Cd, Cr, etc to be carried out at least once in six months.

- iii. Transportation of coal by road shall be carried out by covered trucks/conveyors. The transportation of clean coal and rejects shall be by rail with wagon loading through silo. Effective measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulates such as roads, belt conveyors, loading/unloading and transfer points. Fugitive dust emissions from all sources shall be controlled at source. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the Central/State Pollution Control Board.
- iv. All approach roads shall be black topped and internal roads shall be concreted. The roads shall be regularly cleaned. Coal transportation shall be carried out by covered trucks.
- v. Covered trucks shall be engaged for mineral transportation outside the washery upto the railway siding, shall be optimally loaded to avoid spillage en-route. Trucks shall be adequately maintained and emissions shall be below notified limits.
- vi. Facilities for parking of trucks carrying raw material from linked mine shall be created within the unit.
- vii. Vehicular emissions shall be kept under control and regularly monitored. The vehicles having 'PUC' certificate from authorized pollution testing centres shall be deployed for washery operations.
- viii. Hoppers of the coal crushing unit and other washery units shall be fitted with high efficiency bag filters/mist spray water sprinkling system shall be installed and operated effectively at all times of operation to check fugitive emissions from crushing operations, transfer points of closed belt conveyor systems and from transportation roads.
- ix. The raw coal, washed coal and coal wastes (rejects) shall be stacked properly at earmarked site (s) within stockyards fitted with wind breakers/shields. Adequate measures shall be taken to ensure that the stored mineral does not catch fire.
- x. The temporary reject sites should appropriate planned and designed to avoid air and water pollution from such sites.

III. Water quality monitoring and preservation

- i. The effluent discharge (mine waste water, workshop effluent) shall be monitored in terms of the parameters notified under the Water Act, 1974 Coal Industry Standards vide GSR 742 (E) dated 25.9.2000 and as amended from time to time by the Central Pollution Control Board.
- ii. The monitoring data shall be uploaded on the company's website and displayed at the project site at a suitable location. The circular No. J-20012/1/2006-IA.11 (M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change shall also be referred in this regard for compliance.

- iii. Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under the Environment (Protection) Act, 1986 and the Rules made there under, and as amended from time to time.
- iv. The project proponent shall not alter major water channels around the site. Appropriate embankment shall be provided along the side of the river/nallah flowing near or adjacent to the washery. The embankment constructed along the river/nallah boundary shall be of suitable dimensions and critical patches shall be strengthened by stone pitching on the river front side stabilised with plantation so as to withstand the peak water pressure preventing any chance of inundation.
- v. Heavy metal content in raw coal and washed coal shall be analysed once in a year and records maintained thereof.
- vi. The rejects should preferably be utilized in FBC power plant or disposed off through sale for its gainful utilization. If the coal washery rejects are to be disposed off, it should be done in a safe and sustainable manner with adequate compaction and post closure arrangement to avoid water pollution due to leachate from rejects and surface run off from reject dumping sites.
- vii. An Integrated Surface Water Management Plan for the washery area up to its buffer zone considering the presence of any river/rivulet/pond/lake etc. with impact of coal washing activities on it, shall be prepared, submitted to MoEFCC and implemented.
- viii. Waste Water shall be effectively treated and recycled completely either for washery operations or maintenance of green belt around the plant.
- ix. Rainwater harvesting in the washery premises shall be implemented for conservation and augmentation of ground water resources in consultation with Central Ground Water Board.
- x. No ground water shall be used for coal washing unless otherwise permitted in writing by competent authority (CGWA) or MoEFCC. The make-up water requirement of washery should not exceed 1.5 m³/tonne of raw coal.
- xi. Regular monitoring of ground water level and quality shall be carried out in and around the mine lease area by establishing a network of existing wells and constructing new piezometers during the mining operations. The monitoring of ground water levels shall be carried out four times a year i.e. pre-monsoon, monsoon, post-monsoon and winter. The ground water quality shall be monitored once a year, and the data thus collected shall be sent regularly to MOEFCC/RO.
- xii. Monitoring of water quality upstream and downstream of water bodies shall be carried out once in six months and record of monitoring data shall be maintained and submitted to the Ministry of Environment, Forest and Climate Change/Regional Office.
- xiii. The project proponent shall take all precautionary measures to ensure riverine/ riparian ecosystem in and around the coal mine up to a distance of 5 km. A riverine/riparian ecosystem conservation and management plan should be prepared and implemented in consultation with the irrigation / water resource department in the state government.

IV. Noise and Vibration monitoring and prevention

- i. The noise level survey shall be carried out as per the prescribed guidelines to assess noise exposure of the workmen at vulnerable points in the mine premises, and report in this regard shall be submitted to the Ministry/RO on six-monthly basis
- ii. Adequate measures shall be taken for control of noise levels as per noise pollution Rules, 2016 in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc shall be provided with personal protective equipments (PPE) like ear plugs/muffs in conformity with the prescribed norms and guidelines in this regard. Adequate awareness programme for users to be conducted. Progress in usage of such accessories to be monitored.

V. Coal beneficiation

- i. Coal stacking plan shall be prepared separately for raw coal, clean coal, middling and rejects.
- ii. Efforts should be made to reduce energy consumption by conservation, efficiency improvements and use of renewable energy.

VI. Green Belt

- i. Three tier greenbelt comprising of a mix of native species, of minimum 30 m width shall be developed all along the washery area to check fugitive dust emissions and to render aesthetic to neighbouring stakeholders. A 3-tier green belt comprising of a mix of native species or tree species with thick leaves shall be developed along vacant areas, storage yards, loading/transfer points and also along internal roads/main approach roads.
- ii. The project proponent shall make necessary alternative arrangements, if grazing land is involved in core zone, in consultation with the State government to provide alternate areas for livestock grazing, if any. In this context, the project proponent shall implement the directions of Hon'ble Supreme Court with regard to acquiring grazing land.

VII. Public hearing and Human health issues

- i. Adequate illumination shall be ensured in all mine locations (as per DGMS standards) and monitored weekly. The report on the same shall be submitted to this ministry & its RO on six-monthly basis.
- ii. The project proponent shall undertake occupational health survey for initial and periodical medical examination of the personnel engaged in the project and maintain records accordingly as per the provisions of the Mines Rules, 1955 and DGMS circulars. Besides regular periodic health check-up, 20% of the personnel identified from workforce engaged in active mining operations shall be subjected to health check-up for occupational diseases and hearing impairment, if any, as amended time to time.
- iii. Personnel (including outsourced employees) working in core zone shall wear protective respiratory devices and shall also be provided with adequate training and information on safety and health aspects.

- iv. Implementation of the action plan on the issues raised during the public hearing shall be ensured. The project proponent shall undertake all the tasks/measures as per the action plan submitted with budgetary provisions during the public hearing. Land oustees shall be compensated as per the norms laid down in the R&R policy of the company/State Government/Central Government, as applicable.
- v. The project proponent shall follow the mitigation measures provided in this Ministry's OM No.Z-11013/5712014-IA.II (M) dated 29th October, 2014, titled 'Impact of mining activities on habitations-issues related to the mining projects wherein habitations and villages are the part of mine lease areas or habitations and villages are surrounded by the mine lease area'.

VIII. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project authorities shall inform to the Regional Office of the MOEFCC regarding commencement of mining operations.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No change in coal beneficiation process and scope of work shall be made without obtaining prior approval of the Ministry of Environment, Forests and Climate Change (MoEFCC) with such conditions mentioned therein. No change in the maximum quantum of raw material feed per annum against the approved washery capacity shall be made.
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XVIII

Standard EC Conditions for Petroleum Refining Industry, Petro-chemical complexes and Petrochemical products and petrochemical based processing

[applicable to item 4(a) Petroleum refining industry; 5(c) Petro-chemical complexes (industries based on processing of petroleum fractions & natural gas and/or reforming to aromatics); 5(e) Petrochemical products and petrochemical based processing such as production of carbon black and electrode grade graphite (processes other than cracking & reformation and not covered under the complexes)]

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier

specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.

- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Continuous Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120 each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)
- iv. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- v. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vi. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- viii. The National Emission Standards for Petroleum Oil Refinery issued by the Ministry vide G.S.R. 186(E) dated 18th March, 2008 and G.S.R. 595(E) dated 21st August, 2009 as amended from time to time shall be followed.
- ix. The National Emission Standards for Petrochemical (Basic & Intermediates) issued by the Ministry vide G.S.R. 820 (E) dated 9th November, 2012as amended time to time shall be followed.
- x. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions

III. Water quality monitoring and preservation

- I. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).

- ii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- v. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- vi. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- vii. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- viii. The project proponent shall practice rainwater harvesting to maximum possible extent.
- ix. The project proponent shall make efforts to minimise water consumption in the complex by segregation of used water, practicing cascade use and by recycling treated water.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.

- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation.

VII. Green Belt

- i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- iv. The project proponent shall carry out heat stress analysis for the workmen who work in high temperature work zone and provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- v. 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.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places.

- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) for the Iron and Steel plants shall be implemented.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.

- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xiii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XIX

Standard EC Conditions Distillery sector **(applicable to item S.N. 5(g)- Distilleries & 5(j) - Sugar industry)**

I. Statutory compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (Incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall install system carryout to Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions. (case to case basis small plants: Manual; Large plants: Continuous)

- iii. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- v. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- vi. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- viii. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.

III. Water quality monitoring and preservation

- i. For online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD) and connected to SPCB and CPCB online servers.
- ii. Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD)
- iii. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- iv. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- v. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- vi. Industrial/trade effluent shall be segregated into High COD/TDS and Low COD/TDS effluent streams. High TDS/COD shall be passed through stripper followed by MEE and ATFD (agitated thin film drier). Low TDS effluent stream shall be treated in ETP and then passed through RO system.

- vii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- i. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

- ii. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- iii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- iv. 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.
- v. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- vi. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.

- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XX

Standard EC Conditions for Pharmaceutical/Chemical Industry sector
(applicable to item S.N. 4(d) - Chlor-alkali industry; 4(e) - Soda ash industry; 5(b) -Pesticides industry and Pesticides specific intermediates; 5(f) - Synthetic organic chemicals industry {dyes & dye intermediates, bulk drugs and intermediates & synthetic rubbers etc} and 5(h) - Integrated paint industry)

I. Statutory compliance

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986; in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- vi. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.

- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- v. Storage of raw materials, coal etc shall be either stored in silos or in covered areas to prevent dust pollution and other fugitive emissions.
- vi. National Emission Standards for Organic Chemicals Manufacturing Industry issued by the Ministry vide G.S.R. 608(E) dated 21st July, 2010 and amended from time to time shall be followed.
- vii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.

III. Water quality monitoring and preservation

- i. The project proponent shall provide online continuous monitoring of effluent, the unit shall install web camera with night vision capability and flow meters in the channel/drain carrying effluent within the premises (applicable in case of the projects achieving ZLD).
- ii. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- iii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iv. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- v. Process effluent/any wastewater shall not be allowed to mix with storm water. The storm water from the premises shall be collected and discharged through a separate conveyance system.
- vi. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

- vii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Hazardous chemicals shall be stored in tanks, tank farms, drums, carboys etc. Flame arresters shall be provided on tank farm and the solvent transfer through pumps.
- ii. Process organic residue and spent carbon, if any, shall be sent to cement industries. ETP sludge, process inorganic & evaporation salt shall be disposed off to the TSDF.
- iii. The company shall undertake waste minimization measures as below:-
 - a. Metering and control of quantities of active ingredients to minimize waste.
 - b. Reuse of by-products from the process as raw materials or as raw material substitutes in other processes.
 - c. Use of automated filling to minimize spillage.
 - d. Use of Close Feed system into batch reactors.
 - e. Venting equipment through vapour recovery system.
 - f. Use of high pressure hoses for equipment clearing to reduce wastewater generation

VII. Green Belt

- i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public bearing and Human health issues

- ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii. The unit shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling. Fire fighting system shall be as per the norms.
- iv. The PP shall provide Personal Protection Equipment (PPE) as per the norms of Factory Act.
- v. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- vi. 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.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- viii. There shall be adequate space inside the plant premises earmarked for parking of vehicles for raw materials and finished products, and no parking to be allowed outside on public places

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-63/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other

purpose. Year-wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall monitor the criteria pollutants level namely; PM₁₀, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XXI

Standard EC Conditions for Offshore and Onshore Oil and Gas exploration, development & production sector

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- vi. The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable

II. Air quality monitoring and preservation

- i. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with
- ii. To control source and the fugitive emissions, suitable pollution control devices shall be installed to meet the prescribed norms and/or the NAAQS. Sulphur content should not exceed 0.5% in the coal for use in coal fired boilers to control particulate emissions within permissible limits (as applicable). The gaseous emissions shall be dispersed through stack of adequate height as per CPCB/SPCB guidelines.
- iii. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one stations each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.

- iv. Ambient air quality shall be monitored at the nearest human settlements as per the National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 for PM10, PM2.5, SO2, NOX, CO, CH4, HC, Non-methane HC etc.
- v. During exploration, production, storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- vi. The project proponent also to ensure trapping/storing of the CO2 generated, if any, during the process and handling.
- vii. Approach road shall be made pucca to minimize generation of suspended dust.

III. Water quality monitoring and preservation

- i. As proposed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged to any surface water body, sea and/or on land. Domestic sewage shall be disposed off through septic tank/soak pit.
- ii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iii. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- iv. The company shall construct the garland drain all around the drilling site to prevent runoff of any oil containing waste into the nearby water bodies. Separate drainage system shall be created for oil contaminated and non-oil contaminated. Effluent shall be properly treated and treated wastewater shall conform to CPCB standards.
- v. Drill cuttings separated from drilling fluid shall be adequately washed and disposed in HDPE lined pit. Waste mud shall be tested for hazardous contaminants and disposed according to HWMH Rules, 2016. No effluent/drilling mud/drill cutting shall be discharged/disposed off into nearby surface water bodies. The company shall comply with the guidelines for disposal of solid waste, drill cutting and drilling fluids for onshore drilling operation notified vide GSR.546(E) dated 30th August, 2005.

IV. Noise monitoring and prevention

- i. The company shall make all arrangements for control of noise from the drilling activity. Acoustic enclosure shall be provided for the DG sets along with the adequate stack height as per CPCB guidelines.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

V. Energy Conservation measures

- iv. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.
- ii. Oil content in the drill cuttings shall be monitored by some Authorized agency and report shall be sent to the Ministry's Regional Office

VII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Blow Out Preventer system shall be installed to prevent well blowouts during drilling operations. BOP measures during drilling shall focus on maintaining well bore hydrostatic pressure by proper pre-well planning and drilling fluid logging etc.
- iii. Company shall prepare operating manual in respect of all activities, which would cover all safety & environment related issues and measures to be taken for protection. One set of environmental manual shall be made available at the drilling site/ project site. Awareness shall be created at each level of the management. All the schedules and results of environmental monitoring shall be available at the project site office. Remote monitoring of site should be done.
- iv. On completion of drilling, the company has to plug the drilled wells safely and obtain certificate from environment safety angle from the concerned authority
- v. The company shall take measures after completion of drilling process by well plugging and secured enclosures; decommissioning of rig upon abandonment of the well and drilling site shall be restored the area in original condition. In the event that no economic quantity of hydrocarbon is found a full abandonment plan shall be implemented for the drilling site in accordance with the applicable Indian Petroleum Regulations
- vi. The Company shall take necessary measures to prevent fire hazards, containing oil spill and soil remediation as needed. Possibility of using ground flare shall be explored. At the place of ground flaring, the overhead flaring stack with knockout drums shall be installed to minimize gaseous emissions during operation.
- vii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- viii. The company shall develop a contingency plan for H₂S release including all necessary aspects from evacuation to resumption of normal operations. The workers shall be

provided with personal H₂S detectors in locations of high risk of exposure along with self containing breathing apparatus

- 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, crèche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.
- x. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.
- xi. The Company shall carry out long term subsidence study by collecting base line data before initiating drilling operation till the project lasts. The data so collected shall be submitted six monthly to the Ministry and Regional Office.

VIII. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XXII

Standard EC Conditions for Oil & gas transportation pipeline sector

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (In case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016, Solid Waste Management Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- vi. The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable.
- vii. The Oil Industry Safety Directorate (OISD) guidelines for pipeline projects shall be followed in letter and spirit.
- viii. Necessary approval from Chief Controller of Explosive must be obtained before commission of project.

II. Air quality monitoring and preservation

- i. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- ii. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.

- iii. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.

III. Water quality monitoring and preservation

- i. As already committed by the project proponent, Zero Liquid Discharge shall be ensured and no waste/treated water shall be discharged outside the premises (applicable in case of the projects achieving the ZLD).
- ii. The effluent discharge shall conform to the standards prescribed under the Environment (Protection) Rules, 1986, or as specified by the State Pollution Control Board while granting Consent under the Air/Water Act, whichever is more stringent.
- iii. Total fresh water requirement shall not exceed the proposed quantity or as specified by the Committee. Prior permission shall be obtained from the concerned regulatory authority/CGWA in this regard.
- iv. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.
- v. The construction of pipelines through the waterbodies shall be avoided during the rainy season/ breeding seasons of aquatic animals.
- vi. The riverbed, embankments and dykes shall be restored adequately after installation of crossings.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz. 75 dBA (day time) and 70 dBA (night time).

V. Energy Conservation measures

- i. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

VII. Safety, Public hearing and Human health issues

- i. SCADA system shall be installed with dedicated optical fiber based telecommunication link for safe operation of pipeline and leak detection system.
- ii. Intelligent pigging facilities shall be provided for the entire pipeline system for internal corrosion monitoring. Coating and impressed current cathodic protection system shall be provided to prevent external corrosion.
- iii. All the recommendations mentioned in the risk assessment report shall be implemented and Emergency response plan shall be based on guideline prepared by OISD
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Onsite and Offsite Disaster Management Plan shall be implemented.

VIII. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of

which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of commencing the land development work and completion of the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- vii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- viii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- ix. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- x. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other

Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.

- xiii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XXIII

Standard EC Conditions for isolated storage and handling of hazardous chemicals sector

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- v. Necessary authorization required under the Hazardous and Other Wastes (Management and Trans-Boundary Movement) Rules, 2016 shall be obtained and the provisions contained in the Rules shall be strictly adhered to.
- vi. During construction phase, air pollution and solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.
- vii. The Company shall strictly comply with the rules and guidelines under Manufacture, Storage and Import of Hazardous Chemicals (MSIHC) Rules, 1989 as amended time to time. All transportation of Hazardous Chemicals shall be as per the Motor Vehicle Act (MVA), 1989.
- viii. The company should obtain all requisite clearances for fire safety and explosives and should comply with the stipulation made by the respective authorities.
- ix. Necessary approvals from Chief Controller of Explosives must be obtained before commission of project, if applicable.
- x. The project proponent shall obtain and adhere to statutory clearance under the Coastal Regulation Zone Notification, 2011, as applicable

II. Air quality monitoring and preservation

- i. The National Ambient Air Quality Emission Standards issued by the Ministry vide G.S.R. No. 826(E) dated 16th November, 2009 shall be complied with.
- ii. The locations of ambient air quality monitoring stations shall be decided in consultation with the State Pollution Control Board (SPCB) and it shall be ensured that at least one station each is installed in the upwind and downwind direction as well as where maximum ground level concentrations are anticipated.
- iii. Regularly monitoring of VOC and HC in the work zone area in the plant premises should be carried out and data be submitted to Ministry's Regional Office, CPCB and State Pollution Control Board. Quarterly monitoring for fugitive emissions should be carried out as per the guidelines of CPCB and reports submitted to Ministry's Regional Office.
- iv. During storage and handling, the fugitive emission of methane, if any, shall be monitored using Infra-red camera/ appropriate technology.
- v. The project proponent also to ensure trapping/storing of the CO₂ generated, if any, during the process and handling.
- vi. The DG sets shall be equipped with suitable pollution control devices and the adequate stack height so that the emissions are in conformity with the extant regulations and the guidelines in this regard.
- vii. Water sprinkling has to be undertaken on regular basis to control the polluting particles.
- viii. Approach road shall be made pucca to minimize generation of suspended dust.

III. Water quality monitoring and preservation

- i. As already committed by the project proponent, Zero Liquid Discharge shall be ensured (applicable in case of the projects achieving the ZLD).
- ii. The Company shall harvest rainwater from the roof tops of the buildings and storm water drains to recharge the ground water and utilize the same for different industrial operations within the plant.

IV. Noise monitoring and prevention

- i. Acoustic enclosure shall be provided to DG set for controlling the noise pollution.
- ii. The overall noise levels in and around the plant area shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.
- iii. The ambient noise levels shall conform to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989 viz: 75 dBA (day time) and 70 dBA (night time).

V. Energy Conservation measures

- iv. The energy sources for lighting purposes shall preferably be LED based.

VI. Waste management

- i. Oil spillage prevention and mitigation scheme shall be prepared. In case of oil spillage/ contamination, action plan shall be prepared to clean the site by adopting proven technology. The recyclable waste (oily sludge) and spent oil shall be disposed of to the authorized recyclers.

VII. Green Belt

- i. The green belt of 5-10 m width shall be developed in more than 33% of the total project area, mainly along the plant periphery, in downward wind direction, and along road sides etc. Selection of plant species shall be as per the CPCB guidelines in consultation with the State Forest Department.

VIII. Safety, Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard Identification and Risk Assessment (HIRA) and guidelines prepared by OISD, DGMS and Govt. of India. Mock drill should be conducted once in a month, onsite and off-site Disaster Management Plan shall be implemented.
- ii. Training shall be imparted to all employees on safety and health aspects of chemicals handling. Pre-employment and routine periodical medical examinations for all employees shall be undertaken on regular basis. Training to all employees on handling of chemicals shall be imparted.
- iii. Additional safety measures should be taken by using remote operated shut off valve, double block & bleed valve (DBB), impervious dyke wall and un-bonded flexible roof drain pipe, if applicable.
- iv. High and low-level alarms shall be fitted to plant storage tanks which can detect overfilling. However, proper supervision shall be done every time.
- v. Unit should carry out safety audit and report submitted to the Regional Office.
- vi. 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.
- vii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell equipped with full-fledged laboratory facilities shall be set up to carry out the Environmental Management and Monitoring functions, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of commencing the land development work and completion of the project.
- vii. Restoration of the project site shall be carried out satisfactorily and report shall be sent to the Ministry's Regional Office.
- xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

XL. Miscellaneous (applicable only for LPG storage)

- i. No packing/loading/unloading of LPG cylinders shall be made on road/outside factory premises. Vehicles loaded/unloaded with LPG cylinders shall be parked inside the plant premises only and not on road sides.
- ii. The proponent shall strictly follow Oil Industry Safety Directorate (OISD) norms/guidelines for installation and design of equipments and operation of the LPG Bottling Plants.

- iii. Cylinders should be filled with the LPG and should never be over-filled. Cylinders should be checked before and after filling to ensure that they are fit to fill, have been correctly filled, are gas tight and will be trouble-free in service.
- iv. Cylinder filling operations should be carried out in accordance with a reputable technical standard or code such as ISO 10691.
- v. Road tankers should be equipped to the standard specified in national regulations reputable code. Vehicles should be mobilized during transfer operations and equipped to prevent untimely movement. Loading/unloading bays should be protected against impact. Fire-resistant coatings shall be provided to tanks/vessels.
- vi. Sections of pipeline and storage systems that can be isolated with valves or blinds should be equipped with safety valves to protect against possible damage as liquid LPG expands with increases in temperature.
- vii. The norms/guidelines of Oil Industry Safety Directorate (OISD) for installation and design of equipments and operation of the LPG Bottling Plants shall be strictly followed. Safety audit to be carried out and report submitted to the Regional Office.
- viii. The project proponent shall conduct a traffic density survey on the approach road to be used for transportation of LPG tankers and LPG cylinders.
- ix. Static electricity discharge shall be checked. Steel structures and pipeline should be securely earthed. Road tankers should be bonded to earth before LP Gas transfers commence and remain so until the operation is complete and the hose is disconnected.
- x. The proponent shall strictly comply with Government of India's Gas Cylinder Rules and its amendments.

ANNEXURE - XXIV

Standard EC Conditions for River Valley and Hydroelectric projects

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/Committee.
- v. NOC shall be obtained from National Commission of Seismic Design Parameters (NCSDS) of CWC.
- vi. Necessary approval of CEA shall be obtained for those projects having the project cost more than Rs. 1,000 crore.

II. Air quality monitoring and preservation

- i. Regular monitoring of various environmental parameters viz., Water Quality, Ambient Air Quality and Noise levels as per the CPCB guidelines at designated locations shall be carried out on monthly basis and a detailed database of the same shall be prepared and recorded. This shall be used as a baseline data for post construction EIA / Monitoring purposes.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed standards.
- iii. Necessary control measures such as water sprinkling arrangements, etc. be taken up to arrest fugitive dust at all the construction sites.

III. Water quality monitoring and preservation

- i. Conjunctive use of surface water to be planned in the project to check water logging as well as to increase crops productivity. The field drains shall be connected with natural drainage system.

- ii. Remodelling of existing natural drains (link drains) and connecting them with irrigated land through constructed field drains, collector drains, etc. are to be ensured on priority basis.
- iii. Before impounding of the water, Cofferdams for both at the upstream and downstream are to be decommissioned as per EIA/EMP report so that once the project is commissioned, cofferdam should not create any adverse impact on water environment including the rock mass and muck used for the Cofferdam.
- iv. As the reservoir will be acting as balancing reservoir and there would be fluctuation of water level during peaking period, efforts be made to reduce impact on aquatic life including impacts during spawning period both at the upstream and downstream of the project
- v. Water depth sensors shall be installed at suitable locations to monitor e-flow. Hourly data to be collected and converted to discharge data. The Gauge and Discharge data in the form of Excel Sheet be submitted to the Regional Office, MoEF & CC and to the CWC on weekly basis.
- vi. Mixed irrigation shall be practised and necessary awareness be given to all the farmers and trained in the use of such systems. Proper crops selection shall be carried out for making irrigation facility more effective.
- vii. On Farm Development (OFD) works like landscaping, land levelling, drainage facilities, field irrigation channels and farm roads, etc. should be taken up in phased manner prior to the start of irrigation in the entire command area. The Command Area Development Plan should be strictly implemented as proposed in the EIA/EMP report.

IV. Noise monitoring and prevention

- i. All the equipment likely to generate high noise shall be appropriately enclosed or inbuilt noise enclosures be provided so as to meet the ambient noise standards as notified under the Noise Pollution (Regulation and Control) Rules, 2000, as amended in 2010 under the Environment Protection Act (EPA), 1986.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Catchment Area Treatment Plan

- i. Catchment Area Treatment (CAT) Plan as proposed in the EIA/EMP report shall be implemented in consultation with the State Forest Department and shall be implemented in synchronization with the construction of the project.

VI. Waste management

- i. Muck disposal be carried out only in the approved and earmarked sites. The dumping sites shall be located sufficiently away from the HFL of the river. Efforts be made to reuse the muck for construction and other filling purposes and balanced be disposed of at the designated disposal sites. Once the muck disposal sites are inactive, proper treatment measures like both engineering and biological measures be carried out so that sites are stabilized quickly.

- ii. Solid waste management should be planned in details. Land filling of plastic waste shall be avoided and instead be used for various purposes as envisaged in the EIA/EMP reports. Efforts be made to avoid one time use of plastics.

VII. Green Belt, EMP Cost, Fisheries and Wildlife Management

- i. Based on the recommendation of Cumulative Impact Assessment and Carrying capacity study of river basin or as per the ToR conditions or minimum 15% of the average flow of four consecutive leanest months, whichever value is higher, shall be released as environmental flow.
- ii. Detailed information on species composition particular to fish species from previous study/literature be inventorized and proper management plan shall be prepared for in-situ conservation in the streams, tributaries of river and the main river itself for which adequate budget provision be made and followed strictly.
- iii. Wildlife Conservation Plan prepared for both core and buffer zones shall be implemented in consultation with the local State Forest Department.
- iv. To enrich the habitat of the project site, plantation shall be raised as envisaged in the EIA/EMP report. Plantation to be developed along the periphery of the reservoir in multi-layers with local indigenous species in consultation with the local State Forest Department.
- v. Compensatory afforestation programme shall be implemented as per the plan approved.
- vi. Fish ladder/pass as envisaged in the EIA/EMP report shall be provided for migration of fishes. Regular monitoring of this facility be carried out to ensure its effectiveness.

VIII. Public hearing and Human health issues

- i. Resettlement & Rehabilitation plan be implemented in consultation with the State Govt. as approved by the State Govt.
- ii. Budget provisions made for the community and social development plan including community welfare schemes shall be implemented in toto.
- iii. Preventive measures viz. fuming and spraying of mosquito control shall be done in and around the labour colonies, affected villages, stagnated pools, etc. Provisions be made to not to create any stagnated pools to avoid creation of breeding grounds of the vector borne diseases.
- iv. 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.
- v. Labourforce to be engaged for construction works shall be examined thoroughly and adequately treated before issuing them work permit. Medical facilities shall be provided at the construction sites.

- vi. Early Warning Telemetric system shall be installed in the upper catchment area of the project for advance intimation of flood forecast.
- vii. Emergency preparedness plan be made for any eventuality of the dam failure and shall be implemented as per the Dam Break Analysis

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. Skill mapping be undertaken for the youths of the affected project area and based on the skill mapping, necessary trainings to the youths be provided for their long time livelihood generation
- iii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iv. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- v. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- vi. Post EIA and SIA be prepared for the project through a third party and evaluation report be submitted to the Ministry after five years of commissioning of the project.
- vii. Multi Disciplinary Committee (MDC) be constituted with experts from Ecology, Forestry, Wildlife, Sociology, Soil Conservation, Fisheries, NGO, etc. to oversee implementation of various environmental safeguards proposed in EIA/EMP report during construction of the project. The monitoring report of the Committee shall be uploaded in the website of the Company.
- viii. Formation of Water User Association/Co-operative be made involvement of the whole community be ensured for discipline use of available water for irrigation purposes

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by

prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.

- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- vii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- viii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- ix. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- x. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xi. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.

- xii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

ANNEXURE - XXV**STANDARD ENVIRONMENT AND CRZ CLEARANCE CONDITIONS FOR THE PROJECTS RELATED TO INDUSTRIAL ESTATES/PARKS/COMPLEXES/ AREAS, EXPORT PROCESSING ZONES (EPZS), SPECIAL ECONOMIC ZONES (SEZS), BIOTECH PARKS, LEATHER COMPLEXES****I. Statutory compliance:**

- i. This clearance is subject to final order of the Hon'ble Supreme Court of India in the matter of Goa Foundation Vs Union of India in Writ Petition (Civil) No.460 of 2004 as may be applicable to this project.
- ii. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- iii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iv. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- v. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State pollution Control Board/ Committee.
- vi. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vii. The project proponent shall obtain authorization under the Hazardous and other Waste Management Rules, 2016 as amended from time to time.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.
- ix. This environmental clearance is only for the said Industrial Area. Any other activity within the Industrial Area would require separate environmental clearance, as applicable under EIA Notification, 2006 as amended from time to time. For all the individual units, environmental clearances, as applicable, shall be obtained from the respective regulatory authorities.

- x. The buildings shall have adequate distance (as per local building bye laws) between them to allow movement of fresh air and passage of natural light, air and ventilation in accordance with guidelines of local authorities

II. Air quality monitoring and preservation

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the Industrial area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- ii. The D.G. sets to be used during development/ construction phase shall be in conformity to Environment (Protection) Rules prescribed for air and noise emission standards. Storage of diesel shall be made underground and necessary approvals/permissions from Chief control of explosives to be obtained.
- iii. Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking, loading and unloading shall be fully internalized and no public space shall be utilized.
- iv. Vehicles hired for bringing construction material to the site should have a Pollution Under Control (PUC) certificate and shall conform to applicable air and noise emission standards and shall be operated only during non-peak hours.

III. Water quality monitoring and preservation

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986.
- ii. Construction of storm water drains for collection, storage and its re-use as per guidelines of Central Ground Water Authority (CGWA).
- iii. The project proponent shall report to the State Pollution Control Board about the compliance of the prescribed standards for all discharges from the Industrial Area into the sea: - Project specific
- iv. Fixtures for showers, toilet flushing and drinking shall be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- v. The quantity of fresh water usage, water recycling and rainwater harvesting shall be measured/recorded to ensure the water balance as projected by the project proponent. The record shall be submitted to the concerned Regional Office of the Ministry along with six monthly monitoring reports.
- vi. Water demand during development/construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices referred. Project specific
- vii. The project proponent shall monitor regularly ground water quality at least twice a year (pre and post monsoon) at sufficient numbers of piezometers/sampling wells in

the plant and adjacent areas through labs recognised under Environment (Protection) Act, 1986 and NABL accredited laboratories.

- viii. The project proponent shall make efforts to minimise water consumption in the industrial complex by segregation of used water, practicing cascade use and by recycling treated water.
- ix. Member industries shall treat the effluent to meet the prescribed CETP inlet norms.
- x. The member units shall provide RCC tanks for storage of effluent for monitoring the characteristics of effluent before taking into the Common Effluent Treatment Plant (CETP) for further treatment.
- xi. Proper flow meters along with online monitoring facilities shall be provided to monitor the effluent quality and quantity sent from member industries to CETP and from CETP to the final disposal/re-use on a continuous basis.
- xii. Weep holes in the compound walls shall be provided to ensure natural drainage of rain water in the catchment area during the monsoon period.
- xiii. To achieve the Zero Liquid Discharge, waste water generated from different industrial operations shall be properly collected, treated to the prescribed standards and then recycled or reused for the identified uses. – Project specific
- xiv. The project should not amend or alter the pathways of the natural streams or creeks/nallah flowing.
- xv. Rain water harvesting for roof run-off and surface run-off, as plan submitted shall be implemented. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease. The bore well for rainwater recharging shall be kept at least 4 m above the highest ground water table.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Disposal of muck during development/construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority. The ground water quality of the adjacent to dumping area should be monitored and report should be submitted to MoEF&CC and its Regional Office concerned.
- ii. Fly ash bricks should be used as building material in the construction as per the provisions of Fly Ash Notification of September, 1999 and amended as on 27th August, 2003 and 25th January, 2016
- iii. All hazardous waste generated during development/ construction phase, shall be disposed off as per applicable rules and norms with necessary approvals of the Central Pollution Control Board/State Pollution Control Board.
- iv. Used LEDs shall be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible. Energy conservation measures should be as per Bureau of Energy Efficiency (BEE) standards.
- v. Air pollution and the solid waste management aspects need to be properly addressed ensuring compliance of the Construction and Demolition Waste Management Rules, 2016.
- vi. The solid waste generated shall be properly collected and segregated in accordance with the Solid Waste Management Rules, 2016. Wet garbage shall be composted and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material. No municipal waste shall be disposed off outside the premises

VII. Green Belt

- i. The green belt/plantation of to a width of 15 m should be provided all along the periphery of industrial area with native species. The individual units should keep 33% of allotted area as green area with native place. The time bound action plan for green belt/plantation be submitted to the MoEF&CC and concerned Regional Office within three months of issue of this letter.
- ii. Cutting of plants/trees are to be totally avoided by the construction labours. The contractor has to maintain log book for the purchase and distribution of fuel wood.
- iii. Management Plan for biodiversity conservation along with the implementation schedule should be prepared with the help of concerned government institution /state forest department, and same to be submitted to MoEF&CC and its Regional Office before commencement of work. Sufficient fund provision to be made to implement the same.
- iv. All the topsoil excavated during development/construction activities should be stored for use in horticulture/landscape development within the project site. Report should be submitted to MoEF&CC and its Regional Office concerned.

- v. For monitoring of land use pattern, a time series of landuse maps, based on satellite imagery (on a scale of 1: 5000) of the core zone and buffer zone, shall be prepared once in 3 years (for any one particular season which is consistent in the time series), and the report submitted to MOEF and its concerned Regional office

VIII. Public hearing and Human health issues

- i. 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.
- ii. Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.
- vi. All the recommendations made in the Charter on Corporate Responsibility for Environment Protection (CREP) regarding plants located in the industrial estates/park shall be implemented.
- vii. Special purpose vehicle shall be established for implementation, monitoring and compliance of the environmental safeguards.

X. Miscellaneous

- i. Construction material has to be brought from approved/authorized places.
- ii. Internal Road widths within the industrial area shall be minimum 18 m ROW.
- iii. Parking space to accommodate trucks, cars, two wheelers and bicycles shall be provided as per the norms.
- iv. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- v. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- vi. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- vii. The project proponent shall monitor the criteria pollutants level namely; PM_{10} , SO_2 , NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company.
- viii. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- ix. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- x. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- xi. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

- xii. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xiii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiv. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xvi. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvii. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

XI. Coastal Regulation Zone (CRZ) – If applicable

- i. On the project site physical HTL demarcation has to be compulsorily made with the help of Government of India organizations/Institutions.
- ii. Screens and trash bars shall be provided to avoid entry of fishes and fish larvae in to the system - Project Specific
- iii. There shall be no disturbance to the sand dunes (Size and location latitude and longitude to be given).
- iv. All the provisions of the CRZ Notification, 2011 and subsequent amendments shall be strictly complied with, and in case of any change in scope of work, necessary recommendations from the concerned CZMA shall be obtained for further consideration by the concerned regulatory authority.
- v. No construction work other than those permitted in CRZ Notification shall be carried out in CRZ area.
- vi. The physio – chemical and biological parameters including benthic fauna and flora, primary and secondary productions as well as fishery populations are to be monitored regularly during the construction phase by employing qualified persons.
- vii. In view of the river ecology and dependency for sustenance of fishery in coastal areas, alternate water resources shall be explored to meet the huge water demand for the

project, in addition to the best recycling practices for the industrial requirements. Natural flow of River shall not be altered or tampered with. Project specific

- viii. Though the sumps and pump house are located beyond CRZ area, in view of its proximity to sea necessary prior permission shall be obtained for construction of sumps from the competent authority. Copy of permission shall be submitted to the concerned the concerned Regional Office of the Ministry prior to the commencement of work. Project Specific
- ix. Detailed scientific studies for Coastal Management Plan shall be prepared by an expert institution of repute and time bound action plan to be submitted to the Ministry and its Regional Office concerned within three months of issue of this letter.
- x. Non vegetated mudflats must be clearly demarcated on the map and no artificial plantation to be undertaken on non- vegetated mudflats.
- xi. 2% of the project cost shall be apportioned for marine and coastal biodiversity protection and conservation measures, to be spent by the project proponent towards fulfilling its Corporate Environmental Responsibility (CER). Project Specific.
- xii. The temperature at the discharge point has to be monitored regularly and also the physico-chemical and biological parameters including benthic fauna and flora, primary and secondary productions as well as fishery populations has to be monitor regularly during the operation phase by employing qualified persons.
- xiii. The project proponent shall report to the State Pollution Control Board about the compliance of the prescribed standards for all discharges from the Industrial Area into the sea.
- xiv. The desalination plant reject has to be disposed properly.
- xv. Periodic monitoring of coastal water shall be carried out at outfall location by the project proponent by establishing minimum 3 monitoring stations. Proper record of monitoring should be placed along with six monthly compliance report.
- xvi. Implementation of Marine Environmental Management Plan in Toto

F.No.J-11013/55/2017-IA-II (I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi - 110003

Dated: 4th September, 2018

Office Memorandum

Sub: Increase in number of working days for distilleries - Amendment in Environmental Clearance - reg.

Earlier, the Ministry has issued environmental clearances to molasses based distilleries utilizing their concentrated spent wash, with the condition that the number of working/operating days shall not exceed 270. That was based on the technology/facilities available at that stage and the CPCB's guidelines, not allowing the distilleries to operate during rainy season.


2. CPCB has formulated the Standard Operating Procedure (SOP) for bio-composting operations for molasses based distilleries to allow increase in number of working days for distilleries, and also the specification of covered bio-compost yard for distilleries operating throughout the year or 270 days. A copy of the communication dated 9th August, 2018 is enclosed.

3. CPCB has further opined that the issues related to environmental pollution which inter-alia include increased air emissions, odour, leachate, water demand, etc. may be considered by the Expert Appraisal Committees. In cases where the Committee is satisfied that the distillery has taken adequate measures to address the said issues, they may consider to dispense with the requirement of public hearing for considering expansion proposals.

4. In view of the above, recommendations of the sectoral Expert Appraisal Committee in the Ministry and further deliberations in the Ministry, following clarifications/instructions are issued for compliance with immediate effect:-

'In case of proposals for amendment in the existing EC to increase number of working days (from the present to round the year), there shall be no requirement for amendment therein, provided the Standard Operating Procedure formulated by CPCB for bio-composting operations is duly complied with and the same is ensured by the concerned SPCBs/PCCs before issuing Consent to Establish/Operate under the Air (Prevention and Control of Pollution) Act, 1981 and the Water (Prevention and Control of Pollution) Act, 1974.'

5. This issues with approval of the competent authority.


(Sharath Kumar Pallerla)
Director

1. All the officers of IA Division
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs

3. Chairman of all the Expert Appraisal Committees
4. Chairman, CPCB
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file.



केन्द्रीय प्रदूषण नियंत्रण बोर्ड
CENTRAL POLLUTION CONTROL BOARD
पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय भारत सरकार
MINISTRY OF ENVIRONMENT, FOREST & CLIMATE CHANGE GOVT. OF INDIA

Dated: 09.08.2018

F. No.B-190198/WQM-II/CPCB/Dist/Gen/18-19

To,
Dr. Arun Kumar Mehta, IAS
Additional Secretary,
Ministry of Environment Forest, & Climate Change,
Indira Paryavaran Bhawan, Jor Bagh, New Delhi - 03

Subject: Increasing no. of days operations of distilleries adopted bio composting for achieving ZLD

Sir,

I am directed to refer your letter dated 31.07.2018 regarding permissible number of days of operation of distilleries for Increasing production of ethanol and to inform following:

- i. Distilleries are required to achieve Zero Liquid Discharge (ZLD) through bio-composting of spent wash with press mud or through concentration and incineration of spent wash. Distilleries can carry out bio-composting either with impervious compost yard open to sky or with covered compost yard. Distilleries having covered compost yard can operate throughout the year, whereas distilleries without covered compost yard can operate for 270 days (excluding rainy season). CPCB has prepared Standard Operating Procedures (SOPs) for bio-composting with covered bio-compost yard (**copy enclosed**) which is being forwarded to SPCBs for allowing distilleries to operate throughout the year.
- ii. Distilleries generate spent wash besides other effluent streams such as process condensate, boiler/cooling tower blowdown. Spent wash which is a recalcitrant waste, cannot be easily biodegradable and therefore it is to be disposed either through composting with press mud or through incineration. Distilleries are required to achieve ZLD through spent wash disposal and treatment and utilisation of effluent streams such as process condensate, spent lees, RO permeate, blowdowns etc. Expansion of production capacity of Distillery units within their existing premises requires expansion of compost yard, augmentation of digesters, boiler and Multi Effect Evaporator capacities. This further, requires additional land for compost yard, additional storage capacity, augmentation of Air Pollution Control Devices etc. The issues related to environmental pollution are increased air emission, odour, leachate, expansion to vicinity of nearby habitations due to land addition (inviting land use change), increase of potable and fresh water demand and availability of infrastructure i.e. roads, transport etc. These issues may be considered by the Expert Appraisal Committees and in cases where committee is satisfied that the distillery

Cond..2/

unit has taken adequate measures to address these issues, the committee may considered to dispense with the need for public hearing for expansion of capacity of distillery units within their existing premises.

- III. Bio-CNG production from press mud involves digestion of mixture of cow dung and other waste with press mud in certain proportion. The production of bio-CNG is helpful to solve the disposal problem of the press mud for sugar mills. Methane content in bio-CNG is more than 95 % and about 15 kg of bio-CNG can be produced from 25-30 kg of press mud.
- iv. Use of Multi Effect Evaporator (MEE) followed by bio-composting, for achieving ZLD is already allowed procedure. CPCB has already issued directions to 07 SPCBs (namely Uttarakhand, Uttar Pradesh, Bihar, West Bengal, Haryana, Chhattisgarh and Madhya Pradesh) of Ganga River Basin States on December 7, 2015 under section 18 1(b) of Water Act, 1974.

Yours faithfully,

A K Vidyarthi
09/08/18

(Dr. A K Vidyarthi)

DH-WQM-II & Additional Director

Encl: As above

STANDARD OPERATING PROCEDURE (SOP) for Bio-composting operation for Molasses based distilleries

S.No.	Particulars	Time range
1.	Distilleries with covered shed bio-composting may be allowed to operate throughout the year and those without covered shed shall be operated 270 days (excluding monsoon season)	
2.	Press mud may be directly laid in the bio-compost yard or properly stored for consumption the rest of the year.	
3.	Feed stock received as combination of press mud, yeast sludge and boiler ash in press mud yard or plant as per requirement from sugar industries. Average Moisture content after testing : $70 \pm 5\%$	
4.	Areas for Press mud storage, Bio-compost operation, Finished goods storage must be properly demarcated.	
5.	Windrows laid shall be as per the machine size and length as per the Bio-compost yard	
6.	On completion of laying & dressing of windrows, initial turning started to reduce moisture content from $70 \pm 5\%$ to $50 \pm 5\%$. Time required for achieving desired moisture level, in summers 3 to 5 days, winters 4 to 7 days.	4 th -8 th days
7.	On achieving $50 \pm 5\%$ moisture, bio culture (as a seed) in windrows added and turning of windrow started for proper mixing of culture seed and allow to increase windrow's temperature at around 70°C .	
8.	Prepared windrows left idle for 2-3 days to proper growth of microbes.	8 th to 10 th day
9.	Growth/ development of microbes in windrows is observed by measuring its temperature. In normal condition temperature of windrows are between $60-70^\circ$. This temperature gain is result of microbial activity.	
10.	When desired temperature achieved (within 2-3 days), start turning of press mud through aero tiller machines without any major deviation in shape & size of windrows.	
11.	Measure temperature manually with the help of thermometer.	
12.	Receive concentrated effluent from plant or lagoon at the bio compost yard through flow meter.	
13.	Spray concentrated spent wash not more than 10% of press mud weight on alternate days using the aero tiller or on suitable interval based on windrow	

S.No.	Particulars	Time range
	<p>temperature & moisture content. (The overall consumption of concentrated spent wash shall be 1.6 m³/MT of Press Mud).</p> <p>Alternatively spent wash can be sprayed on the basis of moisture content i.e. spraying can take place when moisture content has come down to 45 to 50% so as to increase moisture content to about 65 to 70%. During active Bio-composting process the moisture will tend to go down because of heat generation.</p>	
14.	During turning & spraying of effluent, monitor the windrow's temperature on daily basis and note in the log book. The quantity of sprayed effluent must be noted down in the log book.	
15.	Concentrated spent wash and turning of windrows continues for 50-60 days or till the windrows temperature up to 55± 5°C maintained.	10 th to 50 th day
16.	If no temperature rise is observed, then stop the concentrated spent wash spray on windrows and continue the turning of bio-compost till moisture content reaches 35±5 %	50 th to 60 th
17.	Store the prepared bio-compost under covered condition during rainy season	
18.	Bio-compost shall be analyzed for parameters as per the Fertilizer Control order with latest amendments and shall be packed as per the customer requirement.	
19.	Personal Protective Equipment (PPE) as per job requirement shall be used by personnel working in the bio-compost yard.	
20.	Check the top level of concentrated spent wash storage lagoon on daily basis so as to maintain below Red mark.	

NB: Requirement of Pressmud depends on the size of aerotilling machines which are available in different sizes and also with side mounted turner and top mounted turning equipment. Further, the windrows require dressing with JCB machine after every turning for which a spacing of about 3.0 meters is required between each windrow.

Specification of covered Bio-compost yard for Distillery operating throughout year

1. **Yard Length:** depending upon plot size available covered yard shall be made after leaving proper circulation area for movement of machinery; on an average 15-20% area may be allocated depending on the shape of the yard, e.g., square or rectangular yard may need the minimum circulation area where as stepped yard have the different windrow length need more circulation area.
2. **Windrow markers** indicating windrow number, date of formation, date of inoculation and date of the last application of spent wash. Marker shall be made of MS sheet with rod support, grouted in concrete. Marker shall be painted with white background and letters in black paint. The windrow marker should be located in front of windrow after leaving the distance of movement of machines.
3. **Bays:** Approximately 12.0 meter span, having spacing between vertical columns 5-6 meters, rain water gutter height 6.2 meter, gutter slope of minimum 1 in 200. Gutter MoC HDPE / PE/ GI sheet, discharging into RCC / Cement Plastered Brick masonry channels connected to leachate collection pits. In case of multiple down-comers slope is not mandatory. Ridge height will vary upon truss design. Truss design may have provision of ventilation at the top (North light pattern) or semi elliptical.
4. **Down comers for rain water:** Compost shed shall be provided with Rain gutters and the rain gutters shall be connected to the storm water drain using HDPE/PE pipe of at least 150 mm ID down-comers discharging into channel. Channel MoC RCC (M20)/brick masonry cement mortar plastered (1:6) discharging to either rainwater harvesting pit or to natural stream.
5. **Protection against cross wind rain:** Rain water entry into the shed shall be prevented by either providing protection along the sides or by providing Louvers.
6. **Leachate collection pits:** MoC- RCC (M20) / brick work cement mortar plastered (1:6). Size: not less than 1.5 meter X 1.5 meter having top level / free board 300 mm above the ground level.
7. **Leachate collection drain:** MoC- RCC (M20)/brick work cement mortar plastered (1:6). Size: 0.3 meter (width) X 0.25 (depth). The depth will increase along the length towards collection pit. Bed slope: 1 in 200 approx with smooth finishing to prevent sludge (press mud) deposition on the base.
8. **Truss members:** Members size (Diameter, wall thickness) depending on the safe structural design capable to with stand against design wind load and rainfall. Material of construction shall be preferably GI pipes/ Galvanized angles /channel sections / RCC columns. Pre-engineered profiles may also be used. The GI pipes/ channels should be grouted in concrete in the bio compost yard

floor and should be protected by providing concrete cover of at least 150 mm all-round, at least 300 mm height to prevent corrosion due to direct contact on the base.

9. **Roofing:** Poly film minimum 200 micron film with qualities of UV stability, anti-drip, anti-dust, Light Diffusion minimum 50% film fixing only on roof and gables and up to hockey purlin / GI sheet / Precoated laminated sheet
10. **Floor lining:** The floor lining shall be impervious, strong enough to prevent settlements due to machine load. Minimum thickness 100 mm. The underlining sheet shall be minimum 150 micron HDPE film below the floor. Clay layer cushion of 300 mm below the liner and 50 mm above the liner should be provided. In case of RCC flooring, the construction joint should be sealed using the water bar/hot bitumen.
11. **Ground water monitoring facilities.**
 - a. **Location of piezometer wells:** Minimum at 4 places along the periphery of the bio-compost yard such that one is in the upstream of the Ground water flow direction and one in the downstream direction. For Bio-compost yard of more than 5 acres area, one additional peizowell shall be constructed for every 5 acres and shall be in the downstream direction placed sufficient away from each other to assess any seepage /ground water contamination tested quarterly. (Example: for 20 acre Bio-compost yard the total number of Peizowells shall be $4 + 3 = 7$ nos. One upstream and 6 down steam uniformly distributed). Piezo-wells shall be constructed as per the standard procedure and specifications.
 - b. **Hand pump:** at least 30 meters depth, located within 500 meters to 1 Km from yards. Water quality of hand pump should be tested quarterly.
12. **Data recording:** Log book at yard should be maintained mentioning the date of formation of windrow, quantity of press mud, feed stock, date of last aero-trilling, date of last spent wash spray, quantity of spent wash spray, temperature date-wise, date of maturity, moisture content etc. Data should also be entered into the computer for record and computation. The press mud and ready compost must be weighed and records of the same shall be maintained.
13. **Approach Road to bio-compost yard:** The entrance of the Bio-compost yard should be paved all-weather road for approach of vehicles.
14. **Storage facilities for ready compost:** Covered shed having platform.
15. **Camera** as per OCEMS guidelines shall be installed in the bio-compost yard to monitor the bio-compost operations inside the shed.

Specification of Bio-compost yard for Distillery operating 270 days (excluding rainy season)

1. **Yard Length:** depending upon plot size available yard shall be made after leaving proper circulation area for movement of machinery; on an average 15-20% area may be allocated depending on the shape of the yard, e.g., square or rectangular yard may need the minimum circulation area where as stepped yard have the different windrow length need more circulation area.
2. **Windrow markers** indicating windrow number, date of formation, date of inoculation and date of the last application of spent wash. Marker shall be made of MS sheet with rod support, grouted in concrete. Marker shall be painted with white background and letters in black paint. The windrow marker should be located in front of windrow after leaving the distance of movement of machines.
3. **Leachate collection pits:** MoC- RCC (M20) / brick work cement mortar plastered (1:6). Size: not less than 1.5 meter X 1.5 meter having top level / free board 300 mm above the ground level.
4. **Leachate collection drain:** MoC- RCC (M20)/brick work cement mortar plastered (1:6). Size: 0.3 meter (width) X 0.25 (depth). The depth will increase along the length towards collection pit. Bed slope: 1 in 200 approx with smooth finishing to prevent sludge (press mud) deposition on the base.
5. **Floor lining:** The floor lining shall be impervious, strong enough to prevent settlements due to machine load. Minimum thickness 100 mm. The underlining sheet shall be minimum 150 micron HDPE film below the floor. Clay layer cushion of 300 mm below the liner and 50 mm above the liner should be provided. In case of RCC flooring, the construction joint should be sealed using the water bar/hot bitumen.
6. **Ground water monitoring facilities.**
 - c. **Location of piezometer wells:** Minimum at 4 places along the periphery of the bio-compost yard such that one is in the upstream of the Ground water flow direction and one in the downstream direction. For Bio-compost yard of more than 5 acres area, one additional peizowell shall be constructed for every 5 acres and shall be in the downstream direction placed sufficient away from each other to assess any seepage /ground water contamination tested quarterly. (Example: for 20 acre Bio-compost yard the total number of Peizowells shall be 4+3 =7nos. One upstream and 6 down steam uniformly distributed). Piezo-wells shall be constructed as per the standard procedure and specifications.
 - d. **Hand pump:** at least 30 meters depth, located within 500 meters to 1 Km from yards. Water quality of hand pump should be tested quarterly.

7. **Data recording:** Log book at yard should be maintained mentioning the date of formation of windrow, quantity of press mud, feed stock, date of last aero-trilling, date of last spent wash spray, quantity of spent wash spray, temperature date-wise, date of maturity, moisture content etc. Data should also be entered into the computer for record and computation. The press mud and ready compost must be weighed and records of the same shall be maintained.
8. **Approach Road to bio-compost yard:** The entrance of the Bio-compost yard should be paved all-weather road for approach of vehicles.
9. **Storage facilities for ready compost:** Covered shed having platform.
10. **Camera** as per OCEMS guidelines shall be installed in the bio-compost yard to monitor the bio-compost operations inside the shed.

Biocompost area calculation:

The requirement of Pressmud depends on the size of the aerotilling machine that comes in varying dimensions. Also, aerotilling machines comes with side mounted turner and top mounted turning machine. Further, the windrows require dressing with JCB machine after every turning for which a spacing of 3 mtrs is required between each windrow.

The area of biocompost area required shall be calculated based on the following sample basis of calculation

License capacity of distillery – 36000 KL/Annum

Spent Wash generation – 9 KL/KL

Total Spent Wash = 324000 KL

Concentrated Spent Wash@60% vol reduction = 129600 KL/Annum

Pressmud Requirement@1.6 MT/KL = $129600/1.6 = 81000$ MT

The land requirement for pressmud should therefore be designed based on the windrow size following the sample calculation as below based on 850 MT/Acre/cycle of pressmud

No. of Cycle = 4

Pressmud/Cycle = $81000/4 = 20250$ MT

Land Area Required = $20250/850 = 23.8$ Acres

No. of Cycle = 5

Pressmud/Cycle = $81000/5 = 16200$ MT

Land Area Required = $16200/850 = 19.0$ Acres

In case of specially designed aerotiller machine, bio-compost yard area will be calculated as per the windrow size specification mentioned by the machine manufacturer.

F. No. J-11011/294/2017-IA-II(I)
Government of India
Ministry of Environment, Forest and Climate Change
(IA Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi – 110003

Dated: 6th September, 2018

Office Memorandum

Sub: Oil & gas transportation pipeline - Applicability of the EIA Notification, 2006 - reg.

The Environment Impact Assessment (EIA) Notification, 2006 under the Environment (Protection) Act, 1986 mandates the requirement of prior environmental clearance (EC) to the projects/activities listed in the schedule to the Notification. These projects/activities require appraisal and approval by the concerned regulatory authority (MoEF&CC/SEIAAs in different States/UTs) depending upon the categorization (A/B).

2. As per the provisions of the EIA Notification, 2006, read with subsequent amendments, oil & gas transportation pipeline, passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas including LNG Terminal, is covered under Category A of the Schedule to the EIA Notification, 2006 and thus requiring prior environmental clearance from the concerned regulatory authority. The relevant extract of the schedule is as under: -


Project/ Activity	Category with threshold limit		Conditions, if any
	A	B	
6	Service sectors		
6(a) Oil & gas transportation pipeline (crude and refinery/petrochemical products), passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas including LNG Terminal	All projects	-	-

3. Earlier, this Ministry has issued environmental clearances to the pipeline projects, stipulating the condition that in case of change of scope of work, fresh reference shall be made to the Ministry. Now the Ministry is in receipt of proposals for ToR/EC to pipeline projects, involving their extension, capacity augmentation, modernization/upgradation of pumping arrangements and associated facilities including transmix separator plant, etc. Many times, such proposals involve change in scope of work also for which the earlier environmental clearance was granted.

4. In order to streamline the process for environmental clearances to the pipeline projects in the context of the statutory provisions, following are clarified: -

- Only those projects, where the pipeline is passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas, shall be required to obtain the prior environmental clearance.
- In case of the existing ECs covered under the condition as mentioned in para 3 above, there shall be no requirement of environmental clearance or the amendment therein for the projects not covered under the ambit of the EIA Notification, 2006.
- In case of change of scope of the project (for which the EC was granted earlier) involving extension of pipeline if not passing through national parks/sanctuaries/coral reefs/ecologically sensitive areas, capacity augmentation, modernization/upgradation of pumping arrangements and associated facilities including transmix separator plant, etc., there shall be no requirement of the prior environmental clearance.

5. This issues with approval of the competent authority.


(Sharath Kumar Pallerla)
Director

To

1. All the officers of IA Division
2. Chairperson/Member Secretaries of all the SEIAAs/SEACs
3. Chairman of all the Expert Appraisal Committees
4. Chairman, CPCB
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC)
4. PPS to AS(AKJ)/ AS (AKM)
5. PPS to JS (GB)/ JS(JT)
6. Website, MoEF&CC
7. Guard file.

F.No.21-103/2015-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(I.A. Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi – 110003
E-mail: sharath.kr@gov.in
Tel: 011-24695319

Dated: 2nd November, 2018

OFFICE MEMORANDUM

Subject: Terms of Reference (ToRs) related to ground water drawl - regarding.

It has been decided by the Competent Authority that the following Terms of References (ToRs) shall be invariably incorporated to address the issue while prescribing ToRs for various developmental projects:

- i. In the projects where ground water is proposed as water source, the project proponent shall apply to the Central Ground Water Authority (CGWA)/ State Ground Water Authority (SGWA), as the case may be, for obtaining No Objection Certificate (NOC), if applicable, the MoEF&CC/SEAC may ensure that such an application has been made.
 - ii. Approval/permission of the CGWA/SGWA shall be obtained before drawing ground water for the project activities. State Pollution Control Board (SPCB) concerned shall not issue Consent to Operate (CTO) till the project proponent obtains such permission.
2. This issues with the approval of the Competent Authority.


(Sharath Kumar Pallerla)
Director/ Scientist 'F'

To

1. Chairman/Member Secretaries of all the Expert Appraisal Committees
2. Chairman/Member Secretaries of all the SEIAAs/SEACs
3. All the Officers of I.A. Division
4. Chairman/Member Secretaries of all SPCBs/UTPCCs
5. The Member Secretary, CGWA, New Delhi.

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PPS to JS (VV)/ JS(JT)
6. Website, MoEF&CC
7. Guard file.


(Sharath Kumar Pallerla)
Director/ Scientist 'F'

J-15011/01/2018-IA.I(T)
Government of India
Ministry of Environment, Forests and Climate Change
Impact Assessment Division

3rd Floor, Vayu Block,
Indira Paryavaran Bhawan,
Jor Bagh Road, Aliganj
New Delhi-110003

Dated the 19th November, 2018.

OFFICE MEMORANDUM

Subject: *Standardisation of Conditions to be stipulated in the Environmental Clearance for Thermal Power Projects.*

The Ministry stipulates the specific and general conditions while granting the Environmental Clearance as part of environmental protection measures during project and operational stages. These conditions are recommended by the Expert Appraisal Committee (EAC). To standardize these conditions, the Ministry has initiated the exercise for revision of these conditions across all the sectors.

2. In order to bring uniformity on stipulated terms and conditions along with the other sectors and to provide general guidelines to the EAC as well as Project Proponents, the Ministry in consultation with the EAC (Thermal Power Projects) and Ministry's Regional Offices, has prepared the standard conditions for Thermal Power Sector which is enclosed herewith as *Annexure-I*.

3. These standard conditions shall be considered by the Expert Appraisal Committee (EAC) at the time of appraisal of proposals for grant of Environmental Clearance. The EAC after due diligence may modify, omit and stipulate additional conditions based on the project specific requirements. The recommended conditions by the EAC shall be brought in the minutes of the meeting.

This issues with the approval of the Competent Authority.



(Dr. S. Kerketta)
Director, IA.I

To,

1. The Chairman, CPCB
2. Chairman/Member Secretaries of all the EACs
3. Chairman/Member Secretaries of all the SEIAA/SEACs
4. Chairman/Member Secretaries of all the SPCB/UTPCCs
5. All officers of IA Division

Copy for information to:

1. PS to Minister for Environment, Forest and Climate Change
2. PS to MoS (EF&CC)
3. PPS to Secretary (EF&CC),
4. PPS to AS(AKJ)/AS(AKM)
5. PPS to JS(VV)/JS(JT)
6. Website of MoEF&CC
7. Guard File.

Standard EC Conditions for Thermal Power Sector

A. Statutory compliance:

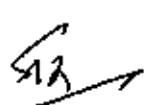
1. Emission Standards for Thermal Power Plants as per Ministry's Notification S.O. 3305(E) dated 7.12.2015, G.S.R.593(E) dated 28.6.2018 and as amended from time to time shall be complied.
2. Part C of Schedule II of Municipal Solid Wastes Rules, 2016 dated 08.04.2016 as amended from time to time shall be complied for power plants based on Municipal Solid Waste.
3. MoEF&CC Notification G.S.R 02(E) dated 2.1.2014 as amended time to time regarding use of raw or blended or beneficiated/washed coal with ash content not exceeding 34% shall be complied with, as applicable.
4. MoEF&CC Notifications on Fly Ash Utilization S.O. 763(E) dated 14.09.1999, S.O. 979(E) dated 27.08.2003, S.O. 2804(E) dated 3.11.2009, S.O. 254(E) dated 25.01.2016 as amended from time to time shall be complied.
5. Thermal Power Plants other than the power plants located on coast and using sea water for cooling purposes, shall achieve specific water consumption of 2.5 m³/MWh and Zero effluent discharge.
6. The recommendation from Standing Committee of NBWL under the Wildlife (Protection) Act, 1972 should be obtained, if applicable.
7. No Objection Certificate from Ministry of Civil Aviation be obtained for installation of requisite chimney height and its siting criteria for height clearance.
8. Groundwater shall not be drawn during construction of the project. In case, groundwater is drawn during construction, necessary permission be obtained from CGWA.

B. Ash content/ mode of transportation of coal:

1. EC is given on the basis of assumption of ____% of ash content and ____ km distance of transportation in rail/road/conveyor/any other mode. Any increase of %ash content by more than 1 percent, and/or any change in transportation mode or increase in the transport distance (except for rail) require application for modifications of EC conditions after conducting the 'incremental impact assessment' and proposal for mitigation measures.

C. Air quality monitoring and Management:

1. Flue Gas Desulphurisation System shall be installed based on Lime/Ammonia dosing to capture Sulphur in the flue gases to meet the SO₂ emissions standard of 100 mg/Nm³.
2. Selective Catalytic Reduction (SCR) system or the Selective Non-Catalytic Reduction (SNCR) system or Low NOX Burners with Over Fire Air (OFA) system shall be installed to achieve NO_x emission standard of 100 mg/Nm³.



3. High efficiency Electrostatic Precipitators (ESPs) shall be installed in each unit to ensure that particulate matter (PM) emission to meet the stipulated standards of 30 mg/Nm³.
4. Stacks of prescribed height ____m shall be provided with continuous online monitoring instruments for SO_x, NO_x and Particulate Matter as per extant rules.
5. Exit velocity of flue gases shall not be less than 20-25 m/s. Mercury emissions from stack shall also be monitored periodically.
6. Continuous Ambient Air Quality monitoring system shall be set up to monitor common/criteria pollutants from the flue gases such as PM₁₀, PM_{2.5}, SO₂, NO_x within the plant area at least at one location. The monitoring of other locations (at least three locations outside the plant area covering upwind and downwind directions at an angle of 120° each) shall be carried out manually.
7. Adequate dust extraction/suppression system shall be installed in coal handling, ash handling areas and material transfer points to control fugitive emissions.
8. Appropriate Air Pollution Control measures (DEs/DSs) be provided at all the dust generating sources including sufficient water sprinkling arrangements at various locations viz., roads, excavation sites, crusher plants, transfer points, loading and unloading areas, etc.

D. Noise pollution and its control measures:

1. The Ambient Noise levels shall meet the standards prescribed as per the Noise Pollution (Regulation and Control) Rules, 2000.
2. Persons exposed to high noise generating equipment shall use Personal Protective Equipment (PPE) like earplugs/ear muffs, etc.
3. Periodical medical examination on hearing loss shall be carried out for all the workers and maintain audiometric record and for treatment of any hearing loss including rotating to non-noisy/less noisy areas.

E. Human Health Environment:

1. Bi-annual Health check-up of all the workers is to be conducted. The study shall take into account of chronic exposure to noise which may lead to adverse effects like increase in heart rate and blood pressure, hypertension and peripheral vasoconstriction and thus increased peripheral vascular resistance. Similarly, the study shall also assess the health impacts due to air polluting agents.
2. Baseline health status within study area shall be assessed and report be prepared. Mitigation measures should be taken to address the endemic diseases.
3. Impact of operation of power plant on agricultural crops, large water bodies (as applicable) once in two years by engaging an institute of repute. The study shall also include impact due to heavy metals associated with emission from power plant.
4. Sewage Treatment Plant shall be provided for domestic wastewater.

F. Water quality monitoring and Management:

1. Induced/Natural draft closed cycle wet cooling system including cooling towers shall be set up with minimum Cycles of Concentration (COC) of 5.0 or above for power plants using fresh water to achieve specific water consumption of 2.5 m³/MWhr. (Or) Induced/Natural draft open cycle cooling system shall be set up with minimum Cycles of Concentration (COC) of 1.5 or above for power plants using sea water.
2. In case of the water withdrawal from river, a minimum flow 15% of the average flow of 120 consecutive leanest days should be maintained for environmental flow whichever is higher, to be released during the lean season after water withdrawal for proposed power plant.
3. Records pertaining to measurements of daily water withdrawal and river flows (obtained from Irrigation Department/Water Resources Department) immediately upstream and downstream of withdrawal site shall be maintained.
4. Rainwater harvesting in and around the plant area be taken up to reduce drawl of fresh water. If possible, recharge of groundwater to be undertaken to improve the ground water table in the area.
5. Regular (at least once in six months) monitoring of groundwater quality in and around the ash pond area including presence of heavy metals (Hg, Cr, As, Pb, etc.) shall be carried out as per CPCB guidelines. Surface water quality monitoring shall be undertaken for major surface water bodies as per the EMP. The data so obtained should be compared with the baseline data so as to ensure that the groundwater and surface water quality is not adversely impacted due to the project & its activities.
6. The treated effluents emanating from the different processes such as DM plant, boiler blow down, ash pond/dyke, sewage, etc. conforming to the prescribed standards shall be re-circulated and reused. Sludge/ rejects will be disposed in accordance with the Hazardous Waste Management Rules.
7. Hot water dispensed from the condenser should be adequately cooled to ensure the temperature of the released surface water is not more than 5 degrees Celsius above the temperature of the intake water.
8. Based on the commitment made by the Project Proponent, Sewage Treatment Plants within the radius of 50 km from proposed project, the treated sewage ofKLD from STP (name) shall be used as an alternative to the fresh water source to minimize the fresh water drawl from surface water bodies.
9. Wastewater generation ofKLD from various sources (viz. cooling tower blowdown, boiler blow down, wastewater from ash handling, etc) shall be treated to meet the standards of pH: 6.5-8.5; Total Suspended Solids: 100 mg/l; Oil & Grease: 20 mg/l; Copper: 1 mg/l; Iron: 1 mg/l; Free Chlorine: 0.5; Zinc: 1.0 mg/l; Total Chromium: 0.2 mg/l; Phosphate: 5.0 mg/l;
10. Sewage generation ofKLD will be treated by setting up Sewage Treatment plant to maintain the treated sewage characteristics of pH: 6.5-9.0; Bio-Chemical



Oxygen Demand (BOD): 30 mg/l; Total Suspended Solids: 100 mg/l; Fecal Coliforms (Most Probable Number): <1000 per 100 ml.

G. Risk Mitigation and Disaster Management:

1. Adequate safety measures and environmental safeguards shall be provided in the plant area to control spontaneous fires in coal yard, especially during dry and humid season.
2. Storage facilities for auxiliary liquid fuel such as LDO and HFO/LSHS shall be made as per the extant rules in the plant area in accordance with the directives of Petroleum & Explosives Safety Organisation (PESO). Sulphur Content in the liquid fuel should not exceed 0.5%.
3. Ergonomic working conditions with First Aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.
4. Safety management plan based on Risk Assessment shall be prepared to limit the risk exposure to the workers within the plant boundary.
5. Regular mock drills for on-site emergency management plan and Integrated Emergency Response System shall be developed for all kind of possible disaster situations.

H. Green belt and Biodiversity conservation:

1. Green belt shall be developed in an area of 33% of the total project with indigenous native tree species in accordance with CPCB guidelines. The green belt shall inter-alia cover an entire periphery of the plant.
2. *In-situ/ex-situ* Conservation Plan for the conservation of flora and fauna should be prepared and implemented.
3. Suitable screens shall be placed across the intake channel to prevent entrainment of life forms including eggs, larvae, juvenile fish, etc., during extraction of seawater.

I. Waste management:

1. Solid waste management should be planned in accordance with extant Solid Waste Management Rules, 2016.
2. Toxicity Characteristic Leachate Procedure (TCLP) test shall be conducted for any substance, potential of leaching heavy metals into the surrounding areas as well as into the groundwater.
3. Ash pond shall be lined with impervious liner as per the soil conditions. Adequate dam/dyke safety measures shall also be implemented to protect the ash dyke from getting breached.
4. Fly ash shall be collected in dry form and ash generated shall be used in phased manner as per provisions of the Notification on Fly Ash Utilization issued by the Ministry and amendment thereto. By the end of 4th year, 100% fly ash utilization should be ensured. Unutilized ash shall be disposed off in the ash pond in the form

- of High Concentration Slurry. 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. Flyash utilization details shall be submitted to concerned Regional Office along with the six-monthly compliance reports and utilization data shall be published on company's website.
5. Unutilized ash shall be disposed off in the ash pond in the form of High Concentration Slurry/Medium Concentration Slurry/Lean Concentration Slurry method. Ash water recycling system shall be set up to recover supernatant water.
 6. In case of waste-to-energy plant, major problems related with environment are fire smog in MSW dump site, foul smell and impacts to the surrounding populations. Therefore, the following measures are required to be taken up:
 - i) Water hydrant at all the dumpsites of MSW area to be provided so that the fire and smog could be controlled.
 - ii) Sprayer like microbial consortia may be provided for arresting the foul smell emanating from MSW area.

J. Monitoring of compliance:

1. Environmental Audit of the project be taken up by the third party for preparation of Environmental Statement as per Form-V & Conditions stipulated in the EC and report be submitted to the Ministry.
2. Resettlement & Rehabilitation Plan as per the extant rules of Govt. of India and respective State Govt. shall be followed, if applicable.
3. Energy Conservation Plan to be implemented as envisaged in the EIA / EMP report. Renewable Energy Purchase Obligation as set by MoP/State Government shall be met either by establishing renewable energy power plant (such as solar, wind, etc.) or by purchasing Renewable Energy Certificates.
4. Monitoring of Carbon Emissions from the existing power plant as well as for the proposed power project shall be carried out annually from a reputed institute and report be submitted to the Ministry's Regional Office.
5. Energy and Water Audit shall be conducted at least once in two years and recommendations arising out of the Report should be followed. A report in this regard shall be submitted to Ministry's Regional Office.
6. Environment Cell (EC) shall be constituted by taking members from different divisions, headed by a qualified person on the subject, who shall be reporting directly to the Head of the Project.
7. The project proponent shall (Post-EC Monitoring):
 - a. send a copy of environmental clearance letter to the heads of Local Bodies, Panchayat, Municipal bodies and relevant offices of the Government;
 - b. upload the clearance letter on the web site of the company as a part of information to the general public.
 - c. inform the public through advertisement within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely

Signature

circulated in the region of which one shall be in the vernacular language that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the SPCB and may also be seen at Website of the Ministry of Environment, Forest and Climate Change (MoEF&CC) at <http://parviesh.nic.in>.

- d. upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same periodically;
- e. monitor the criteria pollutants level namely; PM (PM₁₀ & PM_{2.5} in case of ambient AAQ), SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects and display the same at a convenient location for disclosure to the public and put on the website of the company;
- f. submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MoEF&CC, the respective Zonal Office of CPCB and the SPCB;
- g. submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company;
- h. inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project and the date of commencement of the land development work.

K. Corporate Environmental Responsibility (CER) activities:

1. CER activities will be carried out as per OM No. 22-65/2017-IA.II dated 01.05.2018 or as proposed by the PP in reference to Public Hearing or as earmarked in the EIA/EMP report along with the detailed schedule of implementation with appropriate budgeting.

L. Marine facilities:

1. As the seawater intake systems are required for the plant fall in CRZ area, recommendations from State Coastal Zone Management Authority (SCZMA) as per CRZ Notification shall be implemented.
2. Marine intake and outfall pipelines shall be located as per the recommendations State Coastal Zone Management Authority (SCZMA).

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M. Sea Water Intake:

1. Seawater intake system shall be so designed and constructed to ensure sufficient seawater in terms of quantity and quality.
2. The withdrawal of seawater shall be preferably through a pipeline with a riser equipped with a velocity cap arrangement and bar screen to arrest the impingement of large marine organisms.
3. In all tide conditions (particularly at spring low tides) the riser head must be flooded with the required submergence of seawater above its top.

N. Effluent Release:

1. At the effluent release point, maximum temperature of the discharge water shall not be more than 5°C and salinity shall not exceed 50 ppt with respect to that of the ambient seawater.
2. Use of antifouling agents like chlorine / hypochlorite, shall be carefully controlled. The chlorine concentration shall not exceed 0.2 ppm at the effluent release point.
3. The effluent when released at the selected location shall attain sufficient dilution so that near ambient water quality (particularly temperature and salinity) is attained within 500 m from the release location, at low tide.
4. The location of the diffuser shall be marked with a solar lighted buoy to avoid accidents.
5. The site selected based on mathematical modeling shall ensure absence of recirculation of the effluent plume in the seawater intake area under all tidal conditions.
6. The effluent shall be released through a properly designed multiport diffuser above the seabed to facilitate its efficient initial mixing with the receiving seawater.
7. Efficacy of the diffuser shall be ascertained at least once in 2 years through scientific studies and corrective actions such as cleaning of the diffuser from marine growth, removal of silt deposits, etc. shall be taken up, if warranted.
8. Continuous online monitoring system for Temperature and Salinity shall be installed to monitor the quality of effluent.

O. Common to intake and effluent:

1. The pipeline shall be buried below the seabed at a depth to ensure its stability under rough sea conditions particularly during cyclone / tsunami. The depth of burial will depend on the seafloor strata but normally the top of the pipeline shall be at least 1 m below the bed level. In the surf and intertidal zones, the pipeline shall be buried below the maximum scour level.
2. In case of open channel, the channel shall be constructed as per the recommendations of State Coastal Zone Management Authority (SCZMA).

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3. If the substratum is rocky the pipeline may be anchored to the rock provided the geology of the area satisfactorily supports the structure which shall be ascertained through geo-technical investigations.
4. Exposed pipeline section and riser shall be protected by armour stone from waves, boats anchoring, fishing activities etc.
5. The location of the riser & diffuser shall be marked with a solar lighted buoy to avoid accidents from boats.
6. Marine / Sea water quality shall be monitored at effluent release location at the center. Parameters to be monitored shall be as follows:
 - a. *Physico-chemical*: Temperature, Salinity, pH and Dissolved Oxygen.
 - b. *Biological*: Primary Productivity, Phytoplankton (Chlorophyll a, Phaeophytin, Population, Species), Zooplankton (Biomass, Population, Species) and Benthos (Biomass, Population, Species).
7. In case of Coastal Power Plants, the Mangrove plantation shall be taken up in an area ofha, along the coast/ on the banks of Estuary.

Sg. K. K. S.
17/11/2018

F. No. L-11011/175/2018-IA-II (M)
Government of India
Ministry of Environment, Forest & Climate Change
Impact Assessment Division

3rd Floor, Vayu Wing,
Indira Paryavaran Bhawan,
Jorbagh Road, Aliganj,
New Delhi-110 003
Email: rb.lal@nic.in
Phone/Fax: 011-24695362

Dated: 12th December 2018

Office Memorandum

Subj: Order dated 04th September, 2018 & 13th September, 2018 passed by the Hon'ble National Green Tribunal, New Delhi in O.A. No. 173 of 2018 & O.A. No. 186 of 2016 in the matters titled "Sudarsan Das Vs State of West Bengal & Ors" & "Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr." respectively- regarding.

This is with reference to the recent orders of the Hon'ble NGT dated 04th September, 2018 in the matter titled *Sudarsan Das Vs State of West Bengal & Ors* & and order dated 13th September, 2018 in the matter *Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr.* Copies of the orders are enclosed herewith for ready reference.

2. The Hon'ble NGT vide order dated 13th September, 2018 in O.A. No. 186 of 2016 (*Satendra Pandey Vs Ministry of Environment Forest & Climate Change & Anr.*) has inter-alia directed as follows:-

"(i) Providing for EIA, EMP and therefore, Public Consultation for all areas from 5 to 25 ha falling member Category B-2 at par with Category B-1 by SEAC/ SIEAA as well as for cluster situation wherever it is not provided;

(ii) Form-1M be made more comprehensive for areas of 0 to 5 ha by dispensing with the requirement for Public Consultation to be evaluated by SEAC for recommendation of grant EC by SEIAA instead of DEAC/DEIAA;

(iii) if a cluster or an individual lease size exceeds 5 ha the EIA/EMP be made applicable in the process of grant of prior environmental clearance;

(iv) EIA and/or EMP be prepared for the entire cluster in terms of recommendation 5 (supra) of the Guidelines for the purpose of recommendations 6, 7 and 8 thereof;

(v) revise the procedure to also incorporate procedure with respect to annual rate of replenishment and timeframe for replenishment after mining closure in an area;

(vi) the MoEF&CC to prepare guidelines for calculation of the cost of restitution of damage caused to mined-out areas along with the Net Present Value of Ecological Services forgone because of illegal or unscientific mining."

3. In view of the above, the undersigned is directed to forward the copy of the aforementioned order for necessary compliance and inform the Ministry about the action taken.

4. This issues with the approval of the Competent Authority.

Yours faithfully,

Encl: As above


(Dr. R.B. Lal)
Scientist 'E'

To,

1. The Chief Secretary, 1st Block, 1st Floor A.P Secretariat Office, Andhra Pradesh, Velagapudi - 522503
2. The Chief Secretary, Government of Arunachal Pradesh, Civil Secretariat, Itanagar - 791111
3. The Chief Secretary, Government of Assam, Block-C, 3rd Floor, Assam Sachivalaya, Guwahati-781006
4. The Chief Secretary, Government of Bihar, Main Secretariat Building, Patna-800015
5. The Chief Secretary, Government of Chhattisgarh, Mahanadi Bhawan, Mantralaya, Naya Raipur-492002
6. The Chief Secretary, Government of Gujarat, Block No.1, 5th Floor, Sardar Bhawan, Sachivalaya, Gandhinagar-382010
7. The Chief Secretary, Government of Goa, Secretariat, Porvoin, Bardez, Goa - 403521
8. The Chief Secretary, 4th Floor, Haryana Civil Secretariat Sector-I, Chandigarh - 160019
9. The Chief Secretary, Government of Himachal Pradesh Secretariat, Shimla - 171002
10. The Chief Secretary, R. No. 2/7, 2nd, Floor Main Building Civil Secretariat, Jammu - 180001 R. No. 307, 3rd Floor Civil Secretariat, Srinagar - 190001
11. The Chief Secretary, Government of Jharkhand 1st Floor, Project Building, Dhurwa, Ranchi-834004
12. The Chief Secretary, Govt of Karnataka, Room No.321, Vidhana Soudha, Bengaluru- 560 001
13. The Chief Secretary, Government of Kerala Secretariat, Thiruvananthapuram - 695001
14. The Chief Secretary, Government of Madhya Pradesh MP Mantralaya, Vallabh Bhavan Bhopal - 462004

15. The Chief Secretary, Government of Maharashtra CS Office Main Building, Mantralaya 6th Floor, Madame Cama Road, Mumbai - 400032
16. The Chief Secretary, Government of Manipur South Block, Old Secretariat Imphal-795001
17. The Chief Secretary, Government of Meghalaya Main Secretariat Building Rilang Building, Room No. 321 Meghalaya Secretariat, Shillong - 793001
18. The Chief Secretary, Government of Mizoram New Secretariat Complex, Aizwal - 796001
19. The Chief Secretary, Government of Nagaland Civil Secretariat, Kohima-797004
20. The Chief Secretary, Government of Odisha General Administration Department, Odisha Secretariat, Bhubaneswar - 751001
21. The Chief Secretary, Government of Punjab, Chandigarh - 160001
22. The Chief Secretary, Government of Rajasthan Secretariat, Jaipur - 302005
23. The Chief Secretary, Government of Sikkim New Secretariat, Gangtok - 737101
24. The Chief Secretary, Government of Tamil Nadu Secretariat, Chennai - 600009
25. The Chief Secretary, Government of Telangana Block C, 3rd Floor, Telangana Secretariat Khairatabad, Hyderabad, Telangana
26. The Chief Secretary, Government of Uttar Pradesh 1st Floor, Room No. 110 Lal Bahadur Shastri Bhawan Uttar Pradesh Secretariat, Lucknow - 226-001
27. The Chief Secretary, Government of Tripura New Secretariat Complex, Secretariat-799010, Agartala West Tripura
28. The Chief Secretary, Government of Uttarakhand 4 Subhash Road, Uttarakhand Secretariat, Dehradun - 248001
29. The Chief Secretary, Government of West Bengal Nabanna, 13th Floor, 325, Sarat Chatterjee Road, Mandirala Shilpuri, Howrah - 711102
30. The Chief Secretary, Andaman and Nicobar Administration Secretariat, Port Blair - 744101
31. The Chief Secretary, Secretariat, Moti, Silvassa, Daman - 396220
32. The Chief Secretary, Secretariat, Moti, Daman - 396 220
33. The Chief Secretary, Raj Bhawan, Chandigarh-160019
34. The Chief Secretary, Lakshadweep, Kavaratti - 682555
35. The Chief Secretary, Chief Secretariat, Goubert Avenue, Puducherry - 605001
36. The Chief Secretary, Delhi Secretariat, Ip Estate, Delhi - 110002, Near Indra Gandhi Indoor Stadium

Copy to:

1. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (SZ), Kendriya Sadan, 4th Floor, E&F Wings, 17th Main Road, Koramangala II Block, Bangalore-560034
2. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (W2), E-5, Kendriya Paryavaran Bhawan, E-5 Area Colony, Link Road-3, Ravishankar Nagar, Bhopal-462016
3. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar-751023

4. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (SEZ), 1st and 2nd Floor, Handloom Export Promotion Council, 34, Cathedral Garden Road, Nungambakkam, Chennai-34
5. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NZ), Bays No. 24-25, Sector 31 A, Dakshin Marg, Chandigarh-160030
6. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NCZ), Pearson Road, P.P. New Forest, Forest Research Institute (FRI) Campus Dehradun-248006
7. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (CZ), Kendriya Bhawan, 5th Floor, Sector "H", Aliganj, Lucknow-226020
8. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur-440001
9. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (ECZ), Bungalow No. A-2, Shyamali Colony Ranchi-834002
10. Addl. Principal Chief Conservator of Forests (C), Ministry of Environment, Forest & Climate Change, Regional Office (NEZ) Law-U-Sib, Lumbatnagen, Near MTC Workshop, Shillong, Meghalaya-793021

(Dr. R.B. Lal)
Scientist 'E'

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F. No. 22-34/2018-1A.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi – 110003

E-mail: sharath.kr@gov.in
Tel: 011-24695319

Dated: 4th January, 2019

OFFICE MEMORANDUM

Sub.: Standardization of Environment Clearance conditions – reg.

The Ministry of Environment, Forest and Climate Change has notified the Environmental Impact Assessment (EIA) Notification, 2006 under the provisions of the Environment (Protection) Act, 1986, which regulates development and their expansion/modernization of 39 sectors/activities listed in the Schedule to the EIA Notification, 2006. There are two Category of projects viz. Category 'A' projects that are handled at the level of MoEF&CC and Category 'B' projects that are handled by the respective State Environment Impact Assessment Authority (SEIAA) following the procedure prescribed under the EIA Notification, 2006.

2. All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forest and Climate Change (MoEF&CC) on the recommendations of an Expert Appraisal Committee (EAC) constituted by the Central Government for the purposes of this notification.

3. The Standard Environmental Clearance conditions have been prepared for expediting the process of Environmental Clearance without compromising environmental norms and the rigor of environment impact assessment.


4. The standard Environment Clearance conditions shall be considered by the concerned EAC with due diligence while recommending the Environmental Clearance. The expert appraisal committee can modify, prescribe additional conditions based on the project specific requirements.

5. The recommended conditions by the EAC shall be brought in the minutes of the meeting of the EAC.

6. The standard Environment Clearance conditions are herewith issued for the following sectors:

S.No.	Sector	Project / Activity
I.	Infrastructure	7(a) Airports 7(d) Common hazardous waste treatment, storage and disposal facilities (TSDFs) 7(da) Bio-medical waste treatment facility 7(e) Port, Harbour, Break water and Dredging 7(g) Aerial Ropeways 7(h) Common Effluent Treatment Plants 7(i) Common Municipal Solid Waste Management Facility
II.	Building/construction Projects, Area Development Projects	8 (a) Building and construction projects 8(b) Township and Area Development Projects.

7. This issues with the approval of competent authority.


(Sharath Kumar Palleria)
Director (IA-III-Policy)

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. All the Officers of I.A. Division
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PS to JS (RSP)/ JS(JT)/JS(GM)
6. Website, MoEF&CC
7. Guard file.

Standard EC Conditions for Project/Activity 7(a): Airport

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. Clearance from Directorate General of Civil Aviation (DGCA) and Airports Authority of India (AAI) for safety and project facilities shall be obtained.
- vii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- viii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the airport area at least at four locations

(one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

- ii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D/ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.
- iv. Soil and other construction materials should be sprayed with water prior to any loading, unloading or transfer operation so as to maintain the dusty material wet.
- v. The excavation working area should be sprayed with water after operation so as to maintain the entire surface wet.
- vi. Excavated materials shall be handled and transported in a manner that they do not cause any problems of air pollution.
- vii. The soil/construction materials carried by the vehicle should be covered by impervious sheeting to ensure that the dusty materials do not leak from the vehicle.

III. Water quality monitoring and preservation

- i. Run off from chemicals and other contaminants from aircraft maintenance and other areas within the airport shall be suitably contained and treated before disposal. A spillage and contaminant containment plan shall be drawn up and implemented to the satisfaction of the State Pollution Control Board.
- ii. Proper drainage systems, emergency containment in the event of a major spill during monsoon season etc. shall be provided.
- iii. The runoff from paved structures like Runways, Taxiways, can be routed through drains to oil separation tanks and sedimentation basins before being discharged into rainwater harvesting structures.

- iv. Storm water drains are to be built for discharging storm water from the air-field to avoid flooding/water logging in project area. Domestic and industrial waste water shall not be allowed to be discharged into storm water drains.
- v. Rain water harvesting for roof run-off and surface run-off, as plan submitted should be implemented. Rain water harvesting structures shall conform to CGWA designs. Before recharging the surface run off, pre-treatment must be done to remove suspended matter, oil and grease.
- vi. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- vii. Sewage Treatment Plant shall be provided to treat the wastewater generated from airport. Treated water shall be reused for horticulture, flushing, huckwash, HVAC purposes and dust suppression
- viii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- ix. A detailed drainage plan for rain water shall be drawn up and implemented.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- iv. During airport operation period, noise should be controlled to ensure that it does not exceed the prescribed standards. During night time the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- v. Where construction activity is likely to cause noise nuisance to nearby residents, restrict operation hours between 7 am to 6 pm.

V. Energy Conservation measures

- i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management

- ii. Soil stockpile shall be managed in such a manner that dust emission and sediment runoff are minimized. Ensure that soil stockpiles are designed with no slope greater than 2:1 (horizontal/vertical).
- iii. The project activity shall conform to the Fly Ash notification issued under the E.P. Act of 1986.
- iv. Solid inert waste found on construction sites consists of building rubble, demolition material, concrete, bricks, timber, plastic, glass, metals, bitumen etc shall be reused/recycled or disposed off as per Solid Waste Management Rules, 2016 and Construction and Demolition Waste Rules, 2016.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- vi. The project proponents shall implement a management plan duly approved by the State Pollution Control Board and obtain its permissions for the safe handling and disposal of:
 - a. Trash collected in flight and disposed at the airport including segregation, collection and disposed.
 - b. Toilet wastes and sewage collected from aircrafts and disposed at the Airport.
 - c. Wastes arising out of maintenance and workshops
 - d. Wastes arising out of eateries and shops situated inside the airport complex.
 - e. Hazardous and other wastes
- vii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016. Recycling of wastes such as paper, glass (produced from terminals and aircraft caterers), metal (at aircraft maintenance site), plastics (from aircrafts, terminals and offices), wood, waste oil and solvents (from maintenance and engineering operations), kitchen wastes and vegetable oils (from caterers) shall be carried out. Solid wastes shall be disposed in accordance to the Solid Waste Management Rules, 2016 as amended.

- viii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- ix. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.

VII. Green Belt

- i. Green belt shall be developed in area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the Air Port.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues

- i. Construction site should be adequately barricaded before the construction begins.
- ii. Traffic congestion near the entry and exit points from the roads adjoining the airport shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. Provision of Electro-mechanical doors for toilets meant for disabled passengers. Children nursing/feeding room to be located conveniently near arrival and departure gates.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. 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.
- vi. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any

infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous:

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The criteria pollutant levels namely; PM 10, PM2.5, SO₂, NO_x (ambient levels) shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(d): Common hazardous waste treatment, storage and disposal facilities (TSDFs)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The Project proponent should ensure that the TSDF fulfils all the provisions of Hazardous and other Wastes (Management and Transboundary Movement) Rules, 2016.
- vi. The project proponents shall adhere to all conditions as prescribed in the Protocol for 'Performance Evaluation and Monitoring of the Common Hazardous waste treatment, storage and disposal facilities' published by the CPCB in May, 2010.
- vii. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- viii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be

obtained, as applicable by project proponents from the respective competent authorities

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. The project proponent shall monitor fugitive emissions in the plant premises at least once in every quarter through labs recognised under Environment (Protection) Act, 1986.
- iii. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- iv. Sampling facility at process stacks and at quenching towers shall be provided as per CPCB guidelines for manual monitoring of emissions.
- v. The project proponent shall submit monthly summary report of continuous stack emission and air quality monitoring and results of manual stack monitoring and manual monitoring of air quality /fugitive emissions to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- vi. Appropriate Air Pollution Control (As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed stack emission and fugitive emission standards.
- vii. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out. Analysis of Dioxins and Furans shall be done through CSIR – National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory

- viii. Gas generated in the Land fill should be properly collected, monitored and flared
- ix. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The project proponent shall submit monthly summary report of continuous effluent monitoring and results of manual effluent testing and manual monitoring of ground water quality to Regional Office of MoEF&CC, Zonal office of CPCB and Regional Office of SPCB along with six-monthly monitoring report.
- iv. No discharge in nearby river(s)/pond(s).
- v. The depth of the land fill site shall be decided based on the ground water table at the site.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. The Company shall review the unit operations provided for the treatment of effluents, specially the sequencing of MEE after tertiary treatment, the source of permeate when

no R.O. is recommended and the treatment of MEE condensate. The scheme for treatment of effluents shall be as permitted by the Pollution Control Board/Committee under the provisions of consent to establish.

- ix. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- x. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- xi. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- xii. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- xiii. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Energy Conservation measures

- i. Energy conservation measures like installation of LED/CFLs/TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning.

VI. Waste management

- i. The TSDF should only handle the waste generated from the member units.
- ii. Periodical soil monitoring to check the contamination in and around the site shall be carried out.

- iii. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- iv. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB.
- v. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VII. Green Belt

- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Public hearing and Human health issues

- i. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- ii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under

the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.

- vi. The criteria pollutant levels namely, SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral 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.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- xi. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.

- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(da): Bio-Medical Waste Treatment Facilities.

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- v. Transportation and handling of Bio-medical Wastes shall be as per the Biomedical Wastes (Management and Handling) Rules, 2001 including the section 129 to 137 of Central Motor Vehicle Rules 1989.
- vi. Project shall fulfill all the provisions of hazardous Wastes (Management, handling and Transboundary Movement) Rules, 2016 including collection and transportation design etc and also guidelines for Common Hazardous Waste Incineration – 2005, issued by CPCB. Guidelines of CPCB/MPPCB for Bio-medical Waste Common Hazardous Wastes incinerators shall be followed.
- vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- viii. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- ix. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The project proponent shall install emission monitoring system including Dioxin and furans to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Periodical air quality monitoring in and around the site including VOC, HC shall be carried out.
- iii. Incineration plants shall be operated (combustion chambers) with such temperature, retention time and turbulence, so as to achieve Total Organic Carbon (TOC) content in the slag and bottom ashes less than 3%, or their loss on ignition is less than 5% of the dry weight of the material.
- iv. Venturiscrubber (alkaline) should be provided with the incinerator with stack of adequate height (Minimum 30 meters) to control particulate emission within 50mg/Nm³.
- v. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards. All necessary air pollution control devices (quenching, Venturi scrubber, mist eliminator) should be provided for compliance of emission standards.
- vi. Masking agents should be used for odour control.

III. Water quality monitoring and preservation

- i. The project proponent shall install effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Waste water generated from the facility shall be treated in the ETP and treated waste water shall be reused in the APCD connected to the incinerator. The water quality of treated effluent shall meet the norms prescribed by State Pollution Control Board. Zero discharge should be maintained.
- iii. Process effluent/any waste water should not be allowed to mix with storm water.
- iv. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- v. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.

- vi. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- vii. The leachate from the facility shall be collected and treated to meet the prescribed standards before disposal.
- viii. Magnetic flow meters shall be provided at the inlet and outlet of the ETP & all ground water abstraction points and records for the same shall be maintained regularly.
- ix. Rain water runoff from hazardous waste storage area shall be collected and treated in the effluent treatment plant.

IV. Noise monitoring and prevention

- i. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- i. Provide LED lights in their offices and residential areas

VI. Waste management

- i. Incinerated ash shall be disposed at approved TSDF and MoU made in this regard shall be submitted to the Ministry prior to the commencement.
- ii. The solid wastes shall be segregated as per the norms of the Solid Waste Management Rules, 2016.
- iii. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- iv. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016
- v. No landfill site is allowed within the CBWTF site.
- vi. The Project proponent shall not store the Hazardous Wastes more than the quantity that has been permitted by the CPCB/SPCB

VII. Green Belt

- i. Green belt shall be developed in area as provided in project details, with native tree. Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues

- i. Feeding of materials/Bio-medical waste should be mechanized and automatic no manual feeding is permitted.
- ii. Proper parking facility should be provided for employees & transport used for collection & disposal of waste materials.
- iii. Necessary provision shall be made for fire-fighting facilities within the complex.
- iv. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- v. Emergency plan shall be drawn in consultation with SPCB/CPCB and implemented in order to minimize the hazards to human health or environment from fires, explosion or any unplanned sudden or gradual release of hazardous waste or hazardous waste constituents to air, soil or surface water.
- vi. 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.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-1A.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.

- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies; Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral 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.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities;

commencing the land development work and start of production operation by the project.

- x. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- xi. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts/NGT and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(e): Port, Harbor, Break water, Dredging

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable. No dredging is allowed in protected habitat areas without prior permission from NBWL.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area).
- iv. Construction activity shall be carried out strictly according to the provisions of CRZ Notification, 2011 and the State Coastal Zone Management Plan as drawn up by the State Government. No construction work other than those permitted in Coastal Regulation Zone Notification shall be carried out in Coastal Regulation Zone area.
- v. All the recommendations and conditions specified by State Coastal Zone Management Authority for the project shall be complied with.
- vi. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/Committee.
- vii. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- viii. All excavation related dewatering shall be as duly authorized by the CGWA. A NOC from the CGWA shall be obtained for all dewatering and ground water abstraction.
- ix. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- x. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Coast Guard, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM_{10} and $PM_{2.5}$ in reference to PM emission, and SO_2 and NO_x in reference to SO_2 and NO_x emissions) within and outside the project area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for all the dust generating points including fugitive dust from all vulnerable sources, so as to comply prescribed emission standards.
- iii. Shrouding shall be carried out in the work site enclosing the dock/proposed facility area. This will act as dust curtain as well achieving zero dust discharge from the site. These curtain or shroud will be immensely effective in restricting disturbance from wind in affecting the dry dock operations, preventing waste dispersion, improving working conditions through provision of shade for the workers.
- iv. Dust collectors shall be deployed in all areas where blasting (surface cleaning) and painting operations are to be carried out, supplemented by stacks for effective dispersion.
- v. The Vessels shall comply the emission norms prescribed from time to time.
- vi. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.
- vii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 05 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 05 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

III. Water quality monitoring and preservation

- i. The Project proponent shall ensure that no creeks or rivers are blocked due to any activities at the project site and free flow of water is maintained.

- ii. Appropriate measures must be taken while undertaking digging activities to avoid any likely degradation of water quality. Silt curtains shall be used to contain the spreading of suspended sediment during dredging within the dredging area.
- iii. No ships docking at the proposed project site will discharge its on-board waste water untreated in to the estuary/ channel. All such wastewater load will be diverted to the proposed Effluent Treatment Plant of the project site.
- iv. Measures should be taken to contain, control and recover the accidental spills of fuel and cargo handle.
- v. The project proponents will draw up and implement a plan for the management of temperature differences between intake waters and discharge waters.
- vi. Spillage of fuel / engine oil and lubricants from the construction site are a source of organic pollution which impacts marine life. This shall be prevented by suitable precautions and also by providing necessary mechanisms to trap the spillage.
- vii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- viii. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused for horticulture, flushing, backwash, HVAC purposes and dust suppression.
- ix. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.
- x. No diversion of the natural course of the river shall be made without prior permission from the Ministry of Water resources.
- xi. All the erosion control measures shall be taken at water front facilities. Earth protection work shall be carried out to avoid erosion of soil from the shoreline/boundary line from the land area into the marine water body.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.
- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.

- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.
- iv. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas.

VI. Waste management

- i. Dredged material shall be disposed safely in the designated areas.
- ii. Shoreline should not be disturbed due to dumping. Periodical study on shore line changes shall be conducted and mitigation carried out, if necessary. The details shall be submitted along with the six monthly monitoring report.
- iii. Necessary arrangements for the treatment of the effluents and solid wastes must be made and it must be ensured that they conform to the standards laid down by the competent authorities including the Central or State Pollution Control Board and under the Environment (Protection) Act, 1986.
- iv. The solid wastes shall be managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- vi. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.
- vii. Used CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/ rules of the regulatory authority to avoid mercury contamination.
- viii. Oil spill contingency plan shall be prepared and part of DMP to tackle emergencies. The equipment and recovery of oil from a spill would be assessed. Guidelines given in MARPOL and Shipping Acts for oil spill management would be followed. Mechanism for integration of terminal oil contingency plan with the overall area contingency plan under the co-ordination of Coast should be covered

VII. Green Belt

- i. Green belt shall be developed in area as provided in project details with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.
- ii. Top soil shall be separately stored and used in the development of green belt.

VIII. Marine Ecology

- i. Dredging shall not be carried out during the fish breeding and spawning seasons.
- ii. Dredging, etc shall be carried out in the confined manner to reduce the impacts on marine environment.
- iii. The dredging schedule shall be so planned that the turbidity developed is dispersed soon enough to prevent any stress on the fish population.
- iv. While carrying out dredging, an independent monitoring shall be carried out through a Government Agency/Institute to assess the impact and necessary measures shall be taken on priority basis if any adverse impact is observed.
- v. A detailed marine biodiversity management plan shall be prepared through the NIOS or any other institute of repute on marine, brackish water and fresh water ecology and biodiversity and submitted to and implemented to the satisfaction of the State Biodiversity Board and the CRZ authority. The report shall be based on a study of the impact of the project activities on the intertidal biotopes, corals and coral communities, molluscs, sea grasses, sea weeds, sub-tidal habitats, fishes, other marine and aquatic micro, macro and mega flora and fauna including benthos, plankton, turtles, birds etc. as also the productivity. The data collection and impact assessment shall be as per standards survey methods and include underwater photography.
- vi. Marine ecology shall be monitored regularly also in terms of sea weeds, sea grasses, mudflats, sand dunes, fisheries, echinoderms, shrimps, turtles, corals, coastal vegetation, mangroves and other marine biodiversity components including all micro, macro and mega floral and faunal components of marine biodiversity.
- vii. The project proponent shall ensure that water traffic does not impact the aquatic wildlife sanctuaries that fall along the stretch of the river.

IX. Public hearing and Human health issues

- i. The work space shall be maintained as per international standards for occupational health and safety with provision of fresh air respirators, blowers, and fans to prevent any accumulation and inhalation of undesirable levels of pollutants including VOCs.

- ii. Workers shall be strictly enforced to wear personal protective equipments like dust mask, ear muffs or ear plugs, whenever and wherever necessary/ required. Special visco-elastic gloves will be used by labour exposed to hazards from vibration.
- iii. In case of repair of any old vessels, excessive care shall be taken while handling Asbestos & Freon gas. Besides, fully enclosed covering should be provided for the temporary storage of asbestos materials at site before disposal to CTSDF.
- iv. Safety training shall be given to all workers specific to their work area and every worker and employee will be engaged in fire hazard awareness training and mock drills which will be conducted regularly. All standard safety and occupational hazard measures shall be implemented and monitored by the concerned officials to prevent the occurrence of untoward incidents/ accidents.
- v. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- vi. 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.
- vii. Occupational health surveillance of the workers shall be done on a regular basis.

X. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest /wildlife norms/ conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection

measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.

- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

XI. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels) or critical sectoral 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.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities; commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.

- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- x. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- xi. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xii. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xiii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiv. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xvi. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(g): Aerial ropeways

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (incase of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vi. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, the Forest Conservation Act, 1980 and the Wildlife (Protection) Act, 1972 etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission) covering upwind and downwind directions.
- ii. Appropriate Air Pollution Control (APC) system (both during the construction and operation) shall be provided for all the dust generating points *inter alia* including loading, unloading, transfer points, fugitive dust from all vulnerable sources, so as to comply prescribed standards.

iii. Diesel power generating sets proposed as source of backup power should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use of low sulphur diesel. The location of the DG sets may be decided with in consultation with State Pollution Control Board.

iv. Adequate parking shall be constructed at upper terminal and lower terminal. PP shall ensure smooth traffic management.

III. Water quality monitoring and preservation

i. Storm water from the project area shall be passed through settling chamber.

ii. Garland drains and collection pits shall be provided for each stock pile to arrest the run-off in the event of heavy rains and to check the water pollution due to surface run off.

iii. Total fresh water use shall not exceed the proposed requirement as provided in the project details.

iv. Prior permission from competent authority shall be obtained for use of fresh water.

v. No wastewater shall be discharged in open. Appropriate Water Pollution Control system shall be provided for treatment of waste water.

vi. A certificate from the competent authority, in case of discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Noise monitoring and prevention

i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

ii. The ambient noise levels should conform to the standards prescribed under E(P)A Rules, 1986 viz. 75 dB(A) during day time and 70 dB(A) during night time.

V. Energy Conservation measures

i. Energy conservation measures like installation of LED/CFLs/TFLs for lighting should be integral part of the project design and should be in place before project commissioning.

ii. Solar energy shall be used in the project i.e. at upper terminal and lower terminal to reduce the carbon footprint.

VII. Waste management

- i. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- ii. The waste oil, grease and other hazardous waste shall be disposed of as per the Hazardous & Other waste (Management & Transboundary Movement) Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.

VIII. Public hearing and Human health/safety issues

- i. Comply with the safety procedures, norms and guidelines (as applicable) as outlined in IS 5228, IS 5229 and IS 5230, code of practice for construction of aerial ropeways, Bureau of Indian Standards.
- ii. Maintaining hoists and lifts, lifting machines, chains, ropes, and other lifting tackles in good condition.
- iii. Ensuring that walking surfaces or boards at height are of sound construction and are provided with safety rails or belts.
- iv. The project should conform to the norms prescribed by the Director General Mine safety. Necessary clearances in this regard shall be obtained.
- v. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- vi. Adequate first aid facility shall be provided during construction and operation phase of the project.
- vii. Regular safety inspection shall be carried out of the ropeway project and a copy of safety inspection report should be submitted to the Regional Office.
- viii. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.

IX. Corporate Environment Responsibility

- ix. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- x. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- xi. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- xii. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- xiii. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.

- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- vii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- viii. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.

- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(h): Common Effluent Treatment plants (CETPs)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, etc. shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The gaseous emissions from DG set shall be dispersed through adequate stack height as per CPCB standards. Diesel generating sets shall be installed, in the downwind directions.
- ii. Appropriate Air Pollution Control (APC) system shall be provided for fugitive dust from all vulnerable sources, so as to comply prescribed standards.

III. Water quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 as amended from time to time and connected to SPCB and CPCB online servers and calibrate these system from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- iii. There shall be flow meters at inlet and outlet of CETP to monitor the flow. Suitable meters shall be provided to measure the quantity of effluent received, quantity of effluent recycled/reused and discharged.
- iii. The units and the CETP will maintain daily log book of the quantity and quality of discharge from the units, quantity of inflow into the CETP, details of the treatment at each stage of the CETP including the raw materials used, quantity of the treated water proposed to be recycled, reused within the Industrial park/units, quantity of the treated effluent discharged. All the above information shall be provided on- line of the web site exclusively prepared for the purpose by the CETP owner. The website shall be accessible by the public. The financial and energy details of the CETP will also be provided along with details of the workers of the CETP.
- viii. The CETP operator will maintain an annual register of member units which will contain the details of products with installed capacities and quality and quantity of effluents accepted for discharge. This will form a part of the initial and renewal applications for consent to operate to be made before the State Pollution Control Board.
- iv. No changes in installed capacity, quality or quantity of effluents as agreed upon in the initial MOU between the operator and the member units, addition of any new member units shall be carried without prior approval of the ministry
- v. The Unit shall inform the State Pollution Control Board at least a week prior to undertaking maintenance activities in the recycle system and store/dispose treated effluents under their advice in the matter.
- vi. The unit shall also immediately inform the Pollution Control Board of any breakdown in the recycling system, store the effluents in the interim period and dispose effluents only as advised by the Pollution Control Board.
- vii. The MoU between CETP and member units shall indicate the maximum quantity of

effluent to be sent to the CETP along with the quality.

- viii. The unit shall maintain a robust system of conveyance for primary treated effluents from the member units and constantly monitor the influent quality to the CETP. The Management of the CETP and the individual member shall be jointly and severally responsible for conveyance and pre-treatment of effluents. Only those units will be authorized to send their effluents to the CETP which have a valid consent of the Pollution Control Board and which meet the primary treated standards as prescribed. The CETP operator shall with the consent of the State Pollution Control Board retain the powers to delink the defaulter unit from entering the conveyance system.
- ix. The effluent from member units shall be transported through pipeline. In case the effluent is transported thorough road, it shall be transported through CETP tankers only duly maintaining proper manifest system. The vehicles shall be fitted with proper GPS system.
- x. Before accepting any effluent from member units, the same shall be as permitted by the SPCB in the consent order. No effluent from any unit shall be accepted without consent from SPCB under the Water Act, 1974 as amended.
- xi. Treated water shall be disposed on land for irrigation. An irrigation management plan shall be drawn up in consultation with and to the satisfaction of the State Pollution Control Board.
- xii. The Project proponents will build operate and maintain the collection and conveyance system to transport effluents from the industrial units in consultation with and to the satisfaction of the State Pollution Control Board and ensure that the industrial units meet the primary effluent standards prescribed by the State Pollution Control Board.
- xiii. The State Pollution Control Board will also evaluate the treatment efficiency of the Effluent Treatment Plant (ETP) and its capability of meeting the prescribed standards. The final scheme of treatment would be such as is approved by the Pollution Control Board in the Consent to Establish.
- xiv. The project proponents will create an institutional arrangement for the involvement of individual members in the management of the CETP.

IV. Noise monitoring and prevention

- i. Noise level survey shall be carried as per the prescribed guidelines and report in this regard shall be submitted to Regional Officer of the Ministry as a part of six-monthly compliance report.

- ii. Noise from vehicles, power machinery and equipment on-site should not exceed the prescribed limit. Equipment should be regularly serviced. Attention should also be given to muffler maintenance and enclosure of noisy equipments.
- iii. Acoustic enclosures for DG sets, noise barriers for ground-run bays, ear plugs for operating personnel shall be implemented as mitigation measures for noise impact due to ground sources.

V. Waste management

- i. ETP sludge generated from CETP facility shall be handled and disposed to nearby authorized TSDF site as per Hazardous and Other Waste Management Rules, 2016.
- ii. Non Hazardous solid wastes and sludge arising out of the operation of the CETP shall be adequately disposed as per the Consent to be availed from the State Pollution Control Board. Non Hazardous solid wastes and sludge shall not be mixed with Hazardous wastes.
- iii. The CETP shall have adequate power back up facility, to meet the energy requirement in case of power failure from the grid.
- iv. The site for aerobic composting shall be selected and developed in consultation with and to the satisfaction of the State Pollution Control Board. Odour and insect nuisance shall be adequately controlled.
- v. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- vi. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.

VI. Energy Conservation measures

- i. Provide solar power generation on roof tops of buildings, for solar light system for all common areas, street lights, parking around project area and maintain the same regularly;
- ii. Provide LED lights in their offices and residential areas

VII. Green Belt

- i. Green belt shall be developed in area as provided in project details, with native tree Green belt shall be developed in an area equal to 33% of the plant area with a native tree species in accordance with CPCB guidelines. The greenbelt shall inter alia cover the entire periphery of the plant.

VIII. Public hearing and Human health issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. Adequate infrastructure, including power, shall be provided for emergency situations and disaster management.
- iii. 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.
- iv. Occupational health surveillance of the workers shall be done on a regular basis.

IX. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.
- ii. The company shall have a well laid down environmental policy duly approve by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

X. Miscellaneous

- i. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEFCC/SEIAA website where it is displayed.
- ii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.
- iii. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- iv. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- v. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vi. The criteria pollutant levels or critical sectoral 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.
- vii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of operation by the project.
- ix. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- x. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- viii. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).

- ix. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- x. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xi. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.
- xii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiii. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xiv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Standard EC Conditions for Project/Activity 7(i): Common Municipal Solid Waste Management Facility (CMSWMF)

I. Statutory compliance:

- i. The project proponent shall obtain forest clearance under the provisions of Forest (Conservation) Act, 1986, in case of the diversion of forest land for non-forest purpose involved in the project.
- ii. The project proponent shall obtain clearance from the National Board for Wildlife, if applicable.
- iii. The project proponent shall prepare a Site-Specific Conservation Plan & Wildlife Management Plan and approved by the Chief Wildlife Warden. The recommendations of the approved Site-Specific Conservation Plan / Wildlife Management Plan shall be implemented in consultation with the State Forest Department. The implementation report shall be furnished along with the six-monthly compliance report. (in case of the presence of schedule-I species in the study area)
- iv. The project proponent shall obtain Consent to Establish / Operate under the provisions of Air (Prevention & Control of Pollution) Act, 1981 and the Water (Prevention & Control of Pollution) Act, 1974 from the concerned State Pollution Control Board/ Committee.
- v. The project proponent shall obtain the necessary permission from the Central Ground Water Authority, in case of drawl of ground water / from the competent authority concerned in case of drawl of surface water required for the project.
- vi. A certificate of adequacy of available power from the agency supplying power to the project along with the load allowed for the project should be obtained.
- vii. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department shall be obtained, as applicable by project proponents from the respective competent authorities.

II. Air quality monitoring and preservation

- i. The project proponent shall install 24x7 continuous emission monitoring system at process stacks to monitor stack emission with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognised under Environment (Protection) Act, 1986 or NABL accredited laboratories. ((for projects involving incineration)

- ii. As proposed, air pollution control device viz. gas quencher; treatment with mixture of hydrated lime and activated powder for adsorption of partial acidity and VOCs (if any); bagfilter/ESP for removal of particulate matter; venturi scrubber followed by packed bed scrubber with caustic circulation to neutralize the acidic vapours in flue gas; and demister column for arresting water carry over will be provided to the incinerator. Online pollutant monitoring shall be provided as per CPCB guidelines for monitoring particulate matter, SO₂, NO_x and CO from the incinerator stack. The periodical monitoring of Dioxins and Furans in the Stack emissions shall be carried out.
- iii. Analysis of Dioxins and Furans shall be done through CSIR – National Institute for Interdisciplinary Science and Technology (NIIST), Thiruvananthapuram or equivalent NABL Accredited laboratory.
- iv. Incinerator shall be designed as per CPCB guidelines. Energy shall be recovered from incinerator.
- v. Gas generated in the Land fill should be properly collected, monitored and flared.
- vi. The project proponent shall install system to carryout Ambient Air Quality monitoring for common/criterion parameters relevant to the main pollutants released (e.g. PM₁₀ and PM_{2.5} in reference to PM emission, and SO₂ and NO_x in reference to SO₂ and NO_x emissions) within and outside the plant area at least at four locations (one within and three outside the plant area at an angle of 120° each), covering upwind and downwind directions.

III. Water quality monitoring and preservation

- i. The project proponent shall install continuous effluent monitoring system with respect to standards prescribed in Environment (Protection) Rules 1986 and connected to SPCB and CPCB online servers and calibrate these systems from time to time according to equipment supplier specification through labs recognized under Environment (Protection) Act, 1986 or NABL accredited laboratories.
- ii. Sufficient number of Piezometer wells shall be installed in and around the project site to monitor the ground water quality in consultation with the State Pollution Control Board / CPCB. Trend analysis of ground water quality shall be carried out each season and information shall be submitted to the SPCB and the Regional Office of MoEF&CC.
- iii. The depth of the land fill site shall be decided based on the ground water table at the site.
- iv. Rain water runoff from the landfill area and other hazardous waste management area shall be collected and treated in the effluent treatment plant.

- v. Total fresh water use shall not exceed the proposed requirement as provided in the project details. Prior permission from competent authority shall be obtained for use of fresh water.
- vi. The Company shall ensure proper handling of all spillages by introducing spill control procedures for various chemicals.
- vii. All leachates arising from premises should be collected and treated in the ETP followed by RO. RO rejects shall be evaporated in MEE. Toxicity Characteristic Leaching Procedure (TCLP) test to be performed on leachates.
- viii. Scrubber water, leachate water or wheel wash effluent shall be treated in the effluent treatment plant followed by RO to achieve zero liquid discharge.
- ix. Sewage Treatment Plant shall be provided to treat the wastewater generated from the project. Treated water shall be reused within the project.
- x. A certificate from the competent authority for discharging treated effluent/ untreated effluents into the Public sewer/ disposal/drainage systems along with the final disposal point should be obtained.

IV. Waste management

- i. No non-hazardous wastes, as defined under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016, shall be handled in the premises.
- ii. The solid wastes shall be segregated, managed and disposed as per the norms of the Solid Waste Management Rules, 2016.
- iii. Any wastes from construction and demolition activities related thereto shall be managed so as to strictly conform to the Construction and Demolition Rules, 2016.
- iv. A certificate from the competent authority handling municipal solid wastes should be obtained, indicating the existing civic capacities of handling and their adequacy to cater to the M.S.W. generated from project.

V. Transportation

- i. Project should ensure that the site is properly cordoned off from general movement and no unauthorized person or goods permitted to enter the premises. Necessary security provision should be made as a condition in the Authorisation under the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 to prevent

unwanted access.

- ii. Traffic congestion near the entry and exit points from the roads adjoining the project site shall be avoided. Parking should be fully internalized and no public space should be utilized.
- iii. A detailed traffic management and traffic decongestion plan shall be drawn up to ensure that the current level of service of the roads within a 02 kms radius of the project is maintained and improved upon after the implementation of the project. This plan should be based on cumulative impact of all development and increased habitation being carried out or proposed to be carried out by the project or other agencies in this 02 Kms radius of the site in different scenarios of space and time and the traffic management plan shall be duly validated and certified by the State Urban Development department and the P.W.D./ competent authority for road augmentation and shall also have their consent to the implementation of components of the plan which involve the participation of these departments.

VI. Green belt

- i. Green belt shall be developed in an area as provided in project details, with native tree species in accordance with Forest Department. The greenbelt shall inter alia cover the entire periphery of the project site.
- ii. Top soil shall be separately stored and used in the development of green belt.

VII. Public hearing and Human health/safety issues

- i. Emergency preparedness plan based on the Hazard identification and Risk Assessment (HIRA) and Disaster Management Plan shall be implemented.
- ii. 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.
- iii. Occupational health surveillance of the workers shall be done on a regular basis.

VIII. Corporate Environment Responsibility

- i. The project proponent shall comply with the provisions contained in this Ministry's OM vide F.No. 22-65/2017-IA.III dated 1st May 2018, as applicable, regarding Corporate Environment Responsibility.

- ii. The company shall have a well laid down environmental policy duly approved by the Board of Directors. The environmental policy should prescribe for standard operating procedures to have proper checks and balances and to bring into focus any infringements/deviation/violation of the environmental / forest / wildlife norms / conditions. The company shall have defined system of reporting infringements / deviation / violation of the environmental / forest / wildlife norms / conditions and / or shareholders / stake holders. The copy of the board resolution in this regard shall be submitted to the MoEF&CC as a part of six-monthly report.
- iii. A separate Environmental Cell both at the project and company head quarter level, with qualified personnel shall be set up under the control of senior Executive, who will directly report to the head of the organization.
- iv. Action plan for implementing EMP and environmental conditions along with responsibility matrix of the company shall be prepared and shall be duly approved by competent authority. The year wise funds earmarked for environmental protection measures shall be kept in separate account and not to be diverted for any other purpose. Year wise progress of implementation of action plan shall be reported to the Ministry/Regional Office along with the Six Monthly Compliance Report.
- v. Self environmental audit shall be conducted annually. Every three years third party environmental audit shall be carried out.

IX. Miscellaneous

- i. The project proponent shall make public the environmental clearance granted for their project along with the environmental conditions and safeguards at their cost by prominently advertising it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days and in addition this shall also be displayed in the project proponent's website permanently. (for projects involving incineration)
- ii. The project proponent shall prominently advertise it at least in two local newspapers of the District or State, of which one shall be in the vernacular language within seven days indicating that the project has been accorded environment clearance and the details of MoEF&CC/SEIAA website where it is displayed (For projects involving only Landfill without incineration)
- iii. The copies of the environmental clearance shall be submitted by the project proponents to the Heads of local bodies, Panchayats and Municipal Bodies in addition to the relevant offices of the Government who in turn has to display the same for 30 days from the date of receipt.

- iv. The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and update the same on half-yearly basis.
- v. The project proponent shall submit six-monthly reports on the status of the compliance of the stipulated environmental conditions on the website of the ministry of Environment, Forest and Climate Change at environment clearance portal.
- vi. The project proponent shall submit the environmental statement for each financial year in Form-V to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently and put on the website of the company.
- vii. The criteria pollutant levels namely; SPM, RSPM, SO₂, NO_x (ambient levels as well as stack emissions) or critical sectoral 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 (incase of incineration involved).
- viii. The project proponent shall inform the Regional Office as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities, commencing the land development work and start of production operation by the project.
- viii. The project authorities must strictly adhere to the stipulations made by the State Pollution Control Board and the State Government.
- ix. The project proponent shall abide by all the commitments and recommendations made in the EIA/EMP report, commitment made during Public Hearing and also that during their presentation to the Expert Appraisal Committee.
- ix. No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment, Forests and Climate Change (MoEF&CC).
- x. Concealing factual data or submission of false/fabricated data may result in revocation of this environmental clearance and attract action under the provisions of Environment (Protection) Act, 1986.
- xi. The Ministry may revoke or suspend the clearance, if implementation of any of the above conditions is not satisfactory.
- xii. The Ministry reserves the right to stipulate additional conditions if found necessary. The Company in a time bound manner shall implement these conditions.

- xiii. The Regional Office of this Ministry shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information/monitoring reports.
- xiv. The above conditions shall be enforced, inter-alia under the provisions of the Water (Prevention & Control of Pollution) Act, 1974, the Air (Prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986, Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 and the Public Liability Insurance Act, 1991 along with their amendments and Rules and any other orders passed by the Hon'ble Supreme Court of India / High Courts and any other Court of Law relating to the subject matter.
- xv. Any appeal against this EC shall lie with the National Green Tribunal, if preferred, within a period of 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

F. No. 22-34/2018-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Jor Bagh Road, Aliganj,
New Delhi – 110003

E-mail: sharath.kr@gov.in
Tel: 011-24695319

Dated: 8th January, 2019

OFFICE MEMORANDUM

Sub.: Standardization of Environment Clearance conditions for Non-Coal mining sector – reg.

The Ministry of Environment, Forest and Climate Change has notified the Environmental Impact Assessment (EIA) Notification, 2006 under the provisions of the Environment (Protection) Act, 1986, which regulates development and their expansion/modernization of 39 sectors/activities listed in the Schedule to the EIA Notification, 2006. There are two Category of projects viz. Category 'A' projects that are handled at the level of MoEF&CC and Category 'B' projects that are handled by the respective State Environment Impact Assessment Authority (SEIAA) following the procedure prescribed under the EIA Notification, 2006.

2. All projects or activities included as Category 'A' in the Schedule, including expansion and modernization of existing projects or activities and change in product mix, shall require prior environmental clearance from the Central Government in the Ministry of Environment and Forest and Climate Change (MoEF&CC) on the recommendations of an Expert Appraisal Committee (EAC) constituted by the Central Government for the purposes of this notification.

3. The Standard Environmental Clearance conditions have been prepared for expediting the process of Environmental Clearance without compromising environmental norms and the rigor of environment impact assessment.


4. The standard Environment Clearance conditions shall be considered by the concerned EAC with due diligence while recommending the Environmental Clearance. The expert appraisal committee can modify, prescribe additional conditions based on the project specific requirements.

11-
2/2/19
10/1/2019

5. The recommended conditions by the EAC shall be brought in the minutes of the meeting of the EAC.

6. In continuation to the OMs no. F. No. 22-34/2018-IA.III dated 9th August 2018 and 4th January 2019, the standard Environment Clearance conditions for Mining, extraction of natural resources (Non-coal mining) covered under schedule 1(a) of the EIA Notification 2006 are herewith issued

7. This issues with the approval of competent authority-



(Sharath Kumar Pallerla)
Director (IA-III-Policy)

To

1. Chairman, Central Pollution Control Board (CPCB).
2. Chairman of all the Expert Appraisal Committees
3. Chairperson/Member Secretaries of all the SEIAAs/SEACs
4. All the Officers of IA Division
5. Chairpersons/Member Secretaries of all SPCBs/UTPCCs

Copy for information to:

1. PS to Hon'ble Minister for Environment, Forest and Climate Change
2. PS to Hon'ble MoS (EF&CC)
3. PPS to Secretary(EF&CC)
4. PPS to AS(AKJ) / AS (AKM)
5. PS to JS (RSP)/ JS(JT)/JS(GM)
6. Website, MoEF&CC
7. Guard file.


(Sharath Kumar Pallerla)
Director (IA-III-Policy)

F. No. 22-24/2018-IA.III
Government of India
Ministry of Environment, Forest and Climate Change
(Impact Assessment Division)

Indira Paryavaran Bhawan
Aliganj, Jorbagh Road
New Delhi-110 003

Dated: 23rd January, 2019

OFFICE MEMORANDUM

Sub.: Exemption of Environment Clearance for Thermal Power Plant using Waste Heat recovery Boilers (WHRB) without any auxiliary fuel etc.

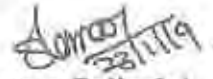
The Environmental Impact Assessment Notification, 2006 under the environment (Protection) Act, 1986, as amended vide S.O. 1599 (E) dated 25th June, 2014 provides exemption to Thermal Power Plant from the requirement of prior environment clearance.

2. This Ministry has received many proposals of environmental clearances for setting up new or expansion of captive power plants employing Waste Heat Recovery Boilers (WHRB) without any auxiliary fuel in the existing Cement Plants, Integrated Steel Plants, Metallurgical Industries (Ferrous and Non-ferrous) and other industries, having potential for heat recovery to utilise the same for power generation.

3. The spirit of exempting requirement of environmental clearance for the Thermal Power Plant using waste heat boilers without any auxiliary fuel vide S.O. 1599 (E) dated 25th June, 2014 is to promote energy conservation, reduce green house emissions and in larger interest of the environment including climate change.

4. In view of the above, it is hereby clarified that setting up new or expansion of captive power plants employing WHRB without using any auxiliary fuel, in the existing Cement Plants, Integrated Steel Plants, Metallurgical Industries (Ferrous and Non-ferrous) and other industries having potential for heat recovery, does not attract the provisions of EIA Notification 2006, read with subsequent amendments therein.

5. This issues with the approval of Competent Authority.


(Sharath Kumar Pallerla)
Director
IA Division

To,

1. All the officers of IA Division
2. Chairperson/Member Secretary of all the SEIAA/SEAC
3. Chairperson/Member Secretary of all the DEIAA/DEAC

4. Chairman/Member Secretary of CPCB
5. Chairperson/Member Secretary of all the SPCBs/UTPCCs

Copy to:

1. PS to Hon'ble Minister, EF&CC
2. PS to Hon'ble Minister for State, EF&CC
3. PPS to Secretary, EF&CC
4. PPS to AS(AKJ)/AS(AKM)
5. PPS to JS(GB)/JS(JT)
6. Website of MoEF&CC
7. Guard file

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GOVERNMENT OF INDIA

MINISTRY OF ENVIRONMENT FOREST AND CLIMATE CHANGE

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