

Ref.: APCPL/IGSTPP/EMG/2018

Dated: 15/05/2018

To,

Director (S)
Northern Regional Office,
Ministry of Environment & Forest & Climate Change, GOI
Bays No. 24-25, Sector 31-A
Dakshin Marg, Chandigarh

Subject: Compliance Status of the Environmental Clearance for Indira Gandhi Super Thermal Power Project (3x500), APCPL for period 1st October 2017 to 31st March 2018.

Please find enclosed herewith the compliance status (Annexure-A) of conditions of environment clearance w.r.t. Indira Gandhi Super Thermal Power Project (3x500 MW), APCPL, Jharli, Jhajjar, Haryana accorded by Ministry of Environment, Forest & Climate Change for the period from 1st October 2017 to 31st March 2018 for your kind perusal please.

APCPL
23/05/2018

Om Prakash
15/5/18

(Om Prakash)

AGM (EMG, AUD & HORT.)

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Encl.: As above

ओम प्रकाश
OM PRAKASH
अवर महाप्रबन्धक (पर्यावरण एवं राख उपयोगिता)
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NTPC LIMITED - APCPL
IGSTPP, PO-JHARLI
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Copy to: -

- 1) Member Secretary, HSPCB, Chandigarh.
- 2) Regional Officer, HSPCB, Bahadurgarh.
- 3) Corporate Centre: Environment Management Group, Noida
- 4) Corporate Centre: Environment Engineering Group, Noida

For Kind information Please



इंदिरा गांधी सुपर थर्मल पावर प्रोजेक्ट, झारली, जिला - झज्जर, हरियाणा-124 141
Indira Gandhi Super Thermal Power Project, Jharli, Dist. Jhajjar, Haryana-124 141
TEL. Off. : 01251-266265, Fax : 01251-266202

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REGD. OFFICE : NTPC BHAVAN, SCOPE COMPLEX, 7, INSTITUTIONAL AREA, LODHI ROAD, NEW DELHI-110003

**COMPLIANCE STATUS OF CONDITIONS STIPULATED IN ENVIRONMENTAL
CLEARANCE FOR 3x500 MW IGSTPP, APCPL.(JHAJJAR)**

S.No.	Stipulations	Status of Implementation (As on 31 st March 2018)
i)	The total Land requirement shall not exceed 2170 acres for all the activities/ facilities of the proposed power project.	The total land used for 3x500 MW power project is 2170 acres.
ii)	Ash and sulphur contents in the coal to be used as fuel shall not exceed 34% and 0.5% respectively.	Ash and sulphur content in the coal being used as fuel at IGSTPP are maintained below 34% and 0.5% respectively.
iii)	A multi-flue stack of 275 m height shall be provided with continuous online monitoring equipment. Exit velocity of at least 23 m/sec shall be maintained.	A single stack for Unit # I and bi-flue stack for Unit II & III of 275 m height has been provided with continuous online monitoring equipments for SO ₂ , NO _x , CO ₂ , CO and Particulate Matter etc. and desired velocity of 23 m/sec is being maintained. Online Continuous Emissions Monitoring System (CEMS) data of three units is being communicated to HSPCB and CPCB network.
iv)	High efficiency Electrostatic Precipitator (ESP) with efficiency not less than 99.9% shall be installed so as to ensure that particulate emissions do not exceed 100 mg/Nm ³	Please refer Annexure-I
v)	Space provision shall be made for Flue Gas De-Sulphurisation (FGD) unit of requisite efficiency of removal of SO ₂ , if required at a later stage.	Please refer Annexure-I
vi)	Closed Circuit Cooling System with COC of at least 4 shall be provided	Closed Circuit cooling system has been provided. COC is being maintained 4 to 6.
vii)	For controlling Fugitive dust, regular sprinkling of water in the coal handling area and other vulnerable areas of the plant shall be ensured.	<ul style="list-style-type: none"> • Dust suppression systems have been provided in coal handling area including coal stock yard area for control of coal dust. • DFDS (Dry fog dust suppression systems) and DE (Dust Extraction Systems) have been provided to control the coal dust in CHP area. • Cold Fog Dust Suppression System in wagon tippler area has been partially commissioned. • Regular sprinkling of water in the other vulnerable areas of the plant is being ensured. • Road vacuum cleaner has been procured and being used for road cleaning in plant to reduce dust emission.

viii)	Detailed ash utilization plan adhering to the provisions stipulated in the fly ash notification of September, 1999 and as amended in August, 2003 in regard to fly ash utilization shall be prepared and submitted to the Ministry within 6 months.	Ash Utilization Plan has been prepared and submitted to MoEF&CC. Fly ash is being utilized as per the latest notification by issuing to users. Ash Brick manufacturing plant has been commissioned at IGSTPP. In FY 2018-19 approx 19 Lac bricks were manufactured. Bricks are being used in house at IGSTPP, project affected villages and in other CSR activities.
ix)	The unutilized fly ash and bottom ash shall be disposed in the ash pond in the form of high concentration slurry.	HCS D system is operational for disposal of unutilized fly ash in the form of high concentration slurry in the ash pond area.
x)	Ash pond shall be lined with impervious lining. Adequate safety measures shall also be taken to ensure that pond ash does not become air borne to cause air pollution in the surrounding areas.	Ash Pond has been lined with impervious lining. Adequate protection measures are being taken to ensure that pond ash does not become air borne to cause air pollution in surrounding areas. Most of area is submerged with water and rest is covered with vegetation.
xi)	The project affected people shall be suitably compensated in accordance with R & R policy of the NTPC Ltd. in consultation with representatives of PAPs and State Government.	Adequate compensation has been given to PAPs in accordance with the R & R policy of NTPC Ltd. Further, various CSR activities have been undertaken in consultation with representatives of PAPs and State Government.
xii)	Rain water harvesting should be adopted. Central Groundwater Authority/Board shall be consulted for finalization of appropriate rain water harvesting structure within a period of three months from the date of clearance.	Provision for collection of all the rain water from plant and township through RCC drains in a sump and further transferring to reservoir through storm water pumps has been made for rain water conservation.
xiii)	Treated effluents conforming to be prescribed standards shall be re-circulated and reuse within the plant. No disposal of effluents shall be made either in Yamuna or in any irrigation network.	IGSTPP is ZLD compliant station. The waste water generated in plant is being treated and re-circulated to reuse within plant. Station is equipped with ETP,AWRS,STP, RO Plant etc.
xiv)	Regular monitoring of ground water quality including heavy metals shall be undertaken around ash dyke and the project area to ascertain the change, if any, in the water quality due to leaching of contaminants from ash disposal area.	The work for monitoring of environmental parameters at and around IGSTPP is being carried out by HSPCB accredited Laboratory "M/s. Vardan Envirolab Gurgaon Haryana".

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xv)	A 100 m wide greenbelt shall be developed all along the plant, ash pond and township boundary covering 1/3 rd of total project area. Widespread canopy of trees shall be provided all around the water reservoir to certain evaporation losses.	100 m wide Greenbelt is developed as per stipulation. The plantation has been done around the reservoir to reduce the evaporation losses. Till date 2,41,930 no. of plants have been planted including distribution of 33,430 no. plants.
xvi	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	A sanitation and first aid facility has been provided to contract workers. A separate driver's rest room provided for ash bulkers/vehicles drivers with all sanitation facilities.
xvii	Leq of Noise level should be limited to 75 dB (A) and regular maintenance of equipment be undertaken. For people working in the high noise areas, personal protection devices should be provided.	All the high noise producing equipment such as Turbines, BFPs and DG sets etc. have been provided with acoustic chambers. People working in high noise area in plant are provided with appropriate ear protection devices. The noise level at the plant boundary is being maintained at 75 dB (A).
xviii)	Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Quarterly reports shall be submitted to the Regional Office of this Ministry.	<ul style="list-style-type: none"> • Regular offline monitoring of AAQ is being done by HSPCB accredited lab. • The four nos. of online Ambient Air Quality Monitoring Stations (AAQMS) at the locations finalized in consultation with HSPCB have been commissioned and in operation. The consolidated data of all the four AAQMS is available in Central Monitoring Station at UCB#I. • Quarterly Ambient Air Quality Monitoring Data is being submitted to the Regional Office of Northern Region Office, MoEF&CC and RO, HSPCB, Bahadurgarh.
xix)	The Project proponent should advertise within 7 days of issue of environmental clearance, in at least two local newspapers widely circulated in the region around the project, one of which should be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/Committee and may also be seen in the Website of the Ministry of Environment and Forests in the http://envfor.nic.in .	Accord of Environmental Clearance had been published in two local newspapers: <ol style="list-style-type: none"> 1. "Amar Ujala", Bhiwani & Delhi edition dated 13.08.2007 2. "The Tribune", Delhi edition dated 14.08.2007.

xx)	A separate environment monitoring cell with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	Environment Management Department comprising of qualified and experienced staff has been established at project for implementation of the stipulated environmental safeguards.
xxi)	Half yearly report on the status of implementation of the conditions and environmental safeguards should be submitted to the Ministry, the Regional Office, CPCB and SPCB.	Being complied.
xxii)	Regional Office of the Ministry of Environment & Forests located at Chandigarh will monitor the implementation of the stipulated conditions. A complete set of documents including Environmental Impact Assessment Report, Environmental Management Plan and additional information/clarifications submitted subsequently should be forwarded to the Regional Office for their use during monitoring.	The additional information/Clarifications has been submitted to the regional Office to MoEF & CC, Chandigarh vide letter 26.11.2007.
xxiii)	Separate funds should be allocated for implementation of environmental protection measures along with item-wise breakup. These cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purpose and year-wise expenditure should be reported to the ministry.	The requisite funds for implementation of environmental protection measures have been included in the project cost. Financial provision earmarked towards environment protection measures are not being diverted for other purposes.

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REPLY OF CONDITION NO. IV & V

Ministry of Environment, Forest & Climate Change, vide notification no.S.0.3305 (E) dt.07.12.2015, amended emission limit for particulate matter and notified new limits for Sulphur dioxide (SO₂), Oxides of Nitrogen (NO_x) and mercury emission. New Limits applicable to IGSTPP (3x500 MW) are as follows:

Particulate Matters (SPM)--50 mg/Nm³

SO₂--200 mg/Nm³

NO_x--300 mg/Nm³

Central Pollution Control Board (CPCB), vide letter ref.no.B-33014/07/2017-18/IPC-II/TPP/15876 dt.11.12.2017, has sent directions to IGSTPP, APCPL, Jhajjar in terms of above parameters to be achieved by Dec 31, Directions from CPCB and their present status is as given below:

Parameters Prescribed to be achieved by 31 st December 2019	Directions dt.11th December 2017 of CPCB	Present Status at IGSTPP
Particulate Matters (SPM)--50 mg/Nm ³	Plant shall install/retrofit ESP by 31st Dec. 2019 in unit 1,2&3 respectively so as to achieve PM emission limit.	ESP with 99.9% efficiency already installed and hence particulate matters are within specified norms in emission of all three units
SO ₂ --200 mg/Nm ³	Plant shall install FGD by 31st Dec. 2019 in unit 1,2&3 respectively so as to comply SO ₂ emission limit.	LOA for installation of FGD system package for IGSTPS (3x500 MW), Jhajjar has been awarded on 1st Feb 2018 to M/s Reliance Infra Ltd. with completion period of 20 months. The party has started mobilizing their resources at site.
NO _x --300 mg/Nm ³	Plant shall take immediate measures like installations of low NO _x burners, providing Over Fire Air (OFA) etc. and achieve progressive reduction so as to comply NO _x emission limit by year 2019.	Low NO _x burners along with OFA and LOFA are already installed. Further combustion modification for reduction of NO _x at IGSTPP (3x500 MW) is also being explored.