



परमाणु ऊर्जा विभाग
Department of Atomic Energy
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP



Ref No.: GCNEP/2019/01-40

Date: 16.01.2019

To,
The Advisor,
Ministry of Environment, Forest and Climate Change (Northern Region)
Bays No: 24-25, Sector-31 A,
Dakshin Marg, Chandigarh-160030

Sub: Half-Yearly Compliance Report (Session: July, 2018 to December, 2018) of the stipulated Environmental conditions/safeguards in the Environmental clearance Letter and Environmental Monitoring Report Expansion of Institutional Campus and Residential Township for Global Centre For Nuclear Energy Partnership (GCNEP) at Village-Kheri Jasaur and Jasaur Kheri, District - Jhajjar, Haryana by GCNEP

Ref: Environmental Clearance No. SEIAA/HR/2018/231 dated 04.04.2018.

Dear Sir,

With reference to the Environmental Clearance granted to our above said project by State Level Environment Impact Assessment Authority, Haryana, we are herewith submitting point wise status of compliance of general and specific conditions of the EC letter in accordance with the provision of EIA notification 2006 and its amendment.

Following documents are attached herewith for your kind perusal:

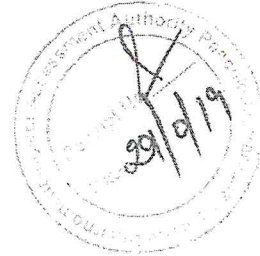
1. Point-wise compliance of the stipulated environmental conditions/ safeguards.
2. Environmental monitoring report along with other necessary permissions/documents (Session: July, 2018 - December, 2018).

We fully assure you that we will comply with all conditions as specified in the Environment clearance granted us. Details of Representative are as follows:

Name	Shrikrishna Gupta
Designation	Project Director
Contact no.	011-23014587
Email ID	pd@gcnep.gov.in

Thanking you,

Yours Sincerely,



For Global Center for Nuclear Energy Partnership
श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
(Authorized Signatory) परियोजना निदेशक / Project Director
Name: Shrikrishna Gupta वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Designation: Project Director Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.क.वि., भारत सरकार / D.A.E., Government of India

CC: 1. The Member Secretary, State Pollution Control Board, Panchkula, Haryana. The Member Secretary SEIAA, Bay No. 55-58, Parytan Bhawan 1st Floor, Sector-2, Panchkula, Haryana



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29/1/19

Project Directorate: 145-A, South Block, New Delhi-110011 Phone: 011 23014587
Site Address GCNEP Village Kheri Jasaur Bahadurgarh Distt Jhajjar Haryana PIN - 124505 Tel 01226-225209

भारत सरकार / Govt. of India
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
Min. of Environment, Forests & Climate Change
बेजिंग नं. 24-25, सेक्टर 31-ए
Bays No.24-25, Sec-31 A
चण्डीगढ़/Chandigarh



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28/1/19
Haryana State Pollution Control Board
C-11, Sector-6, Panchkula



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Project Directorate: 145-A, South Block, New Delhi-110011 Phone: 011 23014587

Site Address: GCNEP, Village Kheri Jasaur, Bahadurgarh, Distt. Jhajjar, Haryana PIN – 124505, Tel:01276-225200

INDEX

SL.No	Description	Page No
1	Compliance Report (June-2018)	1-19
List of Annexures		
Annexure-I	CTE	20-22
Annexure-II	First Aid Room	23
Annexure-III	Drinking Water Facility	24-25
Annexure – IV	Solid Waste Management Plan	26-29
Annexure – V	Storage of Top Soil	30
Annexure –VI	Covered Storage Material	31
Annexure-VII	Lab Reports	32-37
Annexure-VIII	Fly Ash Bricks Used	38
Annexure-IX	Cement Storage	39
Annexure-X	Energy Details	40-43
Annexure-XI	Forest NOC	44-45
Annexure-XII	Fire NOC	46-50
Annexure - XIII	Power NOC	51
Annexure – XIV	No construction Under Taking	52
Annexure-XV	Site Barricade	53
Annexure-XVI	Water Sprinkling	54
Annexure-XVII	Site Plan	55
Annexure-XVIII	Circulation Plan (Campus &	56-58
Annexure-XIX	Public Notice	59
Annexure-XX	Environmental Clearance	60-69
Annexure-XXI	Compliance Receiving (June-	70-72

COMPLIANCE REPORT



श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
ए.न.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

HALF YEARLY COMPLIANCE OF STIPULATED
ENVIRONMENTAL CONDITIONS SAFEGUARDS IN THE
ENVIRONMENTAL CLEARANCE LETTER NO. SEIAA/HR/2018/231

DATED 4th April 2018

FOR

EXPANSION OF INSTITUTIONAL CAMPUS AND RESIDENTIAL TOWNSHIP FOR
GLOBAL CENTER FOR NUCLEAR ENERGY PARTNERSHIP (GCNEP) AT
VILLAGE-KHERI JASOUR AND JASOUR KHERI, DISTT. JHAJJAR, HARYANA

PART A - SPECIFIC CONDITIONS: CONSTRUCTION PHASE.

Condition 1: "Consent to Establish" shall be obtained from Haryana State Pollution Control Board under Air and Water act and a copy shall be submitted to the SEIAA Haryana before the start of any construction work at the site.

Reply: Consent to Establish has been obtained from Haryana State Pollution Control Board for "Consent to Establish" under Air and Water Act vide letter no. HSPCB/Consent/: 329962318JHACTE555066 dated 03.10.2018. Copy of CTE is enclosed as Annexure I CTE extension has been obtained for the period from 03.10.18 to 03.04.2025.

Condition 2: A first aid room as proposed in the project report shall be provided both during construction and operation phase of the project.

Reply: Agreed. First Aid Room is provided at Site by the Contractor. First Aid Facilities are available at DCS&EM Site Office. In case of Snake bite, the treatment can be availed from village hospital for which the facility is available at the hospital. Emergency vehicle is available at site at all working hours. We are doing routine medical check-up for the laborers those who are working at the construction site. Photograph showing First Aid room is attached as Annexure II.

Condition 3: Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the laborers is strictly prohibited. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.

Reply: Agreed. Adequate Drinking Water facility is provided at Labour Hutments. Sanitary Arrangements are provided at labour Hutment Area & Site Offices. The open defecation by the labors is strictly prohibited. The wastewater generated during construction phase is being sent to septic tanks. Photographs showing drinking water facility, toilets and septic tank are attached as **Annexure III.**

Left over cement and mortar, cement concrete blocks, aggregates, sand and other inorganic material are being recycled. Solid waste management plan is enclosed as **Annexure IV.**

Condition 4: All the topsoil excavated during construction activities should be stored for use in horticulture/ landscape development within the project site.

Reply: Agreed. Top soil is preserved separately which will be used for landscaping. Small landscaping made in front of the office is made of top soil of Guest House Building. Photograph showing the top soil storage is enclosed as **Annexure V.**

Condition 5: The project proponent shall ensure that the building material required during construction phase is properly stored within the project area and disposal of construction waste should not create any adverse effect on the neighboring communities and should be disposed of after taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.

Reply: Agreed. No significant muck excavation is being done at the project site. Construction materials are being properly stored within project site. Cement Go-down for Cement Storage is available, store room at Township Site is made, store room at Campus Site is provided, and RMC Plant with partitions is also made. Photograph showing covered construction material enclosed as **Annexure VI.**

Condition 6: 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 and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana State Pollution Control Board.

Reply: Agreed. Construction spoils such as bituminous material and other hazardous materials are not allowed to contaminate water course, dumpsite is being provided inside the boundary of the project site. Hazardous waste generated during construction phase, is being disposed of as per applicable rules and norms.

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA

परियोजना निदेशक / Project Director

ग्लोबल न्यूक्लियर एनर्जी पार्टनरशिप सेंटर (जी.सी.एन.ई.पी.)

Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)

प.ऊ.वि., भारत सरकार / D.A.E., Government of India

बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Condition 7: The diesel generator sets to be used during construction phase should be of low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.

Reply: Agreed. There is provision of 4 no. of DG sets of total capacity 3000 kVA (4 X 750 kVA) capacity for Institutional campus and 2 no. of DG sets of total capacity 640 kVA (2 X 320 kVA) capacity for Residential Township for power back up in this Project. The DG sets will be equipped with acoustic enclosure to minimize noise generation and adequate stack height for proper dispersion. BS-IV norm fuel is used (Available at Delhi & NCR Region). During construction phase DG sets are enclosed with acoustic enclosure installed on the Finn base to minimize vibration and noise. Results of Environmental monitoring carried out at the site for Air and Noise monitoring are enclosed as **Annexure VII**.

Condition 8: The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.

Reply: Agreed.

Condition 9: Ambient noise levels should conform to the residential standards both during day and night. 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 residential standards of CPCB/MoEFCC.

Reply: Agreed. Ambient noise levels are monitored during day & night and conforming to standards. Base line + incremental load of Ambient Air Quality and Noise Level are being closely monitored during construction phase. Adequate measures have been adopted to reduce Ambient Air Quality Level and Noise Level during construction phase to conform to confirm to the stipulated standards. Ambient air quality report and noise monitoring report is enclosed as **Annexure VII**.

Condition 10: 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.

Reply: Fly ash based bricks is being used for the construction of walls. All Superstructure Masonary Works are built/being built with Fly ash bricks Photograph showing same is enclosed as **Annexure VIII**.

Condition 11: Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.

Reply: Agreed. Standards will be followed. Detailed design for storm water drains are carried out and these drains are being constructed.

Condition 12: Water demand during construction should be reduced by use of premixed concrete, curing agents and other best practices as referred.

Reply: Agreed. Ready mix concrete is used for all RCC works.No bore well is made at site. Photograph showing batching plant at site is shown as **Annexure IX**.

Condition 13: Roof must meet prescriptive requirement as per Energy Conservation Building code by using appropriate thermal insulation material.

Reply: Agreed. Insulation (50mm thick Phenotherm board) material are being used at roof. Energy details is attached as **Annexure X**.

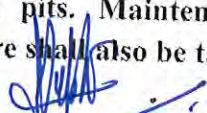
Condition 14: Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is inspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.

Reply: Agreed. Double walls are used on all outer walls (230 mm + 115 mm) .Thermal insulation material is provided between these walls.

Condition 15: The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.

Reply: Agreed. This is a project of Central Government, Department of Atomic Energy project. The project is conceived and detailed by in-house designers, adhering to in vogue safety and design standards. No forest land is involved in the project. Forest NOC is attached as **Annexure XI**.

Condition 16: The project proponent as stated in the proposal shall construct 50 rainwater harvesting pits for recharging the ground water within the project premises. Rain water harvesting pits shall be designed to make provisions for silting chamber and removal of floating matter before entering harvesting pits. Maintenance budget and persons responsible for maintenance must be provided. Care shall also be taken that contaminated water do not enter any RWH pit.


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Reply: We will construct 50 rainwater harvesting pits for recharging the ground water within the project premises. Rain water harvesting pits will be designed to make provisions for silting chamber and removal of floating matter before entering harvesting pits .

Condition 17: The project proponent shall provide for adequate fire safety measures and equipments as required by Haryana Fire Service Act, 2009 and instructions issued by the local Authority/Directorate of fire from time to time. Further the project proponent shall take necessary permission regarding fire safety scheme/NOC from competent Authority as required.

Reply: Agreed. Fire doors at constructed at staircases, Guest House corridor, Electrical panel rooms and AHU rooms. Smoke detector and wet risers with booster pumps and all firefighting accessories are available. Fire NOC from Fire station department is attached in Annexure XII.

Condition 18: The project proponent shall submit assurance from the HBVNL for supply of 6700 KVA (5000 KVA for Institute Campus & 1700 KVA for Residential Township Project) of power supply before the start of construction. In no case project will be operational solely on generators without any power supply from any external power utility.

Reply: Agreed. We have already obtained assurance from the UHBVNL for supply of 6700 kVA of power supply. Same is enclosed as Annexure XIII.

Condition 19: Detail calculation of power load and ultimate power load of the project shall be submitted to HBVNL under intimation to SEIAA Haryana before the start of construction. Provision shall be made for electrical infrastructure in the project area.

Reply: Agreed. We have already obtained required permission from HBVNL for supply of 6700 kVA power load for the Institution campus and residential township project.

Condition 20: The Project proponent shall not raise any construction in the natural lane depression/Nallah/Water course and shall ensure that the natural flow from the Nallah/Water course is not obstructed.

Reply: Agreed. Irrigation channel is preserved by Fencing works. Hume pipes are laid where ever is necessary. Village panchayat has taken action to divert the drainage water from campus site. Additional storm water drain is constructed along the by-pass road at campus site.

Condition 21: The project proponent shall keep the plinth level of the building blocks sufficiently above the level of the approach road to the Project as per prescribed bye-laws. Levels of the other areas in the Projects shall also-be kept suitably so as to avoid flooding.

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परियोजना निदेशक / Project Director

Reply: Agreed. Plinth levels are kept well above the surrounding levels (+101.45m). Level of approach road is kept above the maximum water level during rainy season.

Condition 22: Construction shall be carried out so that density of population does not exceed norms approved by Director General Town and Country Department Haryana.

Reply: Density of population will not exceed norms approved by Director General Town and Country Department Haryana due to the construction of project.

Condition 23: The Project Proponent shall submit an affidavit with the declaration that ground water will not be used for construction and only treated water should be used for construction.

Reply: No bore well is dug at site for construction purpose. We are a government organization. We have submitted an undertaking stating that we will not use Ground water for construction. Same is attached as **Annexure XIV**.

Condition 24: The project proponent shall not cut any existing tree and project landscaping plan should be modified to include those trees in green area.

Reply: Agreed. There is no requirement of cutting the trees, only small bushes have been cleared for construction activity.

Condition 25: The project proponent shall ensure that ECBC norms for composite climate zone are met. In particular building envelope, HVAC service, water heating, pumping, lighting and electrical infrastructure must meet ECBC norms.

Reply: Agreed. ECBC norms will be met. Building envelope, HVAC services, water heating, pumping, lighting electrical infrastructure will all be in energy efficient way and meet Energy conservation Building Code norms. LED/ CFL fixtures are used. Air conditioners are working on R-410 A.

Condition 26: The project proponent shall provide 3 meter high barricade around the project area, dust screen for every floor above the ground, proper sprinkling and covering of stored material to restrict dust and air pollution during construction.

Reply: Agreed. Masonary boundary wall is constructed all around the site and water sprinkling is being done to restrict dust and air pollution during construction. Photograph showing the same is enclosed as **Annexure XV** and **Annexure XVI** respectively.

Condition 27: The project proponent shall construct a sedimentation basin in the lower level of the project site to trap pollutant and other wastes during rains.

Reply: Agreed. Sedimentation basin will be constructed.

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Global Center For Nuclear Energy Partnership (GCNEP)

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Page 7

Condition 28: The project proponent will provide proper *rasta* of proper width and proper strength for the project before the start of construction.

Reply: We will provided proper *rasta* of proper width and proper strength for the project before the start of construction work at project site.

Condition 29: The project proponent shall ensure that the U value of Glass is less than 3.177 and maximum solar heat gain coefficient is 0.25 for vertical fenestration.

Reply: Agreed. Hermetically sealed 38mm thick (12mm SGG cool lite platinum toughened glass + 18mm air gap + 8mm inner glass) with low U value glass for all structural glazing works is being used.

Condition 30: The project proponent shall adequately control construction dusts like silica dust, non-silica dust and wood dust. Such dusts shall not spread outside project premises. Project proponent shall provide respiratory protective equipments to all construction workers.

Reply: Agreed. Proper measures are being taken to control dust on the site like water sprinkling, covering construction material vehicles, the photograph of dust suppression using tractors is attached as **Annexure XVI**. Site barricading is being done so that dust does not spread outside premises which is attached as **Annexure XV**. We are providing mask and other personal protective equipment to the construction laborers.

Condition 31: The project proponent shall provide fire control room and fire officer for building above 30 m as per national Building Code.

Reply: The height of institutional and residential building is G+2, the height of the building will not be raised above 30m.

Condition 32: The project proponent shall obtain permission of Mines and Geology Department for excavation of soil before the start of construction.

Reply: There is no basement provided in the project. If required at any stage, we will obtain permission from concerned department.

Condition 33: The project proponent shall seek specific prior approval from concerned local Authority/HUDA regarding provision of storm drainage and sewerage system including their integration with external services of HUDN Local authorities beside other required services before taking up any construction activity.

Reply: Agreed.

Condition 34: The site for solid waste management plant be earmarked on the layout plan and the detailed project for setting up the solid waste management plant shall be submitted to the Authority within one month.


Reply: The site for solid waste management plant has been earmarked on the layout plan. The same will be provided before operational stage. Site Plan is attached as Annexure XVII.

Condition 35: The project proponent shall discharge excess of treated waste water/storm water in the public drainage system and shall seek permission of HUDA before the start of construction.

Reply: We will discharge excess of treated waste water/storm water in the public drainage system. Application will be submitted to HUDA for drainage connection.

Condition 36: The project proponent shall ensure that structural stability to withstand earthquake of magnitude 8.5 on Richter scale.

Reply: The project is being developed by Central Government, Department of Atomic Energy. The project is conceived and detailed by in-house designers, adhering to in vogue safety and design standards. All measures are being taken to ensure that building is earthquake resistant. All the provisions of IS. 1893 & IS 13920 if followed in structural design.


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परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

SPECIFIC CONDITIONS: OPERATION PHASE

Condition a: "Consent to operate" shall be obtained from Haryana State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Haryana.

Reply: Agreed. We will obtain Consent to operate for Expansion of GCNEP (Institute and Township) from Haryana State Pollution Control Board for "Consent to Operate" under Air and Water Act after completion of the construction work at the project site.

Condition b: The Sewage Treatment Plant (STP) shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The installation of STP shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Haryana before the project is commissioned for operation. Tertiary treatment of waste water is mandatory. The project proponent shall remove not only Ortho-Phosphorus but total Phosphorus to the extent of less than 2 mg/litre. Similarly total Nitrogen level shall be less than 2 mg/liter in tertiary treated waste water. Discharge of treated sewage shall conform to the norms and standards of CPCB/HSPCB, whichever is environmentally better. Project proponent shall implement such STP technology which does not require filter backwash. The project proponent shall essentially provide STP preferably equivalent to 50% of total capacity or as per the initial occupancy as the case may be.

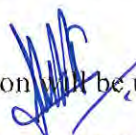
Reply: Agreed. STP will be designed by specialized engineers of the Department. Tertiary treatment of waste water will be done, and the treated water will be reused in the project for horticulture and flushing.

Condition c: Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100 % gray water by decentralized treatment should be done ensuring that the re-circulated water should have BOD level less than 5 mg/liter and the recycled water will be used for flushing, gardening and DG set cooling etc.

Reply: Agreed. Dual Plumbing line will be used. The treated water from STP will be reused in the project for flushing and landscaping purposes.

Condition d: For disinfections of the treated waste water ultra violet radiation or Ozonization should be used.

Reply: Agreed. For disinfection of the treated water, ultra violet radiation will be used.


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Condition e: Diesel power generating sets proposed as source of backup power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The location of the DG sets should be in the basement as promised by the project proponent and appropriate stack height i.e., above the roof level as per the CpeB norms. The diesel used for DG sets should be of ultra-low sulphur diesel (35 ppm sulphur), instead of low sulphur diesel.

Reply: Agreed. D.G. sets to be used for power back up will be of enclosed type and confirmed rules made under the Environment (Protection) Act, 1986. The D.G. sets are run on BS-IV norm fuel (Available at Delhi & NCR Region)

Condition f: Ambient noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the proposed Institutional Campus and Residential Township.

Reply: Agreed. Proper mitigation measures as suggested in EMP report will be done to control noise level both during construction and operation phase and is ensured that it does not exceed the prescribed standards both within and at the boundary of the Commercial Colony.

Condition g: The project proponent as stated in the proposal shall maintain at least 30.75% for the institutional campus and 31.57% for residential township as green cover area for tree plantation especially all around the periphery of the project and on the road sides preferably with local species so as to provide protection against particulars and noise. The open spaces inside the plot should be preferably landscaped and covered with vegetation/grass, herbs and shrubs. Only locally available plant species shall be used.

Reply: Agreed.

Condition h: The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing efficient irrigation system, scheduling irrigation only after checking evapo-transpiration data.

Reply: Agreed. Minimum water will be used in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing efficient irrigation system, scheduling irrigation.

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Condition i: The ground water level and its quality should be monitored regularly in consultation with Central Ground water Authority.

Reply: Agreed.

Condition j: A report on the energy conservation measures conforming to energy conservation norms finalize by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology; R & U factors etc. and submit to the IA Division of Environment, Haryana in three months time.

Reply: Agreed.

Condition k: Energy conservation measures like installation of LEDs only for lighting the areas outside the building and inside the building should be integral part of the project design and should be in place before project commissioning. Use of solar panels must be adapted to the maximum extent possible for energy conservation.

Reply: Agreed.

Condition l: The project proponent shall use zero ozone depleting potential material in insulation, refrigeration, air-conditioning. Project proponent shall also provide Halon free fire suppression system.

Reply: Agreed.

Condition m: The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The bio-degradable waste should be composted by vermin-composting at the site earmarked within the project area and dry/inert solid waste to be disposed off to the approved site for land filling after recovering recyclable material.

Reply: Agreed. Solid Waste Management Plan is attached as Annexure IV.

Condition n: The provision of solar water heating system shall be as per the norms specified by HAREDA and shall be made operational in each building block.

Reply: Agreed.

Condition o: The traffic plan and the parking plan proposed by the project proponent should be adhered to meticulously with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.

Reply: Agreed. Traffic cum parking plan enclosed as **Annexure XVIII**.

Condition p: The Project shall be operationalized only when HUDA/Local authority will provide domestic water supply system in the area.

Reply: Agreed.

Condition q: Operation and maintenance of STP, Solid waste management and electrical Infrastructure, pollution control measures shall be ensured even after the completion of project.

Reply: Agreed. Operation and maintenance of STP, solid waste management and electrical infrastructure, pollution control measures will be completed after the completion of the unit.

Condition r: Different type of wastes should be disposed off as per the provision of municipal solid waste, biomedical waste, hazardous waste, e-waste, batteries and plastic rules made under Environment Protection Act, 1986. Particularly E-waste and Battery waste shall be disposed off as per existing E-waste Management Rules 2011 and Batteries Management Rules 2001. The project proponent shall maintain a collection center for E-waste and it shall be disposed of to only registered and authorized dismantler/recycler as per existing E-waste Management Rules 2011.

Reply: Agreed. MSW will be disposed off as per provisions of municipal solid waste made under Environment Protection Act, 1986. Negligible quantity of Biomedical waste, Hazardous waste, e- waste, and plastic waste generated will be disposed off as per biomedical waste, hazardous waste, e-waste, batteries & plastic rules made under Environment Protection Act, 1986. E-waste and Battery waste will be disposed of as per existing E-waste Management Rules 2011 & its amendment and Batteries Management Rules 2001. A collection center will be maintained for E-waste collection and it will be disposed off to only registered and authorized dismantler/recycler.

Condition s: Standards for discharge of environmental pollutants as enshrined in various schedule of Rule 3 of Environment Protection Rule, 1986 shall be strictly complied with.

Reply: Agreed. As per Environment protection Rule 1986 standard for discharge of environment pollutant will be strictly complied.

Condition t: The project proponent shall make provision for guard pond and other provision for safety against failure in the operation of wastewater treatment facilities. The Project proponent shall also identify acceptable outfall for treated effluent.

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Reply: Agreed. During failure of STP, automatic valves will be open and water will be drained out in sewerage system. Project proponent will provide guard pond.

Condition u: The project proponent shall ensure that the stack height of DG sets is as per the CPCB guide lines and also ensure that the emission standards of noise and air are within the CPCB latest prescribed limits. Noise and Emission level of DG sets greater than 800 KVA shall be as per CPCB latest standards for high capacity DO sets.

Reply: Agreed.

Condition v: All electric supply exceeding 100 amp, 3 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.

Reply: Agreed.

Condition w: The project proponent shall minimize heat island effect through shading and reflective or pervious surface instead of hard surface.

Reply: Agreed. The project proponent will minimize heat island effect through shading and reflective or pervious surface instead of hard surface.

Condition x: The project proponent shall not use fresh water for HVAC and DG cooling. Air based HVAC system should be adopted and only treated water shall be used by project proponent for cooling, if it is at all needed. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC in order to reduce water consumption. Further temperature, relative humidity during summer and winter seasons should be kept at optimal level. Variable speed drive, best Co-efficient of Performance (CoP), as well as optimal Integrated Point Load Value and minimum outside fresh air supply may be resorted for conservation of power and water. Coil type cooling DG Sets shall be used for saving cooling water consumption for water cooled DG Sets.

Reply: Agreed.

Condition y: The project proponent shall ensure that the transformer is constructed with high Quality grain oriented, low loss silicon steel and virgin electrolyte grade copper. The project proponent shall obtain manufacturer's certificate also for that.

Reply: Agreed. Transformer constructed of high quality grain oriented, low loss silicon steel and virgin electrolyte grade copper will be used. The project proponent will obtain manufactures certificate at time of construction.

Condition z: Water supply shall be metered among different users and different utilities.

Reply: Agreed. Water supply will be metered among different users and different utilities.

Condition aa: The project proponent shall ensure that exit velocity from the stack should be Sufficiently high. Stack shall be designed in such a way that there is no stack down-wash under any meteorological conditions.

Reply: Agreed. Stack will be designed in such a way that there will not be stack down wash under any meteorological conditions.

Condition ab: The project proponent shall provide water sprinkling system in the project area to suppress the dust in addition to the already suggested mitigation measures in the Air Environment Chapter of EMP.

Reply: Agreed.

Condition ac: The project proponent shall provide additional green area on terrace and roof top.

Reply: Agreed.

Condition ad: The project proponent shall ensure proper Air Ventilation and light system in the basements area for comfortable living of human being and shall ensure that number of Air Changes per hour/ (ACH) in basement never falls below 15. In case of emergency capacity for increasing ACH to the extent of 30 must be provided by the project proponent.

Reply: Agreed.

Condition ae: The project proponent shall install solar panel for energy conservation.

Reply: Agreed.



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PART B - GENERAL CONDITIONS

Condition 1: The project proponent shall ensure the commitments made in Form I, Form IA, EIA/EMP and other documents submitted to the SEIAA for the protection of environment and proposed environmental safeguards are complied with in letter and spirit. In case of contradiction between two or more documents on any point, the most environmentally friendly commitment on the point shall be taken as commitment by project proponent.

Reply: Agreed. The environmental safeguards contained in the EIA/EMP Report are being implemented in letter and spirit.

Condition 2: The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copy as well as by email) to the northern Regional Office of MoEF, the respective Zonal Office of CPCB, HSPCB and SEIAA, Haryana.

Reply: Agreed. Hard and soft copy of six monthly compliance reports will be submitted in the month of June & December every year. Receiving of June-2018 compliance submission is attached as Annexure-XXI.

Condition 3: STP outlet after stabilization and stack emission shall be monitored monthly. Other environmental parameters and green belt shall be monitored on quarterly basis. After every 3months, the project proponent shall conduct environmental audit and shall take corrective measures, if required, without delay.

Reply: Agreed. Hard and soft copy of six monthly compliance reports will be submitted in the month of June & December every year. Receiving of June- 2017 compliance submission is attached as Annexure-XXI

Condition 4: The SEIAA, Haryana reserves the right to add additional safeguards measures subsequently, if found necessary. Environmental Clearance granted will be revoked if it is found that false information has been given for getting approval of this project. SEIAA reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF.

Reply: Agreed.

Condition 5: The project proponent shall not violate any judicial orders/pronouncement issued by any court/tribunal.

Reply: Agreed. Any judicial orders/pronouncement issued by any court/tribunal will not be violated by us.

Condition 6: All other statutory clearances such as the approvals for storage of diesel from chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest conservation Act 1980 and Wildlife (Protection) Act, 1972, PLPA, 1900 etc. shall be obtained as, applicable by Project proponents from the respective authorities prior to construction of the project.

Reply: Agreed. All the required applicable clearances have been taken from the respective authority. Forest NOC is enclosed as Annexure XI & Fire NOC is enclosed as Annexure XII.

Condition 7: The project proponent should inform the public that the project has been accorded Environment Clearance by the SEIAA and copies of the clearance letter are available with the Haryana State Pollution Control Board & SEIAA. This should be advertised within 7 days from the date of issue of clearance letter at least in two local newspapers that are widely circulated in the region and the copy of the same be forwarded to SEIAA Haryana. A copy of Environment Clearance collections shall also be put on project proponent's website for public awareness.

Reply: Agreed. Advertisement copy is enclosed as Annexure XIX.

Condition 8: Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining Environmental Clearance.

Reply: Agreed. Construction will be started only after obtaining Environment Clearance from State Environment Impact Assessment Authority, Haryana vide letter no. SEIAA/HR/2018/231 Dated 04.04.2018. Copy of EC Letter is enclosed as Annexure XX.

Condition 9: Any appeal against this Environmental Clearance 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.

Reply: Agreed.

Condition 10: The project proponent shall put in place Corporate Environment policy as mentioned in MoEF, GoI OM No. J-HOI3/4112006-IA II (I) dated 26.4.2012 within 3 months period. Latest corporate Environment policy should be submitted to SEIAA within 3 months of issuance of this letter.

Reply: Agreed. We being a Department of Government of India, hence Corporate Environment Policy is not applicable. Instead under Entry Point Activities, the proponent

has earmarked Rs. 219 Lakh for development in neighborhood area which includes some of the specific project on environmental protection like

- Infrastructure in and around Jasaur & Kheri: Desalination plant
- Computer training Centre at and around Jhajjar
- Anganwadis in and around Jasaur & Kheri

Has already contributed Rs. 50 Lakh for Promoting Education: Construction of Govt. Girls Degree College at Jasaur Kheri, Bahadurgarh, Haryana

Condition 11: The fund ear-marked for environment protection measures should be kept in separate account and should not be diverted for other purposes and year wise expenditure shall be reported to the SEIAA/RO MoEF GOI under rules prescribed for Environment Audit.

Reply: Agreed. The fund earmarked for environment protection measures kept in separate account and will not be diverted for other purposes and year wise expenditure will be reported to the SEIAA/RO MoEF GOI under rules prescribed for Environment Audit.

Condition 12: The project proponent shall ensure the compliance of Forest Department, Haryana Notification no. S.O. 121/PA2/1900/S.4/97 dated 28.11.1997.

Reply: Agreed.

Condition 13: The Project Proponent shall ensure that no vehicle during construction/operation phase enter the project premises without valid 'Pollution Under Control' certificate from competent Authority.

Reply: Agreed. Only valid 'Pollution under Control' certificate vehicles will be allowed to enter the project site during construction to carry construction material and as well as operation phase.

Condition 14: The project proponent shall seek fresh Environmental clearance if at any stage there is change in the planning of the proposed project.

Reply: Agreed. Fresh Environment clearance will be taken if at any stage there is change in the planning of the proposed project.

Condition 15: Nodal Officer (Project Director) nominated by GCNEP shall be responsible for implementation of all conditions of Environmental Clearance letter.

Reply: Agreed.

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Condition 16: The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM2.5, PM10, SO_x, NO_x, Ozone, Lead, CO, Benzene, Ammonia, Benzopyrine, arsenic and Nickel. (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.

Reply: Agreed.

Condition 17: The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the HSPCB Panchkula as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of the EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.

Reply: Agreed.

Condition 18: The project proponent shall conduct environment audit at every three months Interval and thereafter corrected measures shall be taken without any delay. Details of environmental audit and corrective measures shall be submitted in the monitoring report.

Reply: Agreed.

Condition 19: The validity of this environment clearance letter is valid up to 7 years from the date of issuance of EC letter. The environment clearance conditions applicable till life span project in case of Residential project will continue to apply. The resident welfare association /Housing co-operative societies shall responsible to comply conditions laid down in EC. In case of violation the action would be taken as per the laid down law of land. Compliance report should be sent to this office till life of the project.

Reply: Agreed.

Condition 20: If project is not completed within the validity period then the project proponent shall submit the application for extension of validity within one month before the lapse of validity period of Environment Clearance i.e. 7 years.

Reply: Agreed.


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**HARYANA STATE POLLUTION CONTROL
BOARD**
SCF No. 42 & 43, Shopping Centre, Sector-6, Huda,
Bahadurgarh Ph. 01276-243077 (O)

Website: www.hspcb.gov.in E-Mail - hspcb.pkl@sifymail.com
Telephone No.: 0172-2577870-73



No. HSPCB/Consent/ : 329962318JHACTE5554066

Dated:03/10/2018

To.

M/s : Global Centre for Nuclear Energy Partnership (Institute and Township)
Village Jasuar Kheri and Kheri Jasaur, Tel Bahadurgarh
JHAJJAR
124505

Sub. : Grant of consent to Establish to M/s Global Centre for Nuclear Energy Partnership (Institute and Township)

Please refer to your application no. 5554066 received on dated 2018-08-27 in regional office Bahadurgarh.

With reference to your above application for consent to establish, M/s Global Centre for Nuclear Energy Partnership (Institute and Township) is here by granted consent as per following specification/Terms and conditions.

Consent Under	AIR/WATER
Period of consent	03/10/2018 - 03/04/2025
Industry Type	Building and construction project having waste water generation more than 100 KLD
Category	RED
Investment(In Lakh)	81100.0
Total Land Area (Sq. meter)	946600.3
Total Builtup Area (Sq. meter)	92979.0
Quantity of effluent	
1. Trade	202.0 KL/Day
2. Domestic	0.0 KL/Day
Number of outlets	1.0
Mode of discharge	
1. Domestic	
2. Trade	through STP
Permissible Domestic Effluent Parameters	
1. BOD	30 mg/l
2. COD	250 mg/l
3. TSS	100 mg/l
4. O&G	10 mg/l

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA

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Permissible Trade Effluent Parameters	
1. NA	mg/l
Number of stacks	1
Height of stack	
1. DG sets 6 no.	6 meters
Permissible Emission parameters	
1. NA	
Capacity of boiler	
1. NA	Ton/hr
Type of Furnace	
1. NA	
Type of Fuel	
1. Diesel	4.6 KL/day

*Regional Officer, Bahadurgarh
Haryana State Pollution Control Board.*

Terms and conditions

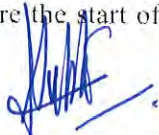
1. The industry has declared that the quantity of effluent shall be 202 KL/Day i.e 0KL/Day for Trade Effluent, 0 KL/Day for Cooling, 202 KL/Day for Domestic and the same should not exceed .
2. The above 'Consent to Establish' is valid for 60 months from the date of its issue to be extended for another one year at the discretion of the Board or till the time the unit starts its trial production whichever is earlier. The unit will have to set up the plant and obtain consent during this period.
3. The officer/official of the Board shall have the right to access and inspection of the industry in connection with the various processes and the treatment facilities being provided simultaneously with the construction of building/machinery. The effluent should conform the effluent standards as applicable
4. That necessary arrangement shall be made by the industry for the control of Air Pollution before commissioning the plant. The emitted pollutants will meet the emission and other standards as laid/will be prescribed by the Board from time to time.
5. The applicant will obtain consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21/22 of the Air (Prevention & Control of Pollution) Act,1981 as amended to-date-even before starting trial production
6. The above Consent to Establish is further subject to the conditions that the unit complies with all the laws/rules/decisions and competent directions of the Board/Government and its functionaries in all respects before commissioning of the operation and during its actual working strictly.
7. No in-process or post-process objectionable emission or the effluent will be allowed, if the scheme furnished by the unit turns out to be defective in any actual experience
8. The Electricity Department will give only temporary connection and permanent connection to the unit will be given after verifying the consent granted by the Board, both under Water Act and Air Act.
9. Unit will raise the stack height of DG Set/Boiler as per Board's norms.
10. Unit will maintain proper logbook of Water meter/sub meter before commissioning.


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11. That in the case of an industry or any other process the activity is located in an area approved and that in case the activity is sited in an residential or institutional or commercial or agricultural area, the necessary permission for siting such industry and process in an residential or institutional or commercial or agricultural area or controlled area under Town and Country Planning laws CLU or Municipal laws has to be obtained from the competent Authority in law permitting this deviation and be submitted in original with the request for consent to operate.
12. That there is no discharge directly or indirectly from the unit or the process into any interstate river or Yamuna River or River Ghaggar.
13. That the industry or the unit concerned is not sited within any prohibited distances according to the Environmental Laws and Rules, Notification, Orders and Policies of Central Pollution control Board and Haryana State Pollution Control Board.
14. That of the unit is discharging its sewage or trade effluent into the public sewer meant to receive trade effluent from industries etc. then the permission of the Competent Authority owing and operating such public sewer giving permission letter to his unit shall be submitted at time of consent to operate.
15. That if at any time, there is adverse report from any adjoining neighbor or any other aggrieved party or Municipal Committee or Zila Parishad or any other public body against the unit's pollution; the Consent to Establish so granted shall be revoked.
16. That all the financial dues required under the rules and policies of the Board have been deposited in full by the unit for this Consent to Establish.
17. In case of change of name from previous Consent to Establish granted, fresh Consent to Establish fee shall be levied.
18. Industry should adopt water conservation measures to ensure minimum consumption of water in their Process. Ground water based proposals of new industries should get clearance from Central Ground Water Authority for scientific development of previous resource.
19. That the unit will take all other clearances from concerned agencies, whenever required.
20. That the unit will not change its process without the prior permission of the Board.
21. That the Consent to Establish so granted will be invalid, if the unit falls in Aravali Area or non conforming area.
22. That the unit will comply with the Hazardous Waste Management Rules and will also make the non-leachate pit for storage of Hazardous waste and will undertake not to dispose off the same except for pit in their own premises or with the authorized disposal authority.
23. That the unit will submit an undertaking that it will comply with all the specific and general conditions as imposed in the above Consent to Establish within 30 days failing which Consent to Establish will be revoked.
24. That unit will obtain EIA from MoEF, if required at any stage.
25. In case of unit does not comply with the above conditions within the stipulated period, Consent to Establish will be revoked.
26. That unit will obtain consent to operate from the board before the start of product activity.

Specific Conditions

Other Conditions :


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 Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
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1. CTE expansion is granted for full construction of the institutional campus and residential township including group housing as per the revised EC obtained by the unit from the date of approval till 03.04.2025 ie upto the validity of the EC with the condition that unit will comply with the conditions of Env Clearance granted to the unit.
2. The unit will install 03 no proposed STP's with total of 264.5 KLD capacity as mentioned in the EC.
3. The unit will install the DG set with inbuilt acoustic enclosures as mentioned in the EC.
4. The unit will submit the compliance reports to the concerned authorities on regular basis as mentioned in the EC granted to unit.
5. The unit will get renewed the License issued from T&CP deptt before expiry and will not do any construction during that period.
6. Unit will not operate without obtaining prior CTO from the board during validity period of CTE granted and installation of STP proposed for the expansion part.
7. Unit will comply with the MoEF Guidelines 2010 and Hon'ble NGT directions in regard to the orders passed in OA No. 21 of 2014 titled Vardhman Kaushik v
8. The project/unit will provide separate grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the recycled water will be used for flushing, gardening and DG set cooling.
9. The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The bio-degradable waste should be treated by appropriate technology at the site ear-marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.
10. Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the proposed project.
11. Standards for discharging of environmental pollutants as enshrined in various schedules of rule 3 of Environment Protection Rules, 1986 shall be strictly complied with by the unit.
12. The unit will comply with the Construction & Demolition rules.

HARYANA STATE

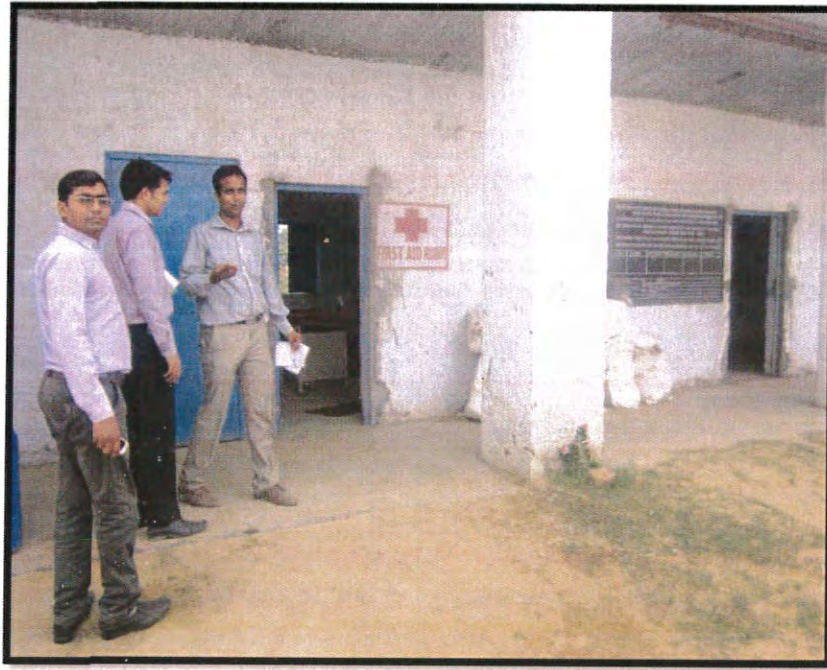
Regional Officer, Bahadurgarh

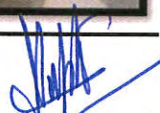
Haryana State Pollution Control Board.



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Annexure II: First Aid Room



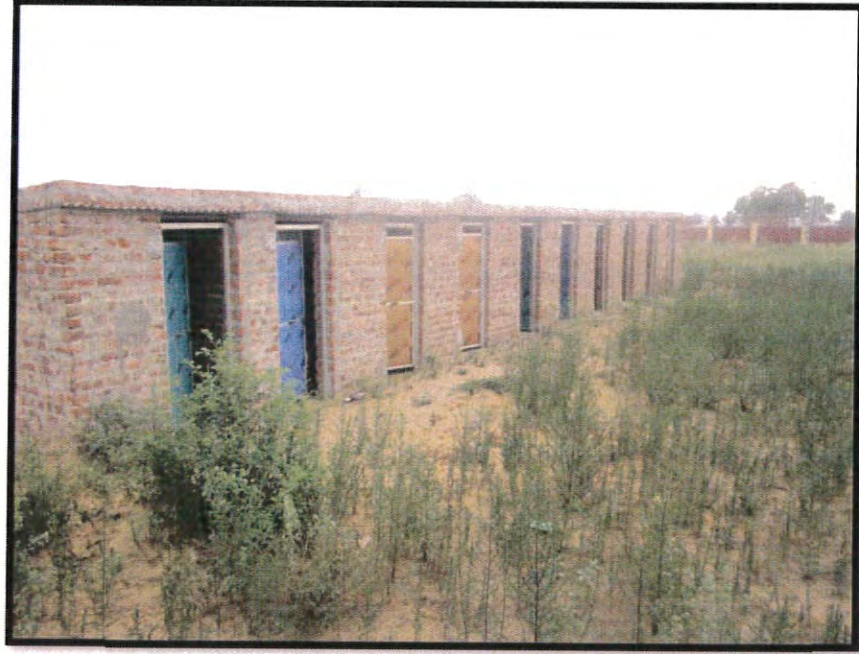

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Annexure III



Drinking Water


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Toilet Facilities



Septic Tank


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25

SOLID WASTE MANAGEMENT

Solid waste would be generated both during construction and operation phase. The solid waste expected to be generated during the construction phase will comprise of excavated materials, used bags, bricks, concrete, MS rods, tiles, wood etc. The following steps are proposed to be followed for the management of solid waste:

- Construction yards are proposed for storage of construction material.
- The excavated material such as topsoil and stones will be stacked for reuse during later stages of construction
- Excavated top soil will be stored in temporary constructed soil bank and reused for landscaping.

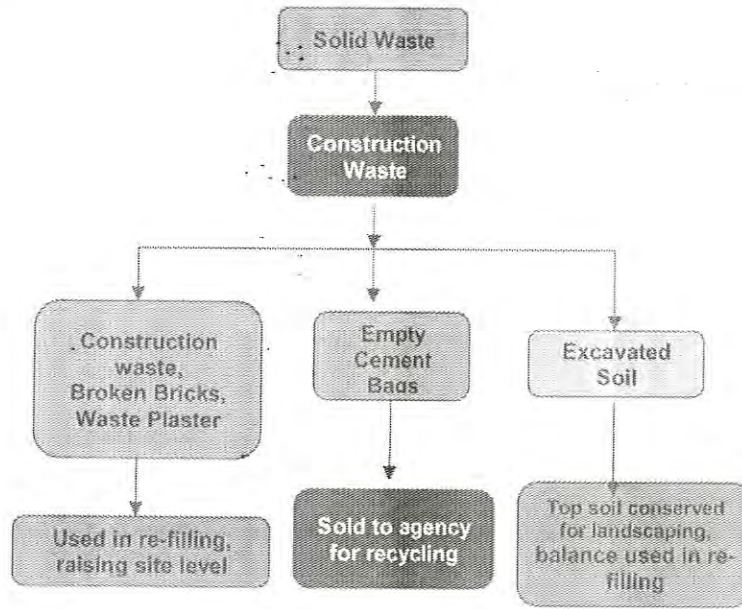


Figure 1: Solid Waste Management Scheme (Construction Phase)

During the operation phase, waste will comprise domestic as well as horticultural waste. The solid waste generated from the project shall be mainly domestic waste and estimated quantity of the waste shall be approx. **522 kg** per day for institutional campus and **770 kg/day** for residential township (@ 0.5 kg per capita per day for residents, @ 0.15 kg per capita per day for the visitor, 0.25 kg per capita per day for the staff members, landscape wastes @ 0.2 kg/acre/day and STP

Annexure IV

sludge). Following arrangements will be made at site in accordance to Municipal Solid Waste (Management & Handling) Rules, 2016.

Table 1: Solid Waste Generation(Existing +Expansion)

	Institutional Campus	Residential Township
	Total (EC accorded + Expansion)	Total (EC accorded + Expansion)
Solid waste generated	522 kg/day	770 kg/day


Table 2.17: Calculation of Solid Waste Generation (Institutional Campus)

Sl. No.	Description	Occupancy	Waste Generated (Kg per capita per day)	Waste Generated (kg/capita/day)
1.	Staff	1319	0.25 kg/capita/day	330
2.	Visitors	830	0.15 kg/capita/day	125
3.	Canteen	100	0.5 kg/capita/day	50
4.	Horticultural Waste (39.72 acres)	@ 0.2 kg/acre/day		8
5.	STP Sludge			9
Total Solid Waste Generation = 522 kg/day				

Table 2.18: Calculation of Solid Waste Generation (Residential Township)

Sl. No.	Description	Occupancy	Waste Generated (Kg per capita per day)	Waste Generated (kg/capita/day)
1.	Residents	1412	0.5 kg/capita/day	706
2.	Dining hall	80	0.5 kg/capita/day	40
3.	Horticultural Waste (33.07 acres)	@ 0.2 kg/acre/day		7
4.	STP Sludge			17
Total Solid Waste Generation = 770 kg/day				

[Source: Chapter 3, Table 3.6, Page No.49 Central Public Health & Environment Engineering Organization, Ministry of Urban Development, (Govt. of India May, 2001)]


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❖ Collection and Segregation of waste

1. Collection of domestic waste will be done from household and commercial units.
2. Local vendors will be hired to provide separate colored bins for dry recyclable and Bio-Degradable waste.
3. Litter bins will also be provided in open areas like parks, etc.

❖ Treatment of waste

• Bio-Degradable waste

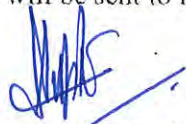
1. Bio-degradable waste will be subjected to composting through organic waste converter and the compost will be used as manure.
2. STP sludge is proposed to be used for horticultural purpose.
3. Horticultural Waste is proposed to be composted and used for gardening purpose.

❖ Recyclable waste

- i. Grass Recycling: The cropped grass will be spread on green area. It will act as manure after decomposition.
- ii. Recyclable waste like paper, plastic, metals etc. will be sold off to recyclers.

❖ Disposal

The recyclable component of solid waste will be sold to recyclers, inert will be sent to nearby waste disposal site.


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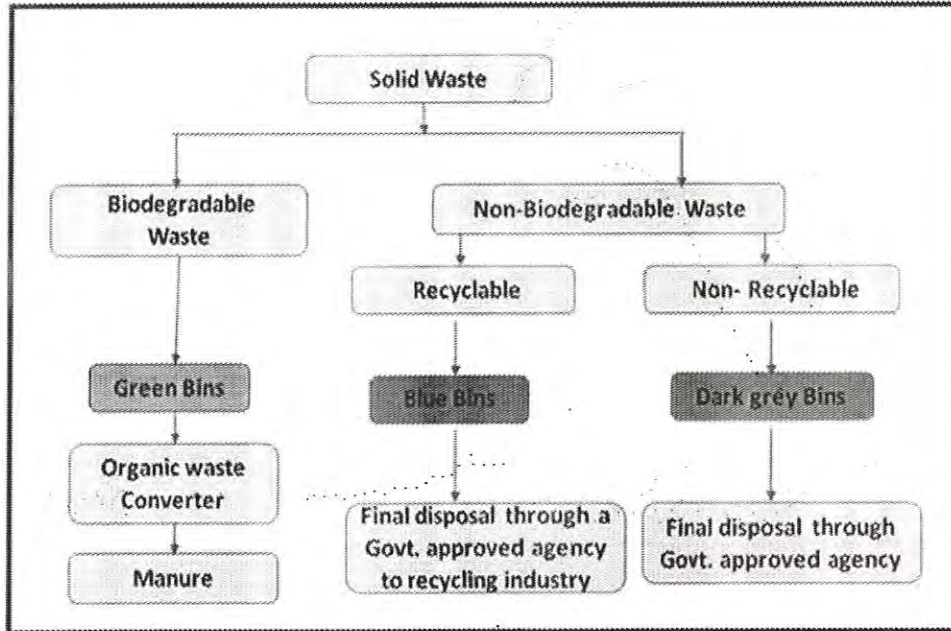


Figure 2: Solid Waste Management Scheme (Operation Phase)

Organic Waste Converter:

A typical Organic Waste Converter - 300 (Dim. 3m × 4m) is used for composting waste 120 kg/batch or 3,000 kg/day & it requires electricity of about 13.5 HP.

No. of batches /day = $3,000/120 = 25$

No. of batches to convert 1292 kg = $1292/120 = 10.76$ say 11

Operation Cost-monthly per capita:

The operating cost of OWC - 300 = 1, 80,000 INR/month

Cost/day = $1, 80,000/30$

= 6000/- (i.e. 25 batch/day = 6000/-)

1 batch/day cost = $6000/25$

= 240 INR

Cost for 11 batch/day = $11 \times 240/-$

= 2,640/-

Monthly operating cost = $30 \times 2,640$

= 79,200 /-

Total population of the project = 1492

Operating cost of OWC -300 = 79,200 INR/month

Per capita cost/month = Monthly operating cost/Total population of the project (i.e.1492)

= $79,200 / 1492$

= 53 INR

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ANNEXURE V: PHOTOGRAPH SHOWING STORAGE OF TOP SOIL



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COVERED CONSTRUCTION MATERIAL



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GRC INDIA TRAINING & ANALYTICAL LABORATORY

(A unit of Grass Roots Research & Creation India (P) Ltd.)

An ISO 9001: 2008, ISO 14001: 2004 & OHSAS 18001: 2007 Certified Lab.

NABL Accredited Laboratory (A Constituent Board of QCI), TC 7501 (Chemical & Biological)

Recognized by Ministry of Environment, Forest & Climate Change (MoEF&CC, GOI) under the E (P) Act, 1986

Head Office: F-375, Sector-63, Noida, Gautam Budh Nagar, U.P - 201 301

Phone No.: 0120 - 4044630, 4044660, 4323120, Fax: 0120 - 2406519, 0120 - 4044675

Website: <https://www.grc-india.com>, E-mail : lab@grc-india.com; info@grc-india.com

Annexure VII

Test Report

Report Code: W20181121-016

Issue Date: 21.11.2018

Issued To : Expansion of Institutional Campus & Residential,
Township (GCNEP) Vill-Kheri Jasaur Jhajjar H.R.

Sample Received on: 09.11.2018

Analysis Duration: 09.11.2018 to 20.11.2018

Sample Description: Ground Water

RESULTS

Water Quality Analysis

SAMPLING DETAILS

Date of Sampling	: 08.11.2018
Sampling Location	: Near Project Site
Sample Collected by	: Mr. Rahul Singh
Sampling Protocol	: IS-3025(Pt-1)-1987 Reaff : 2003
Weather Condition	: Clear Sky
Sample Quantity	: 5 L
Sample Packing & Mark	: Plastic & GCNEP/NOV/GW1

S. No.	Parameters	Units	Limits (as per IS:10500-2012)		Results	Test Method
			Desirable Limit	Permissible Limit		
1	Color	Hazen	5	15	<5	IS : 3025(Pt-4) 1983 (RA 2017)
2	Odour *	-	Agreeable	Agreeable	Agreeable	IS : 3025(Pt-5) 1983 (RA 2017)
3	Taste *	-	Agreeable	Agreeable	Agreeable	IS : 3025(Pt-5) 1983 (RA 2017)
4	Turbidity	NTU	1	5	1	IS : 3025(Pt-8)-1984 (RA 2017)
5	pH	-	6.5-8.5	No Relaxation	7.97	IS : 3025(Pt-11)1983 (RA 2017)
6	Total Hardness (as CaCO ₃)	mg/l	200	600	468	IS : 3025(Pt-21) 2009, (RA 2014)
7	Iron (as Fe)	mg/l	1	No Relaxation	0.22	3120B, APHA 23 rd Ed., 2017 (ICP-OES)
8	Chlorides (as Cl)	mg/l	250	1000	357	IS : 3025(Pt-32)1988 (RA 2014)
9	Fluoride (as F)	mg/l	1	1.5	1.1	4500F(D), APHA 23 rd Ed., 2017
10	TDS	mg/l	500	2000	1425	IS: 3025(Pt-16)1984 (RA 2017)
11	Calcium (as Ca ²⁺)	mg/l	75	200	112	IS : 3025(Pt-40)1991 (RA 2014)
12	Magnesium (as Mg ²⁺)	mg/l	30	100	46	IS : 3025(Pt-40)1991 (RA 2014)
13	Copper (as Cu)	mg/l	0.05	1.5	0.02	3120B, APHA 23 rd Ed., 2017 (ICP-OES)
14	Manganese(as Mn)	mg/l	0.1	0.3	0.06	3120B, APHA 23 rd Ed., 2017 (ICP-OES)
15	Sulphate (as SO ₄)	mg/l	200	400	154	IS : 3025(Pt-24)1986 (RA 2014)
16	Nitrate(as NO ₃)	mg/l	45	No Relaxation	29	IS : 3025(Pt-34)1988 (RA 2014)

Narendra Singh (Chemist)

Authorized Signatory
(Seal & Signature)

- Note: 1. The results indicated only refer to the tested samples and listed parameters and do not endorse any product
2. This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory.
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4. The samples received shall be destroyed after 30 days from the date of issue of the certificate unless specified otherwise and sample for biological testing will be destroyed after one week of testing.



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Test Report

Report Code: W20181121-016

Issue Date: 21.11.2018

17	Phenolic Compounds * (as C ₆ H ₅ OH)	mg/l	0.001	0.002	<0.001	5530-C, APHA 23 nd Ed., 2017
18	Mercury (as Hg)	mg/l	0.001	No Relaxation	<0.001	3120B, APHA 23 nd Ed., 2017 (ICP-OES-VGA)
19	Cadmium (as Cd)	mg/l	0.003	No Relaxation	<0.01	3120B, APHA 23 nd Ed., 2017 (ICP-OES)
20	Selenium (as Se)	mg/l	0.01	No Relaxation	<0.01	3120B, APHA 23 nd Ed., 2017 (ICP-OES)
21	Arsenic (as As)	mg/l	0.01	No Relaxation	<0.01	3120B, APHA 23 nd Ed., 2017 (ICP-OES-VGA)
22	Cyanide (as CN)*	mg/l	0.05	No Relaxation	<0.01	4500-CN (E), APHA 23 nd Ed., 2017
23	Lead (as Pb)	mg/l	0.01	No Relaxation	<0.01	3120B, APHA 23 nd Ed., 2017 (ICP-OES)
24	Zinc (as Zn)	mg/l	5	15	0.45	3120B, APHA 23 nd Ed., 2017 (ICP-OES)
25	Anionic Detergent (as MBAS)*	mg/l	0.2	1	<0.01	5540-C, APHA 23 nd Ed., 2017
26	Chromium (as Cr ⁶⁺)	mg/l	0.05	No Relaxation	<0.01	IS : 3025(Pt-52)2003 (RA 2014)
27	Mineral oil*	mg/l	0.5	No Relaxation	<0.1	IS: 3025(Pt-39)1991 (RA 2014)
28	Alkalinity (as CaCO ₃)	mg/l	200	600	480	IS: 3025(Pt-23)1986 (RA 2014)
29	Aluminum (as Al)	mg/l	0.03	0.2	<0.02	3120B, APHA 23 nd Ed., 2017 (ICP-OES)
30	Boron (as B)	mg/l	0.5	1	0.3	3120B, APHA 23 nd Ed., 2017 (ICP-OES)

Note:- The Parameter Mark with an * are not accredited by NABL.

**** End of Report ****

Narendra Singh (Chemist)

Authorized Signatory
(Seal & Signature)

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Test Report

Report Code: N20181107-016

Issue Date: 07.11.2018

Issued To : Expansion of Institutional Campus & Residential,
Township (GCNEP) Vill-Kheri Jasaur Jhajjar H.R.

Data Received on: 06.11.2018

Sample Description: Ambient Noise

RESULTS

Ambient Noise Level

MONITORING DETAILS

Date of Monitoring : 05.11.2018
Monitoring Done by : Mr. Rahul Singh
Monitoring Protocol : GRC/LAB/STP/NOISE/01 dated: 05.01.2011
Weather Condition : Clear Sky
Monitoring Duration : 24 Hours

S. No.	LOCATION	ZONE	Limit for As Per E(P)A,1986 ; Leq, dB (A)		Observed Value Leq, dB (A)	
			Day Time*	Night Time**	Day Time*	Night Time**
1	Project Site	Commercial Area	65	55	63.7	52.5
	* Day Time	6.00 a.m. to 10.00 p.m				
	**Night Time	10.00 p.m. to 6.00 a.m.				

****End of Report****

Narender Singh (Chemist)

**Authorized Signatory
(Seal & Signature)**

34

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4. The samples received shall be destroyed after 30 days from the date of issue of the certificate unless specified otherwise and sample for biological testing will be destroyed after one week of testing.



Test Report

Report Code: A20181201-016

Issue Date: 01.12.2018

Issued To: Expansion of Institutional Campus & Residential,
Township (GCNEP) Vill-Kheri Jasaur Jhajjar H.R.

Analysis Duration: 06.11.2018 to 30.11.2018

Sample Description: Ambient Air

RESULTS

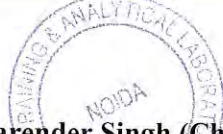

Ambient Air Quality Analysis

SAMPLING DETAILS

Sampling Location	: Project Site
Sample Collected by	: Mr. Rahul Singh
Sampling Protocol	: GRC/LAB/STP/AIR/01
Weather Condition	: Clear Sky
Sampling Duration	: 24 Hours
Sampling Duration for CO	: 1 Hour
Sampler Location w.r.t. Height	: 4.0 Meter above Ground Level
Sample Packing & Marking	: Plastic Bottle / Zip Polybag & GCNEP/NOV/A001-008

S. No.	Date	Test Parameter				
		Particulate Matter (PM _{2.5}); µg/m ³	Particulate Matter (PM ₁₀); µg/m ³	Sulphur Dioxide (SO ₂); µg/m ³	Nitrogen Dioxide (NO ₂); µg/m ³	Carbon Monoxide, (CO) µg/m ³
		GRC/LAB/SOP/AIR/03, Gravimetric Method	IS 5182 (Part 23):2006 (RA 2017)	IS 5182 (Part 2) :2001, (RA 2017)	IS 5182 (Part 6) :2006 (RA 2017)	IS 5182 (Part 10):1999, (RA 2014)
1	05.11.2018	107.2	210.2	11.3	44.1	1550
2	08.11.2018	98.5	182.1	10.9	37.4	1620
3	12.11.2018	105.7	194.5	9.7	43.7	1730
4	15.11.2018	108.3	181.0	10.8	34.5	1690
5	19.11.2018	101.5	207.9	12.4	39.9	1260
6	22.11.2018	103.1	187.3	9.2	37.1	1380
7	25.11.2018	102.5	173.5	11.7	43.5	1460
8	28.11.2018	115.4	228.7	9.8	35.8	1350

****End of Report****


Narender Singh (Chemist)

Authorized Signatory
(Seal & Signature)

- Note:
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 2. This certificate shall not be reproduced wholly or in part without prior written consent of the laboratory.
 3. This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory
 4. The samples received shall be destroyed after 30 days from the date of issue of the certificate unless specified otherwise and sample for biological testing will be destroyed after one week of testing.



GRC INDIA TRAINING & ANALYTICAL LABORATORY

(A unit of Grass Roots Research & Creation India (P) Ltd.)

An ISO 9001: 2008, ISO 14001: 2004 & OHSAS 18001: 2007 Certified Lab.

NABL Accredited Laboratory (A Constituent Board of QCI), TC 7501 (Chemical & Biological)

Recognized by Ministry of Environment, Forest & Climate Change (MoEF&CC, GOI) under the E (P) Act, 1986

Head Office: F-375, Sector-63, Noida, Gautam Budh Nagar, U.P - 201 301

Phone No.: 0120 - 4044630, 4044660, 4323120, Fax: 0120 - 2406519, 0120 - 4044675

Website: <https://www.grc-india.com>, E-mail : lab@grc-india.com; info@grc-india.com

Test Report

Report Code: W20181115-017

Issue Date: 15.11.2018

Issued To : Expansion of Institutional Campus & Residential,
Township (GCNEP) Vill-Kheri Jasaur Hajar H.R.

Sample Received on: 08.11.2018

Analysis Duration: 09.11.2018 to 13.11.2018

Sample Description: Ground Water

RESULTS

Water Quality Analysis

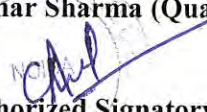
SAMPLING DETAILS

Date of Sampling : 08.11.2018
 Sampling Location : Near Project Site
 Sample Collected by : Mr. Rahul Singh
 Sampling Protocol : IS-1622- 1981(Reaff.:2003)
 Weather Condition : Clear Sky
 Sample Quantity : 500 ml
 Sample Packing & Mark : Glass Bottle & GCNEP/NOV/GW1

S. No.	Parameters	Units	Limits (as per IS:10500-2012)	Results	Test Method
Bacteriological Parameters					
1	Total Coliform	MPN/100ml	shall not be detectable	ND (<2)	IS : 1622-1981 (Reaff.2003)
2	E.coli	E.coli /100ml	shall not be detectable	Absent	IS : 1622-1981 (Reaff.2003)

**** End of Report ****

Ajay Kumar Sharma (Quality Manager)


 Authorized Signatory
 (Seal & Signature)

36

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GRC India

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Phone No.: 0120 – 4044630, 4044660, 4323120, Fax: 0120 – 2406519, 0120 - 4044675

Website: <https://www.grc-india.com>, E-mail : lab@grc-india.com; info@grc-india.com

Test Report

Report Code: S20181121-016

Issued To: Expansion of Institutional Campus & Residential,
Township (GCNEP) Vill-Kheri Jasaur Jhajjar H.R.

Sample Description: Soil

Issue Date: 21.11.2018

Sample Received on: 06.11.2018

Analysis Duration: 06.11.2018 to 19.11.2018

RESULTS

Soil Quality Analysis

SAMPLING DETAILS

Date of Sampling

: 05.11.2018

Sampling Location

: Project Site,

Sample Collected by

: Mr. Rahul Singh

Sampling Protocol

: GRC/LAB/STP/SOIL/01

Weather Condition

: Clear Sky

Sample Quantity

: 5 kg

Sample Packing & Marking

: Zip Polybag; GCNEP/NOV/SQ1

S. No.	Parameters	Units	Results	Test Method
1	Texture*	-		IS: 2720 (part-4), 1985 (Reaff:2006)
	Sand	%	62.3	
	Silt	%	19.0	
	Clay	%	18.7	
2	pH (1:2)	-	7.95	IS: 2720 (part-26),1987 (Reaff:2007)
3	Electrical Conductivity (1:2)	µmhos/cm	427	IS: 14767(2002)
4	Cation exchange capacity*	meq/100 gm	14.4	IS : 2720 (Part-24)-1976(Reaff.2005)
5	Exchangeable Potassium	meq/100 gm	0.45	GRC/LAB/STP/SOIL/07
6	Exchangeable Sodium	meq/100 gm	0.67	GRC/LAB/STP/SOIL /06
7	Exchangeable Calcium	meq/100 gm	9.86	GRC/LAB/STP/SOIL/ 08
8	Exchangeable Magnesium	meq/100 gm	3.39	GRC/LAB/STP/SOIL/ 08
9	Sodium Absorption Ratio*	-	0.82	GRC/LAB/STP/SOIL/20
10	Water Holding Capacity	%	25.7	GRC/LAB/STP/SOIL/13
11	Porosity*	%	39.5	GRC/LAB/STP/SOIL/19
12	Permeability*	cm/hrs	2.5	IS : 2720 (Part-17)-1986(Reaff.2002)
13	Total kjehdahl Nitrogen	%	0.041	GRC/LAB/STP/SOIL/18
14	Phosphorus(Olsen's)	mg/kg	7.7	GRC/LAB/STP/SOIL/10
15	Organic Matter	%	0.33	IS : 2720 (Part-22)-1972(Reaff.2006)

Note:- The Parameter Mark with an * are not accredited by NABL.

End of Report

R.S. Bhawsar (DGM-LAB)

Authorized Signatory
(Seal & Signature)

37

Note: 1.The results indicated only refer to the tested samples and listed parameters and do not endorse any product

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3. This certificate shall not be used in any advertising media or as evidence in the court of Law without prior written consent of the laboratory

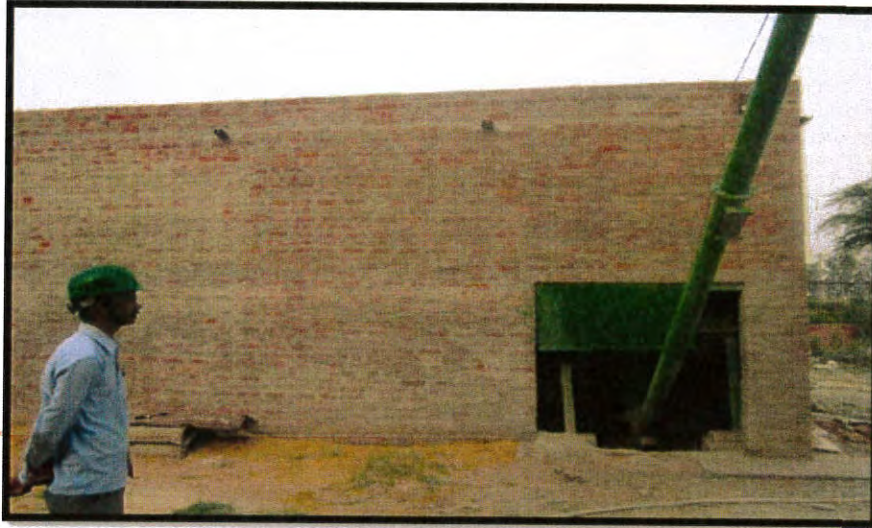
4. The samples received shall be destroyed after 30 days from the date of issue of the certificate unless specified otherwise and sample for biological testing will be destroyed after one week of testing.

Fly Ash Bricks Used for Construction

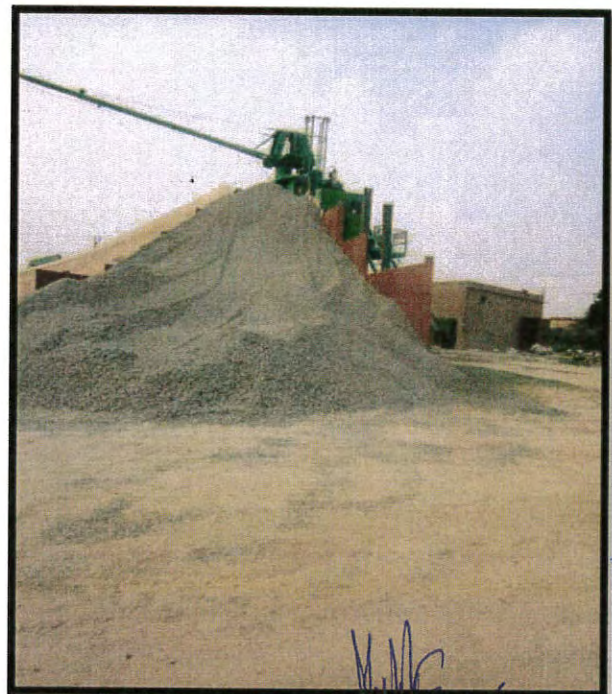


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Cement storage




Batching Plant




39

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124022

CAMPUS SITE			
Sr. No.	Load Description	Connected Load (CL) in kVA	Maximum Demand (MD) in kVA
1.	Central building	1500	750
2.	SARRT	673	150
3.	SNMCS	192	150
4.	SNSS	591	450
5.	SANESS	2000	800
6.	SANESS High Bay	2000	800
7.	SRSS	1500	450
8.	HVAC	3000	2400
9.	Domestic and flushing Panel	75	40
10.	Firefighting Panel	160	160
11.	STP	150	100
12.	Pump Room	200	100
13.	External Road Lighting	15	15
	Total	12056	6365
	TOTAL LOAD (WITH DIVERSITY) 80%		5092
	SAY		5000 kVA


 श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
 परियोजना निदेशक / Project Director
 वैश्विक परमाण्वीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
 Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
 ए.क.वि., भारत सरकार / D.A.E., Government of India
 बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

TOWNSHIP SITE			
Sr. No.	Load Description	Connected Load (CL) in kVA	Maximum Demand (MD) in kVA
1.	Guest House-A & B	400	250
2.	Type-C	510	350
3.	Type-D	918	500
4.	Type-E	306	175
5.	Recreation Centre	300	200
6.	Dining & Party Hall	300	175
7.	Domestic and flushing Panel	50	25
8.	Fire fighting Panel	150	150
9.	STP 1 & 2	200	100
10.	External Road Lighting	15	15
11.	Public Awareness Centre	200	100
12.	Gate House	100	25
13.	Service Building	150	50
	Total	3599	2115
	TOTAL LOAD (WITH 80% DIVERSITY)		1692
	SAY		1700 kVA


श्रीकृष्ण गुप्ता / SHRKRISHNA GUPTA
 परियोजना निदेशक / Project Director
 वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
 Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
 डा.क.वि., भारत सरकार / D.A.E., Government of India
 बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Details of Saving in Electrical Energy in GCNEP Campus & Township by employing Energy Saving devices.

Sr. No.	With out Energy Saving Measures			With Energy Saving Measures			Energy Saved		Remarks
	Load Description	Load (kW)	Energy Consumed (kWh)	Load Description	Load (kW)	Energy Consumed (kWh)	in kWh	% Saving	
1	2	3	4	5	6	7	8	9	10
	CAMPUS								
1	T8 Fluorescent light fixtures	384 (8000 pts) @ 8 hrs per day	3072	T5- Fluorescent light fixtures	248	1984 @ 8 hrs per day	1088	35%	1) 8 Hours operation assumed 2) T8 - 36W lamp with electromagnetic ballast (12W) 3) T5- 28W lamp with electronic ballast (3W)
2	Water heater load	10	60 @ 6 hrs per day	Solar Water Heater	5	30 @ 6 hrs per day	30	50%	
3	Streetlighting with SON-T (HPSV) lamp	15	180 @ 12 hrs per day	Streetlighting with LED (50 W) fixture	5	60 @ 12 hrs per day	120	67%	

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
 परियोजना निदेशक / Project Director
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 Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
 ग.क.वि., भारत सरकार / D.A.E., Government of India
 बहादुरगढ़ (हरियाणा) / Bahadurgah (Haryana) - 124507

Sr. No.	With out Energy Saving Measures			With Energy Saving Measures			Energy Saved		
	Load Description	Load (kW)	Energy Consumed (kWh)	Load Description	Load (kW)	Energy Consumed (kWh)	in kWh	% Saving	Remarks
1	2	3	4	5	6	7	8	9	10
ii)	TOWNSHIP								
1	T8 Fluorescent light fixtures	124 (2600 pts)	992	T5- Fluorescent light fixtures	80	640	352	35%	1) 8 Hours operation assumed 2) T8 - 36W lamp with electromagnetic ballast (12W) 3) T5- 28W lamp with electronic ballast (3W)
2	Water heater load	54	54	Solar Water Heater	25	25	29	54%	
3	Streetlighting with SON-T (HPSV) lamp	15	180	Streetlighting with LED (50 W) fixture	5	60	120	67%	

Total Energy Saved per day = 1739 kWh

Note: 1) The proposed use of Energy efficient LED luminaires for interior lighting will further result in savings up to 40% compared to conventional T-5 fluorescents lamps.

2) The proposed use of roof top grid tied solar PV system will further reduce the energy demand by generation of approx. 5400 units per day considering 6 hours of sunlight.

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
ए.क.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाना) / Bahadurgarh (Haryana) - 124507

वन मण्डल अधिकारी (क्षेत्रीय), झज्जर

बाग जोहआरा स्टेडियम, नजदीक DSP Residence, झज्जर

दुरभाष 01251-257258 e-mail:- dfojajjar@yahoo.co.in, dfojajjar@rediffmail.com

सेवा में:-

Ms. Y.S. Mayya, OS
Project Director, GCNEP
(Global Centre for Nuclear Energy Partnership),
DAE, Govt. of India,
RCnD, BARC, Mumbai-85.

कमांक:- 3293 दिनांक:- 27-12-2013

विषय:-

Construction of Institutional Campus and Residential Township for Global Centre for Nuclear Energy Partnership (GCNEP) at Kheri-Jassor and Jassor-Kheri village, Bahadurgarh in the State of Haryana.


संदर्भ:-


आपका पत्रांक GCNEP/81 दिनांक 26.12.2013

--00--

उपरोक्त विषय के सम्बन्ध में आप द्वारा प्रस्तुत किये गये खसरा न० व किला न० में किसी प्रकार की वन भूमि शामिल नहीं है। इसलिये आप द्वारा प्रस्तुत किये गये खसरा न० व किला न० में Institutional Campus and Residential Township for Global Centre for Nuclear Energy Partnership (GCNEP) का निर्माण करने पर इस कार्यालय को कोई आपत्ति नहीं है।

संलग्न - उपरोक्त खसरा सूची


वन मण्डल अधिकारी,
झज्जर।


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
ए.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

**HARYANA GOVERNMENT
DEVELOPMENT AND PANCHAYATS DEPARTMENT
ORDER**

No.

Whereas the Gram Panchayat Kheri Jasaur passed a resolution No. 1 dated 8.4.2010 for sale of its land measuring 123 Acre 2 Kanal 17 Marla falling in khasra Nos. 82 / 1(7-11), 82 / 2(8-0), 8(8-0), 7(8-0), 8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 18(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 21(8-0), 22(8-0), 23(8-0), 24(8-0), 25(8-0), 83 / 1 (8-0), 2(8-0), 3(8-0), 5(8-15), 6(8-10), 7(8-12), 8(8-0), 9(8-0), 10(8-0), 11(7-12), 12(8-0), 13(8-0), 14(8-14), 15(8-3), 18(4-16), 17(8-12), 18(8-0), 19(8-0), 20(7-12), 21(7-12), 22(8-0), 23(8-0), 24(7-11), 25(3-18), 84 / 5 / 2 (2-5), 6(8-0), 15(8-0), 92 / 5(7-2), 6(8-0), 15(8-0), 16(8-0), 17(8-0), 18(8-0), 83 / 3(7-11), 4(7-11), 5 / 1(1-3), 1(7-3), 2(7-11), 5 / 2(3-4), 8 / 1(2-12), 11(7-12), 12(8-0), 13(8-0), 14(8-0), 15 / 1(2-6), 15 / 2(2-0), 16 / 1(1-14), 18 / 2(2-14), 17(8-0), 18(8-0), 6 / 2(1-18), 7(8-0), 8(8-0), 9(8-0), 10(7-12), 19(8-0), 20(7-12), 23(8-0), 24(8-0), 25 / 1(3-4), 25 / 2(1-4), 94 / 1(8-0), 2(8-0), 3(8-0), 4(8-0), 5(8-0), 6(8-0), 7(8-0), 8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0), 13(8-0), 14(8-0), 15(8-0), 17(8-0), 18(8-0), 19(8-0), 20(8-0), 62 / 18(7-4), 25(8-0), 83 / 21(8-18), 22(4-16), 115 / 1(8-0), 2(8-0), 3(8-0), 8(8-0), 9(8-0), 10(7-6), 11(7-2), 12(8-0), 13(8-0), 17 / 3(2-2), 18(8-0), 19(8-0), 20(8-4), 21 / 2(4-12), 22(8-0), 23 / 1(8-13), 116 / 5 / 2(0-16), 125 / 1 / 2(2-0), 2(7-12), 3 / 1(3-11), 8(0-3), 10 / 1(0-4), 94 / 21(8-0), 22(8-0), 23(8-0), 24(8-0), 81 / 1(8-0), 2(8-0), 3(8-0), 8(8-0), 9(8-0), 10(8-0), 11(8-0), 12(8-0) & 13(8-0) and the Gram Panchayat Jasaur Kheri, Block Bahadurgarh, District Jhajjar passed a resolution No. 1 dated 8.3.2010 for sale of its land measuring 83 Acre 4 Kanal 16 Marla falling in Khasra No. 82 / 12(8-0), 82 / 19 (8-0), 82 / 5 (8-0), 82 / 8(8-0), 82 / 20(8-0), 83 / 6(8-0), 83 / 7(8-0), 83 / 5(8-0), 84 / 8(8-0), 84 / 9(8-0), 85 / 11(8-0), 85 / 12(8-0), 82 / 1(8-0), 82 / 20(8-0), 82 / 21(8-0), 82 / 19(8-0), 82 / 22(8-0), 82 / 10(8-0), 82 / 11(8-0), 80 / 22 / 2(4-8), 80 / 23(8-0), 80 / 24(8-0), 80 / 25 / 1(6-14), 80 / 19(8-0), 80 / 20(8-0), 84 / 1 / 2(4-0), 84 / 2(8-0), 84 / 3(8-0), 84 / 6(8-0), 84 / 7(8-0), 100 / 3(8-0), 100 / 4(8-0), 100 / 7(1-18), 100 / 8(1-13), 85 / 1(8-0), 81 / 2(8-0), 81 / 3(8-0), 81 / 4(10-8), 85 / 2(8-0), 84 / 4(8-0), 84 / 6(8-0), 81 / 16(8-0), 81 / 17(8-8), 81 / 24(8-12), 81 / 25(8-0), 80 / 21(8-0), 80 / 22(8-0), 80 / 23(8-0), 80 / 8(8-0), 80 / 11(8-0), 80 / 12(8-0), 80 / 13(8-0), 84 / 16(8-0), 84 / 17(8-0), 84 / 18(8-0), 84 / 19 / 1(4-0), 84 / 22 / 2(3-18), 84 / 23(8-0), 84 / 24(8-0), 84 / 25(8-0), 85 / 21(8-0), 81 / 15(11-2), 80 / 24(8-0), 80 / 25(7-12), 84 / 12(8-0), 84 / 13(8-0), 84 / 14(8-0), 84 / 15(8-0), 85 / 9(8-0), 85 / 10(8-0), 82 / 18(8-0), 82 / 23(8-0), 100 / 1(8-0), 100 / 2(8-0), 100 / 9(1-2), 100 / 10(0-18), 100 / 5(8-0), 100 / 6 (1-7), 82 / 24(8-0), 82 / 25(8-0), 82 / 14(8-0), 82 / 7(8-0), 82 / 15(8-0), 80 / 16(8-0), 80 / 18(8-0), 81 / 7(6-14), 81 / 8(8-0), 81 / 9(8-0), 81 / 12 / 1(2-0), 81 / 13 / 1(7-2) & 81 / 14 / 1(3-2) (total area of both the Gram Panchayats is 206 Acre 7 Kanal 13 Marla) to the Department of Atomic Energy, Government of India for the purpose of establishing Centre of Excellence for Global Deployment of Nuclear Energy at *Market rate*

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA

परियोजना निदेशक / Project Director

वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)

Global Centre for Nuclear Energy Partnership (G.C.N.E.P)

प.ऊ.वि., भारत सरकार / D.A.E., Government of India

बाहदुरगढ़ (हरियाना) / Bahadurgarh (Haryana) - 124507

From,

Fire Station Officer,
Bahadurgarh(Jhajjar)

To,

Director,
Haryana Fire Service,
Bays No.11-14, Sector-4,
Panchkula (Haryana)

No. 168/FSB

Dated 07-05-2015

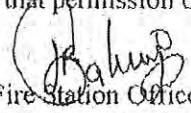
Subject:- Approval of part fire fighting scheme Educational Building of School Of Nuclear Security Studies (SNSS) of Global Center for Nuclear Energy Partnership (GCNEP) in the Village- Kheri Jassaur and Jassaur Khari Tehsil- Bahadurgarh Distt. Jhajjar (HR).


Global Center for Nuclear Energy Partnership (GCNEP), Village - Kheri Jassaur and Jassaur Khari Tehsil- Bahadurgarh Distt. Jhajjar (HR) has applied the subject cited above case for approval of fire fighting scheme of Educational Building of School of Nuclear Security Studies (SNSS) from fire safety point of view.

I have inspected the site and examined the fire fighting scheme in the above said building (Shown in plan and Questionnaire) and found that the building having Maximum Height of Building is 16.15 mtrs, Occupied Height is 13.15 mtrs and Total Plot Area is 522515.73 Sq. mtrs and Total plot Area of Education building is 7552.74 sq.mts and covered area of building is 2175.20 sqm. Proposed Fire Fighting scheme of the building as per National Building Code of India 1983 Part-IV Revised 2005 and type of occupancy group-B. Sub B-1(ii). Detail of Proposed fire fighting scheme as under:-

Sr.No	Installation norms as per NBC	Required	Proposed Installation of fire fighting scheme
1	Fire extinguishers	Yes	Yes
2	Hose Reel	Yes	Yes
3	Under ground water storage Tank	NA	Yes cap. 50 KL
4	Terrace water Tank	Yes	Yes cap.10 KL
5	Down Comer	Yes	Yes provided
6	Yard Hydrant	Yes	Yes
7	Pump	Yes	Terrace Pump 450 LPM

The Proposed part fire fighting scheme in the building were checked and found as per National Building Code of India 1983 Part-IV revised 2005. I recommending above said case for approval of part Fire Fighting scheme of Educational building so that permission of part Fire Fighting Scheme can be issued to the applicant.


Fire Station Officer,
Bahadurgarh (Jhajjar)


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.क.वि., भारत सरकार / D.A.E., Government of India
बाहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

46

From,

Fire Station Officer,
Bahadurgarh(Jhajjar)

To,

Director,
Haryana Fire Service,
Bays No.11-14, Sector-4,
Panchkula (Haryana)

No. 169/ASB

Dated 07-05-2015

Subject:- Approval of part fire fighting scheme Residential Building - Guest House Block A of Global Center for Nuclear Energy Partnership (GCNEP) in the Village-Kheri Jassaur and Jassaur Khari Tehsil- Bahadurgarh Distt. Jhajjar (HR).

Global Center for Nuclear Energy Partnership (GCNEP), Village - Kheri Jassaur and Jassaur Khari Tehsil- Bahadurgarh Distt. Jhajjar (HR) has applied the subject cited above case for approval of part fire fighting scheme of Residential Building for Guest House Block A from fire safety point of view.

I have inspected the site and examined the fire fighting scheme in the above said building (Shown in plan and Questionnaire) and found that the building having Maximum Height of Building is 10.7 mtrs, Occupied Height is 7.8 mtrs and Total Plot Area is 424021.48 Sq. mtrs and Total plot Area of Guest House Block A building is 7748.35 sq.mts and covered area of building is 1261.65 sqm. Proposed Fire Fighting scheme of the building as per National Building Code of India 1983 Part-IV Revised 2005 and type of occupancy group-A. Detail of Proposed fire fighting scheme as under:-

Sr. No	Installation norms as per NBC	Required	Proposed Installation of fire fighting scheme
1	Fire extinguishers	Yes	Yes
2	Hose Reel	Yes	Yes
3.	Terrace water Tank	Yes	Yes cap.10 KL
4.	Down Comer	Yes	Yes provided
5.	Internal Hydrant	Yes	Yes
6.	Pump	Yes	Terrace Pump 450 LPM

The Proposed part fire fighting scheme in the building were checked and found as per National Building Code of India 1983 Part-IV revised 2005. I recommending above said case for approval of part Fire Fighting scheme of Guest House Block A building so that permission of part Fire Fighting Scheme can be issued to the applicant.

Fire Station Officer,
Bahadurgarh (Jhajjar)

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
दैनिक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

From

Director,
Haryana Fire Service, Haryana,
Panchkula.

To

M/s Project Director,
Global Center for Nuclear Energy Partnership,
Department of Atomic Energy, Anushakti Bhawan,
CSM Marg, Mumbai.

Memo No. DFS/F.A./2015/ 340 /
Dated:

Sub : Approval of fire fighting scheme from the fire safety point of view of the Residential Building (Guest House) of Global Centre for Nuclear Energy Partnership (GCNEP) Township, village-Kheri Jasaur, Tehsil Bahadurgarh, Distt. Jhajjar (HR).

Reference on the subject cited above.

Your case for the approval of fire fighting scheme has been examined by the Fire Station Officer, Bahadurgarh. The Fire fighting scheme is found as per the N.B.C. 1983 Part IV revised 2005/ guidelines. Therefore, your proposed fire fighting scheme is hereby approved from the fire safety point of view with the following conditions:-

- 1) The proposed fire fighting scheme is approved as submitted in the building plan subject to the approval of building plan by the competent authority.
- 2) The approval of fire scheme by this office doesn't absolve the firm from his responsibility from all consequences, in case of fire due to any deficiencies or anything left out in the scheme submitted by you.
- 3) Overhead & underground water tanks provided for firefighting shall be so constructed in such a way that the domestic water tank shall filled from overflow of the fire Water tanks.
- 4) As soon as the installations of fire fighting arrangements are completed, the same may be got inspected/ tested and clearance should be obtained from this office.
- 5) If the infringement of Byelaws remains un-noticed the Authority reserves the right to amend the Plans/Fire Fighting Scheme as and when any such infringement comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
- 6) If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Chapter-III Section 31 Sub-Section 1 & 2 of Fire Act 2009 i.e. imprisonment for a term which may extend to three month or fine which may extend to five thousand rupees or both.
- 7) The staircase shall be made with the specified material enabling it non-slippery.
- 8) If the gap between ceiling and false ceiling is more than 800 mm then upright sprinkler above false ceiling & pendent sprinkler below false ceiling shall be installed in the building.
- 9) The builder/owner not submit any high rise case with single stair case in future and this case should not be quoted as a president in future.

SA
Fire Officer, HQ
for Director, Haryana Fire Service,
Panchkula.

Endst. No- DFS/F.A./2015/340/

69950

Dated

18/12/15

A copy is forwarded to the Fire Station Officer, Bahadurgarh with reference to his Memo No. 488/FSB, Dated 20.10.2015 for information and necessary action.

SA
Fire Officer, HQ
for Director, Haryana Fire Service,
Panchkula.

48

SA
श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

From

Director General,
Fire Service, Haryana,
Panchkula.

To

M/s Global Center for Nuclear Energy Partnership,
Village-Jasaur Kheri, Teh-Bahadurgarh,
Distt. Jhajjar.

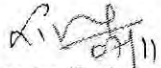
Memo No. DFS/Supdt/2017/751/ 82534
Dated: 2/11/17

Subject: Approval of fire fighting scheme from the fire safety point of view of the Assembly Building (Central Building) at village-Jasaur Kheri, The-Bahadurgarh, Distt. Jhajjar of M/s Global Center for Nuclear Energy Partnership.

Reference on the subject cited above.

Your case for the approval of fire fighting scheme has been examined as recommended by the Fire Station Officer, Bahadurgarh, Jhajjar. The Fire fighting scheme is found as per the N.B.C. 1983 Part IV revised 2005/ guidelines. Therefore, your proposed fire fighting scheme is hereby approved from the fire safety point of view with the following conditions:-

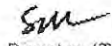
- 1) The proposed fire fighting scheme is approved as submitted in the building plan subject to the approval of building plan by the competent authority.
- 2) The approval of fire scheme by this office doesn't absolve the firm from his responsibility from all consequences, in case of fire due to any deficiencies or anything left out in the scheme submitted by you.
- 3) Overhead & underground water tanks provided for firefighting shall be so constructed in such a way that the domestic water tank shall filled from overflow of the fire Water tanks.
- 4) As soon as the installations of fire fighting arrangements are completed, the same may be got inspected/ tested and clearance should be obtained from this office.
- 5) If the infringement of Byelaws remains un-noticed the Authority reserves the right to amend the Plans/Fire Fighting Scheme as and when any such infringement comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
- 6) If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Chapter-III Section 31 Sub-Section 1 & 2 of Fire Act 2009 i.e. imprisonment for a term which may extend to three month or fine which may extend to five thousand rupees or both.
- 7) The staircase shall be made with the specified material enabling it non-slippery.
- 8) If the gap between ceiling and false ceiling is more than 800 mm then upright sprinkler and detectors above false ceiling & pendent sprinkler below false ceiling shall be installed in the building.



Deputy Director (Technical)-I,
for Director General, Haryana Fire Service,
Panchkula.

Endst. No- DFS/Supdt/2017/751/

Dated:

A copy is forwarded to the Fire Station Officer, Bahadurgarh, Jhajjar with reference to his Memo No. 390/FSB, dated 12.09.2016 for information and necessary action,


Deputy Director (Technical)-I,
for Director General, Haryana Fire Service,
Panchkula.


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
नैतिक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
ग.ऊ.दे., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

From

Director,
Haryana Fire Service, Haryana,
Panchkula.

To

M/s Project Director,
Global Center for Nuclear Energy Partnership,
Department of Atomic Energy, Anushakti Bhawan,
CSM Marg, Mumbai.

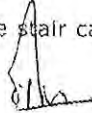
Memo No. DFS/F.A./2015/ 339 / 69973
Dated: 18/12/15

Sub : **Approval of fire fighting scheme from the fire safety point of view of the Educational Building (School for applications Radiosotopes & Radiation Technology Studies Building) of Global Centre for Nuclear Energy Partnership (GCNEP) Township, village-Kheri Jasaur, Tehsil Bahadurgarh, Distt. Jhajjar (HR) Part Scheme.**

Reference on the subject cited above.

Your case for the approval of fire fighting scheme has been examined by the Fire Station Officer, Bahadurgarh. The Fire fighting scheme is found as per the N.B.C. 1983 Part IV revised 2005/ guidelines. Therefore, your proposed fire fighting scheme is hereby approved from the fire safety point of view with the following conditions:-


- 1) The proposed fire fighting scheme is approved as submitted in the building plan subject to the approval of building plan by the competent authority.
- 2) The approval of fire scheme by this office doesn't absolve the firm from his responsibility from all consequences, in case of fire due to any deficiencies or anything left out in the scheme submitted by you.
- 3) Overhead & underground water tanks provided for firefighting shall be so constructed in such a way that the domestic water tank shall filled from overflow of the fire Water tanks.
- 4) As soon as the installations of fire fighting arrangements are completed, the same may be got inspected/ tested and clearance should be obtained from this office.
- 5) If the infringement of Byelaws remains un- noticed the Authority reserves the right to amend the Plans/Fire Fighting Scheme as and when any such infringement comes to notice after giving an opportunity of being heard and the Authority shall stand Indemnified against any claim on this account.
- 6) If you fail to comply with any of the above terms & conditions you will be liable to be punished as per Chapter-III Section 31 Sub-Section 1 & 2 of Fire Act 2009 i.e. imprisonment for a term which may extend to three month or fine which may extend to five thousand rupees or both.
- 7) The staircase shall be made with the specified material enabling it non-slippery.
- 8) If the gap between ceiling and false ceiling is more than 800 mm then upright sprinkler above false ceiling & pendent sprinkler below false ceiling shall be installed in the building.
- 9) The builder/owner not submit any high rise case with single stair case in future and this case should not be quoted as a president in future.


Fire Officer, HQ
for Director, Haryana Fire Service,
Panchkula


Endst. No- DFS/F.A./2015/339/

Dated

A copy is forwarded to the Fire Station Officer, Bahadurgarh with reference to his Memo No. 490/FSB, Dated 20.10.2015 for information and necessary action.


Fire Officer, HQ
for Director, Haryana Fire Service,
Panchkula.

50


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बाहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Ref: GCNEP / ~~12/13~~/01

Date: 26th December 2013

To
Project Director, GCNEP
Reactor Control Division,
Bhabha Atomic Research Centre
Mumbai.



Sub: *Construction of Institutional Campus and Residential Township for Global Centre for Nuclear Energy Partnership (GCNEP) at KheriJasaur and JasaurKheri village in the State of Haryana*


- Electric Supply for GCNEP Campus & Township

Ref: 1. Your letter dated 26.12.13 and Check list received from State Environment Impact Assessment Authority (SEIAA).

Dear Sir,

This is to assure you that the necessary Electricity supply shall be provided for, both the sites at KheriJasaur and Jasaur Kheri villages, for setting up GCNEP project



SDO HBVN,
Bahadurghar, Haryana
SDO S/O S/DIVN,
HBVN, Bahadurghar


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
गैरविद्युत नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurghar (Haryana) - 124507



Government of India
भारत सरकार

Phone: +912225595204

परमाणु ऊर्जा विभाग
Department of Atomic Energy
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र

GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP



Y. S. Mayya, OS

Project Director, GCNEP

Ref: GCNEP/Env/2016/102

Dated: 21/06/2016

Sub.: Environmental Clearance for Expansion of Institutional Campus and Residential Township project located at Village Kheri Jasaur and Jasaur Kheri, Bahadurgarh, Distt. Jhajjar, Haryana.

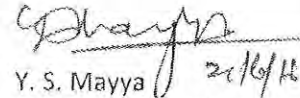
Reference: GCNEP/Env-Expansion/103 dated: 21.06.2016.

UNDERTAKING

We, Global Centre for Nuclear Energy Partnership (GCNEP), having our Project Directorate office at Reactor Control Division, Bhabha Atomic Research Centre Trombay, Mumbai-400085, and Transit Office at BSNL Tel Exchange Building, 2nd Floor, Bahadurgarh (Haryana) - 124507 do hereby solemnly affirm, declare and undertake as under:

We have proposed to Expansion of Institutional Campus and Residential Township located at Village Kheri Jasaur and Jasaur Kheri, Bahadurgarh, Distt. Jhajjar, Haryana PIN - 124505 and we submit an undertaking for the following:

- No activity relating to the Expansion of Institutional Campus and Residential Township project including civil construction further will be done without getting Environmental Clearance.
- That during the construction phase, no groundwater will be used, and water requirement during the construction phase will be met from the safe water zones only.
- That we will not encroach the revenue rasta passing through the project area shown in the zoning plan and layout plan.
- They will keep the ROW require for HT wire passing through the project area as per government instruction.
- That we will use ultra-low sulphur diesel (0.005%)
- That provision for helipad shall be made in case of the building having height more than 200 meter. Provision of atleast one hydraulic ladder for high rise building shall also be made.
- Infrastructure will not obstruct or divert the natural flow of water covered or open nallah, drainage of rainwater as per natural flow of water.


Y. S. Mayya

Project Director, GCNEP
BARC, Mumbai-400085

Project Directorate: GCNEP, Reactor Control Division, BARC, Mumbai - 400085, Phone: 022 25595176

Transit Office: GCNEP, BSNL Telephone Exchange, 2nd Floor, Bahadurgarh, Haryana - 124507, Phone: 01276-220700

Site Address: GCNEP, Village Kheri Jasaur, Bahadurgarh, Distt. Jhajjar, Haryana PIN - 124505, Phone: 01276 280701


श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

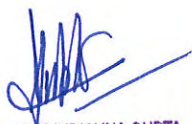
Site Barricade with High wall



श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Water Sprinkling at Site.




श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
ए.के.जे. भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507



LEGEND

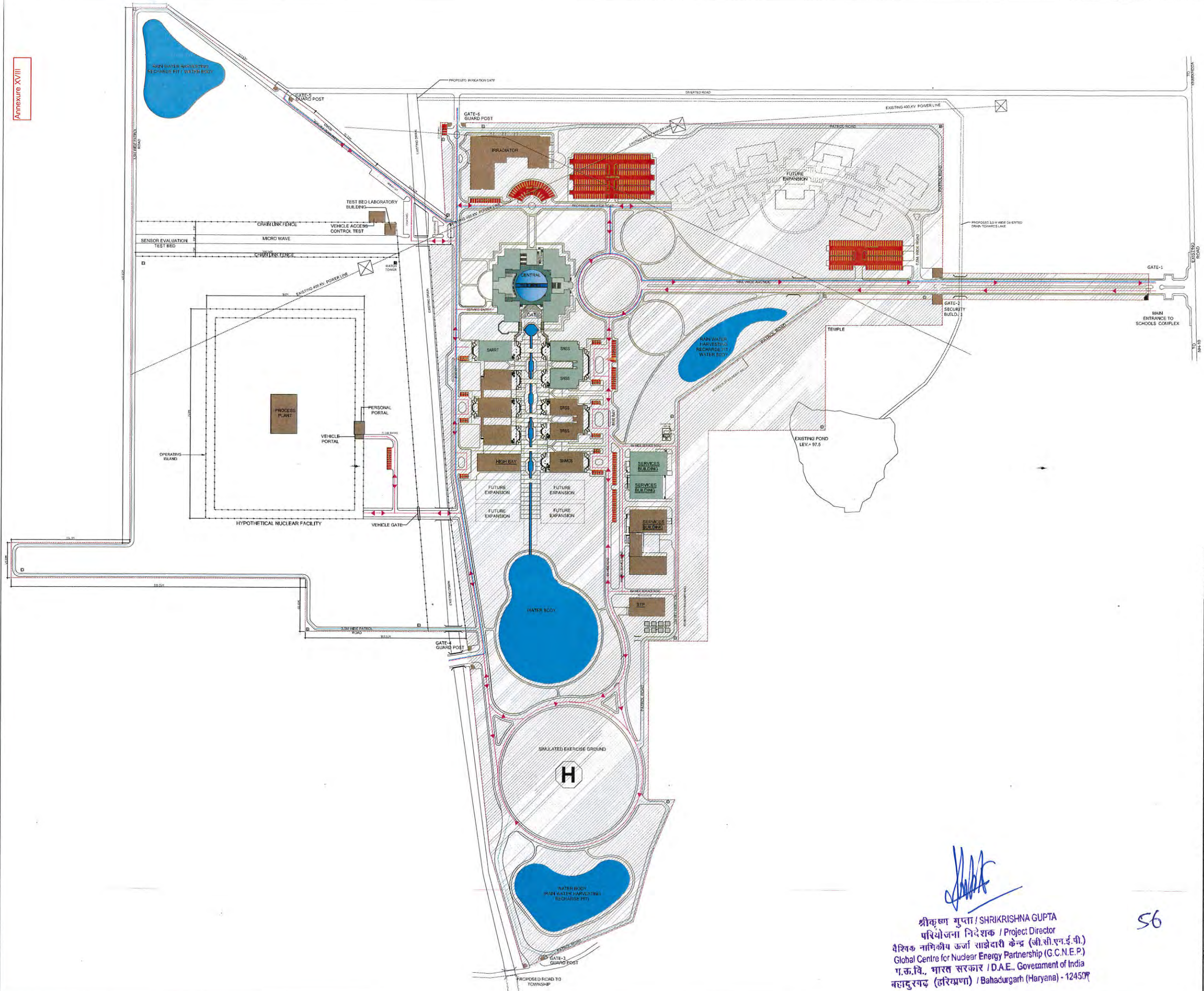
- [Green Box] BUILDING FOOTPRINT - EC ACCORDED
- [Brown Box] BUILDING FOOTPRINT - EXPANSION
- [Blue Box] WATER BODY
- [Green Box with Dotted Pattern] INTENSIVE LANDSCAPED AREA & LAWN
- [Green Box with Tree Symbols] TREE PLANTING & SHELTER BELT
- [Green Box with Shrub Symbols] SHRUBBERY
- [White Box with Dotted Pattern] PARKING AREAS
- [Line with Dashed] ROADS
- [Line with Solid] WALKWAYS
- [Line with Arrow] BIO SWALES
- [Line with Dotted] FUTURE EXPANSION
- [White Box with Border] EC ACCORDED

Sr. No.	Description of Areas	Required %	Provided Institutional Campus Overall	
			Area in SQM	%
1	Total Site Area	-	522626.68	-
2	Ground Coverage	-	29578	5.66
3	Green area under herbs, shrub, climbers lawns and park	5%	26200	5.01
4	(i) Tree plantation in Shelter belt along the boundary in three rows (ii) Avenue trees along the roads either in one or two rows	15% + 5%	104655	20.02
5	Rain water Harvesting and Water bodies in saucer shape	5%	29890	5.72
6	Area under Roads	-	40615	7.77
7	Area under Parking	-	11886	2.27
8	Area under Pavements	-	6500	1.24
9	Area under bicycle tracks	-	1200	0.23
10	Other Open Areas	-	272103	52.06
TOTAL (2+3+4+5+6+7+8+9+10)			522626.68	100.00

MRK/D	ISSUED	DESCRIPTION	DEALT	CHECKED	APPROVED
REVISIONS					
<p>THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD. AND IS ISSUED TO THE PARTY FOR THE SPECIFIC PURPOSE AS STATED IN THE AGREEMENT AND IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY OTHER PURPOSE OTHER THAN FOR WHICH IT IS FURNISHED.</p> <p style="text-align: right;">NORTH </p> <p>PROJECT GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP, BAHADURGARH, HARYANA G C N E P</p> <p>GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY DIRECTORATE OF CONSTRUCTION SERVICES AND ESTATE MANAGEMENT VIKRAM SARABHAI BHAVAN, ANUSHAKTINAGAR, MUMBAI - 400094</p> <p>ENVIRONMENTAL CONSULTANT GRASS ROOTS RESEARCH & CREATION INDIA (P) LTD. F-374-375, SECTOR-63, NOIDA, U.P.</p> <p style="text-align: center;">C A M P U S</p>					
PURPOSE	ENVIRONMENTAL CLEARANCE	ISSUED	JULY, 2017		
SCALE	1:2000 @A1	ARCHITECTURAL DRAWING			
DEALT	SD	CAMPUS MASTER PLAN			
CHECKED	SB				
APPROVED	JG	DRG. NO-47120260/GCNEP/EIA/C1	Rev. RO		
PROJECT DESIGN CONSULTANT CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD. 184, UDOYG VIHAR, PHASE I, GURGAON					

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बाहादुरगढ़ (हरियणणा) / Bahadurgarh (Haryana) - 124507

Annexure XVIII



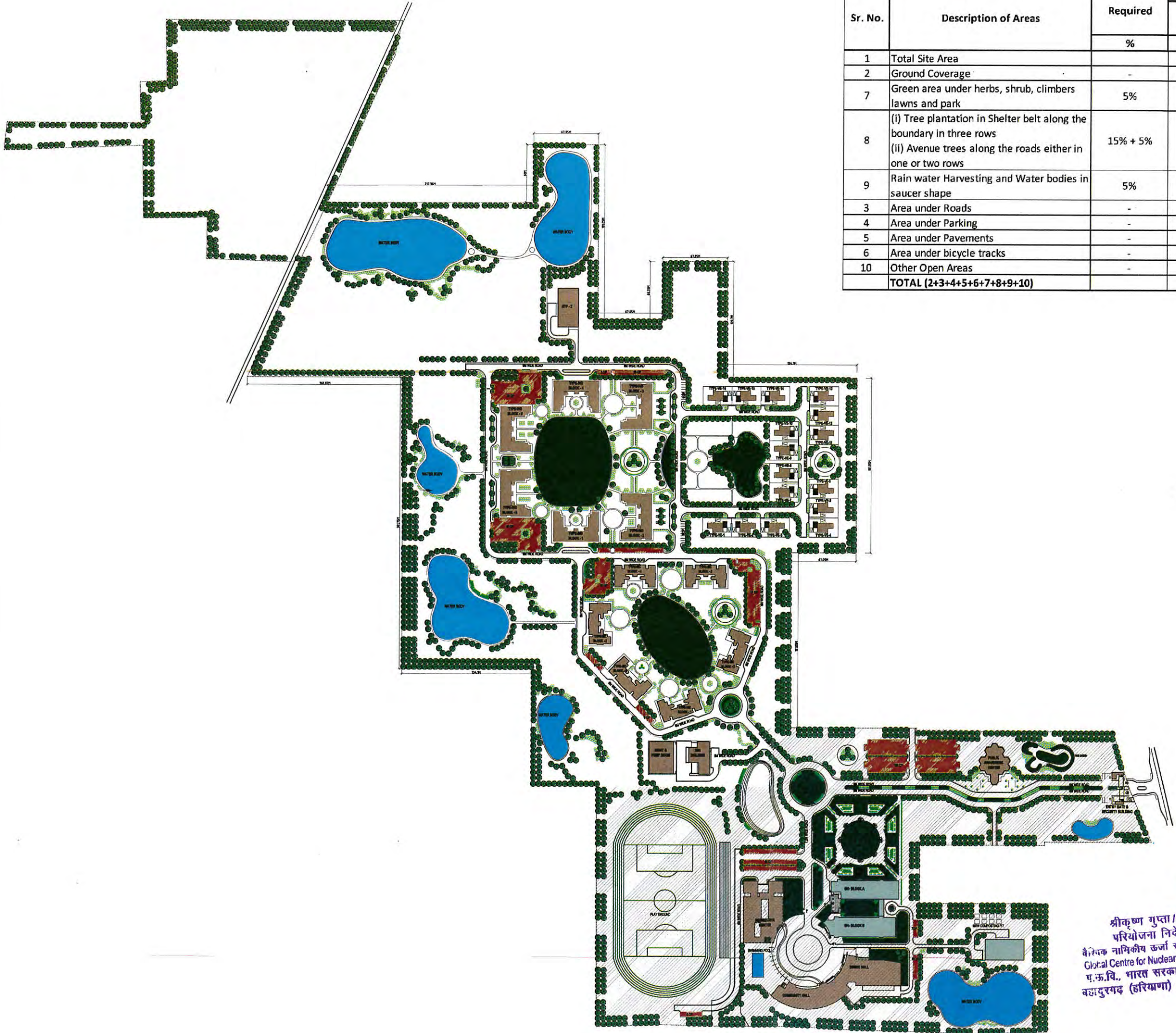
LEGEND

- BUILDING FOOTPRINT - EC ACCORDED
- BUILDING FOOTPRINT - EXPANSION
- WATER BODY
- ROADS
- WALKWAYS
- FUTURE EXPANSION
- EC ACCORDED
- PARKING AREA
- VEHICULAR MOVEMENT
- BI-CYCLE TRACKS
- PEDESTRIAN MOVEMENT
- PATROL ROAD

MKD.	ISSUED	DESCRIPTION	DEALT	CHECKED	APPROVED
REVISIONS					
THIS DRAWING HAS NOT BEEN PUBLISHED AND IS THE SOLE PROPERTY OF CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD. AND IS ISSUED TO THE PARTY FOR THE SPECIFIC PURPOSE AS STATED IN THE AGREEMENT AND IT SHALL NOT BE REPRODUCED, COPIED, LENT OR OTHERWISE DISPOSED OF DIRECTLY OR INDIRECTLY, NOR USED FOR ANY OTHER PURPOSE OTHER THAN FOR WHICH IT IS FURNISHED.					
NORTH 					
PROJECT					
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP, BAHADURGARH, HARYANA G C N E P					
GOVERNMENT OF INDIA DEPARTMENT OF ATOMIC ENERGY DIRECTORATE OF CONSTRUCTION SERVICES AND ESTATE MANAGEMENT VIKRAM SARABHAI BHAVAN, ANUSHAKTINAGAR, MUMBAI - 400094					
ENVIRONMENTAL CONSULTANT GRASS ROOTS RESEARCH & CREATION INDIA (P) LTD. F-374-375, SECTOR-63, NOIDA, U.P.					
C A M P U S					
PURPOSE	ENVIRONMENTAL CLEARANCE	ISSUED	JULY, 2017 JG		
SCALE	1:2000 @A1	ARCHITECTURAL DRAWING			
DEALT	SD	CAMPUS TRAFFIC CIRCULATION PLAN			
CHECKED	SB				
APPROVED	JG	DRG. NO- 47120260/GCNEP/EIA/C2	Rev. RO		
PROJECT DESIGN CONSULTANT CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD. 184, UDYOG VIHAR, PHASE I, GURGAON					

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
 परियोजना निदेशक / Project Director
 वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
 Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
 ग.ऊ.वि., भारत सरकार / D.A.E., Government of India
 बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124509

56



Sr. No.	Description of Areas	Required %	Provided	
			Residential Township	
			Area in SQM	%
1	Total Site Area	-	423973.70	-
2	Ground Coverage	-	23127	5.45
7	Green area under herbs, shrub, climbers lawns and park	5%	22354	5.27
8	(i) Tree plantation in Shelter belt along the boundary in three rows (ii) Avenue trees along the roads either in one or two rows	15% + 5%	85945	20.27
9	Rain water Harvesting and Water bodies in saucer shape	5%	25545	6.03
3	Area under Roads	-	28900	6.82
4	Area under Parking	-	13200	3.11
5	Area under Pavements	-	7500	1.77
6	Area under bicycle tracks	-	4800	1.13
10	Other Open Areas	-	212603	50.15
TOTAL (2+3+4+5+6+7+8+9+10)			423973.70	100.00

LEGEND

- BUILDING FOOTPRINT - EC ACCORDED
- BUILDING FOOTPRINT - EXPANSION
- WATER BODY
- INTENSIVE LANDSCAPED AREA & LAWN
- TREE PLANTING & SHELTER BELT
- SHRUBBERY
- PARKING AREAS
- ROADS
- WALKWAYS
- EC ACCORDED

MKD	ISSUED	DESCRIPTION	DEALT	CHECKED	APPROVED

REVISIONS

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NORTH

PROJECT
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP, BAHADURGARH, HARYANA
G C N E P

GOVERNMENT OF INDIA
 DEPARTMENT OF ATOMIC ENERGY
DIRECTORATE OF CONSTRUCTION SERVICES AND ESTATE MANAGEMENT
 VIKRAM SARABHAI BHAVAN, ANUSHAKTINAGAR, MUMBAI - 400094

ENVIRONMENTAL CONSULTANT
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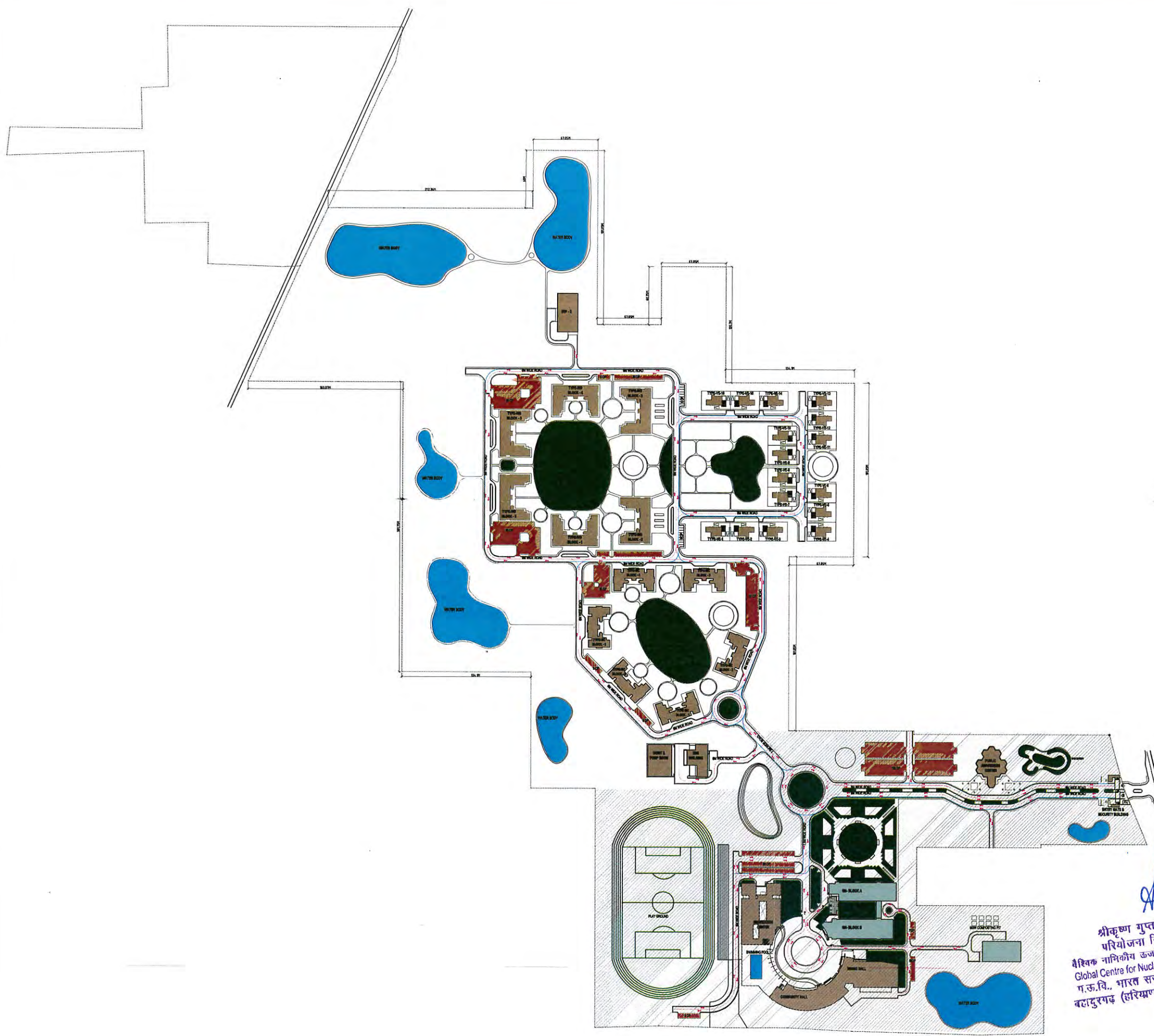
TOWNSHIP

PURPOSE	ENVIRONMENTAL CLEARANCE	ISSUED	JULY, 2017
SCALE	1:2000 @A1	ARCHITECTURAL DRAWING	
DEALT	SD	TOWNSHIP MASTER PLAN	
CHECKED	SB		
APPROVED	JG	DRG. NO- 47120260/GCNEP/EIA/C5	Rev. RO

PROJECT DESIGN CONSULTANT
CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD.
 184, UDYOG VIHAR, PHASE I, GURGAON

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 ए.ऊ.वि., भारत सरकार / D.A.E., Government of India
 बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

57



LEGEND

- BUILDING FOOTPRINT - EC ACCORDED
- BUILDING FOOTPRINT - EXPANSION
- WATER BODY
- ROAD
- WALKWAYS
- EC ACCORDED
- PARKING AREA
- VEHICULAR MOVEMENT
- BI-CYCLE TRACKS
- PEDESTRIAN MOVEMENT

MKD.	ISSUED	DESCRIPTION	DEALT	CHECKED	APPROVED

REVISIONS

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PROJECT
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP, BAHADURGARH, HARYANA
G C N E P

GOVERNMENT OF INDIA
 DEPARTMENT OF ATOMIC ENERGY
DIRECTORATE OF CONSTRUCTION SERVICES AND ESTATE MANAGEMENT
 VIKRAM SARABHAI BHAVAN, ANUSHAKTINAGAR, MUMBAI - 400094

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 F-374-375, SECTOR-63, NOIDA, U.P.

TOWNSHIP

PURPOSE	ENVIRONMENTAL CLEARANCE	ISSUED	JULY, 2017
SCALE	1:2000 @A1	ARCHITECTURAL DRAWING	
DEALT	SD	TOWNSHIP TRAFFIC CIRCULATION PLAN	
CHECKED	SB		
APPROVED	JG	DRG. NO- 47120260/GCNEP/EIA/C6	Rev. RO

PROJECT DESIGN CONSULTANT
CONSULTING ENGINEERING SERVICES (INDIA) PVT. LTD.
 184, UDYOG VIHAR, PHASE I, GURGAON

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
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 बहादुरगढ़ (हरियाना) / Bahadurgarh (Haryana) - 124507

58



GOVERNMENT OF INDIA
DEPARTMENT OF ATOMIC ENERGY
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP
Jasaur-Kheri, Bahadurgarh, District Jhajjar, Haryana-124505



Annexure-XIX

Advt. No.: GCNEP/Advt/18/04-43

PUBLIC NOTICE

Annexure XIX

Global Centre for Nuclear Energy Partnership (GCNEP), Government of India, Department of Atomic Energy (DAE), has obtained Environmental Clearance for expansion of Institutional campus and Residential Township project located at Village Kheri Jasaur and Jasaur Kheri, Bahadurgarh, District Jhajjar, Haryana, from Haryana State Environment Impact Assessment Authority (SEIAA), Panchkula (Haryana) vide their reference file No. SEIAA/HR/2018/231 dated: 04.04.2018.

The clearance covers construction (Existing and expansion) on a plot area of 946600.38 sqm (94.66 Hectare = 522626.68 sqm for Institutional campus+ 423973.7 sqm for Residential Township). The total built up area shall be 92979 sqm (47154 sqm institutional campus + 45825 sqm residential township). The project shall comprise of Institutional Campus and residential township having Auditorium, conference room, Canteen, E-class, Lecture room, Labs, recreation centre, dining, Guest House & Residential housing. The project shall be constructed on a land area of 522626.68 sqm in village Kheri Jasaur and a land area of 423973.7 sqm in village Jasaur Kheri, Bahadurgarh, District Jhajjar, Haryana. In this respect, copies of Clearance letter are available with the Haryana State Pollution Control Board & Haryana State Environment Impact Assessment Authority and may also be seen at their Website at <http://www.seiaahry.in> and GCNEP Website <http://www.gcnep.gov.in>. (This is published as a statutory requirement of above cited SEIAA clearance).

-Project Director, GCNEP.

8x8 cm



भारत सरकार
परमाणु ऊर्जा विभाग
वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र
जासौर-खेड़ी, बहादुरगढ़, जिला झज्जर, हरियाणा - 124505



विज्ञापन संख्या : जी.सी.एन.ई.पी./विज्ञापन/18/04-43

वेबसाइट: www.gcnep.gov.in

सार्वजनिक सूचना

वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी. - ग्लोबल सेंटर फॉर न्यूक्लियर एनर्जी पार्टनरशिप), भारत सरकार, परमाणु ऊर्जा विभाग (डी.ए.ई.) को गांव जासौर खेड़ी एवं गांव खेड़ी जासौर, तहसील बहादुरगढ़, जिला झज्जर (हरियाणा) में संस्थागत एवं आवासीय परिसर के विस्तार निर्माण हेतु हरियाणा राज्य पर्यावरण प्रभाव आकलन प्राधिकरण (SEIAA पंचकूला ने, उनके संप्रषण क्रमांक. SEIAA/HR/2018/231 dated: तिथि: 04.04.2018, के द्वारा, स्वीकृति प्रदान की है।

यह स्वीकृति 946600.38 वर्ग मीटर (94.66 हेक्टर = 522626.68 वर्ग मीटर संस्थागत + 423973.7 वर्ग मीटर आवासीय) में निर्माण हेतु दी गयी है। कुल निर्मित क्षेत्र 92979 वर्ग मीटर (47154 वर्ग मीटर संस्थागत + 45825 वर्ग मीटर आवासीय) होगा। परियोजना के अंतर्गत इंस्टीट्यूशनल कैम्पस और आवासीय टाउनशिप शामिल है, जिसमें ऑडिटोरियम, सम्मेलन कक्ष, कैटीन, ईक्लास, व्याख्यान कक्ष, लैब्स, मनोरंजन केंद्र, भोजन कक्ष, गेस्ट हाउस और आवासीय आवास शामिल है। परियोजना के अंतर्गत गांव खेड़ी जासौर में 522626.68 वर्ग मीटर एवं गांव जासौर खेड़ी में 423973.7 वर्ग मीटर निर्माण होगा।

इस संदर्भ में स्वीकृति पत्र हरियाणा राज्य प्रदूषण नियंत्रण बोर्ड और हरियाणा राज्य पर्यावरण प्रभाव आकलन प्राधिकरण (SEIAA) के पास उपलब्ध है। यह जानकारी उनकी वेबसाइट at <http://www.seiaahry.in> तथा जी.सी.एन.ई.पी. की वेबसाइट <http://www.gcnep.gov.in> पर भी उपलब्ध है। यह सूचना इस स्वीकृति से जुड़ी वैधानिक आवश्यकता के तहत दी जा रही है।

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director

59

--परियोजना निदेशक, जी. सी. एन. ई. पी.

वैश्विक नाभिकीय ऊर्जा साझेदारी केंद्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507

Hindi 8x8 cm

STATE ENVIRONMENT IMPACT ASSESSMENT AUTHORITY HARYANA
Bay No. 55-58, Prayatan Bhawan, Sector-2, PANCHKULA.

No. SEIAA/HR/2018/231

Dated: 04-04-2018

To

The Project Director,
GCNEP, Department of Atomic Energy,
Government of India, Reactor Control Division,
Bhabha Atomic Research Centre,
Trombay, Mumbai-400085

Subject: Environment Clearance for expansion of Institutional campus and Residential Township project located at Village Kheri Jasaur and Jasaur Kheri, Bahadurgarh, Distt. Jhajjar, Haryana.

Dear Sir,

This letter is in reference to your application no. GCNEP/ENV-expansion/2016/103 dated 21.06.2016 addressed to M.S. SEIAA, Haryana received on 10.08.2016 and subsequent letters dated 12.09.2017, 03.11.2017 and 24.01.2018 seeking prior Environmental Clearance for the above project under the EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under the EIA Notification, 2006 on the basis of the mandatory documents enclosed with the application viz., Form-1, Form1-A, Conceptual Plan, EIA/EMP on the basis of approved TOR and additional clarifications furnished in response to the observations of the State Expert Appraisal Committee (SEAC) constituted by MOEF, GOI vide their Notification 23.3.2012, in its meetings held on 27.10.2016, 16.10.2017, 29.11.2017 and 15.02.2018 awarded "Gold" grading to the project.

[2] It is inter-alia, noted that the project involves the expansion of Institutional campus and Residential Township project located at Village Kheri Jasaur and Jasaur Kheri, Bahadurgarh, Distt. Jhajjar, Haryana with the proposal as given under:

Sr. no.	Particulars	Existing + Expansion
1	Plot Area	946600.38 sqm 94.66 Hectare (Institutional Campus 522626.68 sqm + Residential Township 423973.7 sqm)
2	Built-up Area	92979 sqm (Institutional Campus 47154 sqm + Residential Township 45825 sqm)
3	No. of Towers	Auditorium, conference room, canteen, E-class, Lecture room, Labs, Recreational Centre & Dinning, Guest House and Residential Housing
4	Height	12.55 meter
5	Green Area	Institutional Campus 30.75% Residential Township 31.57%
6	Total Water Requirement	1087.25 KLD
7	Fresh Water	242.25 KLD
8	Waste Water	224.7 KLD
9	STP Capacity	267 KLD
10	Power Requirement	6700 KVA UHBVN (5000 KVA for Institute Campus & 1700 KVA

60

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
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वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
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		for Residential Township)
11	Solid Waste	770 kg/day for Residential Township 522 Kg/day for Institutional Campus
12	RWH	50 pits
13	Parking	1068 ECS

[3] The State Expert Appraisal Committee, Haryana after due consideration of the relevant documents submitted by the project proponent and additional clarification furnished in response to its observations, have recommended the grant of environmental clearance for the project mentioned above, subject to compliance with the stipulated conditions. Accordingly, the State Environment Impact Assessment Authority in its meeting held on 21.03.2018 decided to agree with the recommendations of SEAC to accord necessary environmental clearance for the project under Category 8(b) of EIA Notification 2006 subject to the strict compliance with the specific and general conditions mentioned below:-

PART A:-
SPECIFIC CONDITIONS:-
Construction Phase:-

- [1] "Consent for Establish" shall be obtained from Haryana State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Haryana before the start of any construction work at site.
- [2] A first aid room as proposed in the project report shall be provided both during construction and operational phase of the project.
- [3] Adequate drinking water and sanitary facilities shall be provided for construction workers at the site. Provision should be made for mobile toilets. Open defecation by the labourers is strictly prohibited. The safe disposal of waste water and solid wastes generated during the construction phase should be ensured.
- [4] All the topsoil excavated during construction activities shall be stored for use in horticulture/landscape development within the project site.
- [5] The project proponent shall ensure that the building material required during construction phase is properly stored within the project area and disposal of construction waste should not create any adverse effect on the neighboring communities and should be disposed of after taking necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- [6] 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 and any hazardous waste generated during construction phase, should be disposed off as per applicable rules and norms with necessary approval of the Haryana Pollution Control Board.

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- [7] The diesel generator sets to be used during construction phase shall be of ultra low sulphur diesel type and should conform to Environment (Protection) Rules prescribed for air and noise emission standards.
- [8] The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from Chief Controller of Explosives shall be taken.
- [9] Ambient noise levels shall conform to the residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be taken to reduce ambient air pollution and noise level during construction phase, so as to conform to the stipulated residential standards of CPCB/MoEF.
- [10] Fly ash shall be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and as amended on 27th August 2003.
- [11] Storm water control and its re-use as per CGWB and BIS standards for various applications should be ensured.
- [12] Water demand during construction shall be reduced by use of pre-mixed concrete, curing agents and other best practices.
- [13] Roof must meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material.
- [14] Opaque wall must meet prescriptive requirement as per Energy Conservation Building Code which is proposed to be mandatory for all air conditioned spaces while it is desirable for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
- [15] The approval of the competent authority shall be obtained for structural safety of the building on account of earthquake, adequacy of fire fighting equipments, etc. as per National Building Code including protection measures from lightening etc. If any forest land is involved in the proposed site, clearance under Forest Conservation Act shall be obtained from the competent Authority.
- [16] The Project Proponent as stated in proposal shall construct 50 nos. rain water harvesting pits for recharging the ground water within the project premises. Rain water harvesting pits shall be designed to make provisions for silting chamber and removal of floating matter before entering harvesting pit. Maintenance budget and persons responsible for maintenance must be provided. Care shall also be taken that contaminated water do not enter any RWH pit.
- [17] The project proponent shall provide for adequate fire safety measures and equipments as required by Haryana Fire Service Act, 2009 and instructions issued by the local Authority/Directorate of fire from time to time. Further the project proponent shall take necessary permission regarding fire safety scheme NOC from competent Authority as required.

62

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
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- [18] The Project Proponent shall obtain assurance from the UHBVN for supply of 6700 KVA (5000 KVA for Institute Campus & 1700 KVA for Residential Township) of power supply before the start of construction. In no case project will be operational solely on generators without any power supply from any external power utility.
- [19] Detail calculation of power load and ultimate power load of the project shall be submitted to UHBVN under intimation to SEIAA Haryana before the start of construction. Provisions shall be made for electrical infrastructure in the project area.
- [20] The Project Proponent shall not raise any construction in the natural land depression / Nallah/water course and shall ensure that the natural flow from the Nallah/water course is not obstructed.
- [21] The Project Proponent shall keep the plinth level of the building blocks sufficiently above the level of the approach road to the Project. Levels of the other areas in the Projects shall also be kept suitably so as to avoid flooding.
- [22] Construction shall be carried out so that density of population does not exceed norms approved by Director General Town and Country Department Haryana.
- [23] The Project Proponent shall submit an affidavit with the declaration that ground water will not be used for construction and only treated water should be used for construction.
- [24] The project proponent shall not cut any existing tree and project landscaping plan should be modified to include those trees in green area.
- [25] The project proponent shall ensure that ECBC norms for composite climate zone are met. In particular building envelope, HVAC service, water heating, pumping, lighting and electrical infrastructure must meet ECBC norms.
- [26] The Project Proponent shall provide 3 meter high barricade around the project area, dust screen for every floor above the ground, proper sprinkling and covering of stored material to restrict dust and air pollution during construction.
- [27] The project proponent shall construct a sedimentation basin in the lower level of the project site to trap pollutant and other wastes during rains.
- [28] The project proponent shall provide proper rasta of proper width and proper strength for the project before the start of construction.
- [29] The project proponent shall ensure that the U-value of the glass is less than 3.177 and maximum solar heat gain co-efficient is 0.25 for vertical fenestration.
- [30] The project proponent shall adequately control construction dusts like silica dust, non-silica dust and wood dust. Such dusts shall not spread outside project premises. Project Proponent shall provide respiratory protective equipment to all construction workers.

- [31] The project proponent shall provide fire control room and fire officer for building above 30 meter as per National Building Code.
- [32] The project proponent shall obtain permission of Mines and Geology Department for excavation of soil before the start of construction.
- [33] The project proponent shall seek specific prior approval from concerned local Authority/HUDA regarding provision of storm drainage and sewerage system including their integration with external services of HUDA/ Local authorities beside other required services before taking up any construction activity.
- [34] The site for solid waste management plant be earmarked on the layout plan and the detailed project for setting up the solid waste management plant shall be submitted to the Authority within one month.
- [35] The project proponent shall discharge excess of treated waste water/storm water in the public drainage system and shall seek permission of HUDA before the start of construction.
- [36] The project proponent shall ensure that structural stability to withstand earthquake of magnitude 8.5 on Richter scale.

Operational Phase:

- [a] "Consent to Operate" shall be obtained from Haryana State Pollution Control Board under Air and Water Act and a copy shall be submitted to the SEIAA, Haryana.
- [b] The Sewage Treatment Plant (STP) shall be installed for the treatment of the sewage to the prescribed standards including odour and treated effluent will be recycled to achieve zero exit discharge. The installation of STP shall be certified by an independent expert and a report in this regard shall be submitted to the SEIAA, Haryana before the project is commissioned for operation. Tertiary treatment of waste water is mandatory. The project proponent shall remove not only Ortho-Phosphorus but total Phosphorus to the extent of less than 2mg/liter. Similarly total Nitrogen level shall be less than 2mg/liter in tertiary treated waste water. Discharge of treated sewage shall conform to the norms and standards of CPCB/ HSPCB, whichever is environmentally better. Project Proponent shall implement such STP technology which does not require filter backwash. The project proponent shall essentially provide STP preferably equivalent to 50% of total capacity or as per the initial occupancy as the case may be.
- [c] Separation of the grey and black water should be done by the use of dual plumbing line. Treatment of 100% grey water by decentralized treatment should be done ensuring that the re-circulated water should have BOD level less than 5 mg/litre and the recycled water will be used for flushing, gardening and DG set cooling/etc.
- [d] For disinfection of the treated wastewater ultra-violet radiation or ozonation process should be used.

64

- [e] Diesel power generating sets proposed as source of back-up power for lifts, common area illumination and for domestic use should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The location of the DG sets shall be in the basement as promised by the project proponent with appropriate stack height above the highest roof level of the project as per the CPCB norms. The diesel used for DG sets shall be ultra low sulphur diesel (35 ppm sulphur), instead of low sulphur diesel.
- [f] Ambient Noise level should be controlled to ensure that it does not exceed the prescribed standards both within and at the boundary of the Proposed Institutional Campus & Residential Township.
- [g] The project proponent as stated in the proposal shall maintain at least 30.75% for the Institutional Campus and 31.57% for Residential Township as green cover area for tree plantation especially all around the periphery of the project and on the road sides preferably with local species which can provide protection against noise and suspended particulate matter. The open spaces inside the project shall be preferably landscaped and covered with vegetation/grass, herbs & shrubs. Only locally available plant species shall be used.
- [h] The project proponent shall strive to minimize water in irrigation of landscape by minimizing grass area, using native variety, xeriscaping and mulching, utilizing efficient irrigation system, scheduling irrigation only after checking evapo-transpiration data.
- [i] The ground water level and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- [j] A report on the energy conservation measures conforming to energy conservation norms finalized by Bureau of Energy Efficiency should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the SEIAA, Haryana in three months time.
- [k] Energy conservation measures like installation of LED only for lighting the areas outside the building and inside the building should be integral part of the project design and should be in place before project commissioning. Use of solar panels must be adapted to the maximum energy conservation.
- [l] The Project Proponent shall use zero ozone depleting potential material in insulation, refrigeration, air-conditioning and adhesive. Project Proponent shall also provide halon free fire suppression system.
- [m] The solid waste generated should be properly collected and segregated as per the requirement of the MSW Rules, 2000 and as amended from time to time. The bio-degradable waste should be treated by appropriate technology at the site ear-marked within the project area and dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

- [n] The provision of the solar water heating system shall be as per norms specified by HAREDA and shall be made operational in each building block.
- [o] The traffic plan and the parking plan proposed by the Project Proponent should be meticulously adhered to with further scope of additional parking for future requirement. There should be no traffic congestion near the entry and exit points from the roads adjoining the proposed project site. Parking should be fully internalized and no public space should be used.
- [p] The Project shall be operationalized only when HUDA/local authority will provide domestic water supply system in the area.
- [q] Operation and maintenance of STP, solid waste management and electrical Infrastructure, pollution control measures shall be ensured even after the completion of project.
- [r] Different type of wastes should be disposed off as per provisions of municipal solid waste, biomedical waste, hazardous waste, e-waste, batteries & plastic rules made under Environment Protection Act, 1986. Particularly E-waste and Battery waste shall be disposed of as per existing E-waste Management Rules 2011 and Batteries Management Rules 2001. The project proponent shall maintain a collection center for E-waste and it shall be disposed of to only registered and authorized dismantler / recycler as per existing E-waste Management Rules 2011.
- [s] Standards for discharge of environmental pollutants as enshrined in various schedules of rule 3 of Environment Protection Rule 1986 shall be strictly complied with.
- [t] The project proponent shall make provision for guard pond and other provisions for safety against failure in the operation of wastewater treatment facilities. The project proponent shall also identify acceptable outfall for treated effluent.
- [u] The project proponent shall ensure that the stack height of DG sets is as per the CPCB guide lines and also ensure that the emission standards of noise and air are within the CPCB latest prescribed limits. Noise and Emission level of DG sets greater than 800 KVA shall be as per CPCB latest standards for high capacity DG sets.
- [v] All electric supply exceeding 100 amp, 3 phase shall maintain the power factor between 0.98 lag to 1 at the point of connection.
- [w] The project proponent shall minimize heat island effect through shading and reflective or pervious surface instead of hard surface.
- [x] The project proponent shall not use fresh water for HVAC and DG cooling. Air based HVAC system should be adopted and only treated water shall be used by project proponent for cooling, if it is at all needed. The Project Proponent shall also use evaporative cooling technology and double stage cooling system for HVAC in order to reduce water consumption. Further temperature, relative

humidity during summer and winter seasons should be kept at optimal level. Variable speed drive, best Co-efficient of Performance (CoP), as well as optimal Integrated Point Load Value and minimum outside fresh air supply may be resorted for conservation of power and water. Coil type cooling DG Sets shall be used for saving cooling water consumption for water cooled DG Sets.

- [y] The project proponent shall ensure that the transformer is constructed with high quality grain oriented, low loss silicon steel and virgin electrolyte grade copper. The project proponent shall obtain manufacturer's certificate also for that.
- [z] Water supply shall be metered among different users and different utilities.
- [aa] The project proponent shall ensure that exit velocity from the stack should be sufficiently high. Stack shall be designed in such a way that there is no stack down-wash under any meteorological conditions.
- [ab] The project proponent shall provide water sprinkling system in the project area to suppress the dust in addition to the already suggested mitigation measures in the Air Environment Chapter of EMP.
- [ac] The project proponent shall provide additional green area on terrace and roof top.
- [ad] The project proponent shall ensure proper Air Ventilation and light system in the basements area for comfortable living of human being and shall ensure that number of Air Changes per hour/(ACH) in basement never falls below 15. In case of emergency capacity for increasing ACH to the extent of 30 must be provided by the project proponent.
- [ae] The project proponent shall install solar panel for energy conservation.

PART-B. GENERAL CONDITIONS:

- [i] The Project Proponent shall ensure the commitments made in Form-1, Form-1A, EIA/EMP and other documents submitted to the SEIAA for the protection of environment and proposed environmental safeguards are complied with in letter and spirit. In case of contradiction between two or more documents on any point, the most environmentally friendly commitment on the point shall be taken as commitment by project proponent.
- [ii] The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the northern Regional Office of MoEF, the respective Zonal Office of CPCB, HSPCB and SEIAA Haryana.
- [iii] STP outlet after stabilization and stack emission shall be monitored monthly. Other environmental parameters and green belt shall be monitored on quarterly basis. After every 3 (three) months, the project proponent shall conduct environmental audit and shall take corrective measure, if required, without delay.
- [iv] The SEIAA, Haryana reserves the right to add additional safeguard measures subsequently, if found necessary. Environmental Clearance granted will be -

revoked if it is found that false information has been given for getting approval of this project. SEIAA reserves the right to revoke the clearance if conditions stipulated are not implemented to the satisfaction of SEIAA/MoEF.

- [v] The Project proponent shall not violate any judicial orders/pronouncements issued by any Court/Tribunal.
- [vi] All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department, Forest Conservation Act, 1980 and Wildlife (Protection) Act, 1972, Forest Act, 1927, PLPA 1900, etc. shall be obtained, as applicable by project proponents from the respective authorities prior to construction of the project.
- [vii] The Project proponent should inform the public that the project has been accorded Environment Clearance by the SEIAA and copies of the clearance letter are available with the Haryana State Pollution Control Board & SEIAA. This should be advertised within 7 days from the date of issue of the clearance letter at least in two local newspapers that are widely circulated in the region and the copy of the same should be forwarded to SEIAA Haryana. A copy of Environment Clearance conditions shall also be put on project proponent's web site for public awareness.
- [viii] Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the Project Proponent if it was found that construction of the expansion project has been started before obtaining prior Environmental Clearance.
- [ix] Any appeal against the this Environmental Clearance 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.
- [x] The project proponent shall put in place Corporate Environment Policy as mentioned in MoEF, GoI OM No. J-11013/41/2006-IA II (I) dated 26.4.2012 within 3 months period. Latest Corporate Environment Policy should be submitted to SEIAA within 3 months of issuance of this letter.
- [xi] The fund ear-marked for environment protection measures should be kept in separate account and should not be diverted for other purposes and year wise expenditure shall be reported to the SEIAA/RO MoEF, GoI under rules prescribed for Environment Audit.
- [xii] The project proponent shall ensure the compliance of Forest Department, Haryana Notification no. S.O.121/PA2/1900/S.4/97 dated 28.11.1997.
- [xiii] The Project Proponent shall ensure that no vehicle during construction/operation phase enter the project premises without valid 'Pollution Under Control' certificate from competent Authority.
- [xiv] The project proponent shall seek fresh Environmental clearance if at any stage there is change in the planning of the proposed project.

68

- [xv] Nodal Officer (Project Director) nominated by GCNEP shall be responsible for implementation of all conditions of Environmental Clearance letter.
- [xvi] The proponent shall upload the status of compliance of the stipulated EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB. The criteria pollutant levels namely; PM_{2.5}, PM₁₀, SO_x, NO_x, Ozone, Lead, CO, Benzene, Ammonia, Benzopyrine, arsenic and Nickel. (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.
- [xvii] The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the HSPCB Panchkula as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of the EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- [xviii] The project proponent shall conduct environment audit at every three months interval and thereafter corrected measures shall be taken without any delay. Details of environmental audit and corrective measures shall be submitted in the monitoring report.
- [xix] The validity of this environment clearance letter is valid up to 7 years from the date of issuance of EC letter. The environment clearance conditions applicable till life space project in case of Residential project will continue to apply. The resident welfare association/Housing co-operative societies shall responsible to comply conditions laid down in EC. In case of violation the action would be taken as per the laid down law of land. Compliance report should be sent to this office till life of the project.
- [xx] If project is not completed within the validity period then the project proponent shall submit the application for extension of validity within one month before the lapse of validity period of Environment Clearance i.e. 7 years.

**Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula.**

Endst. No. SEIAA/HR/2018

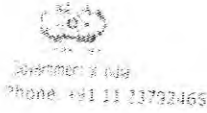
Dated:.....

A copy of the above is forwarded to the following:

1. The Additional Director (IA Division), MOEF, GOI, Indra Paryavaran Bhavan, Zor bagh Road-New Delhi.
2. The Regional office, Ministry of Environment & Forests, Govt. of India, Sector 31, Chandigarh.
3. The Chairman, Haryana State Pollution Control Board, Pkl.

**Member Secretary,
State Level Environment Impact
Assessment Authority, Haryana, Panchkula**

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.क.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507



Department of Atomic Energy
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP

Ref: GCNEP/MoEF/2018/07-42

Dated: 16/07/2018

To,

The Advisor,
Regional Office,
Ministry of Environment, Forest and Climate Change (Northern Region)
Bays No: 24-25, Sector-31 A,
Dakshin Marg, Chandigarh-160030

Sub: Half-Yearly Compliance Report (Session: Jan 2018 to June 2018) of the stipulated Environmental conditions/safeguards in the Environmental clearance Letter and Environmental Monitoring Report of Institutional Campus and Residential Township for Global Centre For Nuclear Energy Partnership (GCNEP) at Village-Kheri Jasaur and Jasaur Kheri, District - Jhajjar, Haryana by GCNEP

Ref: Environmental Clearance No. SEIAA/HR/2014/1385 dated 7th November, 2014.

Dear Sir,

This has reference to the above mentioned Environmental Clearance No. SEIAA/HR/2014/1385 dated 7th November, 2014 in which we have been asked to submit the compliance with the specific and general conditions of the same.

In view of above, we are approaching you by submitting a copy of the following information/ documents for your kind perusal:

1. Point-wise compliance of the stipulated environmental conditions/ safeguards
2. Environmental monitoring report, along with necessary documents & annexures.

We fully assure you that we will comply with all conditions as specified in the Environment clearance granted to us.

Thanking you,
Yours Sincerely,

A Sharma

Anupam Sharma
Outstanding Scientist
Project Director, GCNEP
145A, South Block, New Delhi - 110011
Email: pd@gcneep.gov.in

अनुपम शर्मा / ANUPAM SHARMA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
Global Centre for Nuclear Energy Partnership (G.C.N.E.P.)
प.ऊ.वि., भारत सरकार / D.A.E., Government of India
बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana)-124507

- CC: 1. The Member Secretary, Haryana State Pollution Control Board, Panchkula, Haryana.
2. The Member Secretary SEIAA, Bay No. 55-58, Parytan Bhawan 1st Floor, Sector-2, Panchkula, Haryana.

Project Directorate: 145-A, South Block, New Delhi-110011 Phone: 011 23014587
Site Address: GCNEP, Village Kheri Jasaur, Bahadurgarh, Distt. Jhajjar, Haryana PIN - 124505, Tel: 01270-240000

श्रीकृष्ण गुप्ता / SHRIKRISHNA GUPTA
परियोजना निदेशक / Project Director
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र (जी.सी.एन.ई.पी.)
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बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana)- 124507

2/7/18
Haryana State Pollution Control Board
C-11, Sector-6, Panchkula

70



Government of India
Phone: +91 11 23792465

Department of Atomic Energy
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र
GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP



Ref: GCNEP/MoEF/2018/07-42

Dated: ~~15/07/2018~~ 8/8/2018

To,

The Advisor,
Regional Office,
Ministry of Environment, Forest and Climate Change (Northern Region)
Bays No: 24-25, Sector-31 A,
Dakshin Marg, Chandigarh-160030

Sub: Half-Yearly Compliance Report (Session: Jan 2018 to June 2018) of the stipulated Environment conditions/safeguards in the Environmental clearance Letter and Environmental Monitoring Report of Institutional Campus and Residential Township for Global Centre For Nuclear Energy Partnership (GCNEP) at Village-Kheri Jasaur and Jasaur Kheri, District - Jhajjar, Haryana by GCNEP

Ref: Environmental Clearance No. SEIAA/HR/2014/1385 dated 7th November, 2014.

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We fully assure you that we will comply with all conditions as specified in the Environment clearance granted to us.

Thanking you,
Yours Sincerely,

Anupam Sharma
Outstanding Scientist
Project Director, GCNEP
145A, South Block, New Delhi - 110011
Email: pd@gcnep.gov.in

अनूपम शर्मा / ANUPAM SHARMA
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बहादुरगढ़ हरियाणा / Bahadurgarh (Haryana)-124507

08.08.2018

प्राप्त किया/Received
पर्यावरण, वन एवं जलवायु परिवर्तन विभाग
Ministry of Environment, Forests & Climate Change
उत्तर क्षेत्रीय कार्यालय/Northern Regional Office
चण्डीगढ़/Chandigarh

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Project Directorate: 145-A, South Block, New Delhi-110011 Phone: 011 23014537
Site Address: GCNEP, Village Kheri Jasaur, Bahadurgarh, Distt. Jhajjar, Haryana PIN - 124505, Tel: 01278-225200

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बहादुरगढ़ (हरियाणा) / Bahadurgarh (Haryana) - 124507



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Department of Atomic Energy
वैश्विक नाभिकीय ऊर्जा साझेदारी केन्द्र

GLOBAL CENTRE FOR NUCLEAR ENERGY PARTNERSHIP



Ref: GCNEP/MoEF/2018/07-42

Dated: 16/07/2018

To:

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Site Address: GCNEP, Village Kheri Jasaur, Bahadurgarh, Dist: Jhajjar, Haryana PIN - 124505, Tel: 01276-225200

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