

STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY - DELHI
OFFICE OF DELHI POLLUTION CONTROL COMMITTEE
4th FLOOR, ISBT BUILDING, KASHMERE GATE, DELHI-6
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F.No. 72/DPCC/ SEIAA-SEAC/10/1233-37

Dated: 4/8/10

To

**M/S Delhi Metro Rail Corporation Ltd.,
Seed Bed Park, Opposite Gurudwara,
Shakarpur, Delhi-110092.**

Sub: Environmental Clearance for Rehabilitation Work of Delhi Metro Rail Corporation (DMRC) Limited at Bhai Veer Singh Marg for Shopkeepers displaced from Panchkuian Road, New Delhi.

Consultant to the Project: Central Road Research Institute

This has reference to communication no. DMRC/EIA/2010/169/379 received on 25.02.2010 followed by subsequent letters received on 23.03.2010, 13.04.2010, 16.04.2010, 30.04.2010, 28.04.2010, 11.05.2010, 12.05.2010, 16.06.2010, 14.07.2010 and 23.07.2010 made to State Level Expert Appraisal Committee, NCT-Delhi, constituted vide GOI notification no. S.O. 1888(E) dated 30.07.2008, seeking prior Environmental Clearance for the above project under EIA Notification, 2006. The proposal has been appraised as per prescribed procedure in the light of provisions under EIA Notification, 2006 on the basis of mandatory documents enclosed with the application along with the additional clarifications furnished in response to the observations of State Expert Appraisal Committee constituted by Competent Authority in its meetings held on 29.03.2010 and 29.07.2010.

1. It is interalia noted that the proposal is for grant of Environmental Clearance for Rehabilitation Work of Delhi Metro Rail Corporation (DMRC) Limited at Bhai Veer Singh Marg for Shopkeepers displaced from Panchkuian Road, New Delhi by M/s DMRC on a plot area of 21403.20 m². The Land for this purpose has been allotted by Ministry of Urban Development & NDMC to DMRC for the Rehabilitation of the shopkeepers displaced during the construction of the Metro line at Panchkuian Road. No litigation is pending against the Project related to land in which the project is being proposed. The building is divided into two pockets: Pocket I (to be constructed) and Pocket II (Existing). Total Built-up area of Rehabilitation Centre is 53839.863 m², which includes total floor area of 26743.154 m² for Pocket I & II and total basement area of 27096.709 m² for Pocket I only. Existing Pocket II (approx. 7154.8 m²) has GF + 3 Stories and has no basement. Pocket I (having floor area of 19588.354 m²) which is proposed to be constructed will have GF + 8 stories and has 3 basements. The total height of Proposed Pocket I is 39.45 m and 15.75 m for existing Pocket II. Proposed ground coverage in Pocket I is 5543.915 m² and existing ground coverage in Pocket II is 1985.20 m². Total green belt area provided will be 3298.96 m². Total 840 ECS will be provided for both the Pockets (795 ECS in basements and 45 ECS at surface). Total water requirement for the proposed project has been calculated around 350 KLD, which will be reduced to 254 KLD, due to use of 96 KLD of treated waste water from STP. The domestic water demand will be fulfilled from 104 KLD of fresh

water and 46 KLD of recycled water. About 150 KLD of water will be required for HVAC. The source of water will be NDMC. It is expected that the proposed project would generate approx. 120 KLD of waste water. The total waste water generated will be treated in on-site STP of total capacity 150 KLD. The treated waste water of 96 KLD will be used for domestic purpose, Greenbelt and Road washing and excess water (if any) will be reused in HVAC system. For Pocket I and II, connected load is 3740 KW and estimated maximum load will be 3000 KW. The source of the power supply is BSES. Total Estimated Solid Waste generation will be 329 Kg/day. The total cost of the proposed project is Rs. 180 Crores. SEIAA has not examined their requirements as the same has been taken into account by SEAC during the appraisal of project.

2. The State Expert Appraisal Committee, after due consideration of the relevant documents submitted by the project proponent and additional clarifications furnished in response to the observations, has recommended this project to State Environmental Impact Assessment Authority (SEIAA) for grant of Environmental Clearance. After considering different aspects and SEAC recommendations, SEIAA hereby accords necessary Environmental Clearance for the above project as per provisions of Environment Impact Assessment Notification, 2006 and its subsequent amendments, subject to compliance of the terms and conditions as follows:

PART A- SPECIFIC CONDITIONS

I. Construction Phase

- (i) Construction to be started after Consent to Establish has been obtained from Delhi Pollution Control Committee under Air and Water Act and a copy shall be submitted to the SEAC- NCT Delhi, failing which project shall be discontinued.
- (ii) A first aid room to be provided in the project both during construction and operation phase.
- (iii) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche etc. the housing may be in the form of temporary structures to be removed after completion of the project.
- (iv) Health and safety norms of CPWD should be followed during construction.
- (v) Top soil excavated during construction activities should be stored for horticulture/landscape development within site.
- (vi) Disposal of muck during construction phase should not create any adverse effect on the neighbouring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
- (vii) Proper measures should be adopted to control dust emissions during construction phase.
- (viii) Soil and water samples of the site should be tested by the proponent through DPCC recognized laboratory to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants, on quarterly basis for inclusion in the six monthly report.
- (ix) 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.
- (x) Any hazardous waste generated during construction and operation phase should be disposed off as per applicable rules and norms with necessary approvals to the Delhi Pollution Control Committee.

- (xi) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environment Protection Rules prescribed for air and noise emission standards.
- (xii) 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.
- (xiii) Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours. The material loaded or unloaded should be covered (especially excavated soil) before transportation to avoid fugitive emissions etc.
- (xiv) Ambient noise levels should conform to prescribed residential standards both during day and night. Adequate measures should be made to reduce ambient air and noise level during construction and operation phase, so as to conform to the norms stipulated by CPCB/DPCC. Ambient air and noise monitoring should be done by an accredited lab and data should also be submitted, on six monthly basis, with DPCC.
- (xv) Thick green belt of the adequate width and density, as per plan submitted, shall be raised along the periphery of the plot so as to provide protection against particulates and noise. At least 2 rows of trees should be planted all around the periphery, wherever possible.
- (xvi) Rain water harvesting, as per plan submitted, for roof top run-off and surface run-off should be implemented. Before recharging the surface run-off, pre-treatment must be done to remove suspended matter, oil and grease. The depth of the bore for rainwater recharging should be kept in consultation with DJB. No wastewater (such as sewage, trade effluent, backwash of treatment unit, floor washing wastewater etc) should be discharged into the rainwater harvesting structure in order to avoid groundwater contamination.
- (xvii) 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.
- (xviii) Ready Mix Concrete must be used in building construction.
- (xix) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices preferred.
- (xx) Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
- (xxi) Energy Conservation Building Code to be strictly adopted in all aspects of building design and construction.
- (xxii) Approval of competent authority shall be obtained for structural safety of the building due to earthquake, adequacy for fire fighting equipments etc as per National Building Code including protection measures from lightening etc.
- (xxiii) Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to all surroundings.

II. Operation Phase

- (i) Consent to Operate shall be obtained from DPCC before operation, failing which the Environmental Clearance herein shall be deemed to be withdrawn.
- (ii) M/s Delhi Metro Rail Corporation (DMRC) Ltd. will be responsible for the operation and maintenance and implementation of environmental safeguards for the project.
- (iii) No furniture manufacturing shops should be allowed in the complex.
- (iv) The Zero wastewater discharge condition to be achieved with installation of on-site Sewage Treatment Plant. The STP should be certified by an independent expert and adequacy report in this regard should be submitted to Delhi Pollution Control Committee before the

project is commissioned for operation. Necessary measures should be made to mitigate the odour problem from STP.

- (v) The solid waste (dry as well as wet garbage) generated should be properly collected and segregated before disposal to NDMC. Adequate measures should be taken to prevent odour problem.
- (vi) Utilization of Diesel power generating sets is subject to power failure condition only. The DG sets proposed as a source of power back up during operation phase should be of enclosed type, low sulphur diesel run and conform to rules made under the Environment (Protection) Act, 1986. The DG sets should be subjected to periodic noise and stack monitoring in consultation with DPCC. Waste/used diesel should be stored and managed as per Hazardous Waste (Management and Handling) Rules, 2000 as amended to date and be sold to CPCB approved recyclers. Clearance from AAI should be obtained for stack height of D.G Set.
- (vii) The ground water drawl from existing/proposed bore well during construction and operation phase should be done only with the prior permission of DJB. The ground water level and its quality should also be monitored regularly.
- (viii) Traffic congestion near the entry and exit points from the roads adjoining the project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- (ix) Energy Conservation measures such as solar lighting for common areas, solar water heating system, CFLs/TFLs for lighting of areas, LED lights for signage, solar inverters etc should be adopted.
- (x) Used CFLs/TFLs should be properly collected and disposed off/ sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination.
- (xi) A Report on energy conservation measures conforming to energy conservation norms finalized by Bureau of energy Efficiency should be prepared incorporating details about building materials and technology, R & U factors etc and submit a copy to Ministry of Environment & Forests, Regional Office, Chandigarh and DPCC in three months time with intimation to SEIAA.

PART B- GENERAL CONDITIONS

- (i) The environmental safeguards and monitoring schedule as contained in the EMP should be implemented in letter and spirit & there will be no departure from the final project proposal as approval herein.
- (ii) Corporate Social Responsibility should be carried out as per action plan and budget submitted.
- (iii) Officials from Ministry of Environment & Forests, Regional Office, Chandigarh and Delhi Pollution Control Committee, who would be monitoring the implementation of environmental safeguards, should be given full cooperation, facilities and documents/data on site by the project proponents during their site inspection. A complete set of all the documents submitted to SEAC should be forwarded to Ministry of Environment & Forests, Regional Office, Chandigarh & DPCC. Six monthly monitoring reports should also be submitted to Ministry of Environment & Forests, Regional Office, Chandigarh & DPCC.
- (iv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by the SEAC.
- (v) In compliance to Hon'ble High Court's Order dated 7th August, 2008, use, sale and storage of all kinds of plastic bags shall be forbidden.

- (vi) E-waste generated in the complex should be managed as per CPCB guidelines on E-waste management and disposed through approved e-waste recyclers.
- (vii) State Environmental Impact Assessment Authority reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including the revoking of the environmental clearance under the provisions of the Environmental (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
- (viii) All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department etc shall be obtained, as applicable by project proponents from the respective competent authorities.
- (ix) These stipulations would be enforced among others under the provisions of Water (Prevention and Control) Pollution Act, 1974, the Air (Prevention and Control) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 2006.
- (x) The project proponent should prominently advertise in at least two local Newspapers widely circulated in the region indicating that the project has been accorded Environmental Clearance and copy of clearance is available with the DPCC and may also be seen on the website of DPCC at <http://www.dpcc.delhigovt@nic.in>. The advertisement should be made within 10 days from the date of receipt of the Clearance letter.
- (xi) The project proponent should submit copy of Environmental Clearance to the Heads of Local bodies, Panchayats and Municipal bodies in addition to relevant offices of Government who in turn has to display the same for 30 days from the date of receipt.
- (xii) An appeal against this Environmental Clearance shall lie with the National Environment Appellate Authority, if preferred, within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Act, 1997.
- (xiii) Status of compliance to the various stipulated environmental conditions and environmental safeguards will be uploaded by the project proponent in its website.

Dr. A. K. Ambasht
Member Secretary (SEIAA)

Copy to:

1. The Secretary(Environment) cum Chairman (DPCC), Department of Environment, Government of NCT Delhi, Secretariat Building, 6th Level, C-Wing, I.P.Estate, New Delhi.
2. Sh. Jagdish Sagar, IAS (Retd.), Chairman, State Level Environment Impact Assessment Authority, A-804, Aditya Mega City, Vaibhav Khand, Indira Puram, Ghaziabad, UP-201001.
3. Director, Impact Assessment III– Division, Ministry of Environment & Forests, Paryavaran Bhawan, CGO Complex, Lodhi Road, New Delhi-110003.
4. Conservator of Forests, Ministry of Environment & Forests, Regional Office (NZ), Bays No.24-25, Sector 31 A, Dakshin Marg, Chandigarh - 160030.

Dr A. K. Ambasht
Member Secretary (SEIAA)