## Government of Maharashtra

SEAC 2013/CR- 263/TC-2 Environment department, Room No. 217, 2nd floor, Mantralaya Annexe, Mumbai 400 032 Date: 17th May, 2013

To.

M/s Nirlon Ltd. Western Express Highway, Goregaon (East), Mumbai- 400 063.

Subject: Environmental clearance for Nirlon IT Park in the Environment Clearance for Nirlon ltd. Information Technology (IT) Park in CTS No.257/1, 257/B, 257/C, 257/D, 257/E, 257/F, 557, 558, 559, 586/3, Part of 257/E village Goregaon (E) and Pahadi, T-Borivili, Mumbai by M/s Nirlon Ltd - Environmental clearance regarding.

Sir,

This has reference to your communication on the above mentioned subject. The proposal was considered as per the EIA Notification - 2006, by the State Level Expert Appraisal Committee-II, Maharashtra in its 12<sup>th</sup> meeting decided to recommend the project for prior environmental clearance to SEIAA. Information submitted by you has been considered by State Level Environment Impact Assessment Authority in its 60<sup>th</sup> Meeting.

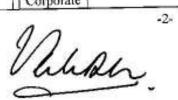
It is noted that the proposal is for grant of Environmental Clearance for proposed Nirlon IT
Park in the Environment Clearance for Nirlon ltd. Information Technology (IT) Park in CTS
No.257/1, 257/B, 257/C, 257/D, 257/E, 257/F, 557, 558, 559, 586/3, Part of 257/E village
Goregaon (E) and Pahadi, T-Borivili, Mumbai. SEAC considered the project under screening
category 8(a) B2 as per EIA Notification 2006.

Brief Information of the project submitted by Project Proponent is as:

Name of the Project	Expansion of Nirlon Knowledge Park.		
Project Proponent	M/s Nirlon Ltd.		
Consultant	Aditya Environmental Services Pvt. Ltd.		
Type of project	Expansion of Existing IT Park		
Location of the Project	CTS Nos. 257/1, 257/B, 257/C, 257/D, 257/E/2/A/2, 257/ Fland 257/F2 of village Goregaon and CTS no., 557, 561of Pahadi Goregaon at Goregaon (East)Borivali Tehsil, Mumbai.		
Total Plot Area (sq.m.) Deductions Net Plot area	1,06,608.10 sqm 9,608.50 sqm 96,999.60 sqm		
Permissible FSI	1,88,149.22 sqm		

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Proposed Built-up Area (FSI & Non-FSI)	Existing* FSI area (sqm): 1,35,493.03 Non FSI area (sqm): 1,10,393.00 Grand Total (sqm): 2,45,886.03  Proposed FSI area (sqm): 22,685.00 Non FSI area (sqm): 18,483.00 Grand Total (sqm): 41,168.00  After expansion (including existing) FSI area (sqm): 1,58,178.03 Non FSI area (sqm): 1,28,875.97 Total (sqm): 2,87,054.00  * FSI of Old building of Nirlon Ltd in the campus (retained): 29,971.19 sqm is additional.					
Ground-coverage Percentage (%)	41.92%		<u> </u>			
Estimated cost of	135 crores (f	135 crores (for expansion only)				
the project  No. of building & its configuration(s)	Phase I	As per existing Environmental Clearance	After Expansion	Remark		
	B1,B2,B3	2B + G + 7,8,9	2B + G + 7,8,9	No change/ Construction completed		
	MLCP 1	2B + G + 9	2B + G + 9	No change/ Construction completed		
	Phase II					
	В7	2B + G + 9	2B + G + 8	No change/ Construction completed		
	Phase III					
	Hotel, B6	2B+G+18, 2B+G+2	2B + G + 15 2B+G+3	No change in the building foot-print. A hotel was		
				proposed earlier. However, it will now be an I.T.office building.		
	Phase IV	Phase IV B4 B5 2B+G+9 1B+G+				
	B4,B5	B4,B5 2B + G + 9		B4, B5 and MLCP 2		
	MLCP 2	2B + G + 9		proposed as a single unit.		
	Nirlon Corporate	5	G + Mezzanine	Amenity building		



	Office		+6		
	Two wheeler parking structure (B8)		Stilt + 3 levels	A dedicated 2 wheeler parking structure for approximately 750 vehicles is proposed.	
Number of expected residents/users	23300 employees				
Tenant density per hector	2402 per he	ctor.	<del></del>	-2 - 200 G	
Height of the building (s)	1. B1, B2, B3: 51.6 m above FGL. 2. B4 & B5: 50.9 m above FGL 3. B6: 69.7 m above FGL 4. B7: 47.4 m above FGL 5. MLCP 1: 35.2 m above FGL 6. Nirlon Corporate Office: 35m above FGL 7. Two wheeler parking building: 14m above FGL				
Right of way	35m wide DP road Site abutting Western Express Highway (80m including service roads), internal campus road all 12m wide. Nearest Fire station is at Dindoshi, Goregaon east which is about 8-10 minutes drive from the project site.				
Turning radius	9 m	ve from the	project site.		
Total Water	Dry season				
Requirement	Fresh water (CMD): 466 +261 Recycled water (CMD): 973 Total Water Requirement (CMD): 1700 Fire fighting (Cum):1000  Wet Season Freshwater (CMD): 466 +157 Recycled water (CMD): 973 Total Water Requirement (CMD): 1596 Fire fighting (Cum):1000				
Rain Water Harvesting (RWH)	Level of the Ground water table – Pre monsoon Approx. 2.7 to 6.4 m BGL Post monsoon – 1.82 to 5.5 m BGL Size and no of RWH tank(s) and Quantity- 3 m x 3 m x 2.2 m Deep- 9Nos Location of the RWH tank(s) as per attached plan – Refer Annex XI Size, no of recharge pits and Quantity- 1 m dia x 3 m deep recharge pit with borewells – 45nos.  Budgetary allocation (Capital cost and O&M cost) Rs. 71 lacs				
Storm water drainage	Natural water drainage pattern – Open / Closed drain sloping from south east to North West which is in line with natural gradient.  Quantity of storm water (from entire project site) – Approx. 32000 cum per season  Size of SWD – 0.6m x 0.6 m to 1m x 1.2 m  Budgetary cost Rs. 417 lacs				
Sewage and Waste water	Sewage generation after expansion (CMD) - 1003 STP technology – MBR and MBBR				

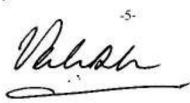
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	Capacity of STP (CMD) – 1200 (existing 800 and proposed 400) Location of the STP – One STP of 800 CMD at the north west of the campus and other STP of 400 CMD on the west of building B4 & B5.  DG sets (during emergency)] – 26.5 MVA (Total 12 number of DG sets) Budgetary allocation (Capital cost and O&M cost) Capital cost Rs. 845
	Lacs and O&M cost 96 Lacs per year
Solid Waste Management	Waste generation in the Pre Construction and Construction phase: Pre construction: 900 cum of demolition waste
	Disposal of the construction debris: As per MCGM norms Operation Phase: Approx. 2600 (including existing)
	Dry waste (Kg/day): approx. 932 Wet waste (Kg/day): approx. 1668
	E-waste (Kg/month); approx. 2000 STP Sludge (Dry sludge) (Kg/day); approx. 20
	Mode of Disposal of waste:
	Dry waste: Sold to recyclers Wet waste: Composted in OWC and used as manure E-waste: Registered vendors
	Hazardous waste: Registered recyclers STP Sludge (Dry sludge): Used as manure
	Budgetary allocation (Capital cost and O&M cost) Capital cost: approx. 10 lacs
Green Belt	Running cost: Approx. 10.8 lacs per year
Development	Total RG area: RG are under green belt: 15166.55 sqm RG on the podium: 5691.38 sqm Plantation:
	Number and list of trees species to be planted in the ground RG: 283 old trees retained and additionally 222 trees are planted in phase I and phase II. Approximately another 350 trees will be planted.
	Number and list of shrubs and bushes species to be planted in the podium RG: Approximately 8000 shrubs and bushes are planted. Budgetary allocation (Capital cost and O&M cost) Capital cost Rs.3209
	Lacs for landscape work.  O&M cost - 32.4 lacs per year.
Energy	Power supply:  Maximum demand – 22.7MW  Connected load – 28.5MW
	Source - REL Energy saving by non-conventional method:
	Roof = RCC 4 inch slab with 3 Inches of over deck roof insulation of R- 15.
	U value = 0.352 W/m2 °C (0.062 Btu/hr.ft2.°F) External Walls= AAC block walls. U value= U factor: 0.329 W/m2 °C (0.058 Btu/hr.ft2.°F)
	Fenestration= Double glazed window, Glass U value= 2.8 W/m2 K, SHGC = Lcss than 0.28, VLT = 40-50%
	Lighting Power Density: Less than 1 w/sft,

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	High efficient air cooled and Water cooled chillers.  Heat recovery wheels with more than 75% efficiency.  CO monitoring for basement parking.  Detail calculations & % of saving –More than 14% better than ASHRAE benchmark (American Standard for Heating, Refrigeration and Airconditioning Equipment).  Budgetary allocation (capital cost and O&M cost)  DG Set:  Number and capacity of the DG sets to be used – 12 DG sets of 2.0 and 2.25 MVA with total capacity of 26.5 MVA.  Type of fuel used – High Speed			
Traffic Management	Nos. of the junction to the main road & design of confluence  Parking details:  Number and area of basement:-approx 87000 sqm of basement and MLCP area for car parking and two wheeler parking.  Number and are of podia-No parking of podium  Total Parking area-87000 sqm			
	Area per car 2-Wheeler:- 6.00sqm/two wheeler 4-Wheeler:- 33.5 sqm/car Width of all Internal road (m): 12 m			
Environmental Management Plan Budgetary Allocation	Construction phase of expansion project(with Break-up): Capital cost – approx. 77 facs Operation Phase of entire knowledge park- Capital cost – 8702 facs O&M cost – 175.2 facs Responsibility for further O&M – PMS team			

- The proposal has been considered by SEIAA in its & 60<sup>th</sup> meeting decided to accord
  environmental clearance to the said project under the provisions of Environment Impact
  Assessment Notification, 2006 subject to implementation of the following terms and conditions:-
  - (i) This environmental clearance is issued subject to land use verification. Local authority / planning authority should ensure this with respect to Rules, Regulations, Notifications, Government Resolutions, Circulars, etc. issued if any. This environmental clearance issued with respect to the environmental consideration and it does not mean that State Level Impact Assessment Authority (SEIAA) approved the proposed land use.
  - (ii) The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
  - (iii) "Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
  - (iv) All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
  - (v) Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. No physical occupation or



- allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
- (vi) Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche and First Aid Room etc.
- (vii) Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- (viii) The solid waste generated should be properly collected and segregated, dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material
- (ix) Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
- (x) Arrangement shall be made that waste water and storm water do not get mixed.
- (xi) All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
- (xii) Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
- (xiii) Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
- (xiv) Disposal of muck during construction phase should not create any adverse effect on the neighboring 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.
- (xv) Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
- (xvi) Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
- (xvii) Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
- (xviii) The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
- (xix) The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
- (xx) 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 nonpeak hours.
- (xxi) Ambient noise levels should conform to 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 standards by CPCB/MPCB.
- (xxii) 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.

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- (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
- (xxiii) Ready mixed concrete must be used in building construction.
- (xxiv) The approval of competent authority shall be obtained for structural safety of the buildings due to any possible earthquake, adequacy of fire fighting equipments etc. as per National Building Code including measures from lighting.
- (xxv) Storm water control and its re-use as per CGWB and BIS standards for various applications.
- (xxvi) Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
- (xxvii) The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
- (xxviii) The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the Ministry before the project is commissioned for operation. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated affluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
- (xxix) Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
- (xxx) Permission to draw ground water shall be obtained from the competent Authority prior to construction/operation of the project.
- (xxxi) Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
- (xxxii) 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.
- (xxxiii)Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
- (xxxiv)Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement
- (xxxv) Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non conventional energy source as source of energy.
- (xxxvi)Diesel power generating sets proposed as source of back up power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
- (xxxvii) Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.

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- (xxxviii) Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
- (xxxix)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 aspirational for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement
- (xl) The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation
- (xli) 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 the surroundings.
- (xlii) 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.
- (xliii) Six monthly monitoring reports should be submitted to the Department and MPCB.
- (xliv) A complete set of all the documents submitted to Department should be forwarded to the MPCB
- (xlv) In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
- (xlvi) A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
- (xlvii) Separate funds shall be allocated for implementation of environmental protection measures/EMP along with item-wise breaks-up. These cost shall be included as part of the project cost. The funds earmarked for the environment protection measures shall not be diverted for other purposes and year-wise expenditure should reported to the MPCB & this department.
- (xlviii) The project management shall advertise at least in two local newspapers widely circulated in the region around the project, one of which shall be in the Marathi language of the local concerned within seven days of issue of this letter, informing that the project has been accorded environmental clearance and copies of clearance letter are available with the Maharashtra Pollution Control Board and may also be seen at Website at <a href="http://ec.maharashtra.gov.ln">http://ec.maharashtra.gov.ln</a>.
- (xlix) Project management should submit half yearly compliance reports in respect of the stipulated prior environment clearance terms and conditions in hard & soft copies to the MPCB & this department, on 1<sup>st</sup> June & 1<sup>st</sup> December of each calendar year.
- (I) A copy of the clearance letter shall be sent by proponent to the concerned Municipal Corporation and the local NGO, if any, from whom suggestions/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the Company by the proponent.
- (li) 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; SPM, RSPM. SO<sub>2</sub>, NOx (ambient levels as well as stack emissions) or critical sector 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.
- (lii) 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

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- in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
- (liii) The environmental statement for each financial year ending 31<sup>st</sup> March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board 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 EC conditions and shall also be sent to the respective Regional Offices of MoEF by e-mail.
- 4. The environmental clearance is being issued without prejudice to the action initiated under EP Act or any court case pending in the court of law and it does not mean that project proponent has not violated any environmental laws in the past and whatever decision under EP Act or of the Hon'ble court will be binding on the project proponent. Hence this clearance does not give immunity to the project proponent in the case filed against him, if any or action initiated under EP Act.
- In case of submission of false document and non compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environmental Clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.
- The Environment department reserves the right to add any stringent condition or to revoke the clearance if conditions stipulated are not implemented to the satisfaction of the department or for that matter, for any other administrative reason.
- Validity of Environment Clearance: The environmental clearance accorded shall be valid for a period of 5 years.
- 8. In case of any deviation or alteration in the project proposed from those submitted to this department for clearance, a fresh reference should be made to the department to assess the adequacy of the condition(s) imposed and to incorporate additional environmental protection measures required, if any.
- 9. The above stipulations would be enforced among others under the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act, 1981, the Environment (Protection) Act, 1986 and rules there under, Hazardous Wastes (Management and Handling) Rules, 1989 and its amendments, the public Liability Insurance Act, 1991 and its amendments.
- 10. Any appeal against this environmental clearance shall lie with the National Green Tribunal, Van Vigyan Bhawan, Sec- 5, R.K. Puram, New Dehli – 110 022, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

(Valsa R Nair Singh) Secretary, Environment

department & MS, SEIAA

## Copy to:

- Shri. P.M.A Hakeem, IAS (Retd.), Chairman, SEIAA, 'Jugnu' Kottaram Road, Calicut- 673 006 Kerla.
- Shri. Ravi Bhushan Budhiraja, Chairman, SEAC-II, 5-South, Dilwara Apartment, Cooperage, M.K.Road, Mumbai 400021
- Additional Secretary, MOEF, 'Paryavaran Bhawan' CGO Complex, Lodhi Road, New Delhi – 110510
- Member Secretary, Maharashtra Pollution Control Board, with request to display a copy of the clearance.
- The CCF, Regional Office, Ministry of Environment and Forest (Regional Office, Western Region, Kendriya Paryavaran Bhavan, Link Road No- 3, E-5, Ravi-Shankar Nagar, Bhopal- 462 016). (MP).
- 6. Commissioner, Municipal Corporation, Greater Mumbai (MCGM)
- 7. Regional Office, MPCB, Mumbai.
- 8. Collector, Mumbai.
- IA- Division, Monitoring Cell, MoEF, Paryavaran Bhavan, CGO Complex, Lodhi Road, New Delhi-110003.
- 10. Select file (TC-3).