



**TATA BLUESCOPE  
STEEL**

To,  
Additional Director  
Ministry of Environment and Forests  
(I. A. Division), Government of India  
Paryavaran Bhawan, CGO Complex, Lodhi Road  
New Delhi – 110003

TBSL / HSE / MoEF / 0639/14  
Date: 24<sup>th</sup> Nov 2014

Your Ref: F. No. J-11011/271/2007-IA II (I)  
Sub: Half Yearly Compliance Report

Sir,

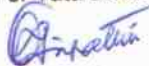
This is in reference to Ministry of Environment & Forests letter no. F. No. J-11011/271/2007-IA II (I) dated 24<sup>th</sup> August 2007 and Jharkhand Pollution Control Board Letter No. JA/2655/W/332 dated 01<sup>st</sup> Feb 2007 to M/s Tata BlueScope Steel Limited for Environment Clearance with certain conditions to establish factory premises for Metal Coating and Colour Coating Line Project at Bara, East Singhbhum, Jamshedpur (Jharkhand).

Please find enclosed the half yearly compliance report {H1 (FY14-15)} for your kind information.

Thanking you

Sincerely yours

For Tata BlueScope Steel Limited



(Factory Manager – Coated Steel)

Encl: As-Above

Copy to:-

1. The Secretary, Jharkhand State Pollution Control Board, Town Administration Division Building (Ground Floor), H. E. C., Dhurwa, Ranchi - 834004, Jharkhand
2. The Chairman, Central Pollution Control Board, Parivesh Bhavan CBD-cum-Office Complex, East Arjun Nagar, New Delhi - 110032
3. The Chairman, Jharkhand State Pollution Control Board, Town Administrative Division Building (Ground Floor) H.E.C., Dhruwa, Ranchi – 824004, Jharkhand
4. The Chief Conservator of Forests (Eastern), Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar – 751023, Orissa.
5. The Joint Director, Government of India, Ministry of Environment & Forests, Eastern Regional Office (EZ), A/3, Chandrasekharpur, Bhubaneswar – 751023, Orissa.
6. Monitoring Cell, Ministry of Environment and Forests, Paryavaran Bhawan, CGO Complex, New Delhi – 110003
- : Chief Resident Executive, Tata Steel Limited, Jeevan Bharti Building, Tower # 1, 10<sup>th</sup> Floor, 124 Cannaught Circus, New Delhi (110001)

**Tata BlueScope Steel Limited**

Coated Steel Plant, Bara P.O. Agrico, Jamshedpur-831009, India

Tel: +91 657 662 4200 Fax: +91 657 662 4270

Agency: Ministry of Environment & Forest - Compliance Report H1 FY(14-15)

**(A) SPECIFIC CONDITIONS**

Sl. No.	Conditions	Compliance
1	<p>a. Total Water requirement from River Subamarekha shall not exceed 2,160 m<sup>3</sup>/day and</p> <p>b. Waste water generation shall not exceed 1106 m<sup>3</sup>/day respectively.</p> <p>c. Effluent Treatment plant passivation section shall be treated separately to reduce Cr+6 into Cr+3 and its proper storage after dewatering in separate secured landfill (SLF).</p> <p>d. Closed circuit cooling water system shall be adopted in cooling towers to reduce consumption of water.</p> <p>e. All the treated effluent shall be monitored for pH, TSS, TDS, volatile dissolved solids, COD, BOD, heavy metals and other relevant parameters like presence of solvents etc. and used for horticulture purposes or secondary usage.</p>	<p>a. Present water consumption (Industrial + Domestic) per day is 650 Cub M/Day.</p> <p>b. Waste water generation per day average 400 Cub M / Day.</p> <p>c. Expected tretment plant has been installed and it is in operation. After treatment of Cr+6, Cr+3 sludge is being stored in the leaching pond called SLF after dewatering.</p> <p>d. Close circuit cooling tower has been installed.</p> <p>e. Expected parameter are being monitored. Trated water being used for horticulture.</p>
2	<p>The ground water quality in and around the unit and the hazardous waste disposal site / secured landfill (SLF) shall be regularly monitored and the data recorded to ensure that there is no contamination of the ground water.</p>	<p>Adesign detail of the secured land fill (SLF) according to which it has been implemented at site is attached as Annexure - I.Layoutoyout showing location of SLF vis-à-vis we are taking sample of ground water from nearest bore well from SLF.Ground and Surface water quality test report as annexure XI A,XI B &amp; XI C.</p>
3	<p>a. Hazardous waste (Chrome sludge, Trivalent Chromium) shall be disposed off in secured landfill (SLF).</p> <p>b. Spent paint shall be provided to the paint manufacturers.</p> <p>c. Aluminium and Zinc metal dross shall be sold to authorised entrepreneurs only. And</p> <p>d. Incinerator shall be installed to incinerate ETP sludge, waste paint, oil wastes etc. and waste heat recovered shall be used in the process. air emissions from the incinerator shall be controlled by installing proper air pollution control equipments to meet the CPCB standards and guidelines. the destructive efficiency of the incinerator shall be assessed time to time by approved agency and a report submitted to the ministry.</p>	<p>a. Hazardous waste (Chrome sludge, Trivalent Chromium) being disposed off in secured landfill (SLF).</p> <p>b. Spent Paint is incinerated as per complaince of 3d.</p> <p>c. Vendors has been developed who buy the Al &amp; Zn dross.</p> <p>d. Incinerator has been installed and ETP sludge, waste paint (mixed with waste cotton) oil waste are being incinerated. Hot flue gas is being emitted after necessary quenching to enviroment and air emission being monitored as per CPCB standard. The Destructive efficiency measurement of the incinerator is under progress.Online stack monitoring system planned.</p>

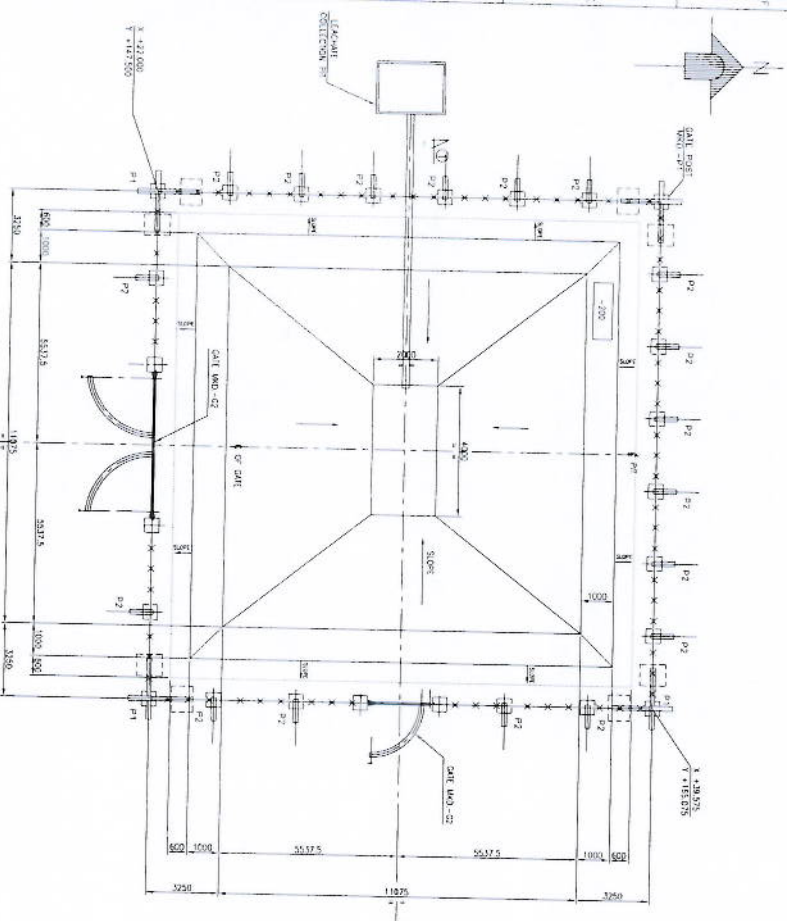
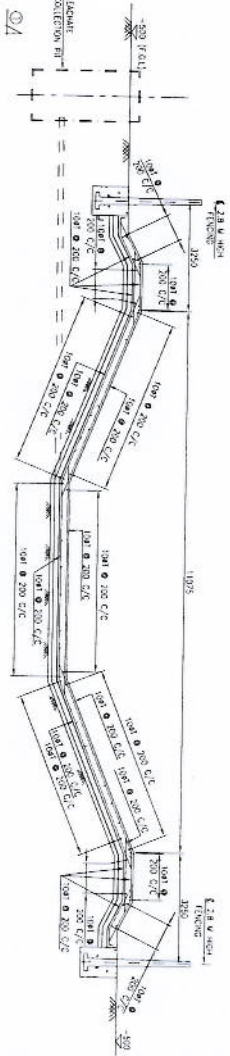
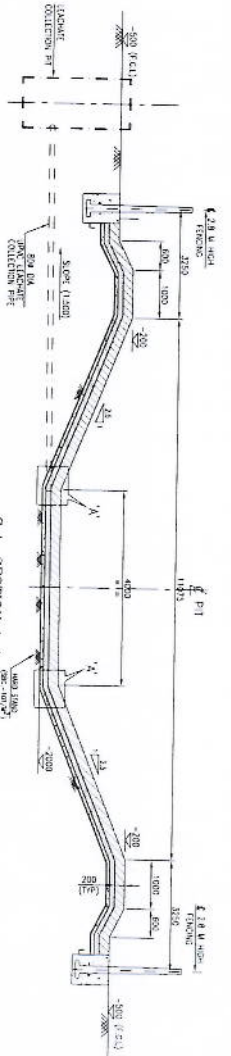
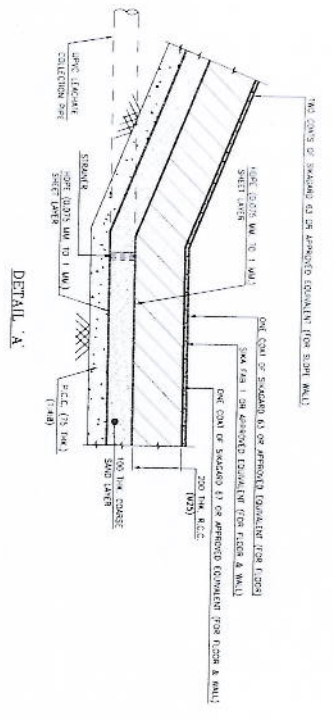
**(B). GENERAL CONDITIONS**

i)	<p>The plant authorities shall strictly adhere to the stipulations made by the Jharkhand State Pollutions Control Board (JSPCB) and the State Government.</p>	<p>TBSL is committed to adhere stipulations made by the Jharkhand State Pollutions Control Board (JSPCB) and the State Government.</p> <p>JSPCB had issued Consent to Establish (NOC) vide ref NO JA/ 2655/w/332. Dated 01.02.07 and Consent to Operate vide ref NO JA/New/New/A/W G 810 dated 04.04.11 and PC/JSR/Air/T-64/11/G-3885 date 10.10.2014. Hazardous Waste Authorization has been obtained from JSPCB. All clearances of JSPCB attached as Annexure - II,Annexure IIA, and IIB.</p>
ii)	<p>No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.</p>	<p>Shall follow the Norms</p>
iii)	<p>The gaseous emissions from various process units shall conform to the load mass based standards notified by this Ministry on 19th may 1993 and standards prescribed from time to time. The state Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and locations. At no time, the emission level shall go beyond the prescribed standards. interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.</p>	<p>The plant design includes fumes extractor, fumes will be burnt in the incinerator before it goes to air through stacks. Gaseous emission from MCL is designed as per MoEF standards and maintained. Emission from the MCL stack is being designed as per standards (Air - Prevention &amp; Control of Pollution Act, 1981) and is as follows:</p> <p>Particulate matter : 50 mg/Nm<sup>3</sup> Max                      NOx emission : &lt;200 mg/Nm<sup>3</sup>                      SOx emission : &lt;20 mg/Nm<sup>3</sup>                      VOC emission : &lt;50 mg/Nm<sup>3</sup>                      Alkali fumes : &lt; 2 mg/m<sup>3</sup>                      Chromic acid fume : &lt; 0.1 mg/Nm<sup>3</sup></p>
iv)	<p>Fume extraction system shall be provided to collect solvent vapors (VOCs) and shall be incinerated in incinerator to mitigate odour pollution. Fume extraction system shall also be provided to alkali degreasing section and chrome passivation both to extract alkali and acid droplets.</p>	<p>Fume extraction system is designed for Solvent vapours incineration and for alkali &amp; Chromate with a water scrubber</p>
v)	<p>At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub> and NO<sub>x</sub> are anticipated in consultation with JSPCB. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bhubaneswar, JSPC and CPCB once in six months.</p>	<p>Four Ambient Air quality monitoring station established. data being submitted with this report .AAQ report as Annexure VIII &amp; VIIIA,VIIIB,VIIIC,VIIID,VIIIE and VIIIF.</p> <p>Monitoring of PM<sub>2.5</sub> and other parameters from SL5 to Sl. 12 as specified in the notification GSR 826 (E) date 16.11.2009 as Annexure x.</p>
vi)	<p>In plant control measures for checking fugitive emission from all the vulnerable sources shall be provided. Further specific measures like water sprinkling shall be carried out and fugitive emissions shall be controlled, regularly monitored and records maintained.</p>	<p>N.A</p>
vii)	<p>Secondary fugitive emissions shall be controlled within the latest permissible limits issued the Ministry and regularly monitored. Guidelines / Code of Practice issued by the CPCB in this regard shall be followed.</p>	<p>N.A</p>

viii)	Industrial waste water shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December, 1993 or as amended from time to time. The treated wastewater shall be utilised for plantation purpose.	ETP is designed to take care of Environmental norms. The treated water is used for gardening.
ix)	The plant authorities shall strictly comply with the rules and regulations under manufacture, storage and Import of Hazardous Chemical Rules, 1989 as amended in October 1994 and January 2000 and Hazardous Wastes (Management and Handling) Rules, 2003. Authorisation from the Jharkhand SPCB must be obtained for collection / treatment / storage / disposal of hazardous wastes. No hazardous waste shall be sold.	Requirements under manufacture, storage and Import of Hazardous Chemical Rules, 1989 as amended in October 1994 and January 2000 are being complied. Consent for Hazardous waste authorisation has been taken. Document is attached as Annexure II B.
x)	Occupational health surveillance of the workers shall be done on regular basis and records maintained as per the Factories Act.	Occupational health surveillance of the workers are being done as per the Factories Act. We are attaching details as: annexure III and IIIA.
xi)	The company shall develop surface as well as ground water harvesting structures to harvest the rainwater for utilisation in the lean season besides recharging the ground water table.	Detailed design of rainwater harvesting plan attached as Annexure - IV.
xii)	As proposed, green belt shall be developed 8 ha (33%) out of total 24 ha to mitigate the effect of fugitive emissions all around the plant as per the CPCB guidelines.	More than 30 percent area has been developed as Green belt. Plant layout showing green belt developed till date attached as Annexure - V & V A.
xiii)	The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels should conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (nighttime).	All equipment are designed in accordance with EPA Rules for control of noise levels. Acoustic enclosures for DG sets, Air compressors etc Done. Noise Monitoring Report attached as Annexure -IX.
xiv)	Recommendations made in the Corporate Responsibility for Environment Conservation (CREP) issued for the steel plants shall be implemented.	Details of the equipments installed and practices put in place or proposed for compliance of CREP attached as Annexure - VII.
xv)	Occupational health surveillance of the workers shall be done on regular basis and records maintained as per the Factories Act.	Currently we have some crane operators who work under contractor whose occupational health is being monitored and we are attaching details of health check-up till date. We are attaching our future scheme provision and plans to be done under occupational Health. We are attaching details as: annexure III, And IIIA.
xvi)	The plant proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report.	Being complied
xvii)	The company must undertake socio-economic developments activities in the surrounding villages like community development programmes, educational programmes. Drinking water supply and health care etc.	Tabular details of CSR done and envisaged is attached as Annexure - VI.
xviii)	The Regional Office of this Ministry at Bhubaneswar / CPCB / SPCB will monitor the stipulated conditions. A six monthly compliance report and the monitoring data along with statistical interpretation shall be submitted to them regularly.	Implemented. Statistical interpretation of environmental data being submitted with this report. AAQ report including Monitoring of PM2.5 and other parameters from sl.5 to sl. 12 as specified in the notification GSR 826 (E) dated 16.11.2009 as Annexure. Report for month of Apr-14 as Annexure VIII, Report of May-14 as Annexure VIIIA, Report of June-14 as Annexure VIIIB, Report of July-14 as Annexure VIIC, report of Aug-14 as Annexure VIID, report of Sep-14 as VIIE. Statical analysis of AAQ is attached as Annexure VIIF. We are submitting Noise Level Report as Annexure IX. Report of stack emission is being attached as Annexure X, XA, XB, XC, XD, XE. Effluent water quality report as Annexure XI, Ground water Quality Report as XIA. Surface water quality report as XIB & XIC and Soil Analysis report as Annexure XID
xix)	The Plant Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with JSPCB / Committee and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.n">http://envfor.nic.n</a> . This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same shall be forwarded to the regional office.	Complied
xx)	Plant authorities should inform the Regional Offices as well as the Ministry, the date of Financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.	Complied

# DESIGN OF SECURED LAND FILL (SLF)

Ameyyee - IT



G.A. PLAN

FOR DETAIL OF FENCING & GATE REFER DWS NO. 25331-00-00-CV-00-15  
 FOR DETAIL OF GATE NO. -02 & 03 REFER DWS NO. 25331-00-00-CV-00-15  
 400 LEVEL CORRESPONDS TO RL. +135.5M

APPROXIMATE CONCRETE QUANTITY  
 FOR PLANNING PURPOSE ONLY  
 RCC (M<sup>3</sup>) = 52.00M<sup>3</sup>  
 PCC (M<sup>3</sup>) = 24.00M<sup>3</sup>

NO.	DESCRIPTION	UNIT	QUANTITY
1	CONCRETE	M <sup>3</sup>	52.00
2	PCC	M <sup>3</sup>	24.00
3	STEEL	TON	1.50
4	REINFORCEMENT	TON	1.50
5	FORMWORK	M <sup>2</sup>	1000
6	PAINT	LITERS	1000

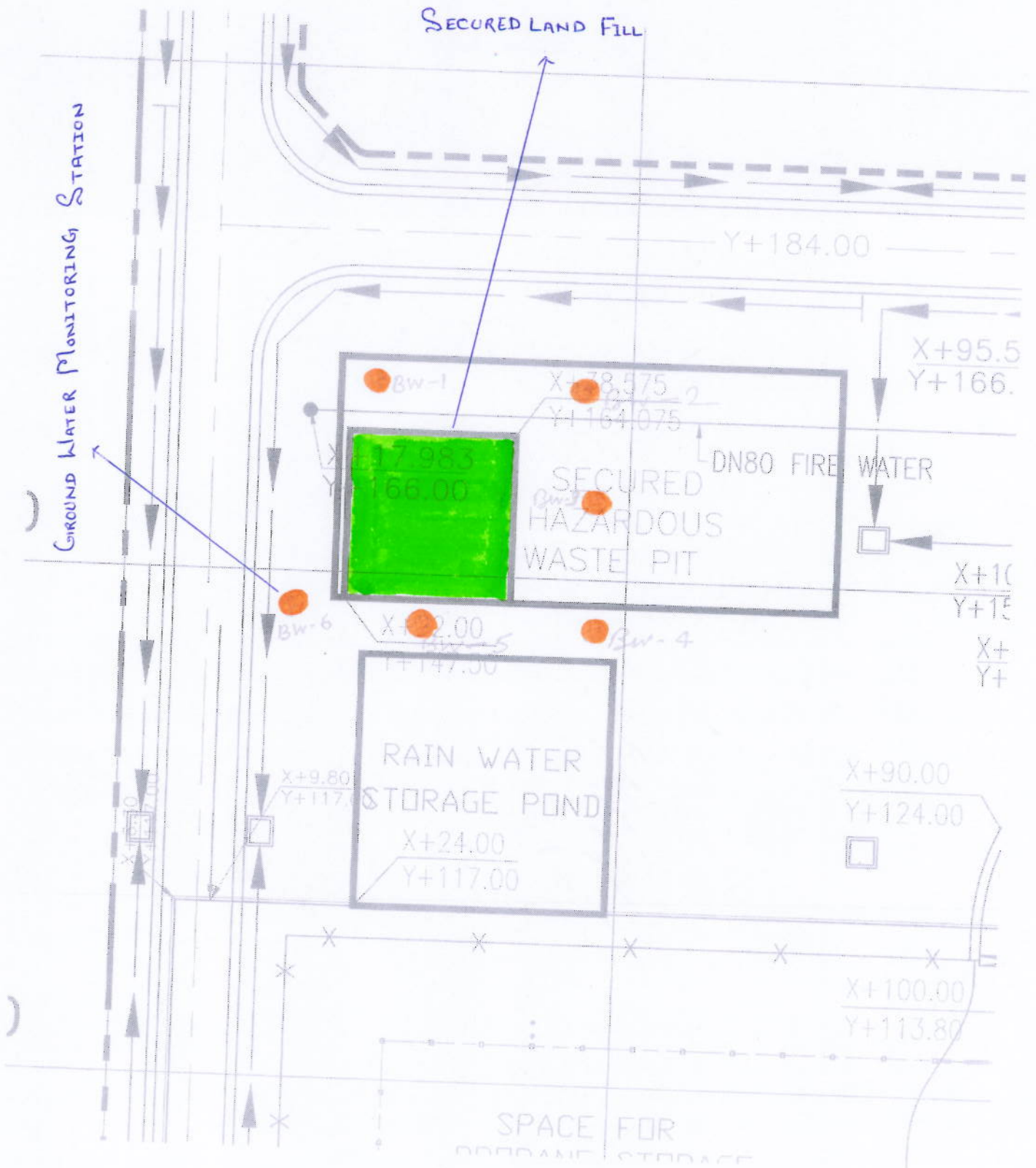
1. ALL DIMENSIONS ARE IN MILLIMETERS UNLESS OTHERWISE SPECIFIED.
2. CHECK OF R.C.C. SHALL BE W/S.
3. REINFORCEMENT SHALL BE PROVIDED AS PER IS:456 - 1978 (REV. 1993) UNLESS OTHERWISE SPECIFIED.
4. ALL WORK SHALL BE DONE IN ACCORDANCE WITH IS:456 - 1978 (REV. 1993) UNLESS OTHERWISE SPECIFIED.
5. SLOPE COEFFICIENT SHALL BE 1 V TO 1 H.
6. SLOPE COEFFICIENT SHALL BE 1 V TO 1 H.
7. THE SLOPE OF SO. AT THE EXISTING LEVEL SHALL BE MAINTAINED BY AMENDING AND CORRECTING THE SO. UNLESS OTHERWISE SPECIFIED.
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12. THE SLOPE OF SO. AT THE EXISTING LEVEL SHALL BE MAINTAINED BY AMENDING AND CORRECTING THE SO. UNLESS OTHERWISE SPECIFIED.

DATE ZONE		REVISION		BY APP		DWG. NO.		REFERENCE DRAWINGS		DETAILS	

APPROVED FOR CONSTRUCTION	DATE	SCALE	BY	DATE	SCALE	BY	DATE	SCALE	BY	DATE

CONSULTING ENGINEERS  
**M. N. DASTUR & COMPANY (P) LTD.**  
 TATA BLUESCOPE STEEL LTD.  
 BASE XRD-500, JAMNESHAPUR  
 COATED STEEL COMPLEX (PHH)  
 DETAIL OF HAZARDOUS WASTE PIT

25331	00-00	CV-072	0
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SKETCH - 1



झारखण्ड राज्य प्रदूषण नियंत्रण पर्वद  
JHARKHAND STATE POLLUTION CONTROL BOARD  
T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI-834004  
Phone No:- 2400852, 2400979, 2400851, Fax No:- 2400850.

Annexure II

Ref No. JA/2655/W/332

Date - 1.2.07.

No Objection Certificate under section 25 & 26 of the water (Prevention & Control of pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of pollution) Act, 1981.

1. Reference application no. 4588 dated 19-09-05 of M/s Tata BlueScope Steel Ltd. , Bara Ash pond Area, Jamshedpur- 831009 for setting up a plant for manufacturing of Zinc- Aluminium, Coated Steel Strip and Polyester paint Coated Strip at Bara Ash pond Area, Po- Agrico, Dist - East Singhbhum. The production capacity of the industry will be as follows :-

- 1) Zinc-Aluminium Coated Steel Strips (Galvalue/Zinc column - 100,000 TPY
- 2) Polyester Paint coated Strip- 150,000TPY

Project Cost- 785.0 Crores

2. After Consideration

- i) The facts stated in the N.O.C application & Project Report
- ii) Provisions of related water (Prevention & control of Pollution) Act, 1974 & Air (Prevention & Control of pollution) Act, 1981.
- iii) EIA/EMP submitted.
- iv) Public Hearing conducted on 12-05-06.

3. N.O.C in favour of unit, based on EIA/EMP & facts stated in the project report, N.O.C application is hereby accorded subject to the following conditions:-

- i) The unit shall obtain consent to operate from State pollution Control Board under section 25 and 26 of the Water (Prevention & Control of pollution) Act, 1974 and section 21 of the Air (Prevention & Control of pollution) Act, 1981 prior to commissioning of the plant.
- ii) The unit shall install Effluent Treatment Plant adopting appropriate technology to treat the effluent to the standard stipulated and it shall be recirculated.
- iii) All tanks used for collection and treatment of effluent shall be made impervious by providing adequate cement concrete/stone masonry/stone slab lining with leak proof materials.
- iv) The unit shall install water meter to measure the water consumed for different purposes as per the water (Prevention & Control of pollution) Cess Act, 1977.
- v) The unit shall ensure continuous and uninterrupted power supply so that the pollution control system functions uninterruptedly. Separate energy meters shall be provided for the pollution control systems.
- vi) The unit shall upgrade pollution control systems as and when new technologies are available.
- vii) The unit shall install suitable Air pollution control devices wherever necessary to control fugitive emission, and emission from stack shall conform to the stipulated standards.
- viii) The height of stack(s) shall be as per norms of Central Pollution Control Board. Necessary port hole(s) ladder and platform shall be provided with the stack as per norms of the Central Pollution Control Board for stack emission monitoring.

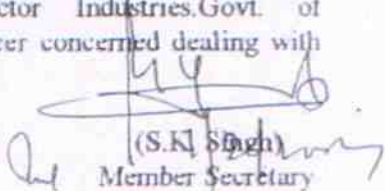
- ix) The unit shall provide Ambient Air Quality Report & Noise level monitoring report before and after commissioning of the plant. The unit shall ensure that the Noise level & AAQ are within the prescribed limit.
  - x) The D.G. sets shall be housed properly to minimize noise pollution in and around the factory campus. The height of exhaust pipe shall be raised as per the norms of C.P.C.B.
  - xi) The plantation shall be made in every direction in all vacant spaces available around the factory campus.
  - xii) The unit shall prepare and submit a plan of rain water harvesting within Six months.
  - xiii) The unit shall implement all pollution control measures as suggested in EIA/EMP.
  - xiv) Online monitoring system shall be installed to check pollution level continuously.
  - xv) For the disposal of Oily and Volatile organic waste, Incinerator shall be provided with adequate pollution control devices to meet the Board's emission standard.
  - xvi) The unit shall obtain Environmental Clearance from MOEF, Govt. of India by 30<sup>th</sup>, June, 2007.
  - xvii) The unit shall comply the following directions as per the recommendation of the committee constituted vide Board's letter no. 3113 dated 21-09-06
    - a) The road leading from M/s Timken India Ltd. to M/s Tata BlueScope Steel Ltd. Shall be made pucca and frequency of water spraying shall be increased.
    - b) Slag dumped in the northern side of the premises shall be removed.
    - c) Garland drain along the boundary outside the premises shall be provided.
    - d) Water spraying on all haul roads shall be done regularly.
    - e) Garbage dumped in the Eastern side of the premises shall be removed.
4. The Jharkhand State Pollution Control Board reserves the right to revise and/or add any other conditions, if necessary, for the protection of Environment and to ensure pollution control or any.
5. The present N.O.C shall not be considered as an assurance for granting consent to operate the proposed plant and is subject to compliance of all conditions as mentioned above.
6. This N.O.C is valid for a period of 12 months from the date of issue.

Sd/-  
(S.K. Singh)  
Member Secretary

Memo No. 332

Ranchi, Dated 1.2.07.

Copy forwarded to M/s Tata BlueScope Steel Ltd., Bara Ash pond Area, Jamshedpur-831009 /Secretary, Ministry of Environment and Forest, Govt. of India New Delhi/Secretary, Dept. of Forest and Environment, Govt. Of Jharkhand, Ranchi/ Chief inspector of Factories, Doranda, Ranchi/Deputy Commissioner, East Singhbhum/Director Industries Govt. of Jharkhand, Ranchi/Regional Office, J.S.P.C Board, Jamshedpur/officer concerned dealing with consent/PS to Chairman.

  
(S.K. Singh)  
Member Secretary

- ix) The unit shall provide Ambient Air Quality Report & Noise level monitoring report before



# JHARKHAND STATE POLLUTION CONTROL BOARD

T.A. DIVISION BUILDING (GROUND FLOOR), H.E.C., DHURWA, RANCHI-834004

Phone :2400852, 2400851, Fax:0651- 2400850, Web Site-www.jspcb.org

Annexure IIA

Ref.No. JA/New/New/A/W 9-810

Date: 4.4.11

## CONSENT TO OPERATE

With reference to the applications dated **14.02.2011** of **M/s. Tata Blue Scope Steel Ltd, At-Bara, P.O.-Agrico, Jamshedpur, East Singhbhum** for consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and that under section 21 of the Air (Prevention & Control of Pollution) Act, 1981, he (they) is (are) granted consent to bring into use his (their) new/alterd/existing outlet(s) for discharge of trade effluent and (or) domestic sewage and to operate his (their) industrial plant having installed production capacity to produce **Metal Coated Steel Coils-1,00,000 TPA and Painted Coils-1,50,000 TPA, At-Bara, P.O.-Agrico, Jamshedpur, East Singhbhum** for the period from **14.02.2011 to 31.12.2011** with the following conditions:

1. That, he (they) shall not make any alteration, addition, deletion or modification in the plant without the prior clearance from the Board:
2. That, he (they) shall abide by the obligations provided under sections 24, 31 and 33A of the Water (Prevention & Control of Pollution) Act, 1974 and shall extend co-operation to the Board in performing its functions entrusted under sections 20, 21 23, 30 and 32 of the Act.
3. That, he (they) shall comply with the requirements of the Water (Prevention & Control of Pollution) Cess Act, 1977 read with the Water (Prevention & Control of Pollution) Cess Rules, 1978
4. That, he (they) shall abide by the obligations provided under sections 22, 23 and 31A of the Air (Prevention & Control of Pollution) Act, 1981 and shall extend co-operation to the Board in performing its functions entrusted under sections 24, 25 and 26 of the Act.
5. That, he (they) shall abide by the obligations provided under sections 5, 7, 8 and 9 of the Environment (Protection) Act, 1986 and shall extend co-operation in performing the functions entrusted under sections 3, 10 and 11 of the Act.
6. That, he (they) shall abide by the applicable provisions of the Environment (Protection) Rules, 1986; the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008; the Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989; the Bio-Medical Waste (Management and Handling) Rules, 1998; the Municipal Solid Wastes (Management and Handling) Rules, 2000 and the Batteries (Management and Handling) Rules, 2001.
7. That, he (they) shall maintain the quality of discharge and (or) emission and (or) noise level of environmental pollutants in conformity with the standards as laid under rule 3 of the Environment (Protection) Rules, 1986.
8. That, he (they) shall monitor his (their) effluent (s), emission (s) and the ambient air, noise level regularly and shall submit the report to the Board in compliance of the condition laid in paragraph 7.

Contd.....



9. That, \*he (they) shall establish well equipped environmental laboratory with the facilities of system (s) of continuous monitoring of effluent (s), emission (s), ambient water quality (ies), ambient air quality (ies) and ambient noise level (s) and transferring them (monitoring results) to his (their) website (s) and to the e-mail address (es) of the key persons of Jharkhand State Pollution Control Board; Central Pollution Control Board, Zonal Office, Kolkata and Ministry of Environment & Forests, Regional Office, Bhubaneswar with simultaneous displaying at prominent locations in front of the his (their) premises. [\* Unit (s) of medium and large scale under 17 categories of polluting industries of category A of E I A Notification, 2006.]
10. That, he (they) shall submit applications for consent under section 25/26 of the Water (Prevention & Control of Pollution) Act, 1974 and that under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days before the expiration of the consent i.e. **31.12.2011** or within **30 days** from the date of receipt of this order, whichever is earlier.
11. That, he (they) shall submit the environmental statement every year by 30<sup>th</sup> September and shall harvest all rainwater precipitating in the premises and do three tier tree plantation as air barrier during the forthcoming monsoon.
12. That, he (they) shall submit AAQ, Stack(s) Monitoring Report and Noise level monitoring report within consent period.
13. That, he (they) shall monitor and submit the effluent analysis report within consent period.
14. That, he(they) shall implement rain water harvesting plan by May, 2011.
15. That, he(they) shall upgrade, maintain and operate ESP/bag filters installed at kiln/cooler discharge, product separation, transfer point, coal crusher etc to meet emission standard.
16. That, he (they) shall pay Cess under the Water (Prevention & Control of Pollution) Cess Act, 1977
17. That, he(they) shall operate ESP regularly.
18. That, he(they) shall interlock the production with pollution control equipment within consent period.
19. That, he(they) shall recycle its effluent(s) and ensure no discharge out side the premises all the time.
20. That, he(they) shall construct pucca road inside the factory and shall maintain good house keeping inside the factory campus within consent period.
21. That, he (they) shall raise the height of exhaust of D.G. Set & quality of emission & Noise level in conformity with the standard prescribed in EP Rule, 1986 as per Central Pollution Control Board norm.
22. That, he(they) shall comply the direction given in Environmental Clearance issued by Ministry of Environment and Forest, New Delhi.

Sd/-  
MEMBER SECRETARY

Memo. No. 4.810

Ranchi, Dated 4.6.11

**Copy forwarded to: M/s. Tata Blue Scope Steel Ltd, At-Bara, P.O.-Agrico, Jamshedpur, East Singhbhum**  
/Regional Officer, R.O.-Cum-Laboratory, Jamshedpur for information and necessary.

*Siddhanta*  
2/4  
MEMBER SECRETARY



# JHARKHAND STATE POLLUTION CONTROL BOARD

TOWNSHIP ADMINISTRATION BUILDING, HEC COMPLEX, DHURWA, RANCHI 834004  
Telephone: 0651-2400850 (Fax)/ 2400851/2400852/2401847/2400979/2400139

Ref. No. PC/ISR/Air/T-64/11/...G.3885

Ranchi, Dated 10.10.14

Consent to operate (CTO) under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

- Reference:** Application (s) dated 19.09.2013 of M/s. Tata Blue Scope Steel Ltd., At - Bara, P.O. - Agrico, Jamshedpur, Dist. - East Singhbhum (occupier) for consent under section 25 /26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981.
- Documents Relied Upon:**
  - The content of Environmental Clearance (EC), -Ref No. J-11011/271/2007-IA.II(I) Dated 24.08.2007 issued by MoEF, Govt. of India
  - The content of Consent-to-Establish (CTE), Ref No. 332 Ranchi, Dated 01.02.2007
  - The content of Consent-to-Operate (CTO), Ref No. G-810 Ranchi, Dated 04.04.2011
  - The content of Inspection Report (I/R), Ref No. 3780 Regional Officer, Regional Office-Cum-Laboratory, Jamshedpur, Dated 24.12.2013
- The consent is granted under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 to operate the project in At - Bara, P.O. - Agrico, Jamshedpur, Dist. - East Singhbhum, as follows:

Project	Plot No.	Area	Investment (Rs)	Product & Capacity	Period	
					From	To
Before Expansion	At - Bara, P.O. - Agrico, Jamshedpur, Dist. - East Singhbhum	-----	785.0 Crores	Metal Coated Steel Coils - 1,00,000 TPA and Painted Coils - 1,50,000 TPA	01.01.2014	31.12.2014

### (A) General Conditions :

- That, the occupier shall comply with all conditions of EC, Ref. No. J-11011/271/2007-IA.II(I) Dated 24.08.2007, CTE Ref. No. 332, Ranchi, Dated 01.02.2007 previous CTO, Ref. No. G-810 Ranchi, Dated 04.04.2011 shall submit report to this effect with supporting documents.
- That, the occupier shall maintain the ambient air quality within the standard given below:

S N	Parameter	Standard
I	Respirable Suspended Particulate Matter (24 hrs.)	100 µg/ Nm <sup>3</sup>
II	Sulphur Dioxide (24 hrs.)	80 µg/ Nm <sup>3</sup>
III	Oxides of Nitrogen (24 hrs.)	80 µg/ Nm <sup>3</sup>

iii. That, the occupier shall maintain the emission quality within the standard and the quantity, as follows:

S. N.	Parameter	Standard
I	Particulate Matter	150 mg/ Nm <sup>3</sup>

iv. That, the occupier shall keep D G Set(s) within acoustic enclosure (s) and shall keep the height(s) of exhaust pipe(s) as per Central Pollution Control Board norm.

v. That, the occupier shall keep process effluent in close-circuit and the quality of effluent from other sources in conformity with the standard (s) and the discharge quantity as below:

S N	Parameter	Standard
I	Total Suspended Solids	100 mg/L
II	BOD	30 mg/L
III	COD	250 mg/ L
IV	Oil & Grease	10 mg/ L

vi. That, the occupier shall install and maintain Central Ground Water Board/ State Ground Water Directorate approved system of rain water harvesting-cum-ground water recharge.

vii. That, the occupier shall create and maintain new water body (ies) / remove deposit(s) of existing water body(ies)/ nearby stream(s) and pond(s) and well(s) and shall maintain the wholesomeness of water.

viii. That, the occupier shall dispose of solid wastes as follows:

S N	Waste Type	Mode of Disposal
I	Hazardous Carbonaceous Wastes	In co-processing in high temperature furnaces or kilns
II	Hazardous Non-Carbonaceous Wastes	In TSDF
III	Non-carbonaceous non-hazardous solid wastes/ Mine Over Burden	As a substitute of Soil or Mineral

ix. That, the occupier shall grow and maintain greenery in the periphery and other available spaces and shall continue enhancing its plant density and biodiversity.

x. That, the occupier shall submit environmental statement with supporting stoichiometric calculations analyses reports, every year.

xi. That, the occupier shall submit report(s) duly monitored and issued by an NABL accredited laboratory in compliance of sub-para (ii), (iii), (v) and (viii) of general condition monthly/ quarterly/ six monthly/ annually.

xii. That, the occupier shall comply with all applicable provisions of the Water (Prevention & Control of Pollution) Act, 1974; the Water (Prevention & Control of Pollution) Cess Act, 1977; the Air (Prevention & Control of Pollution) Act, 1981; and the Environment (Protection) Act, 1986 and Rules there under.

*(Signature)* *(Signature)*

(B). Specific Conditions:

- i. That, the occupier shall install and operate systems for online monitoring of ambient air quality and stack emission and effluent quality with connectivity to Jharkhand State Pollution Control Board server.
  - ii. That, the occupier shall establish and operate well equipped environmental laboratory with facilities to monitor at least all regulatory parameters and duly accredited by NABL.
  - iii. That, the occupier shall upgrade operate and maintain fume extraction system to control voc fumes and shall operate water scrubber in alkali & chromate section.
  - iv. That, the occupier shall operate ETP regularly.
  - v. That, the occupier shall operate & maintain incinerator for hazardous wastes.
  - vi. That, the occupier shall interlock the production with pollution control equipment within consent period.
  - vii. That, the occupier shall ensure no discharge outside the premises all the time.
  - viii. That, the occupier shall construct pucca road inside the factory and shall maintain good house keeping inside the factory campus within consent period.
  - ix. That, the occupier shall comply the directions given in Environment Clearance issued by Ministry of Environment and Forest, New Delhi.
  - x. That, the occupier shall submit applications for renewal of consent under section 25 / 26 of the Water (Prevention & Control of Pollution) Act, 1974 and under section 21 of the Air (Prevention & Control of Pollution) Act, 1981 again 120 days prior to the date of expiry of this consent i.e. 31.12.2014, with requisite fee and documents showing compliance of all of the above conditions.
4. This order shall be valid subject to all compliance(s)/statutory clearance (s) under all other applicable laws to the unit.

This is issued with the approval of the competent authority

Sd/-  
[Dr Mahendra Mahto]  
Member Secretary

Ranchi, Dated 10/10/14

Memo No. PC/JSR/Air/T-64/11/... 63885 ✓  
Copy to: M/s. Tata Blue Scope Steel Ltd., At - Bara, P.O. - Agrico, Jamshedpur, Dist. - East Singhbhum / Regional Office-cum-Laboratory, Jamshedpur for information & necessary action.

[Dr Mahendra Mahto]  
Member Secretary

Handwritten initials

SE/ 10/10/14

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**JHARKHAND STATE POLLUTION CONTROL BOARD**  
**REGIONAL OFFICE-CUM-LABORATORY**  
**FORM-2/See Rule 3 (C) and 5 (s)**

**FORM FOR GRANT OF AUTHORIZATION NOC OCCUPIER OR OPERATOR HANDLING  
 HAZARDOUS WASTES.**

Ref. No: - 2021

Dated:- 20/7/11

1. M/s Tata Blue Scope Steel Ltd hereby granted provisional authorization to operate a facility for collection, reception, treatment storage, transport and disposal of hazardous waste on the premises stipulated at- Bara, P.O.- Agrico, Jamshedpur, Dist- East Singhbhum.
2. The authorization granted to operate a facility for collection, treatment storage and disposal of hazardous wastes.
3. The authorization shall be in force for a period of 5 years with effect from date- 24.03.2011
4. The authorization in subject to the conditions stated below and such conditions as may be specified in the Rules for the time being force under the Environment (Protection) Act, 1986.
  - (i) The authorization shall comply with the provisions of the Environment (P) Act, 1986 and the Rules made there under.
  - (ii) The authorization or its renewal shall be produced for inspection at the request of an office authorized by the State Pollution Control Board.
  - (iii) The person authorized shall not rent, sell, transfer or otherwise transport the hazardous waste(s) without obtaining prior permission of the State Pollution Control Board.
  - (iv) Any unauthorized change in personnel, equipment as working conditions as mentioned in the application by the person authorized shall constitute a break of his authorization.
  - (v) It is the duty of authorized person to take prior permission of the State Pollution Control Board to close down the facility.
  - (vi) *An application for the renewal of an authorization shall be made as laid down in 5 (6) (II).*
  - (vii) *The quantities, categories and names of Hazardous Wastes generating processes shall be submitted within one month.*
  - (viii) *Hazardous Wastes shall be kept in secured landfill.*
  - (ix) *The unit shall maintain records of collection, Reception, Treatment, Storage & Disposal of H/W in form-3 and submit annual return in form-4 as per the rules.*

This is being issued as per direction of competent authority contained in letter no-3117, dated- 10.07.2004.

To,

M/s Tata Blue Scope Steel Ltd,  
 At- Bara, P.O.- Agrico, Jamshedpur,  
 Dist- East Singhbhum.

20/7/11  
 Regional Officer  
 Jamshedpur.

## Occupational Health Monitoring Programmes

Sr. No.	Type of Medical Examination	Details		Frequency
		Pre-Employment Medical Checkup	Before Employment	
1	All Employee	Will undergo Medical checkup once in 12 month.		Annual
2	Examination of Eye site and colour vision of certain workers such as crane, Locomotive, Fork lift, Payloaders, Dumpers or other automobiles operators as well as workers involved in giving signal to crane or locomotive operator.	As per Bihar / Jharkhand factory rules 1) No person shall be employed to operate crane , Locomotive and forklift pay loader ,Dumper or other automobiles or to give signals to a crane operator or locomotive operator unless his eye sight and colour vision have been examined by qualified ophthalmologist ,approve by the inspector and declare fit to work whether or without the use of corrective glasses. The eye-sight and colour vision of person employed as referred shall be examined once in a period of 12 month up to age of 45 and once in six month beyond that age.		Once in a up to age of 45 beyond that once in six month.
3	Workers employed in hazardous process	6 month general checkup to assertion in the health status of all workers in respect of occupational health hazards to which they are exposed and in cases where in the opinion of factory medical officer it is necessary to do so in shorter interval in respect of any worker. b) The details of pre-employment and and periodical examination carried out as aforesaid shall be recorded in health register in form no 24 C) No person shall be employed for first time without a certificate of fitness in form no 33 granted by factory medical officer. d) Any finding of factory medical officer revealing any abnormality or unsuitability of any person employed in process shall immediately be reported to certifying surgeon who shall in turn, examine the concerned worker and communicate his finding to occupier within 30 days. If the certifying surgeon is of opinion that workers so examined is required to be taken away from process for health protection he will direct the occupier accordingly, who shall not employ the said worker in the same process. However the worker so taken away be provided with alternate placement unless he is fully incapacitated. in opinion of the certifying surgeon, in which case the worker affected shall be suitably rehabilitated. Provided that the certifying surgeon on his own may examine any worker when he considers it necessary to do so for ascertaining the suitability of his employment in the hazardous process of for ascertaining the health status of any worker. E) The workers taken away from employment in any process under sub rules may be employed again in same process only after obtaining the fitness certificate from certifying surgeon and after making entry to that effect in health register.		Once in six month
4	Person involved in handling of Chronic compound	every worker involved in in should be examined by M.O at least twice in every week and by certifying surgeon at least in three months.		Twice in week by M.O. And By certifying surgeon once in three month
5	Person involved in molten metal area	6 month general checkup and special check up for Eye		Once in six month
6	Person involved in high noise level	Will be examined by certifying surgeon within 14 days of first employment and thereafter in every 12 months. (Audiometry examination )		
7				

## Medical Examination Report of Contractor Employee Involved in crane Operation and forklift operation

Sr.No	Date of Medical Examination	Name	SEX	Age	Height	Weight	Blood Group	Pulse Rate	B.P	Wearing Glass or not	Eye Sight	Chest	EAR	Nose	Remarks of
1	29-Nov-13	Sunil Kumar Gupta	Male	32						No	Normal				Fit For Duty
2	24-Nov-13	Sadab Alam	Male	30						No	Normal				Fit For Duty
3	29-Nov-13	Sagan Kumar Sinha	Male	30						No	Normal				Fit For Duty
4	29-Nov-13	Ranjit Kumar	Male	25						No	Normal				Fit For Duty
5	24-Sep-13	Manoj Kumar Yadav	Male	25						No	Normal				Fit For Duty
6	24-Sep-13	Hemant Kumar	Male	23						No	Normal				Fit For Duty
7	25-Sep-13	Md Abaque Usmani	Male	33						No	Normal				Fit For Duty
8	25-Sep-13	Guddu Kumar Singh	Male	22						No	Normal				Fit For Duty
9	24-Sep-13	Anup Kumar Dey	Male	24						No	Normal				Fit For Duty
10	24-Sep-13	Chandan Kumar	Male	23						No	Normal				Fit For Duty
11	24-Sep-13	Radhe Urang	Male	37						No	Normal				Fit For Duty
12	29-Nov-13	R.N. Charaborty	Male	56						No	Normal				Fit For Duty
13	29-Nov-13	Niranjan Patel	Male	41						No	Normal				Fit For Duty
14	29-Nov-13	Hari Shankar Singh	Male	49						Yes	Normal				Fit For Duty
15	29-Nov-13	Shyamal Ghosh	Male	49						No	Normal				
16	29-Nov-13	Sitaram Yadav	Male	29						No	Normal				Fit For Duty
17	29-Nov-13	Vijay Kumar Yadav	Male	30						No	Normal				Fit For Duty

## Annexure III A

Employee Name	Age	Sex	Emp. No	Date of Examination	Depart.	Status
Dheerendra Singh Baghel	32	Male	1148	19.08.2013	CPL	Fit
Sagar Mukherjee	34	Male	1115	25.08.2013	CPL	Fit
Mohaniraj Jagannath Dhamak	33	Male	1094	25.08.2013	CPL	Fit
Ramesh Tudu	23	Male	1324	19.08.2013	CPL	Fit
MD. Tausif Shahab	27	Male	1349	25.08.2013	CPL	Fit
Manjeet Singh	32	Male	1392	19.08.2013	CPL	Fit
Debadatta Sahu	30	Male	1393	19.08.2013	CPL	Fit
Ravindra Deonandan Yadav	31	Male	1409	19.08.2013	CPL	Fit
Pawan Kumar Singh	25	Male	1207	19.08.2013	CPL	Fit
Ravi Upadhyay	24	Male	1209	25.08.2013	CPL	Fit
Tikechand Deep	28	Male	1248	19.08.2013	CPL	Fit
Bali H.Patil	24	Male	1462	02.09.2013	CPL	Fit
Ravikant	28	Male	1096	19.08.2013	CPL	Fit
Vinod B Shelar	27	Male	969	19.08.2013	CPL	Fit
Amit Kumar Sinha	26	Male	1342	28.08.2013	MCL	Fit
Abhay Kumar	22	Male	1429	28.08.2013	MCL	Fit
Deepak Kumar Mishra	24	Male	1432	28.08.2013	MCL	Fit
Harsh Yadav	22	Male	1433	26.08.2013	MCL	Fit
Ashwani Kumar Sinha	23	Male	1434	26.08.2013	MCL	Fit
Kishan Lal Saini	28	Male	1301	28.08.2013	MCL	Fit
Karamvir Gulab Singh	34	Male	1341	28.08.2013	MCL	Fit
Satyendra Mishra	22	Male	1424	28.08.2013	MCL	Fit
Suman Seal	23	Male	1426	28.08.2013	MCL	Fit
Vikash Kumar Mahto	21	Male	1428	28.08.2013	MCL	Fit
Ramkhillawan Ramkrit Yadav	37	Male	1338	28.08.2013	MCL	Fit
K. Rajshekhar Rao	29	Male	1401	28.08.2013	MCL	Fit
Priyabrata Patra	23	Male	1427	28.08.2013	MCL	Fit
Prafulla Hiranrao Takalkhede	26	Male	1413	28.08.2013	MCL	Fit
Amol Madhukar Rawte	28	Male	1244	28.08.2013	MCL	Fit
Gaurav Kumar Jha	28	Male	1249	01.09.2013	MCL	Fit
Vikas Kumar	26	Male	1336	28.08.2013	MCL	Fit
Tejinder Pal Singh	23	Male	1377	28.08.2013	MCL	Fit
Vivek Kumar	26	Male	1234	28.08.2013	MCL	Fit
Susanta Kumar Mohanty	26	Male	1240	28.08.2013	MCL	Fit
Yogesh Sharma	26	Male	1243	28.08.2013	MCL	Fit
Lalitesh .	30	Male	1189	01.09.2013	MCL	Fit
Malkit Singh	22	Male	1644	01.09.2013	MCL	Fit

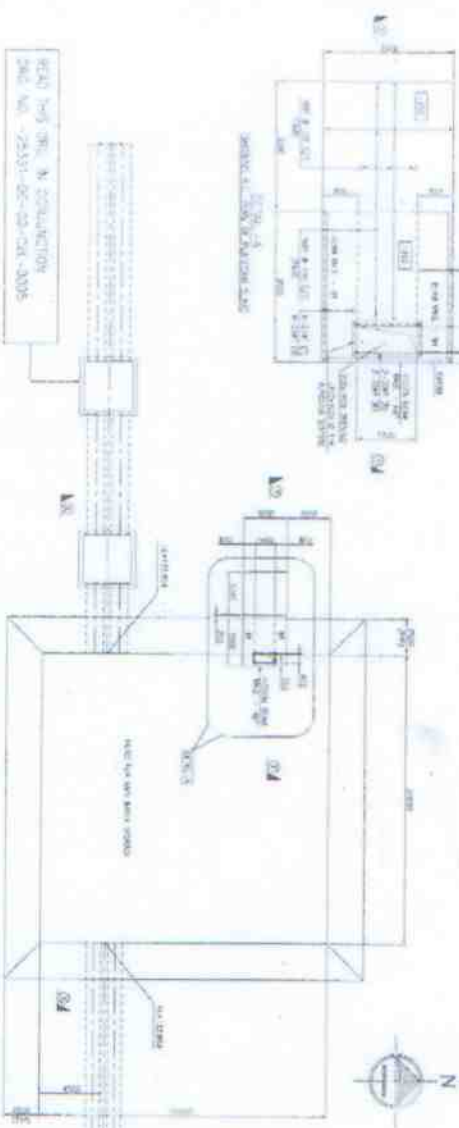


## Annexure III A

Employee Name	Age	Sex	Emp. No	Date of Examination	Depart.	Status
Rupesh Kumar	22	Male	1431	28.08.2013	MCL	Fit
Johny Mathew	43	Male	154	19.08.2013	MCL	Fit
Ranjan Singh	28	Male	1245	26.08.2013	MCL	Fit
Hemant Bhakuni	28	Male	1638	28.08.2013	MCL	Fit
Saurabh Khandelwal	30	Male	1251	28.08.2013	MCL	Fit
Ashish Ranjan	28	Male	1628	01.09.2013	CPL	Fit
Prakash Vishwakarma	30	Male	1640	15.08.2013	CPL	Fit
Sudhir Kumar	23	Male	1673	15.08.2013	CPL	Fit
Kislay Kishore	26	Male	1178	25.08.2013	CPL	Fit
Mahesh Mishra	26	Male	1580	01.09.2013	CPL	Fit
Amit Nakatu Mate	27	Male	1493	19.08.2013	CPL	Fit
Gaurav Agrawal	31	Male	1142	01.09.2013	CPL	Fit
Mukesh Kumar Tiwary	23	Male	1425	01.09.2013	MCL	Fit
Shristidhar Mahto	25	Male	1414	28.08.2013	MCL	Fit

# DESIGN OF RAIN WATER HARVESTING POND

DATE: 2023-10-10



PLAN OF RAIN WATER HARVESTING POND

1. The pond shall be constructed in concrete with a minimum depth of 1.5m. The concrete shall be of grade M20 and shall be cast in layers. The bottom of the pond shall be finished with a 150mm thick concrete lining. The sides of the pond shall be finished with a 150mm thick concrete lining. The pond shall be finished with a 150mm thick concrete lining. The pond shall be finished with a 150mm thick concrete lining.

NO.	REVISION
1	ISSUED FOR CONSTRUCTION
2	REVISED
3	REVISED
4	REVISED
5	REVISED
6	REVISED
7	REVISED
8	REVISED
9	REVISED
10	REVISED

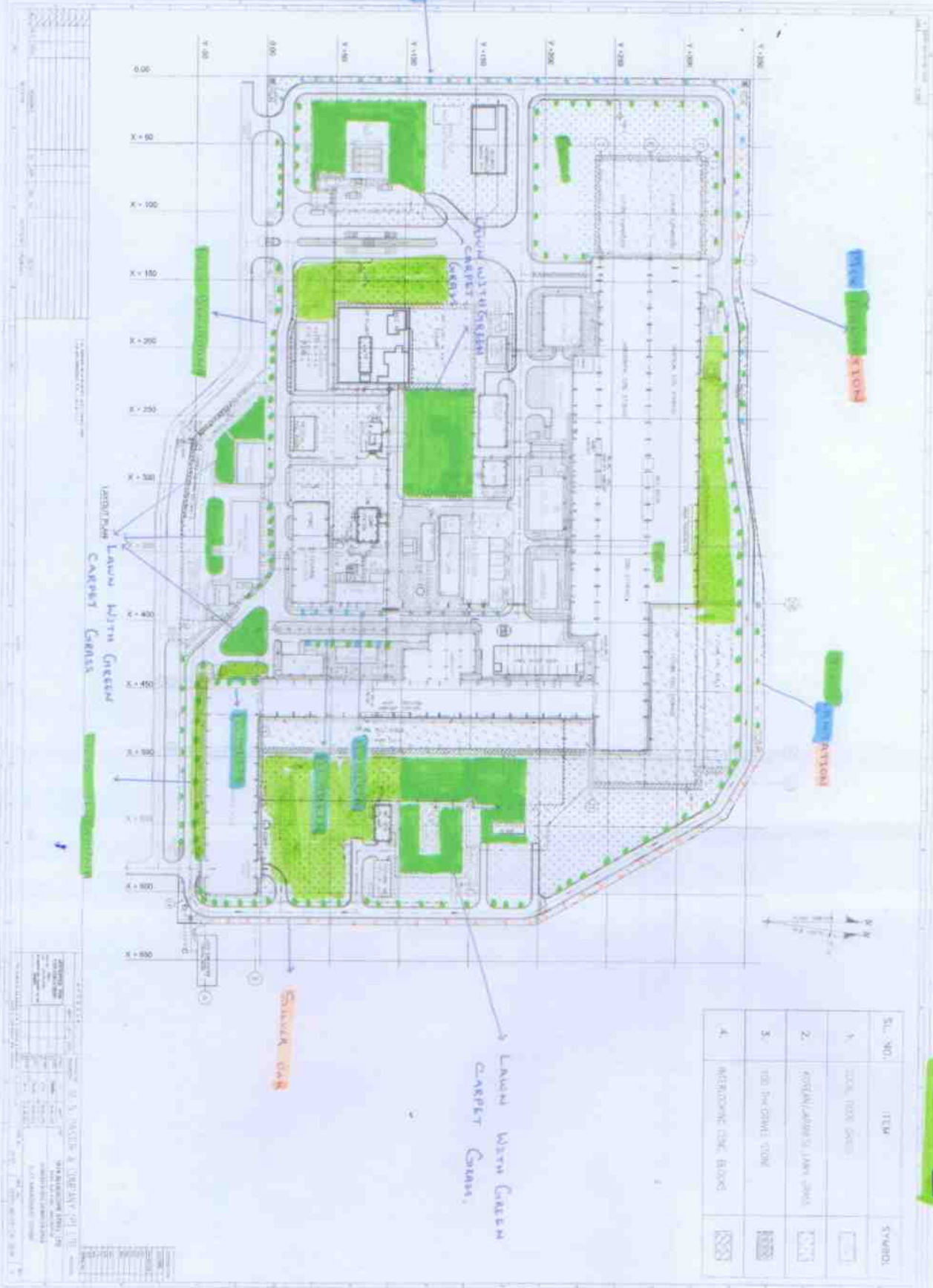
DATE	2023-10-10
SCALE	1:100
DRAWN BY	M. N. DASTUR
CHECKED BY	M. N. DASTUR
APPROVED BY	M. N. DASTUR
PROJECT NO.	2023-10-10
CLIENT	YATA BIRSINGH STEEL & CO.
ADDRESS	YATA BIRSINGH STEEL & CO. PRIVATE LIMITED, P.O. BOX 1234, KATHMANDU, NEPAL.
CONTACT NO.	977-1-42345678
EMAIL	info@yatabirsinghsteel.com.np

YATA BIRSINGH STEEL & CO. PRIVATE LIMITED  
 P.O. BOX 1234, KATHMANDU, NEPAL  
 TEL: 977-1-42345678  
 EMAIL: info@yatabirsinghsteel.com.np

DESIGNER: M. N. DASTUR  
 CHECKER: M. N. DASTUR  
 APPROVED: M. N. DASTUR

NO. SYMBOLS OF DIMENSIONS  
 TO BE USED IN THE DRAWING  
 FOR DIMENSIONS AND  
 DIMENSIONS ONLY

DESIGNER: M. N. DASTUR  
 CHECKER: M. N. DASTUR  
 APPROVED: M. N. DASTUR



SL. NO.	ITEM	SYMBOL
1.	SOIL TONE SAND	[Symbol]
2.	ROCK/LAVAS/LIM STONE	[Symbol]
3.	RED TONE STONE	[Symbol]
4.	ANDROOME OIL BLOCKS	[Symbol]

PROJECT NO. 10/2018  
 DATE 10/2018  
 DRAWN BY: [Name]  
 CHECKED BY: [Name]  
 APPROVED BY: [Name]  
 SCALE: 1:100  
 SHEET NO. 1 OF 1

10/2018  
 10/2018

GREEN BELT AND PLATATION WORK PROGRESS REPORT				
Month & year	Work details Manual and Area of work	Plantation and lawn preparation Details	No of Plants & shrubs	Expenses amount Rs
October-2010 to December 2010.	Work started from 3 rd October 2010. Total working days:- 70 No. of labors :- 20 Work soil labeling and trench making around Admin and Canteen Building. Supply of good earth ( 27457.676 CFT) and Supply of Manure (7 trucks)			
	All Around plant at different place.	Fichus Benjamin	36	1440
		Bismarck	30	1200
		Shrubs	383	20956
		Ground cover	262	4800
		Golden Doranda	783	1570
		Lavenders ,	32	3320
		Plumbaria Alba	5	240
		Calendar	30	375
		Alistonia Scholaris	20	1500
		Plumeria Rubra	4	225
		Silver oak	15	1125
		<b>Total</b>	<b>1600</b>	<b>36751</b>
	<b>Area</b>	<b>Lawn</b>	<b>Area in Sqre Meter</b>	<b>Expense</b>
	Near Admin Building and Canteen Building	Kalunchu	2.5	100
	Near canteen Building and Canteen Building	Korean Carpet Grass	36	4000
	Near L.P.G. Fencing area	Green grass lawn	4100	264200
	Hydrogen plant inside fencing area	Green grass Lawn	568.712	35260.144
	Nitrogen plant Inside fencing area	green grass Lawn	1483	91946
	Out side LPG	Green Grass Lawn	990.75	61380
	Lunch room Area	Green grass Lawn	1208.56	74896
	North side of chemical store	Green grass Lawn	3987	247194
	LBss north east Corner	Green grass Lawn	248.015	15376
	Out side H2 and N2 plant area	Green grass Lawn	6116.995	379253
	DG surrounding area	Green grass Lawn	106.38	6572
	<b>Total</b>		<b>18845</b>	<b>1180177</b>
	<b>Cost of Good Earth and manure</b>			<b>305000</b>
	<b>GRAND TOTAL</b>			<b>1521928</b>
Total No of Plants and Shrubs Planted during period October 2010 to December 2010 was 1610 and expense amount was Rs. 36751 Total area of lawn in Sq. mtr was 18845 and expense amount was Rs. 1180177 Cost of good earth and manure was Rs. 305000 Total Amount of expense was Rs. 1521928				

## Annexure VA

January 2011 to March 2011	Total No of working Days 62	Cost of good Earth and Manure		305000
	No of labors 20	Caussia fistula	13	520
		Arocaria	1	40
		Erythrina Varigata	13	520
		Minusops Elengi	13	806
		Chorisia Speciosa	10	400
		Ficus Panda	1	40
		Cledendron inerme (Shrubs)	1000	6200
		Ribbon Grass	250	15500
		China Palm	25	1000
		Golden Doranda	500	20000
		Ficus King Bush	4	300
		Lavendra (Ground coveres)	50	3100
		kalachu	50	3100
		cuphea	25	1875
		ficus panda	1	75
		Bismarika nobolis	3	225
		Ficus Benjamina	50	2000
		Bottle Palm	18	1350
		<b>GRAND TOTAL</b>	<b>2027</b>	<b>362051</b>

Total Number of Plants, Ground coverers and Shrubs planted during January to March 2011 was 2027 and amount expense was Rs. 362051

April to 15 June 2011	Total no of working days 47	Gulmohar	46	3425
	Total no of labours 16	Champa	77	2000
		Bottle Palm	50	975
		Silver Oke	13	975
		LangesttrmiaFlosergia	13	975
		Champa	75	1900
		Elistonia	61	3782
		Ficus Benjamina	70	2400
		Phonick Pan	61	2800
		Cassiafis Tula	13	4575
		Cledendron Inerme	100	806
		Elentina Red	100	4000
		Golden Bamboo	10	6200
		Murraya paniculata	250	6200
		<b>Grand Total</b>	<b>939</b>	<b>41013</b>
		<b>Lawn</b>	<b>Area in Square Meter</b>	
		Ground Coverers	65	10000
		Grass Koren carpet	3116	373968
		Earth and Good Manure		302000
		<b>Total</b>		<b>685968</b>

Total No of Plants and Shrubs Planted during period April 2011 to 15th June 2011 was 939 and expeance amount was Rs. 41013

Total area of lawn in Sq. mtr was 3181 and expense amount was Rs 383968 Cost of good earth and manure was Rs. 302000

Total Amount of expense was Rs. 726981

## Annexure VA

July 2011 to Sept 2011		Fichus Benjamin	36	1440
		Bismarck	30	1200
		Shrubs	383	20956
		Ground cover	262	4800
		Lavenders ,	32	3320
		Golden Doranda	783	1570
		Plumbaria Alba	5	240
		Calendar	30	375
		Alistonia Scholaris	20	1500
		Ficus Benjamin	70	2400
		Silver oak	15	1125
	Total no of working days 42	Gulmohar	46	3425
	Total no of labours 24	Champa	77	2000
		Golden Bamboo	10	6200
		Murraya paniculata	250	6200
		<b>Total</b>	<b>2049</b>	<b>56751</b>
Total No of Plants, Shrubs and Ground coverers planted during October 2010 to Sept 30 2011 is 6615 and amount expend is Rs. 496566 Total area of Lawn develop in Sq. Mtr is 22026 and amount expend is Rs. 1564145 Cost of good earth and manure is Rs. 912000				
Cost of development of Green Belt in TATA BLUESCOPE STEEL, Bara Plant is Rs. 2972711 which was paid to authorized vendors of company				
From October to December 2011	Total no of working days 75, Total no of labours 7			Cost of maintaining lawn and plantation was Rs 290000 .
From January 12 to March 12	Total no of working days 75, Total no of labours 9			Cost of maintaining lawn and plantation was Rs 302600
Total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 592600 and it was paid to authorized vendors of company. During period from Oct-2011 to March-2012.				
From April 12 to June 2012	Total no of working days 70 ,total no of labours 11			Cost of maintaining lawn and plantation was Rs 302600
from July 2012 to Sept 2012	Total no of working days 73 ,total no of labours 11			Cost of maintaining lawn and plantation was Rs 302600
Total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 6052000 and it was paid to authorized vendors of company. During period from APRIL 2012 to Sept 2012.				
From Oct 12 to Dec 2012	Total no of working days 65 ,total no of labours 12			Cost of maintaining lawn and plantation was Rs 325843
from Jan 13 to Mar 13	Total no of working days 73 ,total no of labours 12			Cost of maintaining lawn and plantation was Rs 316854
Total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 642699 and it was paid to authorized vendors of company. During period from Oct 2012 to Mar 2013.				
from April-13 to Sep-13	Total no of working days 154 ,total no of labours 05			Cost of maintaining lawn and plantation was Rs 479822
Total 235 plants and Shrubs Planted during period April 2013 to Sep-13, out of 235, 135 Plants donated by forest department and total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 478932 and it was paid to authorized vendors of company. During period from April to 2013 to Sep-2013.				
From Oct 13 to Dec 2013	Total no of working days 70 ,total no of labours 06			Cost of maintaining lawn and plantation was Rs 249325
From Jan 14 to Mar 14	Total no of working days 73 ,total no of labours 06			Cost of maintaining lawn and plantation was Rs 255295
Total 120 plants and shrubs planted during period Oct-13 to March-14 and total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 504620 and it was paid to authorized vendors of company. During period from Oct 2013 to Mar 2014.				
From April 14 to June 14	Total no of working days 72 ,total no of labours 05			Cost of maintaining lawn and plantation was Rs 262923
From July 14 to Sep 14	Total no of working days 73 ,total no of labours 05			Cost of maintaining lawn and plantation was Rs 262225
Total 70 plants and shrubs planted during period April-14 to Sep-14 and total Cost of Maintaining plants ,Shrubs ,Ground coverers and Lawn was RS 525148 and it was paid to authorized vendors of company, during period from April 14 to Sep 2014.				

## CSR of Tata BlueScope Steel

### Annexure-vi

Since the inauguration of our plant was on 06.03.12 (about only 2.6 year back) we have started the CSR activities in a very humble manner. Some of the activities are mentioned below:

1. Local vendors are encouraged to get contractual Job at our site such as housekeeping, canteen etc.
2. Blood donation camp on was organised in the Premises and 177 unit blood donated to Red Cross Society.
3. We have provided drinking water tank on the occasion of Ram Navami and Durga Puja at Sidhgora
4. Cleaning of Chhath Puja Ghat at Bhuyandih Basti on the occasion of Chhath Puja

**Summary of CREP (Corporate Responsibility for Environment Conservation) activity done so far and proposed to do in future.**

Since the inauguration of our plant was on 06.03.12 (about only 2.6 year back), CREP activity are in progress. Some of the compliance which has been completed so far and proposed to do in future is as below mention.

**Compliance of CREP Recommendations for iron and steel Plant**

SL No	CREP GUIDELINES	ACTION PLANNED
1	Fugitive emissions from material handling, conveying and screening operations shall be evacuated in closed systems and extracted by Fabric filters or ESPs or equally effective methods	N/A
2	Pollution control systems shall be operated as an integral part of production to ensure minimum emissions. Timely evacuation of dust (from Dust catchers, ESPs, Bag filter hoppers etc.) shall be routinely organized.	N/A
3	Fugitive emissions shall be controlled by controlled wetting and /or by the use of crust formers.	The plants design includes fume extractor; fumes are burnt in the incinerator before it goes to air through stacks. Gaseous emission from MCL is design as per MoEF standard. Fume extraction system is design for solvent vapors incineration, water scrubber system is implemented for alkaline substances. Fugitive emission is anticipated as nil
4	Flue dust, collected within the dust catchers shall be evacuated using closed vessels or employing equally effective methods to minimize fugitive dust.	N/A
5	Cooling water shall be recycled and reused	Two no. of Water cooling towers has been installed and waste water treatment plant has been installed. Water is recycling and reused. Close Circuit Cooling water scheme implemented WWTP implemented at site. Design of Water system and ETP takes care of all the norms.



6	Domestic discharges which are not reused, shall meet outfall, only after conforming to the specified effluent discharge standards.	N/A
7	The areas where high noise levels persist continuously for a significant period of time like Furnace area, Gas Cleaning Plant area, etc. shall be earmarked as High Noise Zone areas and accordingly it shall be displayed at appropriate places for warning employees. Through Integrated Maintenance Management system, necessary care shall be taken to minimize the noise at these areas.	In MCL Zinc pot area has been earmarked as high noise zone area and it has been displayed there. All the person working there has been provided with ear muff /ear plug. Acoustics enclosure for DG set and Air Compressor done.
8	Employees who are continuously exposed to high noise levels shall be provided with earplugs or earmuffs.	All the persons working at high noise level have been provided ear muff /ear plug.
9	Appropriate measures shall be taken, so that employees are not getting exposed to higher noise levels for a significant period of time.	Being complied.
10	Noise levels at various areas of the plant shall be regularly monitored and reviewed	Included in EMP. Regular monitoring will be done and reported accordingly. All equipments area design in accordance with EPA rules for control of noise levels.
11	Areas where continuous exposure cannot be avoided, necessary care shall be taken to insulate them from the surroundings.	Being complied
12	All efforts shall be made to minimize the generation of wastes and maximize its effective utilization	Included in EMP, Waste water treatment plant has been installed.
13	Wherever it becomes unavoidable, except resorting to option of dumping, in such cases, the wastes shall be disposed under controlled conditions.	Included in EMP. SLF has been installed. Incinerator installed.
14	All the wastes from the pollution control systems or treatment units shall be reused or recycled to the extent possible.	Included in EMP. Waste water treatment plant has been installed & after treatment water is being used for gardening.
15	Disposal of wastes shall be done in such away that the pressure on land and subsequent land contamination shall be minimum.	Included in EMP. No open dumping on land. SLF has been installed. Incinerator has been installed.