

MAHARASHTRA POLLUTION CONTROL BOARD

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Sion Circle, Sion (E),
Mumbai - 400 022

Consent order No.:- BO/JD(APC)/ EIC No. NG-9008-13/R/CC-CAC-6686

Date- 07.08.2013

To,
M/s. Sunflag Iron & Steel Co. Ltd.
Village Eklari (Warthi).
Tal. Mohadi, Dist.Bhandara.

Subject: Renewal of Consent to Operate -RED category.

- Ref : 1. Earlier Consent for Main Plant granted vide no. BO/APAE/ EIC No. Ng-5568-10/R/CC-502 datd 18.10.2011.
2. Earlier Consent for New DRI & Oxygen Plant granted vide no. BO/RO-Nagpur/AS(T)/ EIC No. NG-5466-11/O/CC-196 datd 11.10.2011.
3. Consent for Expansion of Rolling Mill Project granted vide no. BO/JD(APC)/ EIC No. NG-6343-12/O/CC-CAC-367 dated 29.03.2012
4. Minutes of CC/CAC meeting held on 12.07.2013.

Your application

Dated:30.04.2013.

For: Consent to Renewal with Amalgamation under Section 26 of the Water (Prevention & Control of Pollution) Act, 1974 & under Section 21 of the Air (Prevention & Control of Pollution) Act, 1981 and Authorization under Rule 5 of the Hazardous Wastes (M, H & T M) Rules 2008 is considered and the consent is hereby granted subject to the following terms and conditions and as detailed in the schedule I, II, III & IV annexed to this order:

The consent is granted for a period from 31.05.2013 to 31.05.2014.

The actual capital investment of the industry is Rs.1268.3 Crs. (As per C.A.Certificate dated 18.04.2013 submitted by industry along with the consent applications)

The Consent is valid for the manufacture of -

Sr. No.	Name of Products /By products	Maximum Quantity	UOM
1	Direct reduced iron (captive)	280000	MT/A
2	Pickling of stainless steel & carbon steel (intermediate)	66000	MT/A
3	coil blanks from rolled steel products (finished)	9600	MT/A
4	Hot metal from blast furnace (captive)	250000	MT/A
5	Sinters (Captive & intermediate products)	250000	MT/A
6	Continuous cast Billets (Intermediates)	525000	MT/A
7	Rolled steel products (finished)	500004	MT/A
8	Oxygen/Nitrogen/Argon (Captive Consumption)	45000	MT/A
9	Additional Facilities as Rolling Mill Bell & Bar Annealing Furnaces etc.	5	Nos.
10	Electricity (captive)	30	MW
11	Refining in stainless steel convertor (intermediate)	288000	MT/A
12	Coiling of steel bars (intermediate)	18000	MT/A
13	Oxygen (captive)	1200	Nm3/hr
14	DRI Ash/Char (By products)	15000	MT/A

M/s Sunflag Iron & Steel Co. Ltd. Bhandara



Conditions under Water (P&CP), 1974 Act for discharge of effluent:

Sr. no.	Description	Permitted quantity of discharge (CMD)	Standards to be achieved	Disposal
1.	Trade effluent	2118.5	As per Schedule -I	land / Recycle
2.	Domestic effluent	11.8	As per Schedule -I	land / Recycle

Conditions under Air (P&CP) Act, 1981 for air emissions:

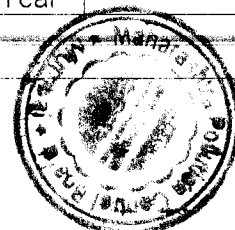
Sr. no.	Description of stack / source	Number of Stack	Standards to be achieved
1.	Boiler & various furnaces	07	As per Schedule -II

Conditions about Non Hazardous Wastes:

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1	Fly Ash (CPP)	26784	Ton/Y		Brick Manufacture / Landfill
2	Bed Ash (CPP)	22320	Ton/Y		Landfill
3	Dusts from Bag Filters (DRP and SMS)	37620	Ton/Y		Reuse
4	DRP Sludge (DRP)	252	Ton/Y		Reused as fuel
5	Mill Scale (Rolling Mill)	9480	Ton/Y		Reuse
6	EAF & SS Refining Converter Slag (SMS)	100200	Ton/Y		Landfill
7	Iron/Steel Scrap/ Rejected Billets (SMS)	24864	Ton/Y		Recycle
8	Grinder Waste (Rolling Mill)	240	Ton/Y		Recycle
9	Coal Rejects (Stone & Shells) (Coal Washery)	21600	Ton/Y		Landfill
10	Granulated MBF Slag	75000	Ton/Y		Reuse / By Sale
11	Residue at MBF GCP	6168	Ton/Y		Reuse
12	Coke fines (MBF)	8004	Ton/Y		Reuse
13	Iron Ore Fines (DRI & MBF)	18336	Ton/Y		Reuse
14	Dusts (ETP & WTP)	180	Ton/Y		Reuse
15	Hot Returned Ore (Sinter Plant)	75000	Ton/Y		Reuse
16	Removed Dust (Sinter Plant)	20112	Ton/Y		Reuse

Conditions under Hazardous Waste (MH & TM) Rules, 2008 for treatment and disposal of hazardous waste:

Sr. No.	Type Of Waste	Category	Quantity	UOM	Treatment	Disposal
1	Used/spent oil	5.1	5.63	MT/Year	---	By Sale to authorized



						reprocessor
2	Acid Residue/ Spent Bath sludge Chemical sludge from waste water treatment	12.1 & 12.2 34.3	288	MT/ Year	---	To CHWTSDF, Butibori, Nagpur

The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.

This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.

For and on behalf of the
Maharashtra Pollution Control Board



(V.M.Motghare)
Member Secretary

31/8/13

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	7125943	448227	30 Apr 2013	Canara Bank
2	100	844471	30 Apr 2013	Canara Bank

Copy to:

1. Regional Officer -Nagpur and Sub-Regional Officer-Bhandara
MPCB,Nagpur-They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. CC/CAC desk- for record & website updation purposes.

Schedule-I

Terms & conditions for compliance of Water Pollution Control:

1) A) As per your application, you have provided the Effluent Treatment Plant (ETP) with the design capacity of 2413.5 CMD.

B) The Applicant shall operate the effluent treatment plant (ETP) to treat the trade effluent so as to achieve the following standards prescribed by the Board or under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.

Sr No.	Parameters	Standards prescribed by Board
	I. Compulsory Parameters	Limiting Concentration in mg/l, except for pH
01	pH	5.5 to 9.0
02	Oil & Grease	10
03	BOD (3 days 27°C)	100
04	Total Dissolved Solids	2100
05	Bioassay Test	---
	II Additional Parameters	
06	Mercury	---
07	Arsenic	---
08	Chromium (Hexavalent)	--
09	Lead	---
10	Cyanide	---
11	Phenolics (C ₆ H ₅ OH)	---
12	Sulphide (as S)	---
13	Phosphate(as P)	---
14	Suspended Solids	100
15	COD	250
16	Chloride	600
17	Sulphate	1000
18	Iron	5.0

The industrial effluent arising from various sections of Power Plant shall be given such treatment either collective or individually as the site condition permits that the final quality of effluent shall have following character standards :

I. Condensor Cooling Water :

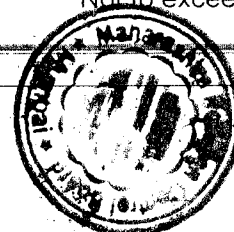
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|----|-------------------------|---|
| 1) | pH | Between 6.5 to 8.5 |
| 2) | Temperature | Not to exceed 7 Degree C. Higher than the intake water temperature. |
| 3) | Free available Chlorine | Not to exceed 0.5 mg/l |

II. Boiler Blowdowns :

- | | | |
|----|------------------|-------------------------|
| 1) | Suspended Solids | Not to exceed 100 mg/l. |
| 2) | Oil & Grease | Not to exceed 20 mg/l. |
| 3) | Copper (Total) | Not to exceed 1 mg/l. |
| 4) | Iron (Total) | Not to exceed 1 mg/l. |

III. Cooling Tower Blowdown :

- | | | |
|----|-------------------------|-------------------------|
| 1) | Free available Chlorine | Not to exceed 0.5 mg/l. |
| 2) | Zinc | Not to exceed 1 mg/l. |



- | | | | | |
|----|------------------|---------------|-----|-------|
| 3) | Chromium (Total) | Not to exceed | 0.2 | mg/l. |
| 4) | Phosphate | Not to exceed | 5 | mg/l. |

IV. Ash Pond Effluent :

- | | | | | |
|----|------------------|---------------|------------|-------|
| 1) | pH | Between | 6.5 to 8.5 | |
| 2) | Suspended Solids | Not to exceed | 100 | mg/l. |
| 3) | Oil & Grease | Not to exceed | 20 | mg/l. |

C) The treated effluent shall be 100% recycled in the process to achieve zero discharge. In no case effluent shall find its way for gardening/outside factory premises.

OR

The treated effluent shall be disposed on land for gardening/irrigation/HRTS-
2414.0 CMD

- 2) A] As per your consent application, you have proposed to install/ provided the sewage treatment system with the design capacity of 240 CMD.
- B] The Applicant shall operate the sewage treatment system to treat the sewage so as to achieve the following standards/ prescribed under EP Act, 1986 and Rules made there under from time to time, whichever is stringent.
- | | | | | |
|-----|-------------------|---------------|-----|-------|
| (1) | Suspended Solids. | Not to exceed | 100 | mg/l. |
| (2) | BOD 3 days 27oC. | Not to exceed | 100 | mg/l. |
- C] The 100% treated sewage shall be recycled for flushing ,fire fighting, cooling etc
- D] In case the treatment system is combined for trade effluent and sewage then the standards and disposal path prescribed at sr. no.1 B & C of schedule I shall be applicable.
- 3) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of waterworks for the purification thereof & the system for the disposal of sewage or trade effluent or in connection with the grant of any consent conditions. The Applicant shall obtain prior consent of the Board to take steps to establish the unit or establish any treatment and disposal system or and extension or addition thereto.
- 4) The industry shall ensure replacement of pollution control system or its parts after expiry of its expected life as defined by manufacturer so as to ensure the compliance of standards and safety of the operation thereof.
- 5) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 and as amended, by installing water meters, filing water cess returns in Form-I and other provisions as contained in the said act.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Industrial Cooling, spraying in mine pits or boiler feed	11151.0
2.	Domestic purpose	652.0
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	---
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	197.0

- 6) The Applicant shall provide Specific Water Pollution control system as per the conditions of EP Act,1986 and rule made there under from time to time/ Environmental Clearance / CREP guidelines.

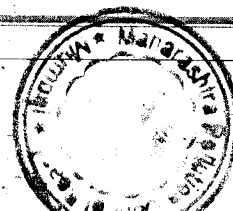


Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to install/ provided the Air pollution control (APC) system and also proposed to erect / erected following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	APC System	Height in Mtrs.	Type of Fuel	Quantity & UoM	S %	SO ₂ Kg/Day
1	Reheating Furnace (ASM) S-1	--	30.5	Furnace Oil / BF Gas	3.0 TPD	4.5	270.0
2	Reheating Furnace (ASM) S-1A (Newly Installed)	--	30	Furnace Oil / BF Gas	8.0 TPD	4.5	720.0
3	FBC Boiler-ESP (CPP) S-2	ESP	55	Coal, Coal Fines, DRI Ash, ESP Dust	410.0 TPD	0.5	4100.0
4	Reheating Furnace (BSM) S-3	--	65	Furnace Oil/BF Gas	32.4 TPD	4.5	2916.0
5	APC system to EAF & LHF (SMS) S-4	Bag Filter	43	Electricity	--	--	--
6	ESP to WHRSG Boiler for Kiln (DRP-1) S-5	--	55	Coal	725.0 TPD	0.5	7250.0
7	DES-II Dedusting System of Discharge Building (DRP -1) S-6	Bag Filter	32	--	--	--	--
8	Wet scrubber for Discharge Cooler (DRP-1) S-7	Scrubber	28	--	--	--	--
9	4.0 T/Hr. Oil Fired Boiler for FO Storage Tank Heating S-8	--	30	Furnace Oil	1.75 TPD (6 hours working)	4.5	157.0
10	16.0 T/Hr Oil Fired Boiler (VD Plant) S-9	--	55	Furnace Oil	6.7 TPD	4.5	600.0
11	MBF Stove S-10	--	45	MBF Gas (Coke)	405 TPD	0.2	1620
12	Annealing Furnace S-11	--	16	Furnace Oil	1.44 TPD	4.5	129
13	DES - I at Coal Crusher, Raw Material Handling - II (DRP) S-12	--	30	--	--	--	--
14	DES - III Raw Material Handling - I (SMS)	Bag Filter	25	--	--	--	--
15	DES - IV Kiln Charging Cone (DRP)	Bag Filter	30	--	--	--	--
16	DES - V Product Handling (addl) at Discharge Building (DRP)	Bag Filter	30	--	--	--	--



17	CCM Steam Exhaust	--	35	--	--	--	--
18	0.5 T/Hr Mini Boiler (BBS Section)	--	12	LDO	0.44 TPD (6 hours working)	1.8	15.8
19	Stainless Steel Refining Converter (SMS)	Bag Filter	20.5	--	--	--	--
20	Pickling Line (Coinage Plant)	Scrubber	15	--	--	--	--
21	Centralized Pickling Plant	Scrubber	15	--	--	--	--
22	MBF Boiler	--	30	MBF Gas (Coke)	135 TPD	0.2	540
23	Head ESP (Sinter Plant)	ESP	50	Coke Breeze & Fines	68 TPD	0.2	272
24	Tail ESP (Sinter Plant)	ESP	40	Coke Breeze & Fines	23 TPD	0.2	92
25	Fuel Crusher De-Dusting System (Sinter Plant)	Bag Filter	15	--	--	--	--
26	Flux Crusher De-Dusting System (Sinter Plant)	Bag Filter	15	--	--	--	--
27	Flux Screening Quicklime Bunker top De Dusting System (Sinter Plant)	Bag Filter	20	--	--	--	--
28	ESP to new WHRSG of Kiln (DRP - 2)	ESP	60	Coal	452 TPD	0.5	4520
29	Coal Circuit (DRP-2)	Bag Filter	30	--	--	--	--
30	Iron Ore Circuit (DRP-2)	Bag Filter	30	--	--	--	--
31	Char Bin & DRI Blending (DRP-2)	Bag Filter	30	--	--	--	--
32	Lumps & Fins Silo (DRP-2)	Bag Filter	30	--	--	--	--
33	Producer Hopper (DRP-2)	Bag Filter	30	--	--	--	--
34	Reheating Furnace -3	--	70	Furnace Oil	61 TPD	4.5	5490
35	Bell Annealing Furnace -I	--	20	LDO/LPG	2.84 TPD	1.8	102
36	Bell Annealing Furnace - II	--	20	LDO/LPG	1.0 TPD	1.8	36
37	Bar Annealing Furnace) - 1 & 2	--	32	Furnace Oil	1.44 TPD	4.5	130

2. The Applicant shall provide Specific Air Pollution control equipments as per the conditions of EP Act, 1986 and rule made there under from time to time / Environmental Clearance / CREP guidelines. (Concern section shall mention specific control equipments)



3. The applicant shall operate and maintain above mentioned air pollution control system, so as to achieve the level of pollutants to the following standards:

Particulate matter	Not to exceed	100 mg/Nm ³ .
SO ₂ Process	Not to exceed	50 ppm
HCL	Not to exceed	35 mg/Nm ³

4. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement well before its life come to an end or erection of new pollution control equipment.
5. The Board reserves its rights to vary all or any of the condition in the consent, if due to any technological improvement or otherwise such variation (including the change of any control equipment, other in whole or in part is necessary).



Schedule-III
Details of Bank Guarantees

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	R	Rs. 15 Lakhs	Within 15 days	Towards operation and maintenance of secondary emission control system so as to achieve the consented standards.	----	31.8.2014
2	R	Rs. 20 Lakhs	Within 15 days	Towards operation and maintenance pollution control system in DRI plant so as to achieve the consented standards.	----	31.8.2014
3	R	Rs. 20 Lakhs	Within 15 days	Towards operation and maintenance of ETP so as to achieve the consented standards and no effluent discharge outside factory premises.	----	31.8.2014



[Handwritten Signature]

Schedule-IV

General Conditions:

- 1) The applicant shall provide facility for collection of environmental samples and samples of trade and sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and shall pay to the Board for the services rendered in this behalf.
- 2) If the MIDC pipeline is broken/ overflowing chamber, in such cases industry shall not discharge their treated effluent into MIDC drain, it shall be sent to CETP by tanker.
- 3) Industry should monitor effluent quality, stack emissions and ambient air quality monthly/quarterly.
- 4) The applicant shall provide ports in the chimney/(s) and facilities such as ladder, platform etc. for monitoring the air emissions and the same shall be open for inspection to/and for use of the Board's Staff. The chimney(s) vents attached to various sources of emission shall be designated by numbers such as S-1, S-2, etc. and these shall be painted/ displayed to facilitate identification.
- 5) Whenever due to any accident or other unforeseen act or even, such emissions occur or is apprehended to occur in excess of standards laid down, such information shall be forthwith Reported to Board, concerned Police Station, office of Directorate of Health Services, Department of Explosives, Inspectorate of Factories and Local Body. In case of failure of pollution control equipments, the production process connected to it shall be stopped.
- 6) The applicant shall provide an alternate electric power source sufficient to operate all pollution control facilities installed to maintain compliance with the terms and conditions of the consent. In the absence, the applicant shall stop, reduce or otherwise, control production to abide by terms and conditions of this consent.
- 7) The firm shall submit to this office, the 30th day of September every year , the Environmental Statement Report for the financial year ending 31st March in the prescribed Form-V as per the provisions of rule 14 of the Environment (Protection) (Second Amendment) Rules, 1992.
- 8) The industry shall recycle/reprocess/reuse/recover Hazardous Waste as per the provision contain in the HW(MH&TM) Rules 2008, which can be recycled
- 9) /processed/reused/recovered and only waste which has to be incinerated shall go to incineration and waste which can be used for land filling and cannot be recycled/reprocessed etc should go for that purpose, in order to reduce load on incineration and landfill site/environment.
- 10) The industry should comply with the Hazardous Waste (M,H & TM) Rules, 2008 and submit the Annual Returns as per Rule 5(6) & 22(2) of Hazarsous Waste (M,H & TM) Rules. 2008 for the preceding year April to March in Form-IV by 30th June of every year.
- 11) An inspection book shall be opened and made available to the Board's officers during their visit to the applicant.
- 12) The applicant shall obtain Consent to Operate from Maharashtra Pollution Control Board before actual commencement of the Unit/ Activity (in case of Consent to establish).
- 13) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent (in case of Renewal of consent).
- 14) Industry shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act,1981 and Environmental Protection Act,1986 and industry specific standard under EP Rules 1986 which are available on MPCB website(www.mpcb.gov.in).
- 15) The industry shall constitute an Environmental cell with qualified staff/personnel/agency to see the day to day compliance of consent condition towards Environment Protection.
- 16) Separate drainage system shall be provided for collection of trade and sewage effluents. Terminal manholes shall be provided at the end of the collection system



- with arrangement for measuring the flow. No effluent shall be admitted in the pipes/sewers downstream of the terminal manholes. No effluent shall find its way other than in designed and provided collection system.
- 17) Neither storm water nor discharge from other premises shall be allowed to mix with the effluents from the factory.
 - 18) The applicant shall install a separate meter showing the consumption of energy for operation of domestic and industrial effluent treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
 - 19) Conditions for D.G. Set
 - a) Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
 - b) Industry should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room should be designed for minimum 25 dB (A) insertion loss or for meeting the ambient noise standards, whichever is on higher side. A suitable exhaust muffler with insertion loss of 25 dB (A) shall also be provided. The measurement of insertion loss will be done at different points at 0.5 meters from acoustic enclosure/room and then average.
 - c) Industry should make efforts to bring down noise level due to DG set, outside industrial premises, within ambient noise requirements by proper siting and control measures.
 - d) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - e) A proper routine and preventive maintenance procedure for DG set should be set and followed in consultation with the DG manufacturer which would help to prevent noise levels of DG set from deteriorating with use
 - f) D.G. Set shall be operated only in case of power failure.
 - g) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - h) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel
 - 20) The industry should not cause any nuisance in surrounding area.
 - 21) The industry shall take adequate measures for control of noise levels from its own sources within the premises so as to maintain ambient air quality standard in respect of noise to less than 75 dB (A) during day time and 70 dB (A) during night time. Day time is reckoned in between 6 a.m. and 10 p.m. and night time is reckoned between 10 p.m. and 6 a.m.
 - 22) The applicant shall maintain good housekeeping.
 - 23) The applicant shall bring minimum 33% of the available open land under green coverage/ plantation. The applicant shall submit a statement on available open plot area, number of trees surviving as on 31st March of the year and number of trees planted by September end, with the Environment Statement.
 - 24) The non-hazardous solid waste arising in the factory premises, sweepings, etc. be disposed of scientifically so as not to cause any nuisance / pollution. The applicant shall take necessary permissions from civic authorities for disposal of solid waste.
 - 25) The applicant shall not change or alter the quantity, quality, the rate of discharge, temperature or the mode of the effluent/emissions or hazardous wastes or control equipments provided for without previous written permission of the Board. The industry will not carry out any activity, for which this consent has not been granted/without prior consent of the Board.
 - 26) The industry shall ensure that fugitive emissions from the activity are controlled so as to maintain clean and safe environment in and around the factory premises.
 - 27) The industry shall submit quarterly statement in respect of industries' obligation towards consent and pollution control compliance's duly supported with documentary evidences (format can be downloaded from MPCB official site).



- 28) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 29) The industry shall achieve the National Ambient Air Quality standards prescribed vide Government of India, Notification dt. 16.11.2009 as amended.

Optional Condition as per applicability

- 1) The applicant shall comply with the conditions stipulated in Environmental Clearance.
- 2) The industry shall comply with the notification issued by MoEF for utilization of flyash from coal or lignite based thermal power plants dated 14th September, 1999 and as amended on 3rd November, 2009.
- 3) Industry shall provide dry fly ash handling & collection system and utilize the fly ash as per the fly ash notification of the Govt. of India
- 4) Transportation of coal & fly ash shall be by closed system, Conveyor system wherever possible.
- 5) The applicant shall operate & maintain online continuous monitoring system for process stack emission analysis continuously & same shall be directly connected to MPCB website <http://mpcb.gov.in> as well as to the respective Regional Office.
- 6) The applicant shall operate all continuous automatic ambient air and micrometeorological monitoring station at location indicated by State Board to be set up and operate at its own cost measure SO₂, NO_x and particulate matter. These CAAQMS shall also have necessary provision of networking to the Air Quality Monitoring network of MPCB.

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