



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

सत्यमेव जयते

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date: January 24, 2020

To,
Mr. Niranjan Sachade
at Plot - M-12, MIDC Additional Zone

Subject: Environment Clearance for Expansion of existing synthetic organic chemical intermediates manufacturing unit of M/s. Kalpsutra Chemicals Pvt. Ltd.

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-I, Maharashtra in its 172nd meeting and 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 185th meetings.

2. It is noted that the proposal is considered by SEAC-I under screening category 5(f) B-1 as per EIA Notification 2006.

Brief Information of the project submitted by you is as below :-

1.Name of Project	M/s. Kalpsutra Chemicals Pvt. Ltd.
2.Type of institution	Private
3.Name of Project Proponent	Mr. Niranjan Sachade
4.Name of Consultant	M/s. Sadekar Enviro Engineers Pvt. Ltd.
5.Type of project	Industrial Expansion Project; Category: B-1, Schedule: 5(f) as per EIA Notification, 2006
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion in existing project
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Yes, EC Letter vide No. SEAC-2015/CR-169/TC-2 dated 28th Jan'16 for product quantity 510 tons/month
8.Location of the project	Plot - M-12, MIDC Additional Zone
9.Taluka	Ambarnath
10.Village	Ambarnath
Correspondence Name:	Mr. Niranjan Sachade
Room Number:	Plot No. - M-12, MIDC Additional Zone
Floor:	--
Building Name:	--
Road/Street Name:	--
Locality:	Additional Ambarnath MIDC
City:	Ambarnath
11.Whether in Corporation / Municipal / other area	Maharashtra Industrial Corporation Development
12.IOD/IOA/Concession/Plan Approval Number	MIDC Ambarnath Additional Zone IOD/IOA/Concession/Plan Approval Number: EE/AMB/M-12/C-70180/of 2018 Approved Built-up Area: 7526.74

SEIAA Meeting No: 185 Meeting Date: January 10, 2020 (SEIAA-STATEMENT-0000001690)
SEIAA-MINUTES-0000002945
SEIAA-EC-0000002341

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Shri. Anil Diggikar (Member Secretary SEIAA)

13.Note on the initiated work (If applicable)	Construction has been completed as per previous EC received vide no. SEAC-2015/CR-169/TC-2 dated 28th Jan'16.
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	NA
15.Total Plot Area (sq. m.)	11,000 m2
16.Deductions	NA
17.Net Plot area	NA
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): NA
	Non FSI area (sq. m.): NA
	Total BUA area (sq. m.): 7526.74
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): NA
	Approved Non FSI area (sq. m.): NA
	Date of Approval: 09-08-2018
19.Total ground coverage (m2)	4326.01
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	39.33
21.Estimated cost of the project	64000000

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22. Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Isobornyl Cyclohexanol	300	--	300
2	Isocamphyl Cyclohexanol	100	150	250
3	Sandalum	5	--	5
4	Kalpantal	5	--	5
5	Citronellal	25	--	25
6	Citronellol	50	--	50
7	Para Tertiary Butyl Cyclohexanol	25	--	25
8	Isobornyl Acetate	--	300	300
9	Dipentene	--	330	330
10	Phenol Terpene resin	--	200	200
11	Isobornyl Acrylate	--	100	100
12	Isobornyl Methacrylate	--	100	100
13	Methanol	52	--	52
14	Mixed fractions	284	231	515

23. Total Water Requirement

Dry season:	Source of water	MIDC water supply
	Fresh water (CMD):	NA
	Recycled water - Flushing (CMD):	NA
	Recycled water - Gardening (CMD):	NA
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	NA
	Fire fighting - Underground water tank(CMD):	NA
	Fire fighting - Overhead water tank(CMD):	NA
	Excess treated water	NA

Wet season:	Source of water	MIDC water supply
	Fresh water (CMD):	NA
	Recycled water - Flushing (CMD):	NA
	Recycled water - Gardening (CMD):	NA
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	NA
	Fire fighting - Underground water tank(CMD):	NA
	Fire fighting - Overhead water tank(CMD):	NA
	Excess treated water	NA
Details of Swimming pool (If any)	NA	

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24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	2	0.5	2.50	0.5	0	0.5	1.5	0.5	2
Industrial Process	0	0.48	0.48	0	0	0	0	0.5	0.5
Cooling tower & thermopack	2	41.3	43.3	0.1	34.6	34.7	0	8.6	8.6
Gardening	2	16	18	2	16	18	0	0	0
Fresh water requirement	6	58.28	64.28	2.6	50.6	53.2	1.5	9.6	11.1

25.Rain Water Harvesting (RWH)

Level of the Ground water table:	Pre-monsoon: 5-8 m bgl, Post-monsoon: 1-3 m bgl
Size and no of RWH tank(s) and Quantity:	Size: 5 x 3.2 x 2.5, Quantity: 40 m ³
Location of the RWH tank(s):	Near Under Ground Fire hydrant tank
Quantity of recharge pits:	NA
Size of recharge pits :	NA
Budgetary allocation (Capital cost) :	Rs. 2 Lakhs
Budgetary allocation (O & M cost) :	Rs. 0.25 Lakhs/yr
Details of UGT tanks if any :	Fire hydrant water Tank: 200 m ³ Rainwater harvesting Tank: 40 m ³

26.Storm water drainage

Natural water drainage pattern:	Slope = 0.03, towards plot boundary from East to West towards approach road
Quantity of storm water:	1237.5 m ³ /hr.
Size of SWD:	Size: Width = 0.5 m, Depth: 0.5 m; MIDC drainage dimension: 0.9 m diameter hume pipe.

27.Sewage and Waste water	Sewage generation in KLD:	2.0 m3/day
	STP technology:	Conventional STP with primary, secondary and tertiary treatment
	Capacity of STP (CMD):	6 m3/day x 1 no
	Location & area of the STP:	Center of Plot
	Budgetary allocation (Capital cost):	Rs. 8.5 Lakhs
	Budgetary allocation (O & M cost):	Rs. 0.7 Lakhs/yr



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28.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	Waste generation:	NA
	Disposal of the construction waste debris:	NA
Waste generation in the operation Phase:	Dry waste:	Office Waste (Cardboard, Paper waste): 100 kg/A, Coal Ash: 2.1 T/D.
	Wet waste:	NA
	Hazardous waste:	Evaporator Residue - Cat. 37.3 (100 kg/day); Spent Catalyst - Cat. 28.2 (700 kg/month); Process Residue and waste - Cat. 28.1 (25 kg/year); Discarded Containers and barrels/liners - Cat. 33.1 (150 Nos./M); Paper bags - Cat. 33.1 (1000 Nos./M)
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	0.3 kg/day
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	Authorized recyclers
	Wet waste:	NA
	Hazardous waste:	Evaporator Residue - Will be sold to authorized recycler or dealer or Will be sent to CHWTSDF, Spent Catalyst - Will be Regenerated and reused or Will be sold to authorized recyclers; Process Residue and waste - Will be reuse within process or will be sent to CHWTSDF, Discarded Containers and barrels/liners - Authorized re conditioners or recyclers; Paper bags - Sold to authorized recyclers.
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Used as manure for gardening
	Others if any:	Office Waste (Cardboard, Paper waste): Sold to authorized recyclers; Coal Ash: Sold to brick manufacturers.
Area requirement:	Location(s):	HW storage is done in Plant area and TFH room
	Area for the storage of waste & other material:	32 sq. m. is provided for storage of HW
	Area for machinery:	NA
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	NA
	O & M cost:	NA

29. Effluent Characteristics

Serial Number	Parameters	Unit	Inlet Effluent Characteristics	Outlet Effluent Characteristics	Effluent discharge standards (MPCB)
1	pH	--	5.64	7.1	5.5.-9
2	TSS	mg/l	119	34	100
3	TDS	mg/l	738	176	2100
4	COD	mg/l	593	50	250
5	BOD (3 days at 27°C)	mg/l	184	17	100
6	O&G	mg/l	4.0	0.2	10
Amount of effluent generation (CMD):		Process: 0.5 CMD, Cooling Tower: 8.6 CMD,			
Capacity of the ETP:		SEE: 3 m ³ /day; R.O.: 10 CMD			
Amount of treated effluent recycled :		NA			
Amount of water send to the CETP:		NA			
Membership of CETP (if require):		NA			
Note on ETP technology to be used		Effluent generated will be passed through SEE (3 m ³ /day). Cooling tower blow down will be treated into RO (10 m ³ /day). SEE condensate and RO permeate will be reused as cooling tower makeup water. R.O. reject will be treated in SEE.			
Disposal of the ETP sludge		NA			

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30.Hazardous Waste Details							
Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Evaporator Residue	37.3	Kg/day	--	100	100	Will be sold to authorized recycler or dealer / Will be sent to CHWTSDF
2	Spent Catalyst	28.2	Kg/month	--	700	700	Will be Regenerated and reused / will be sold to authorized recyclers.
3	Process Residue and waste	28.1	Kg/yr	--	25	25	Will be Reuse within process/Will be sent to CHWTSDF.
4	Discarded Containers and barrels/liners	33.1	Nos./M	150	00	150	Authorized reconditioner/ recycler
5	Paper bags	33.1	Nos./M	00	1000	1000	Sold to authorized recyclers.
31.Stacks emission Details							
Serial Number	Section & units	Fuel Used with Quantity		Stack No.	Height from ground level (m)	Internal diameter (m)	Temp. of Exhaust Gases
1	Thermic Fluid Heater	Coal (15 TPD) & FO (2 TPD)		1	30	0.8	130
2	DG	HSD (200 L/Hr)		2	5	0.12	150
32.Details of Fuel to be used							
Serial Number	Type of Fuel	Existing		Proposed		Total	
1	Coal (TPD)	5		10		15	
2	FO (TPD)	1.5		0.5		2	
3	HSD (LPH)	150		50		200	
33.Source of Fuel		Local Purchase					
34.Mode of Transportation of fuel to site		By Road					
35.Energy							

Power requirement:	Source of power supply :	MSEDCL
	During Construction Phase: (Demand Load)	NA
	DG set as Power back-up during construction phase	NA
	During Operation phase (Connected load):	600 kW
	During Operation phase (Demand load):	430 kVA
	Transformer:	630 kVA
	DG set as Power back-up during operation phase:	1 x 320 kVA
	Fuel used:	HSD
	Details of high tension line passing through the plot if any:	NA

Energy saving by non-conventional method:

Solar streetlights are installed, Solar lighting will be used for illuminating office buildings, common area, parking etc.

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	Solar streetlights are installed, Solar lighting will be used for illuminating office buildings, common area, parking etc.	0.1 %

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Domestic waste water	6 CMD capacity STP for domestic waste water treatment	--
DG Set	Stack (320 kVA x 01) ht - 5 m above ground	--
Thermopack (Coal + F.O. fired)	Common stack having 30 m height & bag filter	--
Noise	Ear muffs, ear plugs & DG acoustic enclosure	--
Industrial waste water	--	SEE (3 CMD) & RO (10 CMD)

Budgetary allocation (Capital cost and O&M cost):	Capital cost:	12.5 Lakhs
	O & M cost:	NA

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	NA	NA	NA

b) Operation Phase (with Break-up):				
Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	Air	Installation of Bag filter, Annual maintenance work, DG stack of 5 m height above roof.	3.00	0.25
2	Water	Installation of SEE & R.O & Maintenance of Existing STP .	17.00	2.00
3	Environment Monitoring and Management	Installation of air emission monitoring system, Periodic Monitoring of environmental parameters etc.	11.5	2.00
4	Noise	Installation of anti-vibration pads, Acoustic enclosures for DG set, Ear Muffs & Ear Plugs.	2.50	0.25
5	Occupational Health	PPEs such as Glares, Breathing Masks, Gloves, Boots, Helmets, Ear Plugs etc. & annual health-medical checkup of workers, First aid Kit.	0.20	0.25
6	Green Belt development	Green Belt development & Maintenance	2.0	2.0
7	Solid Waste Management	Purchase of additional containers/bags for storage of solid waste, concrete paving of Hazardous Waste Storage area and CHWTSDF Cost etc.	2.0	0.1
8	Energy Conservation	Installation of solar streetlights, illumination of common, parking areas etc.	12.5	0
9	Rain Water Harvesting	For Rainwater collection network & 40 KL RCC water tank for storage of harvested rain water & annual cleaning and maintenance of RWH tank	2.0	0.25
10	Carbon foot print monitoring	Monitoring of Global Warming Potential, Ozone Layer Depletion Potential using Life Cycle Assessment Tool.	0.0	2.5

11	Water Footprint Monitoring	Water consumption, Water recycled/reused quantity to be monitored using flow meter and footprints will be analyzed.	0.0	2.0
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39.Storage of chemicals (inflammable/explosive/hazardous/toxic substances)

Description	Status	Location	Storage Capacity in MT	Maximum Quantity of Storage at any point of time in MT	Consumption / Month in MT	Source of Supply	Means of transportation
Alpha Pinene	Liquid	ISO Tank	600	600	1170	Imported	By sea & road
Guaiacol	Liquid	Tank	100	100	210	Local	By road
Phenol	Solid at RT	Tank	100	100	278	Local	By road
Hydrogen	Gas	Cylinders mounted on trolleys	0.4	0.4	36	Local	By road
Raney Nickel Catalyst	Solid	HDPE drums	0.15	0.15	0.15	Local	By road
Clay Catalyst	Solid	Bags	4	4	0.7	Local	By road
Citral	Liquid	Drums / Tanks	22	20	70	Imported	By sea & road
Para tert. Butyl phenol	Solid	Bags	25	20	24	Imported	By sea & road
Acetic acid	Liquid	Tank	30	30	110	Local	By road
Acrylic acid	Liquid	Drums / Tanks	20	20	45	Imported	By sea & road
Methacrylic acid	Liquid	Drums / tanks	20	20	50	Imported	By sea & road
Titanium Oxide	Solid	Bags	5	5	4	Local	By road
Caustic Soda	Solid	Bags	1	1	4	Local	By road
Hydrochloric acid (32%)	Liquid	Drums	3	3	10	Local	By road
Camphene	Solid at RT	Tank	100	100	772.6	In-house	--
Iso Propyl Myristate	Liquid	Drums	2	2	2	Local	By Road
PEG 400	Liquid	Drums	2	2	2	Local	By Road

40.Any Other Information

No Information Available

	CRZ/ RRZ clearance obtain, if any:	NA
	Distance from Protected Areas / Critically Polluted areas / Eco-sensitive areas/ inter-State boundaries	NA
	Category as per schedule of EIA Notification sheet	5(f) B-1
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	No
	Date of online submission	-

3. The proposal has been considered by SEIAA in its 185th 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:

Specific Conditions:

I	PP submitted conceptual plan showing 33% green belt along the periphery; PP to ensure to provide the same and submit an undertaking in this regard.
II	PP to establish Environment Management Cell.
III	PP to implement CER plan as approved by the District Authority.
IV	PP to ensure that CER plan gets approved from Municipal Commissioner/District Collector.
V	PP to ensure to comply with the conditions stipulated in the Office Memorandum issued by MoEF& CC dated 9th August, 2018.

General Conditions:

I	(i)PP to achieve Zero Liquid Discharge ; PP shall ensure that there is no increase in the effluent load to CETP.
II	No additional land shall be used /acquired for any activity of the project without obtaining proper permission.
III	PP to take utmost precaution for the health and safety of the people working in the unit as also for protecting the environment.
IV	Proper Housekeeping programmers shall be implemented.
V	In the event of the failure of any pollution control system adopted by the unit, the unit shall be immediately put out of operation and shall not be restarted until the desired efficiency has been achieve.
VI	A stack of adequate height based on DG set capacity shall be provided for control and dispersion of pollutant from DG set. (If applicable).
VII	A detailed scheme for rainwater harvesting shall be prepared and implemented to recharge ground water.
VIII	Arrangement shall be made that effluent and storm water does not get mixed.
IX	Periodic monitoring of ground water shall be undertaken and results analyzed to ascertain any change in the quality of water. Results shall be regularly submitted to the Maharashtra Pollution Control Board.
X	Noise level shall be maintained as per standards. For people working in the high noise area, requisite personal protective equipment like earplugs etc. shall be provided.
XI	The overall noise levels in and around the plant are shall be kept well within the standards by providing noise control measures including acoustic hoods, silencers, enclosures, etc. on all sources of noise generation. The ambient noise levels shall confirm to the standards prescribed under Environment (Protection) Act, 1986 Rules, 1989.

XII	Green belt shall be developed & maintained around the plant periphery. Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XIII	Adequate safety measures shall be provided to limit the risk zone within the plant boundary, in case of an accident. Leak detection devices shall also be installed at strategic places for early detection and warning.
XIV	Occupational health surveillance of the workers shall be done on a regular basis and record maintained as per Factories Act.
XV	(The company shall make the arrangement for protection of possible fire hazards during manufacturing process in material handling.
XVI	The project authorities must strictly comply with the rules and regulations with regard to handling and disposal of hazardous wastes in accordance with the Hazardous Waste (Management and Handling) Rules, 2003 (amended). Authorization from the MPCB shall be obtained for collections/treatment/storage/disposal of hazardous wastes.
XVII	Regular mock drills for the on-site emergency management plan shall be carried out. Implementation of changes / improvements required, if any, in the on-site management plan shall be ensured.
XVIII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
XIX	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
XX	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 http://ec.maharashtra.gov.in
XXI	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 1st June & 1st December of each calendar year.
XXII	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.
XXIII	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 ₂ , NO _x (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
XXIV	The project proponent shall also submit six monthly reports on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the respective Regional Office of MoEF, the respective Zonal Office of CPCB and the SPCB.
XXV	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the 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.

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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.

5. In case of submission of false document and non-compliance of stipulated conditions, Authority/ Environment Department will revoke or suspend the Environment clearance without any intimation and initiate appropriate legal action under Environmental Protection Act, 1986.

6. 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.

7. Validity of Environment Clearance: The environmental clearance accorded shall be valid as per EIA Notification, 2006, and amendments by MoEF&CC Notification dated 29th April, 2015.

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 Environment clearance shall lie with the National Green Tribunal (Western Zone Bench, Pune), New Administrative Building, 1st Floor, D- Wing, Opposite Council Hall, Pune, if preferred, within 30 days as prescribed under Section 16 of the National Green Tribunal Act, 2010.

Shri. Anil Diggikar (Member Secretary SEIAA)

Copy to:

1. SECRETARY MOEF & CC
2. IA- DIVISION MOEF & CC
3. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
4. REGIONAL OFFICE MOEF & CC NAGPUR
5. MUNICIPAL COMMISSIONER THANE
6. REGIONAL OFFICE MPCB THANE
7. REGIONAL OFFICE MIDC AMBERNATH
8. REGIONAL OFFICE MIDC THANE
9. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
10. COLLECTOR OFFICE THANE