

**REPORT OF COMMITTEE
IN COMPLIANCE WITH THE ORDER OF
HON'BLE NATIONAL GREEN TRIBUNAL,
PRINCIPAL BENCH, NEW DELHI
IN THE MATTER- APPEAL NO. 42/2020 (WZ)
(RAM BABAN BORKAR VS M/S. DEEPAK FERTILISERS & PETROCHEMICAL
CORPORATION LTD. & ORS.)**

For Submission To

**HON'BLE NATIONAL GREEN TRIBUNAL,
WESTERN ZONE BENCH, PUNE**

JULY 2022

REPORT OF COMMITTEE IN COMPLIANCE WITH THE ORDER OF HON'BLE NATIONAL GREEN TRIBUNAL, PRINCIPAL BENCH, NEW DELHI IN THE MATTER APPEAL NO. 42/2020 (WZ) (RAM BABAN BORKAR VS M/S. DEEPAK FERTILISERS & PETROCHEMICAL CORPORATION LTD. & ORS.)

1.0 BACKGROUND

An Appeal filed vide Appeal No. 42 of 2020 titled Ram Baban Borkar Vs M/s. Deepak Fertilisers & Petrochemical Corporation Ltd. & Ors against the Environmental Clearance granted by State Environment Impact Assessment Authority (SEIAA), Maharashtra on 20.07.2020 for shopping mall project by M/s. Deepak Fertilizers & Petrochemical Corporation Limited at Pune.

Grievance in the appeal is that the Project Proponent earlier obtained Environmental Clearance (EC) on 10.04.2007 with total permissible area of 34170.83 m². It is alleged that further the construction to the extent of 60397.81 m² was raised without EC.

A complaint was filed against the same on which show cause notice was issued by the Maharashtra Government and the same was thereafter withdrawn on 18.02.2020 with following observations: -

“After examination of the documents submitted by you along with your representation dated 10.02.2020 and 13.02.2020 and the submission made during the personal hearing conducted on 15.02.2020, it has been observed that the project proponent M/s. Yerrowda Investments Limited has carried out construction activity in respect of building construction project “Ishanya Mall “situated at Survey No. 190(P) & 192(P) of Village –Yerwada, Taluka-Haveli, District- Pune.

It is clear from the record that project proponent has obtained Environmental Clearance and also obtained necessary permissions from the concerned departments.

Therefore, there is no case of violation of the Environmental (P) Act, 1986 r.w. EIA Notification dated 14.09.2006 Therefore, the show cause notice/proposed directions u/s of the Environmental Act needs to be withdrawn.”

The applicant alleges that if the Project Proponent had initially taken EC, constructions raised are in excess of the construction permitted under the original EC which is not permissible as held by the Hon’ble Supreme Court in (2020) 2 Supreme Court Cases 66, Keystone Realtors Private Limited V. Anil V. Tharthare and Ors. It is for this reason that subsequently EC has been sought and granted. Absence of EC prior to construction deprives the authorities’ opportunity of appraisal of impact of additional construction on the environment. Ex post facto EC is thus illegal. Either the construction need to be demolished or compensation needs to be assessed and recovered.

The Hon’ble NGT has directed vide para 4 of the order dated 10.12.2020 that,

“4. Before proceeding further, we find it necessary to require a joint Committee of SEIAA, Maharashtra, the CPCB and the Maharashtra State PCB to look into the matter and give a factual and action taken report. The SEIAA, Maharashtra will be the nodal agency for coordination and compliance. The joint Committee may give an opportunity of hearing to the Project Proponent and consider its view point.”

Copy of the order dated 10.12.2020 is provided as **Annexure-I**.

In compliance with the aforesaid order of the Hon’ble NGT, a Joint Committee consisting of the following officials visited M/s. Deepak Fertilizer & Petrochemical Corporation Ltd. “Ishanya Mall”, Survey No. 190 (p), 192(P), CTS no. 2185- A, P. No. A, B & C, Shastri Nagar, Yerwada, Tal. Haveli, Dist. Pune, on 09.08.2021-

- Shri. Pankaj Joshi, Member SEIAA, Maharashtra

- Shri. Pratik Bharne, Scientist 'E', Regional Directorate, CPCB, Pune
- Dr. Y. B. Sontakke, Joint Director (Water), MPCB, Mumbai
- Shri. Nitin Shinde, I/c. Regional Officer, MPCB, Pune
- Shri. Pratap Jagtap, Sub Regional Officer, MPCB, Pune-I

Shri. Rajesh Shinde, Deputy Engineer, Pune Municipal Corporation (PMC), Pune along with other officials accompanied the joint committee during the visit. Shri Shetty, Operation Manager and other representatives of Ishanya Mall (M/s Deepak Fertilizer & Petrochemical Corporation Ltd) were present during the visit.

2.0 OBSERVATIONS AND FINDINGS

2.1 ENVIRONMENTAL CLEARANCE (EC) AND VIOLATIONS THERETO, IF ANY

2.1.1 The project proponent M/s. Deepak Fertilizers & Petrochemical Corporation Limited submitted application under EIA Notification 1994 (as amended on July 7, 2004) to MoEF for Environmental Clearance (EC) for construction of shopping mall. Ministry appraised the application under EIA Notification 2006 and granted Environmental Clearance (EC) for the project vide letter No.21-243/2006-IA.III dated 10.04.2007. Copy of the EC dated 10.04.2007 is provided at **Annexure-II**.

2.1.2 The said EC dated 10.04.2007 was granted for total plot area of 41,806.35 sq.m for development of Shopping Mall "*Ishanya*" at C.S. No. 190 & 192, Shastri Nagar, Yerwada, Pune, Maharashtra with a total built up area of 34,170.83 sq.m.

2.1.3 Details of the Commencement Certificate, Plinth Check Certificate, EC granted and current construction status are given at **Table No. 1**.

Table No. 01: Details of the Commencement Certificate, Plinth Check Certificate, EC granted and Construction Status

Sl. No.	Particulars	Plot Area	Configuration	Total Built-up Area
1.	Commencement Certificate CC/1050/03 dated 19.12.2003	88593.06 sq.m	N-Showroom: G+2 O-Showroom: G+2 P-Showroom: G+3 Q-Showroom: G+2 S-Centre Entrance Lobby: G T-Multipurpose Hall: G Stalls (1-4): G+1	Total FSI-27561.02 sq.m Total Non-FSI#- 28091.31 sq.m TBUA- 55652.33 sq.m
2.	Plinth Check Certificate dated 09.11.2005	-	For Building No. 'N' & 'O' as per Commencement Certificate dated 19.12.2003	
3.	Commencement Certificate CC/4109/05 dated 27.02.2006	88593.06 sq.m	Building No. 0: 0 Building No. 1: G+4 Building No. 2: G+3 Building No. 3 & 4: G+4 Building No. 5: G+1 Building No. 6: G+2	Total FSI-28719.25 sq.m Total Non-FSI#-38014.91 sq.m TBUA- 66734.16 sq.m
4.	Plinth Check Certificate dated 04.03.2006	-	For Building No. '4', as per Commencement Certificate dated 27.02.2006	
5.	Plinth Check Certificate dated 21.06.2006	-	For Building No. '3', as per Commencement Certificate dated 27.02.2006	
6.	Plinth Check Certificate dated 19.10.2006	-	For Building No. '0' (Part), Building No. '5' (Part) and Building No. '6' (Part) as per Commencement Certificate dated 27.02.2006	
7.	EC dated 10.04.2007 granted by MoEF&CC, Gol	41806.35 sq.m	For development of Shopping Mall "Ishanya" with a Total Built Up Area of 34,170.83 sq.m.	
8.	Commencement Certificate CC/0712/07 dated 28.05.2007	60981.55 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2	Total FSI-32853.24 sq.m Total Non-FSI#-38050.66 sq.m TBUA- 70903.90 sq.m
9.	Completion Certificate Dated 17.08.2007	-	For 21 Showrooms of Building No. 4 as per Commencement Certificate dated 16.03.1990 & 28.05.2007	

10.	Commencement Certificate CC/2804/07 dated 15.12.2007	60981.55 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2	Total FSI-32423.65 sq.m Total Non-FSI#-38480.25 sq.m TBUA- 70903.90 sq.m
11.	Completion Certificate Dated 18.12.2007	-	For 20 Showrooms of Building No. 1 as per Commencement Certificate dated 15.12.2007	
12.	Commencement Certificate CC/0163/08 dated 16.04.2008	60981.55 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2	Total FSI-31121.99 sq.m Total Non-FSI#-39781.91 sq.m TBUA- 70903.90 sq.m
13.	Completion Certificate Dated 03.06.2008	-	For 7 Showrooms with entire Building No. 0, 44 Showrooms & 2 Store Room of Building No. 2 only, 74 Showrooms & 2 warehouse storage of Building No. 3&4only, 20 Showrooms, 1 Office, Kitchens, Communications Room, Storeroom, Mall Office, Cafeteria of Building No. 5 only, 10 Showrooms, 7 Offices, Kitchen of Building No. 6 only as per Commencement Certificate dated 16.04.2008	
14.	Commencement Certificate CC/0924/10/51 dated 15.06.2010	59399.43 sq.m	Building No. 0 (Entrance Hall): LG+S+2 Building No. 1 (Showroom): LG+S+3 Building No. 2 (Showroom): LG+S+3 Building No. 3 & 4 (Showroom): LG/P+S+3 Building No. 5 (Cafe): LG+S+1 Building No. 6 (Multipurpose Hall): LG/P+S+2 Building No. 7: (Arcade): G+3	Total FSI-32113.18 sq.m Total Non-FSI#-41539.76 sq.m TBUA- 73652.94 sq.m
15.	Commencement Certificate CC/2106/10 dated 30.09.2010	59399.43 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2 Building No. 7: LG/P+S+2	Total FSI-32838.88 sq.m Total Non-FSI#-41539.76 sq.m TBUA- 74378.64 sq.m

16.	Commencement Certificate CC/4177/10/V/60 dated 15.03.2011	59399.43 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2 Building No. 7: LG/P+S+2	Total FSI-36847.09 sq.m Total Non-FSI#-41874.27 sq.m TBUA- 78721.36 sq.m
17.	Commencement Certificate CC/4177/10 dated 15.03.2011	59399.43 sq.m	Building No. 0: LG+S+2 Building No. 1: LG+S+3 Building No. 2: LG+S+3 Building No. 3 & 4: LG/P+S+3 Building No. 5: LG+S+1 Building No. 6: LG/P+S+2 Building No. 7: LG/P+S+2	Total FSI-36847.09 sq.m Total Non-FSI#-41874.27 sq.m TBUA-78721.36 sq.m
18.	Plinth Check Certificate dated 16.03.2011	-	For Building No. '0' (Part), Building No. '6' (Part) and Building No. '7' as per Commencement Certificate dated 30.09.2010	
19.	Plinth Check Certificate dated 18.04.2011	-	For Building No. '5' (Part) as per Commencement Certificate dated 15.03.2011	
20.	Commencement Certificate CC/1875/12 dated 03.09.2012	59399.43 sq.m	Building No. 0: LG+UG+2 Building No. 1: LG+UG+3 Building No. 2: LG+UG+3 Building No. 3 & 4: LG+UG+4 Building No. 5: LG+UG+1 Building No. 6: LG+UG+2 Building No. 7: LG+UG+2	Total FSI-38624.28 sq.m Total Non-FSI#-42002.30 sq.m TBUA-80626.58 sq.m
21.	Completion Certificate dated 12.02.2013	-	For 14 Showrooms, 11 Showrooms with Store, Office Storeroom, Electrical Room & Communication Room, Parking of Building No. 5 as per Commencement Certificate dated 03.09.2012	
22.	Completion Certificate dated 30.09.2013	-	For Lobby, Panel room, 4 Shops, 4 Anchor Shops, A.H.U.'s Lift Lobbies, Electrical room, Gents& Ladies toilets, Corridors & Parking of Building No.7 only as per Commencement Certificate dated 03.09.2012	
23.	Commencement Certificate CC/1148/14 dated 14.07.2014	59399.43 sq.m	Building No. 0: LG+UG+2 Building No. 1: LG+UG+3 Building No. 2: LG+UG+3 Building No. 3 & 4: LG+UG+4 Building No. 5: LG+UG+1	Total FSI-38624.28 sq.m Total Non-FSI#-42002.30 sq.m TBUA-80626.58 sq.m

			Building No. 6: LG+UG+2 Building No. 7: LG+UG+2	
24.	Completion Certificate dated 03.11.2016	-	For 1 Electrical room, 2 A.H.U., 13 Showrooms, Gents & Ladies Toilet , Lift Lobby, Passage & Parking of Building No. 2 only as per Commencement Certificate dated 14.07.2014	
25.	Commencement Certificate CC/0027/19 dated 04.04.2019	59399.43 sq.m	Building No. 0: LG+UG+2 Building No. 1: LG+UG+3 Building No. 2: LG+UG+3 Building No. 3 & 4: LG+UG+2+Mezzanine Building No. 5: LG+UG+1 Building No. 6: LG+UG+2 Building No. 7: LG+UG+2 Engineering Office: G	Total FSI-32710.04 sq.m Total Non-FSI#- 40239.55 sq.m TBUA-72949.59 sq.m
26.	EC dated 20.07.2020 granted by SEIAA, Maharashtra	59399.43 sq.m	SEIAA decided to grant EC for – FSI: 32710.04 m², Non-FSI: 62073.48 m² and Total BUA: 94783.52 (Plan Approval no-CC/0027/19, Dated-04.04.2019)	
27.	Current Status of Project as on date 16.05.2022 reported by PMC vide letter dated 20.05.2022	-	-	Total FSI-32710.04 sq.m Total Non-FSI#-61856.60 sq.m TBUA-94568.64 sq.m
Note- # Non-FSI areas include terrace slab, Podium, Parking. Building services area such as Overhead Water Tank, Engineering Services (Plant Room) Area, Sewage Treatment Plant Area, Cooling Tower, Organic Waster Composter, MSEB Sub- Station, Diesel Storage Tank, Diesel Generator Bank, Thermal Storage Tank, Transformer and Other Services Equipment, Sewage Collection Tank, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank.				

Copy of the PMC vide letter dated 20.05.2022 with Details of the Commencement Certificate, Plinth Check Certificate, EC granted and Construction Status is provided at **Annexure-III.**

2.1.4 As per the guidelines mentioned in EIA Notification 1994 amended on 07.07.2004; public hearing was conducted on 22.02.2006 (**Annexure-IV**) for the aforesaid project and PP approached MoEF for obtaining Environmental Clearance (EC).

2.1.5 PP obtained CTE dated 29.04.2006 (**Annexure-V**) from MPCB in which the Condition No.7 & Condition No. 10 were as follows;

“7. The proposed activity comes under Entry 31 (New Construction Project) listed in schedule-I of the EIA Notification dated January 27, 1994 (as amended till date) issued by Ministry of Environment & Forests, Govt. of India, New Delhi and therefore Environmental Clearance from Govt. of India (MoEF) shall be required as per conditions in amended EIA Notification dated July &, 2004.”

Xxxxxxxxxx

“10. The applicant shall obtain Environmental Clearance from MoEF, GOI before taking any steps to develop/start construction the site.”

2.1.6 PP vide letter dated 15.05.2006 (**Annexure-VI**) submitted a proposal/EIA Report to MoEF for the grant of EC. As per said proposal/EIA Report (page-88) PP mentioned built up area as 34170.83 sq.m and non-built up spaces as 19575.73 sq.m.

2.1.7 MoEF granted EC to the PP on 10/4/2007 referring application seeking prior environmental clearance under the EIA notification 1994 as amended on July 07, 2004. The proposal has been appraised as per prescribed procedures and provisions under the

EIA Notification 2006. The said EC was granted for Total Built up Area (TBUA) of 34170.83 sq. m.

Further, PMC has informed that Non-FSI area is not mentioned in the sanctioned plans as per then prevailing practice followed by Building Permission Department, PMC. It has been informed that Non-FSI areas include terrace slab, Podium, Parking and Building services area such as Overhead Water Tank, Engineering Services (Plant Room) Area, Sewage Treatment Plant Area, Cooling Tower, Organic Waster Composter, MSEB Sub-Station, Diesel Storage Tank, Diesel Generator Bank, Thermal Storage Tank, Transformer and Other Services Equipment, Sewage Collection Tank, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank.

Hon'ble Supreme Court in the matter Civil Appeal No. 10854 of 2016 M/s. Goel Ganga Developers India Pvt. Ltd. Versus Union of India through Secretary Ministry of Environment and Forests & Ors with Civil Appeal No. 10901 of 2016 and Civil Appeal no. 5157-5158 of 2018, has passed judgement about TBUA as per EIA Notification 2006. The relevant paras of the aforesaid Judgement are reproduced below-

“21. In view of the above, we are clearly of the view that the EC granted to the project proponent on 04.04.2008 was for constructing a total built up area of 57,658.42 sq.mtrs. and this would include all covered construction not open to the sky. No artificial division on the basis of FSI and non-FSI area can be made. Therefore, the NGT was fully justified in coming to the conclusion that the construction raised by the project proponent was in total violation of the EC granted to it.”

In view of the above, it may be considered that the EC dated 10/4/2007 granted of TBUA of 34170.83 sq. m. was for constructing a total built up area of 34170.83 sq. m. and this

would include all covered construction not open to the sky. No artificial division on the basis of FSI and non-FSI area can be made.

It is observed from the **Table-01**, that the PP has constructed the total built up area of 94,568.64 sq.m. more than the approved built up area of 34170.83 sq.m., is violation of Environmental Clearance and provisions of EIA Notification 2006.

- 2.1.8 General Condition, as mentioned at Part B; Para 6 of the said EC sated 10.4.2007 stipulates that *“In case of change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.”*

Construction of a new building structure (i.e. Building No. 7) was started which was not in the application/proposal dated 15.05.2006 (**Annexure-VI**) submitted while grant of EC dated 10.04.2007. The Commencement Certificate (Please, refer Table-01, Sr No.14) for Building No. 07 is issued on 15.06.2010 and obtained Competition Certificate (Please, refer Table-01, Sr No.22) on 30.09.2013.

Therefore, PP has violated the General Condition as at Part B; para 6 of the EC dated 10.04.2007.

- 2.1.9 As per Section 9 of the EIA notification 2006, validity of the said EC dated 10.04.2007 is 5 years i.e. 09.04.2012. However, obtaining Commencement Certificate dated 03/9/2012 and dated 14/7/2014 (as at Sr. No. 20 and 23 of **Table-01** above) followed by obtaining Completion certificate dated 03/9/2013 and dated 03/11/2016 respectively (as at Sl. 22 and 24 of **Table-01** above) reveal that construction continued beyond validity of the said EC dated 10/4/2007 and thus violated section -09 of the EIA Notification 2006.

- 2.1.10 Earlier, PP approached MoEF&CC for the revalidation of EC dated 10.04.2007 and MoEF&CC transferred the proposal to SEIAA. PP applied for Environmental Clearance

(EC) on 24.12.2016 to SEIAA for the expansion and change in use as referred in 175th SEIAA minutes dated 18.09.2019 (**Annexure-VII**). PP has mentioned in the EC application that initiated construction work is of 94,568.64 sqm and proposed total built-up area of 95,082.28 sqm (FSI-33008.80 sqm, Non-FSI-62073.48 sqm).

- 2.1.11 Further, SEIAA decided to grant EC dated 20.07.2020 for – FSI: 32710.04 m², Non-FSI: 62073.48 m² and Total BUA: 94783.52 m² (Plan Approval no-CC/0027/19, Dated-04.04.2019). The copy of EC dated 20.07.2020 is attached as **Annexure-VIII**.
- 2.1.12 Current status of project as on date 16.05.2022 as reported by PMC vide letter dated 20.05.2022 (**Annexure-III**), is as below;
- Total FSI area-32710.04 sq.m
 Total Non FSI area-61856.60 sq.m
 TBUA area- 94568.64 sq.m
- As per aforesaid PMC letter, EC granted on 20.07.2020 for change in use towards establishing of Multiplex within existing building. fit out work is not commenced in existing building and there is no new construction.
- 2.1.13 PP had obtained the first EC on 10.04.2007 for total plot area of 41,806.35 sq.m and the revised EC on 20.07.2020 for total plot area of 59,399.43 sq.m. PP had added adjoining plot of area 17,593.08 sq.m in the EC, dated 20.07.2020. Out of the total area of the plot of 59,399.43 sqm, construction has been carried out only on plot of 41,806.35 sq.m. However, no construction is carried out on additional adjoining plot with an area of 17,593.08 sq.m and is still vacant.
- 2.1.14 With regard to alleged construction exceeding 95082.28 sq.m and other allegations in the complaint dated 07.08.2019 and withdrawal of show cause notice/proposed direction dated 18.02.2022 (**Annexure-IX**) by Environment Department, Government of Maharashtra, it is observed that construction has still not found to be exceeding the

same i.e. 95082.28 Sqm as PMC vide letter dated 20.05.2022 (**Annexure-III**) has reported the construction of area - 94568.64 sq.m.

2.2 STATUS OF CONSENT TO ESTABLISH/OPERATE ISSUED BY MPCB AND VIOLATIONS THEREOF, IF ANY

2.2.1 The details of CTE & CTO issued by MPCB are provided in **Table 2** as given below-

Table 2- Details of CTE & CTO issued by MPCB

CTE / CTO	Date of consent application	Date of grant of consent	Validity	Plot Area (Sqm)	Total Built up Area (Sqm)
CTE	05.09.2005	29.04.2006	Not mentioned	42,000.00	Not mentioned
CTO	--	24.11.2009	31.03.2013	41,806.35	34,170.83
CTO	28.2.2013	21.01.2014	31.01.2015	41,806.35	34,170.83
CTO	26.12.2014	03.06.2015	31.01.2017	41,806.35	34,170.83
CTO	07.12.2016	14.08.2018	01.02.2017 to 31.01.2019	41,806.35	34,170.83
CTO	07.12.2018	17.05.2019	31.01.2020	41,806.35	34,170.83
CTO	02.12.2019	08.07.2020	01.02.2020 to 31.03.2022	41,806.35	34,170.83
Application of CTE	31.08.2020	---	---	59,399.43	95082.28
CTO	31.01.2022	---	---	59,399.43	95082.28

Copy of CTE dated 29.04.2006 (**Annexure-V**), copy of all CTO and application for CTE is provided at **Annexure-X**.

3.0 CONCLUSIONS

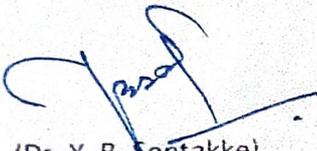
The above observations reveal the following violations -

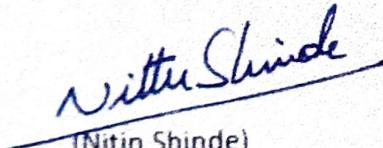
- a) Initiating construction of more than TBUA of 34170.84 sq.m., (Please refer para 2.1.7)
- b) Construction of a new building i.e. Building No. 7 in violation of General Condition as at Part B; para 6 of the EC dated 10.04.2007, (Please refer para 2.1.8)
- c) Construction even after the expiry of EC dated 10.04.2007 (Please refer para 2.1.9)

- b) Construction of a new building i.e. Building No. 7 in violation of General Condition as at Part B; para 6 of the EC dated 10.04.2007, (Please refer para 2.1.8)
- c) Construction even after the expiry of EC dated 10.04.2007 (Please refer para 2.1.9)

4.0 RECOMMENDATIONS

In view of the aforesaid violations as at para 3 above i.e. violations of EC dated 10/4/2007 and EIA notification 2006; Environment Department, Govt of Maharashtra, may take appropriate actions as per the Standard Operating Procedure (SoP) issued by the MoEF&CC vide Office Memorandum (OM) F. No. 22-21/2020-IA.III dated 07/07/2021 for dealing with EC violation cases.


(Dr. Y. B. Sontakke)
Joint Director (Water)
MPCB, Mumbai


(Nitin Shinde)
I/c. Regional Officer,
MPCB, Pune


(Pratik Bharne)
Scientist 'E',
Regional Directorate, CPCB, Pune


(Pankaj Joshi),
Member
SEIAA, Mumbai

Item No. 01 (Pune Bench)

**BEFORE THE NATIONAL GREEN TRIBUNAL
PRINCIPAL BENCH, NEW DELHI**

(By Video Conferencing)

Appeal No. 42/2020(WZ)

Ram Baban Borkar

Appellant

Versus

Union of India & Ors.

Respondent(s)

Date of hearing: 10.12.2020

**CORAM: HON'BLE MR. JUSTICE ADARSH KUMAR GOEL, CHAIRPERSON
HON'BLE MR. JUSTICE SHEO KUMAR SINGH, JUDICIAL MEMBER
HON'BLE DR. NAGIN NANDA, EXPERT MEMBER**

Appellant: Mr. Nitin Lonkar, Advocate

ORDER

1. This appeal has been preferred against Environmental Clearance granted by SEIAA, Maharashtra on 20.07.2020 for shopping mall project by M/s Deepak Fertilizers & Petrochemical Corporation Limited at Pune.
2. According to the appellant, the Project Proponent earlier obtained EC on 10.04.2007 with total permissible area of 34170.83 M². Thereafter, further construction to the extent of 60397.81 M² was raised without EC. A complaint was filed against the same on which show cause notice was issued by the Maharashtra Government but the same was thereafter withdrawn on 18.02.2020 with following observations:-

“After examination of the documents submitted by you along with your representation dated 10.02.2020 and 13.02.2020 and the submission made during the personal hearing conducted on 15.02.2020, it has been observed that the project proponent M/s Yerrowda Investments Limited has carried out construction activity in respect of building construction project “Ishanya Mall” situated at

Survey No. 190(P) & 192(P) of Village-Yerwada, Taluka-Haveli, District Pune.

It is clear from the record that project proponent has obtained Environmental Clearance and also obtained necessary permissions from the concerned departments.

Therefore, there is no case of violation of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.09.2006. Therefore, the show cause notice/proposed directions u/s 5 of the Environment Act needs to be withdrawn.”

3. According to the appellant, even if the Project Proponent had initially taken EC, constructions raised are in excess of the construction permitted under the original EC which is not permissible as held by the Hon'ble Supreme Court in *(2020) 2 Supreme Court Cases 66, Keystone Realtors Private Limited v. Anil V. Tharthare and Ors.* It is for this reason that subsequently EC has been sought and granted. Absence of EC prior to construction deprives the authorities opportunity of appraisal of impact of additional constructions on the environment. Ex post facto EC is thus illegal. Either the constructions need to be demolished or compensation needs to be assessed and recovered.

4. Before proceeding further, we find it necessary to require a joint Committee of SEIAA, Maharashtra, the CPCB and the Maharashtra State PCB to look into the matter and give a factual and action taken report. The SEIAA, Maharashtra will be the nodal agency for coordination and compliance. The joint Committee may give an opportunity of hearing to the Project Proponent and consider its view point.

5. The report may be furnished to this Tribunal within two months by e-mail at judicial-ngt@gov.in preferably in the form of searchable PDF/OCR Support PDF and not in the form of Image PDF.

A copy of this order be forwarded to the SEIAA, Maharashtra, the CPCB and the Maharashtra State PCB by e-mail for compliance.

The appellant may serve a set of papers on the SEIAA, Maharashtra, the CPCB and the Maharashtra State PCB and file affidavit of service within one week from today.

List for further consideration on 16.03.2021.

Adarsh Kumar Goel, CP

S.K. Singh, JM

Dr. Nagin Nanda, EM

December 10, 2020
Appeal No. 42/2020(WZ)
SN

BY SPEED POST

No. 21-243/2006-IA -III
 Government of India
 Ministry of Environment and Forests
 (I.A. Division)

Paryavaran Bhawan,
 CGO Complex, Lodhi Road
 New Delhi 110003
 Dated: 10th April, 2007

To

Shri Shirish M. Desai,
 M/s. Deepak Fertilizers & Petrochemicals and
 Corporation Limited.
 Opp. Golf Course,
 Shastri Nagar,
 Yerwada, Pune-411006
 Maharashtra

Subject: Environmental Clearance for construction of proposed Shopping Mall
 "Ishanya" at Shastri Nagar, Yerwada, Pune, Maharashtra.

Sir,

I am directed to refer to your application seeking prior environmental clearance for the above project under the EIA Notification 1994 as amended on July 7, 2004. The above proposal has been appraised as per prescribed procedure on the basis of the mandatory documents enclosed with the application viz., the Questionnaire, EIA, EMP, Public Hearing proceedings and the additional clarifications furnished in response to the observations of the Expert Appraisal Committee (EAC) constituted by the competent authority in its eighth meeting held on 15-16 December, 2006 and provisions under EIA Notification 2006.

2. The project proponent is proposing for development of Shopping Mall "Ishanya" at C.S. No. 190 & 192, Shastri Nagar, Yerwada, Pune, Maharashtra. The project involves development of Shopping Mall comprising of Amphitheatre, Art Galleries and Computer simulation area etc. in total plot area of 41806.35 sq.m. The total built up area as indicated is 34,170.83 sq. m. Total water requirement will be 637 cu.m./day. and total wastewater generation from the complex will be 245 cu. m./day. A STP having capacity of 300 cu.m/day to treat wastewater generated from the Mall will be installed at site.

3. The EIA report submitted along with the application predicts that there will not be any significant impact on air quality during construction as well as operation phase. There will be minor negative impact on water quality. There will be positive impact on land use pattern due to landscaping and greenbelt development. Plantation of trees and development of recreational area, surrounding area will have positive impact on overall land use.

4. The EAC after due consideration of the relevant documents submitted by the project proponent, responses to the public concerns expressed during the public hearing and additional clarifications furnished in response to its observations have

recommended the grant of environmental clearance for the project mentioned above subject to compliance with the EMP and other stipulated conditions. Accordingly, the Ministry hereby accords necessary environmental clearance for the project subject to the strict compliance with the specific and general conditions mentioned below:

PART A- SPECIFIC CONDITIONS

I. Construction Phase

- i. All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
- ii. Soil and ground water samples will be tested to ascertain that there is no threat to groundwater quality by leaching of heavy metals and other toxic contaminants.
- iii. A First Aid Room will be provided at the project site both during construction and operation of the project.
- iv. Adequate drinking water and sanitary facilities should be provided for construction workers at the site. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
- v. Disposal of muck including excavated material during construction phase should not create any adverse effects on the neighboring communities and be disposed off taking the necessary precautions for general safety and health aspects of people.
- vi. Diesel power generating sets used during construction phase should be of "enclosed type" to prevent noise and should conform to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards.
- vii. Ambient noise levels should conform to mixed area (commercial) standards both during day and night when measured at boundary wall of the premises. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase.
- viii. Vehicles hired for bringing construction material at site should be in good condition and should have valid "pollution under check"(PUC) certificate and to conform to applicable air and noise emission standards.
- ix. Construction spoils including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dump sites for such material must be secured so that they should not leach into the ground water.
- x. Any hazardous waste generated during construction phase should be disposed of as per applicable Rules & norms with necessary approvals of the Maharashtra State Pollution Control Board
- xi. Regular supervision of the above and other measures for monitoring should be in place all through the construction phase so as to avoid disturbance to the surroundings.

II. Operation Phase

The environmental clearance recommended to the project is subject to the specific conditions as follows:

- i. Necessary permission of competent authority shall be taken to store diesel in the premises for operation of DG set.

- ii. Diesel power generating sets proposed as source of back up power for lifts and common area illumination should be of "enclosed type" and conform to rules made under Environment (Protection) Act 1986, prescribed for air and noise emission standards as per CPCB guidelines. Exhausts should be discharged by stack, raised to 4 meters above the rooftop.
- iii. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
- iv. Noise barriers should be provided at appropriate locations so as to ensure that the noise levels do not exceed the prescribed standards.
- v. Weep holes in the compound walls shall be provided to ensure natural drainage of rainwater in the catchment area.
- vi. The sewage treatment plant should be certified by an independent expert for efficiency as well as adequacy and should submit a report in this regard to the Ministry before the project is commissioned for operation. The wastewater should be treated to tertiary level and after treatment reused for flushing of toilets and gardening. Discharge of treated sewage, if any, shall conform to the norms & standards prescribed by Maharashtra State Pollution Control Board.
- vii. Oil & Grease trap shall be provided to remove oil and grease from the surface run off and suspended matter shall be removed in a settling tank before its utilization for rainwater harvesting.
- viii. The solid waste generated should be properly collected & segregated. Wet garbage should be composted and dry/inert solid waste should be disposed of for land filling.
- ix. Any hazardous waste including biomedical waste should be disposed of as per applicable Rules & norms with necessary approvals of the Maharashtra State Pollution Control Board.
- x. The green belt design along the periphery of the plot shall achieve attenuation factor conforming to the day and night noise standards prescribed for residential land use. The open spaces inside the plot should be suitably landscaped and covered with vegetation of indigenous variety.
- xi. Incremental pollution loads on the ambient air quality, noise and water quality should be periodically monitored after commissioning of the project.
- xii. The ground water levels and its quality should be monitored regularly in consultation with Central Ground Water Authority.
- xiii. A Report on the energy conservation measures should be prepared incorporating details about building materials & technology, R & U Factors etc and submitted to the Ministry in three months time.

xiv. The values of R & U for the building envelope should meet the requirements of the hot & humid climatic location. Details of the building envelope should be worked out and furnished in three months time.

PART - B. GENERAL CONDITIONS.

- i) The environmental safeguards contained in the EIA Report should be implemented in letter and spirit.
 - ii) Provision should be made for the supply of kerosene or cooking gas and pressure cooker to the laborers during construction phase.
 - iii) All the laborers to be engaged for construction works should be screened for health and adequately treated before the issue of work permits.
 - iv) 6 monthly monitoring reports should be submitted to the Ministry and its Regional Office.
5. Officials from the Regional Office of MOEF, Bhopal who would be monitoring the implementation of environmental safeguards should be given full cooperation, facilities and documents / data by the project proponents during their inspection. A complete set of all the documents submitted to MoEF should be forwarded to the CCF, Regional office of MOEF, Bhopal.
 6. In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Ministry.
 7. The Ministry reserves the right to add additional safeguard measures subsequently, if found necessary, and to take action including revoking of the environment clearance under the provisions of the Environment (Protection) Act, 1986, to ensure effective implementation of the suggested safeguard measures in a time bound and satisfactory manner.
 8. All other statutory clearances such as the approvals for storage of diesel from Chief Controller of Explosives, Fire Department, Civil Aviation Department (if required), CRZ Regulations, State Forest Department, Wild Life Act, 1972 etc. shall be obtained by project proponents from the competent authorities.
 9. A copy of the environmental clearance letter would be marked to the local NGO(s), if any, from whom suggestion/representation were received at the time of public hearing.
 10. The project proponent should advertise in at least two local Newspapers widely circulated in the region, one of which shall be in the vernacular language informing that the project has been accorded environmental clearance and copies of clearance letters are available with the Maharashtra State Pollution Control Board and may also be seen on the website of the Ministry of Environment and Forests at <http://www.envfor.nic.in>. The advertisement should be made within 7 days from the day of issue of the clearance letter and a copy of the same should be forwarded to the Regional office of this Ministry at Bhopal.

11. These stipulations would be enforced among others under the provisions of the Water (Prevention and Control of Pollution) Act, 1974, the Air (Prevention and Control of Pollution) Act 1981, the Environment (Protection) Act, 1986, the Public Liability (Insurance) Act, 1991 and EIA Notification, 1994 including the amendments.

12. The project authority will enter in to MOU with all buyers of the property, flats/shops etc. to ensure operation and maintenance of the assets handed over to the society formed by the residents/owners of the buildings.

13. Under the provisions of Environment (Protection) Act 1986, legal action shall be initiated against the project proponent if it was found that construction of the project had started without obtaining environmental clearance.


(K.C. RATHORE)
Additional Director (IA)
rathore27@yahoo.com
Tele: 24360789

Copy to: -

1. The Secretary, Department of Environment, Government of Maharashtra, New Administrative Building, 15th Floor, Opp. Mantralaya, Mumbai.
2. The Member Secretary, Maharashtra State Pollution Control Board, Kalptaru Point, 3rd Floor, Near Sion Circle Opp. Cine Planet Cinema, Sion(E), Mumbai.
3. The CCF, Regional Office, Ministry of Environment & Forests, Bhopal.
4. IA - Division, MOEF, New Delhi - 110001.
5. Guard file.

(K. C. RATHORE)
Additional Director (IA)

20023-PTS-0115

Executive Engineer Department
Building Permission Department, Zone - 4
Pune Municipal Corporation
Outward No. :- Zone/4- 759
Date :- 20/05/2022

To,
The Sub Regional Officer,
MPC Board, Pune

Subject :- Information Required for NGT Court No. OA 42/2020.
Reference : Your E- Mail Dated 16/05/2022.

Dear Sir,

This is with reference to the above subject mailer please find attached herewith detail reply of your questionary information for NGT Court Cases Appeal No. 42/2020.

Thanking You,

Yours Faithfully,

~~Ummay~~
SRO P-I
Kang
UP
22/05/2022

~~Pathare~~
20/5
Executive Engineer
Building Permission
Department, Zone - 4
Pune Municipal Corporation
P.S.

- Encl. : Annexure 1
- Annexure 2
- Annexure 3
- Annexure 4

Copy to,

Hon. City Engineer
Pune Municipal Corporation
For information...

22/5
22/5
22/5

o/c

Annexure 1

Sr. No.	Commencement Certificate No. & date	Gross Plot Area In Sq.m.	Deduction of Plot Area In Sq.m.	Notional Plot Area of Mall In Sq.m.	Deduction of F.S.I. area In Sq.m.	Net Plot Area In Sq.m.	Name of Building	No. of Floors	Height of building In M.	F.S.I. Area In Sq.m.	Total F.S.I. Area in Sq.m.	Non-F.S.I. Area in Sq.m.	Parking & Other Areas In Sq.m.	Total Non-F.S.I. Area in Sq.m.	Total Construction Built-up Area In Sq.m.	Remarks
1	CC/1050/03 & 19/12/2003	88593.06	Plot A - 15579.38 Plot C - 13614.25 Vacant Plot - 17593.08	41806.35	Amenity Space - 1775.39 Open Space - 5283.45	36521.90	N - Showroom	G + 2	13.50	10555.66	27561.02	1639.16	23528.52	28091.31	55652.33	First plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 73313.68 Sq.m. F.S.I. - 27561.02 Sq.m. Notional Plot Area of mall = 41805.35 Sq.m. Non - F.S.I. (Balcony, Lift & lift Machine room) - 4562.79 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, IST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m. Note - Non - F.S.I. area is not mentioned in sanctioned plan as prevailing practice followed by building permission Dept., PMC.
							O - Showroom	G + 2	13.50	4653.15		657.47				
							P - Showroom	G + 3	14.99	6859.30		1435.17				
							Q - Showroom	G + 2	13.50	2200.29		440.42				
							S - Centre Entrance Lobby	G	4.20	1019.00		0.00				
							T - Multipurpose Hall	G	4.20	653.64		0.00				
							Stalls (1-4)	G + 1	6.30	1619.98		390.57				
							Building No. 0	0	8.70	0.00		237.16				
							Building No. 1	G + 4	20.40	8887.36		4109.62				
							Building No. 2	G + 3	16.50	5381.09		3106.91				
2	CC/4109/05 & 27/02/2006	88593.06	Plot A - 15579.38 Plot C - 13614.25 Vacant Plot - 17593.08	41806.35	Open Space - 5283.45	36521.90	Building No. 0	G + 2	12.60	2540.42	28719.25	5060.50	23528.52	38014.91	66734.16	Revised plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 73313.68 Sq.m. F.S.I. - 28719.25 Sq.m. Notional Plot Area of mall = 41805.35 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U., /ETC, Attium, Lift & lift Machine room) - 14486.39 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, IST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition wall, Underground Water Tank) - 23528.52 Sq.m. Note - Non - F.S.I. area is not mentioned in sanctioned plan as prevailing practice followed by building permission Dept., PMC.
							Building No. 5	G + 1	8.70	1318.48		990.33				
							Building No. 3 & 4	G + 4	20.40	10591.90		5060.50				
							Building No. 6	G + 2	12.60	2540.42		981.87				
							Building No. 0	L.G. + S + 2	17.50	489.70		2147.77				
							Building No. 1	L.G. + S + 3	20.90	11328.14		4513.45				
3	CC/0712/07 & 28/05/2007	60981.55	Vacant Plot - 19175.20	41806.35	Amenity Space - 1775.39 Open Space - 5283.45	36521.90	Building No. 2	L.G. + S + 3	20.90	7804.41	32853.24	3397.04	23528.52	38050.66	70903.90	Revised plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 60981.55 Sq.m. F.S.I. - 32853.24 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U., /ETC, Attium, Lift & lift Machine room) - 14522.14 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, IST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m. Note - Non - F.S.I. area is
							Building No. 3 & 4	L.G./P + S + 3	20.35	8566.90		3014.28				
							Building No. 5	L.G. + S + 1	11.80	1947.69		541.08				

7	CC/2106/10 & 30.09.2010	59399.43	—	—	—	MSEB - 100.00	40655.89	Building No. 7 (Arcade)	G + 3	17.50	3529.86	989.59	23528.52	41539.76	74378.64	Revised plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 59399.43 Sq.m. F.S.I. - 32838.88 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 18011.24 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, TST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m.
								Building No. 0	L.G. + S + 2	17.50	539.66	1183.25				
								Building No. 1	L.G. + S + 3	20.90	10589.07	5372.51				
								Building No. 2	L.G. + S + 3	20.90	6886.10	4589.51				
								Building No. 3 & 4	L.G./P + S + 3	20.35	7649.36	4605.76				
								Building No. 5	L.G. + S + 1	11.80	1000.37	133.81				
								Building No. 6	L.G./P + S + 2	18.30	2423.97	1136.81				
								Building No. 7	L.G./P + S + 2	16.65	3750.35	989.59				
								Building No. 0	L.G. + S + 2	17.50	530.85	1153.35				
								Building No. 1	L.G. + S + 3	20.90	11825.16	4300.00				
8	CC/4177/10/V/60 & 15.03.2011	59399.43	—	—	—	MSEB - 100.00	40655.89	Building No. 2	L.G. + S + 3	20.90	6640.93	4606.50	23528.52	41874.27	78721.36	Revised layout plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 59399.43 Sq.m. F.S.I. - 36847.09 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 18345.75 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, TST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m. Note - Non - F.S.I. area is not mentioned in sanctioned plan as prevailing practice followed by building permission Dept., PMC. The revised plan sought an increase in F.S.I. area by 4008.71 Sq.m. which however was neither initiated nor executed, and the F.S.I. area continued to be well within the EC 2007 approved area of 34170.83 Sq.m. which was well within EC 2007 approved area.
								Building No. 3 & 4	L.G./P + S + 3	20.35	7649.36	4605.76				
								Building No. 5	L.G. + S + 1	11.80	4308.77	441.57				
								Building No. 6	L.G./P + S + 2	18.30	2423.97	1116.81				
								Building No. 7	L.G./P + S + 2	16.65	3468.05	2121.76				
								Building No. 0	L.G. + S + 2	17.50	530.85	1153.35				
								Building No. 1	L.G. + S + 3	20.90	11825.16	4300.00				
								Building No. 2	L.G. + S + 3	20.90	6640.93	4606.50				
								Building No. 3 & 4	L.G./P + S + 3	20.35	7649.36	4605.76				
								Building No. 5	L.G. + S + 1	11.80	4308.77	441.57				
9	CC/4177/10 & 15.03.2011	59399.43	—	—	—	MSEB - 100.00	40655.89	Building No. 5	L.G. + S + 1	11.80	4308.77	441.57	23528.52	41874.27	78721.36	Revised plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 59399.43 Sq.m. F.S.I. - 36847.09 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 18345.75 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, TST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m.
								Building No. 0	L.G. + S + 2	17.50	530.85	1153.35				
								Building No. 1	L.G. + S + 3	20.90	11825.16	4300.00				
								Building No. 2	L.G. + S + 3	20.90	6640.93	4606.50				

Revised plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under
Plot Area - 59399.43 Sq.m.
F.S.I. - 36847.09 Sq.m.
Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 18345.75 Sq.m.
Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, TST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m.

Revised layout plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under
Plot Area - 59399.43 Sq.m.
F.S.I. - 36847.09 Sq.m.
Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 18345.75 Sq.m.
Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, MSEB Sub Station, Diesel Storage Tank, DG Bank, TST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m.
Note - Non - F.S.I. area is not mentioned in sanctioned plan as prevailing practice followed by building permission Dept., PMC. The revised plan sought an increase in F.S.I. area by 4008.71 Sq.m. which however was neither initiated nor executed, and the F.S.I. area continued to be well within the EC 2007 approved area of 34170.83 Sq.m. which was well within EC 2007 approved area.

12	CC/0027/19 & 04/04/2019	59399.43	-----	-----	4378.90	Building No. 1		L.G. + U.G. + e	17.50	9695.75	4223.27	23528.52	40239.55	72949.59	Revised layout plan sanctioned & details of Plot Area, F.S.I., Non-F.S.I. were as under Plot Area - 59399.43 Sq.m. F.S.I. - 32710.04 Sq.m. Non - F.S.I. (Balcony, Staircase / Lobby, Passage, A.H.U./ETC, Atrium, Lift & Lift Machine room) - 1671.03 Sq.m. Other Non - F.S.I. (Terrace Slab, Podium, Parking, Overhead Water Tank, Engineering Services (Plant Room) Area, STP Area, Cooling Tower, OWC, M&SEB Sub Station, Diesel Storage Tank, DG Bank, IST, Transformer and Other Services Equipment, SCT, Gas Bank, Entrance Wall, Partition Wall, Underground Water Tank) - 23528.52 Sq.m. Note - Non - F.S.I. area is not mentioned in sanctioned plan as prevailing practice followed by building permission Dept., PMC.
					Open Space - 6783.07	Less Internal Road Area - 7481.57	M&SEB - 100.00	Building No. 2	L.G. + U.G. + 3	17.50	6652.42				
					40655.89	Building No. 3 & 4	L.G. + U.G. + 2 + Mezzanine	15.50	7366.86	32710.04	3276.03				
						Building No. 5	L.G. + U.G. + 1	7.40	3612.50	372.20					
						Building No. 6	L.G. + U.G. + 2	10.90	2323.94	1284.26					
						Building No. 7	L.G. + U.G. + 2	9.30	2343.39	1818.30					
						Engineering Office	G	3.00	183.54	0.00					

[Signature]
कनिष्ठ अभियंता
 विकास योजना व बांधकाम नियंत्रण (श्री.क.४)
 पुणे महानगरपालिका

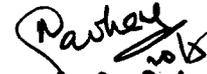
[Signature]
उप अभियंता
 बांधकाम विकास विभाग
 (इंजीन नं.४)
 पुणे महानगरपालिका

[Signature]
कार्यकारी अभियंता
 विकास योजना व बांधकाम नियंत्रण (श्री.क.४)
 पुणे महानगरपालिका

Annexure 2				
Plinth Checking till date for				
Sr. No.	Building No.	Plinth Checking Certificate No.	Plinth Checking Certificate Date	As per Sanctioned plan
1.	1 & 2	BCO/03/204	09/11/2005	CC/1050/03 dated - 19/12/2003
2.	4	BCO/03/291	04/03/2006	CC/4109/05 dated - 27/02/2006
3.	3	BCO/03/72	21/06/2006	CC/4109/05 dated - 27/02/2006
4.	0(Part), 5(Part), 6(Part)	BCO/03/196	19/10/2006	CC/4109/05 dated - 27/02/2006
5.	0(Part), 6(Part), 7	PCC/1083/10	16/03/2011	CC/2106/10 dated - 30/09/2010
6.	5(Part)	PCC/0054/11	18/04/2011	CC/4177/10 dated - 15/03/2011


 कनिष्ठ अभियंता
 विकास योजना व बांधकाम नियंत्रण (प्रो.क्र.४)
 पुणे महानगरपालिका


 उप अभियंता
 बांधकाम विकास विभाग
 (झोन नं.४)
 पुणे महानगरपालिका


 कार्यकारी अभियंता
 विकास योजना व बांधकाम नियंत्रण (प्रो.क्र.४)
 पुणे महानगरपालिका

Annexure 3				
Completion till date for				
Sr. No.	Building No.	Completion Certificate No.	Completion Certificate Date	As per Sanctioned plan
1.	4	BCO/03/45	17/8/2007	CC No. 5777 Dated - 16/03/1990 & CC/0712/07 dated - 28/05/2007 for 21 Showrooms of Building No. 4 only.
2.	1	BCO/03/92	18/12/2007	CC/2804/07 dated - 15/12/2007 for 20 Showrooms of Building No. 1 only.
3.	0, 2, 3 & 4, 5, 6	BCO/YWO/02	03/06/2008	CC/0163/08 dated - 16/04/2008 for 7 Showrooms with entire Building No. 0 only, for 44 Showrooms & 2 Storeroom of Building No. 2 only, for 74 Showrooms & 2 warehouse storage of Building No. 3 & 4 only, for 20 Showrooms, 1 Office, Kitchens, Communication Room, Storeroom, Mall Office, Cafeteria of Building No. 5 only & for 10 Showrooms, 7 Offices, Office, Kitchen of Building No. 6 only
4.	5	OCC/1424/12	12/02/2013	CC/1875/12 dated -

				03/09/2012 for 14 Showrooms, 11 Showrooms with Store, Office, Storeroom, Electrical Room & Communication Room, Parking of Building No. 5
5.	7	OCC/0936/13	30/09/2013	CC/1875/12 dated - 03/09/2012 for Lobby, Panel room, 4 Shops, 4 Anchor Shops, A.H.U.'s, Lift Lobbies, Electrical room, Gents & Ladies toilets, Corridors & Parking of Building No. 7 only.
6.	2	OCC/1491/16	03/11/2016	CC/1148/14 dated - 14/07/2014 for 1 Electrical room, 2 A.H.U., 13 Showrooms, Gents & Ladies Toilet, Lift Lobby, Passage & Parking of Building No. 2 only.

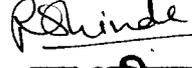

अभिधंत
विकास योजना व बांधकाम नियंत्रण (झो.क्र.४)
पुणे महानगरपालिका

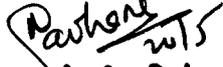

उप अभियंता
बांधकाम विकास विभाग
(झोन नं.४)
पुणे महानगरपालिका


कार्यकारी अभियंता
विकास योजना व बांधकाम नियंत्रण (झो.क्र.४)
पुणे महानगरपालिका

Annexure 4				
WORK IN PROGRESS REPORT TILL DATED – 16/05/2022 AS PER SANCTIONED PLAN NO. CC/0027/19 DATED – 04/04/2019 (NO NEW CONSTRUCTION)				
Sr. No.	Building No.	Floors	Total Built-up Area defined under notification No. S.O. 695 (E) dated – 04/04/2011 issued by MOEF & CC (Sq.m.)	Present Status
There is no work in progress. It is an operating mall and all construction work completed as per EC granted (2007). Below table gives building wise details and total area is within limits of previous EC(2007) as well as EC granted in 2020.				
1.	Building No. 0	L.G.+U.G.+2	As per Environmental Clearance granted on 20.07.2020 having proposal no. SEIAA-EC-0000002310 F.S.I. Area = 32710.04 & Non – F.S.I. Area = 62073.48 and total construction built-up area = 94783.52	F.S.I. Area – 32710.04 Sq.m. Non – F.S.I. Area = 61858.60 Sq.m. Current Construction Area = F.S.I. Area + Non – F.S.I. Area = 32710.04 + 61858.60 = 94568.64 Sq.m. EC granted on 20.07.2020 towards proposal no. SEIAA-EC-0000002310 for change of use towards establishing multiplex within existing building. (Fitout work is not commenced in existing building). No new construction.
2.	Building No. 1	L.G.+U.G.+3		
3.	Building No. 2	L.G.+U.G.+3		
4.	Building No. 3 & 4	L.G. +U.G.+2 + Mezz.		
5.	Building No. 5	L.G.+U.G.+1		
6.	Building No. 6	L.G.+U.G.+2		
7.	Building No. 7	L.G.+U.G.+1		
8.	Engineering Office	Gr. Fl.		


कनिष्ठ अभियंता
विकास योजना व बांधकाम नियंत्रण (झो.क्र.४)
पुणे महानगरपालिका


उप अभियंता
बांधकाम विकास विभाग
(झोन नं.४)
पुणे महानगरपालिका


कार्यकारी अभियंता
विकास योजना व बांधकाम नियंत्रण (झो.क्र.४)
पुणे महानगरपालिका

MEMO (396) 10,000-4-02

BCO/03/308
दि 21/11/05
Building Control Dept.

PUNE MUNICIPAL CORPORATION

Building Control Department

Approval of Work upto Plinth Level

Ref. No.

Date :

To : - अशोक इमान न. व इमान. 0
- लिंक इन्वेस्टमेंट -

येरवडा इन्वेस्टमेंट लिमिटेड
C/O श्री. रमेशकुमार गिरी
श्री. आर्कीड 30 P.V. Park
येरवडा, पुणे - 411 005

PROPOSAL NO.

PAGE NO.

SITE DETAILS	
PETH/ T.P. SCHEME	येरवडा
VILLAGE	येरवडा
SOCIETY	-
C.T.S. NO.	-
SURVEY NO.	950 व 952 पंजी
FINAL PLOT NO.	-
SUB. PLOT NO.	-
LAND MARK	

Sir,

With reference to your intimation No. 32 dated 21.11.05
regarding the completion of construction work upto plinth level in the above mentioned site I have
to inform on verification at site that :-

- The further work may be proceeded with as per sanctioned plans. Sanctioned under Commencement Certificate No. : 9050/03, dated : 25.02.03
- The Work shall not be proceeded with.
 - As it is not as per sanctioned plans.
 -
 -
 -

- श्री. जागेवरील निरकोठ बदलानुसार दुसरी नकाशा व श्मार्तीचा झाराचडा मेदूर करण व्हाय -

Manantra
9/11/05
Sub / Junior Engineer,
Building Control,
Pune Municipal Corporation.

Date :

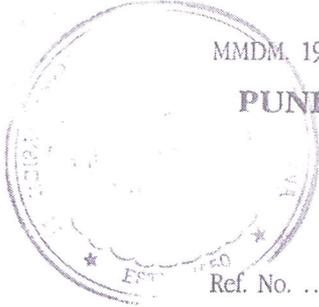
Yours faithfully,

Asst. Engineer
Asst. Engineer,
Building Control No. 3
Pune Municipal Corporation.

Date :

BCO/08/22/09
19.03.06

Building Control Dept.



MMDM, 1909 (50 Pads of 100 pp. each)-3-98

PUNE MUNICIPAL CORPORATION

Building Control Department

Approval of Work upto Plinth Level

PROPOSAL NO.

PAGE NO.

Ref. No.

Date :

३१ मार्च - २००६

To :

इन्व्हेस्ट - ३४

मे अरेवडा Investment Ltd.
८०, ११, लक्ष्मणाना, बिपि (काशी),
ए अरेवडा - ३५

SITE DETAILS	
PETH/ T.P. SCHEME	२१२९३
VILLAGE	२१२९३
SOCIETY	-
C.T.S. NO.	-
SURVEY NO.	१९०५११, १९२१११
FINAL PLOT NO.	-
SUB. PLOT NO.	-
LAND MARK	

Sir,

With reference to your intimation No. 20 dated 23.9.2005 regarding the completion of construction work upto plinth level in the above mentioned site I have to inform on verification at site that :-

- The further work may be proceeded with as per sanctioned plans. Sanctioned under Commencement Certificate No. : १९०५/११ dated : २६.२.०५
- The Work shall not be proceeded with.
 - As it is not as per sanctioned plans.
 -
 -
 -
-

[Signature]
2/03/06

Sub / Junior Engineer,
Building Control,
Pune Municipal Corporation.

Date :

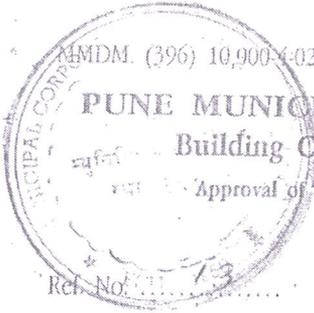
Yours faithfully,

[Signature]

Asst. Engineer,
Building Control No. 3
Pune Municipal Corporation.

Date :

BCO103/196
19/10/2006



Building Control Dept.

PROPOSAL NO.	PAGE NO.

Ref. No. 13

Part :- 4

Bldg. no. 05, 96

Date : 10/07/06.

To :

M/s. Yerwanda Investment Ltd.

ए. अंत्रयकुमार गिरी (ज. आर्क).

शा. येरवडा पुणे 6.

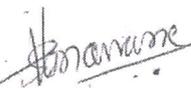
SITE DETAILS	
PETH/ T.P. SCHEME	येरवडा
VILLAGE	येरवडा
SOCIETY	-
C.T.S. NO.	-
SURVEY NO.	190(P), 192(P)
FINAL PLOT NO.	-
SUB. PLOT NO.	-
LAND MARK	

Sir,

With reference to your intimation No. 13 dated 10/07/06.

regarding the completion of construction work upto plinth level in the above mentioned site I have to inform on verification at site that :-

- The further work may be proceeded with as per sanctioned plans. Sanctioned under Commencement Certificate No. : , dated :
- The Work shall not be proceeded with.
 - As it is not as per sanctioned plans: - CC/4109/05 दि. 27/02/06.
 -
 -
 - जागेवरील किश्कोळ भाषालीळ बदलानुसार
इकरत नकाशे मान्य करून घेणार.


Sub / Junior Engineer,
Building Control,
Pune Municipal Corporation.

Date :

Yours faithfully,

Asst. Engineer,
Building Control No.
Pune Municipal Corporation.

Date :

MMDM. (396) 10,000-4-02

BCO/03/02
21/12/2008
Building Control Dept.

PUNE MUNICIPAL CORPORATION
Building Control Department
Approval of Work upto Plinth Level

PROPOSAL NO.

PAGE NO.

Ref. No.

Date :

Part III (Bldg. No. 3)

To :

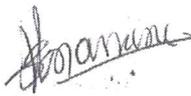
.....
.....
.....
.....
.....

SITE DETAILS	
PETH/ T.P. SCHEME	मेरवडा
VILLAGE	-
SOCIETY	-
C.T.S. NO.	-
SURVEY NO.	१०० पार्ले १०२ पार्ले (Phase II)
FINAL PLOT NO.	-
SUB. PLOT NO.	-
LAND MARK	-

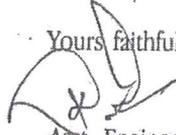
Sir,

With reference to your intimation No. १० dated ... ०१-०६ ...
regarding the completion of construction work upto plinth level in the above mentioned site I have
to inform on verification at site that :-

- The further work may be proceeded with as per sanctioned plans. Sanctioned under
Commencement Certificate No. : ६१०२/०१, dated : २०/१२/२००६
कुकरा
- The Work shall not be proceeded with.
 - As it is not as per sanctioned plans.
 -
 -
 -
-

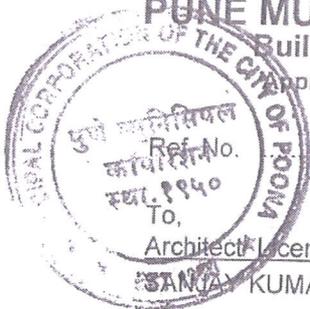

Sub / Junior Engineer,
Building Control,
Pune Municipal Corporation.

Date :

Yours faithfully,

Asst. Engineer,
Building Control No. 3
Pune Municipal Corporation.

Date :

PUNE MUNICIPAL CORPORATION
Building Control Department
 Approval of Work upto Plinth Level



Full
 इमान : ३-०, १, ०२१, व
 आर्किटेक्ट
 इमान-०६.
 Architect/Licence Engineer Name :-
SANTANU KUMAR GIRI

office no 501,502, amit court, behind mangala,
 shivajinagr, PUNE, 411005

Owner Name :-

Yerawada Investment Ltd.

Proposal No.	: yer/0070/03
Outward No.	: PCC/1083/10
Outward Date	: 16/3/2011

SITE DETAILS	
Peth / T.P. Scheme	PUNE
Village	Yerawada
Survey No.	190-(P), 192-(P)
Hissa No.	-
C.T.S. No.	-
Final Plot No.	-
Sub Plot No.	-
Plot No.	B
Society	-
Land Mark	-

Sir,

With reference to your intimation No. PLN/0904/10 dated 15/11/2010 regarding the completion of construction work upto plinth level in the above mentioned site. I have to inform on verification at site that: -

1. The further work may be proceeded with as per sanctioned plans. Sanctioned under commencement Certificate No. CC/2106/10 Dated 30/9/2010.

2. The work shall not be proceeded with.

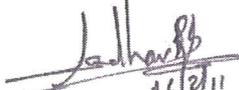
(a) As it is not as per sanctioned plans.

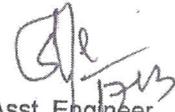
(b)

(c)

(d)

3.


 16/3/11
 Sub / Junior Engineer,
 Building Control,
 Pune Municipal Corporation.
 Date :


 12/3
 Asst. Engineer,
 Building Control No. 2
 Pune Municipal Corporation
 Date :

PUNE MUNICIPAL CORPORATION
Building Control Department
 Approval of Work upto Plinth Level

Proposal No.	: yer/0070/03
Outward No.	: PCC/0054/11
Outward Date	: 18/4/2011

Ref. No.

Full

इमारत - पु करिता

To,

Architect/ Licence Engineer Name :-

SANJAY KUMAR GIRI

office no 501,502, amit court, behind
shivajinagr, PUNE, 411005

Owner Name :-

Yerawada Investment Ltd.



SITE DETAILS	
Peth / T.P. Scheme	PUNE
Village	Yerawada
Survey No.	190-(P), 192-(P)
Hissa No.	-
C.T.S. No.	-
Final Plot No.	-
Sub Plot No.	-
Plot No.	B
Society	-
Land Mark	-

Sir,

With reference to your intimation No. PLN/0035/11 dated 7/4/2011 regarding the completion of construction work upto plinth level in the above mentioned site. I have to inform on verification at site that: -

1. The further work may be proceeded with as per sanctioned plans. Sanctioned under commencement Certificate No. CC/4177/10 Dated 15/3/2011.
2. The work shall not be proceeded with.
 - (a) As it is not as per sanctioned plans.
 - (b) _____
 - (c) _____
 - (d) _____

3. जागेवरील कितीही बदलावही इमारत उंच ये वरुण नसावे म्हणून उपाय घ्यावा

Sub / Junior Engineer,
 Building Control,
 Pune Municipal Corporation.
 Date :

Asst. Engineer,
 Building Control No.
 Pune Municipal Corporation
 Date :



पुणे महानगरपालिका

शिवाजीनगर, पुणे ४११००५.

बांधकाम नियंत्रण कार्यालय

क्रमांक :

BCO/03/45
0002545

दिनांक :

17/8/2007

इमारत क्र. ४

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

अंशतः भोगवटा पत्र भाग-१

श्री. / श्रीमती श्री. येरवडा इन्व्हेस्टमेंट लि. तर्फे श्री. संजयकुमार गिरी (अंश.)

राहणार पठार पठार अमीत कोर्ट, शिवाजीनगर, पुणे-४११००५.

यांत -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३/२५४ व एम्. आर. टी. पी. अॅक्ट कलमे ४५/६९ प्रमाणे पुणे, पेठ येरवडा वरांक. — फायनल प्लॉट क्र. / सर्व्हे क्र. १०० (फॉट) १०२ (फॉट) टी. पी. स्कीम नंबर — यांत

इकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक ५७७७, दिनांक १६/३/१९९०
२६/०७/२००७ दि. २८/५/२००७.

अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेट प्रमाणे सर्व / काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती मिळण्याबाबत दिनांक २२।६।२००७ रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटीवर पुढील वर्णनाचा इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे.

उपयोगात आणावयाच्या बांधकामाचे वर्णन

तळमजला - शीशुम नं. ४००९ ते ४०१६

फहिला मजला - शीशुम नं. ४००९, ४००२, ४००३, ४००५, ४००६

एकूण - २९ शीशुम फ्लॉट

(१)

अंशतः भोगवटा पत्र मकाराव्यतिरिक्त कोणतीही बांधकाम (ज्या सर्व मारिनिंग अंतर्गत व टेरसवरील शेड, पार्टिशन वॉल करून अन्वये प्रील लायुन मारिनिंग बांधिल्ले करणे इ.) केल्यास, कोणतीही पूर्व सूचना न देता सदरची संपूर्ण अधिकृत बांधकामे बांधण्यात येतील व स्थापितार्थ येणारा संपूर्ण खर्च प्लॅटधारक / मालक यांच्याकडून वसूल करण्यात येईल.

सहायक अभियंता,

बांधकाम नियंत्रण क्र. ३
पुणे महानगरपालिका.



बांधकाम नियंत्रण कार्यालय

क्रमांक : BCO103/092

दिनांक : 18/12/07

03678

इमांक नं. १

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

अंशतः भोगवटा पत्र क्रमांक-२

श्री. / श्रीमती **अ. येरवडा इन्व्हेसमेंट लि. तर्फे श्री. नरंजयकुमार शिंदे (A24)**

राहणार **५०१, ५०२ अर्जात कोर्ट, शिवाजीनगर, पुणे-५**

यांस -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३/२५४ व एम्. आर. टी. पी. अॅक्ट कलमे ४५/६९ प्रमाणे पुणे, पेठ **येरवडा** घरांक **फायवळ फ्लॉट क्र. १** सर्व्हे क्र. **५२० (पट्टी) १२२ (पट्टी)** टी. पी. स्कीम नंबर **५२०३/०५** दिनांक **१५.१२.२००७** इकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक **२६३/०५** दिनांक **१५.१२.२००७** अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेटप्रमाणे सर्व / काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती मिळण्याबाबत दिनांक **७.१२.२००७** रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटींवर पुढील वर्णनाचा इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे. **आद्य नकाशांनुसार**

उपयोगात आणावयाच्या बांधकामाचे वर्णन

- १. **लीअर झार्ड - शोरुम-१ एक ०१ अ, १ एक ०१ बी, १ एक ०१ अ**
१ एक ०१ सी, १ एक ०१ फक्त
- २. **स्ट्रीट मजला - शोरुम नं. १ जी ०१ फक्त**
- ३. **परिभा मजला - शोरुम नं. १ एक ०१ फक्त, १ एक ०२ फक्त**
- ४. **दुसरा मजला - शोरुम नं. १ एक ०१ फक्त**
- ५. **तिसरा मजला - शोरुम नं. १ टी ०१, १ टी ०३, १ टी ०६, १ टी ०५, १ टी ११,**
१ टी १२, १ टी १३, १ टी १४, १ टी १६, १ टी १८
१ टी १९ फक्त
- (१) **एकूण - २० शोरुम सह संपूर्ण इमांक नं. १ फक्त,**
- (२) **एकूण - २० शोरुम सह संपूर्ण इमांक नं. १ फक्त,**
- (३) **एकूण - २० शोरुम सह संपूर्ण इमांक नं. १ फक्त,**

२- भविष्यात मान्य नगरपालिकाद्वारे कोणतीही बांधकाम (उदा. सर्व मॉर्निंगल अंतर्गत न टॅरेसरील बोट, पार्टिशन वॉल करून अगर ग्रील लावून मॉर्निंग वॉटर करणे इ.) केल्यास, कोणतीही पूर्व सूचना न देता सदरची संपूर्ण अधिभूत बांधकामे पाडण्यात येतील व त्याप्रित्यर्थ वेगवेगळे संपूर्ण खर्च धरलेटधारक / मालक यांच्याकडून वसूल करण्यात येईल.

PK
सहायक अभियंता,
बांधकाम नियंत्रण क्र. ३,
पुणे महानगरपालिका.
18/12/07



पुणे महानगरपालिका

शिवाजीनगर, पुणे ४११००५.

बांधकाम नियंत्रण कार्यालय

क्रमांक : BCO1YW0102

दिनांक : 31/6/08

03012

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

अंशतः भोगवटा पत्र डाटा-३

श्री. / श्रीमती मे. ऐश्वर्या इन्व्हेस्टमेंट लि. तर्फे श्री. संजयकुमार गिरी (आर्कि.)

राहणार ५०५/५०२ अमित कोर्ट, शिवाजीनगर पुणे-५

यांस -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३ / २५४ व एम्. आर. टी. पी. अॅक्ट कलमे ४५/६९ प्रमाणे पुणे, पेठ ऐश्वर्या घरांक फायनल प्लॉट क्र. / की सर्व्हे क्र. १९०(पट्टे)१९२ (जट्टे) टी. पी. स्कीम नंबर यांत इकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक ०३६३/०८ दिनांक १९/४/२००८ अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेटप्रमाणे सर्व / काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती मिळण्याबाबत दिनांक २८/५/२००८ रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटीवर पुढील वर्णनाचा इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे.

उपयोगात आणावयाच्या बांधकामाचे वर्णन

- इमारत नं. ० मधील - लोअर व्हाइंड शोरूम नं. ०८०१ ते ०८०७ सह संपूर्ण इमारत
 इमारत नं. २ मधील - लोअर व्हाइंड शोरूम नं. २८०१ व दोन स्टोअर रुम
 स्टील मजला - शोरूम नं. २००१ ते २०१०, पहिला मजला - शोरूम नं. २१०१ ते २१११ व २११४
 दुसरा मजला - शोरूम नं. २२०१ ते २२२० व २२०३
 इमारत नं. ३ व ४ मधील - लोअर व्हाइंड - दोन वेअर हाउस स्टोअर, स्टील मजला - शोरूम नं. ३००१ ते ३०१५
 पहिला मजला - शोरूम नं. ३१०१ ते ३११६ व ३१०१ ते ३११२
 दुसरा मजला - शोरूम नं. ३२०१ ते ३२१६ व ३२०१ ते ३२१५
 (१) इमारत नं. ५ लोअर व्हाइंड - शोरूम नं. ५१०१, ऑफिस, कम्युनिकेशन रुम, स्टोअर रुम, मोड ऑफिस, किचन
 (२) स्टील मजला - शोरूम नं. ५००१ ते ५०११ व किचन, लोअर व्हाइंड - ऑफिस
 पहिला मजला - शोरूम नं. ५१०१ ते ५१०९
 (३) इमारत नं. ६ लोअर व्हाइंड - ऑफिस, स्टील मजला - शोरूम नं. ६००१ ते ६००५ व किचन
 पहिला मजला - शोरूम नं. ६१०१ ते ६१०४ दुसरा मजला शोरूम नं. ६२०१, ऑफिस नं. ६००१ ते ६००७

(Signature)
 सहायक अभियंता,
 बांधकाम नियंत्रण क्र.
 पुणे महानगरपालिका.

अविष्कारात नाम्य नकाशाव्यतिरिक्त कोणतीही बांधकाम (उक्त सर्व मार्जिनल अंतरात व टेरेसरील ग्रेड, पार्टिशन वॉल ककन अगर ग्रील लावून फाईन बंदीस लागणे इ.) केल्यास, कोणतीही पूर्व सूचना न देता सदरची संपूर्ण अविष्कार बांधकामे पाळण्यास येतील व त्याप्रित्यर्थ देणारा संपूर्ण खर्च फ्लॅटधारक / मालक यांच्याकडून बसूळ करण्यात येईल.

0002916

बांधकाम नियंत्रण कार्यालय

क्रमांक : 000/1424/12

दिनांक : 12/2/2013

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

भोगवटा पत्र पार्ट-४, इमारत क्र. ५

श्री. / श्रीमती येरवडा इन्व्हेस्टमेंट लिमिटेड तर्फे श्री. समीर वाळींबे (ला.आर्की.)

राहणार ३०, जान्हवी अपार्टमेंट, मोडे कॉलनी, एरंडवणा, पुणे-४.

यांस -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३/२५४ व एम्. आर. टी. पी. अॅक्ट

कलमे ४५/६९ प्रमाणे पुणे, पेठ येरवडा, घरांक — फायनल प्लॉट क्र. / —

सर्व्हे क्र. ३० व ३०२ टी. पी. स्कीम नंबर ला.नं. - बी यांत

इकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक ००/१८०५/१२ दिनांक ३।१।२०१२ डुरुस्त-७.

अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेटप्रमाणे सर्व /

काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती

मिळण्याबाबत दिनांक ४।१२।२०१२ रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका

अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटींवर पुढील वर्णनाचा

इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे.

उपयोगात आणावयाच्या बांधकामाचे वर्णन

मान्य नकाशाप्रमाणे

लोअर ब्राऊंड - ऑफीस, स्टोअररूम, इलेक्ट्रीक रूम व कम्युनिकेशन रूम
पार्किंगसह फक्त.

अप्पर ब्राऊंड - शोरूम नं. १ ते १०, १८, २३ व २४ आणि
स्टोअरसह शोरूम नं. ११ ते १५ व १६ ते २२ फक्त.

(१) पट्टिल मिजला - शोरूम आणि स्टोअरसह शोरूम फक्त.

(२) असे पार्किंगसह एकूण चौदा शोरूम आणि अकरा स्टोअरसह शोरूम.

(३) ऑफीस, स्टोअररूम, इलेक्ट्रीक रूम व कम्युनिकेशन रूम चे बांधकाम फक्त.

अट-श्रविष्यात मान्य नकाशाखेरीज

कोणतीही बांधकामे (उदा. मॉर्निंगल अंतरात व

टेरेसवर शेड, पार्टीरूम वॉल, बाळम अगार

घील लावणे शक्ति पॅविलीन करणे इत्यादी)

केल्यास कोणतीही प्रस्तावना व देवा शहरची

संपूर्ण अनधिकृत बांधकामे करण्यात येतील

व त्यासाठी येणाऱ्या खर्च पैसे घरक/मालक

बांधकाम करून घेतून घेईल.

34 सहायक अभियंता,

बांधकाम नियंत्रण क्र.।

पुणे महानगरपालिका.

पुणे महानगरपालिका

शिवाजीनगर, पुणे ४११००५.

0002931

बांधकाम नियंत्रण कार्यालय

क्रमांक : ०८८/०९३६/१३

दिनांक : ३०/९/१३

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

इमारत क्र - ७ भोगवटा पत्र व्यापारी अंशातः क्र. ५

श्री. / श्रीमती गेरवडा इन्व्हेसमेंट लिमिटेड

राहणार व्. पी. सुमीर वाळिंबे
१०, जानकी मण्डळ, ४०/२२
भोडे कालनी, फुरेंडवाडी
पुणे - ४११००४

यांस -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३ / २५४ व एम्. आर. टी. पी. अॅक्ट

कलमे ४५/६९ प्रमाणे पुणे, पेठ गेरवडा घरांक फायनल प्लॉट क्र. / बी

सर्व्हे क्र. १९०(पा) व १९२(पा) टी. पी. स्कीम नंबर यांत इमारत क्र - ७

इकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक १८७५/१२, दिनांक ३।०९।२०१२

अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेटप्रमाणे सर्व / काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती मिळण्याबाबत दिनांक १७।०९।२०१३ रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटींवर पुढील वर्णनाचा इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे.

उपयोगात आणावयाच्या बांधकामाचे वर्णन

मान्य नकाशाप्रमाणे

लोअर ब्राऊंड - लॉबी, पॅनल रुम, लोअर ब्राऊंड संपूर्ण

अप्पर ब्राऊंड - शॉप क्र - ०३ - ६ - ०२, ०३ - ६ - ०३ व अँकर शॉप २ (दोन) व्. पी. सु.

लिफ्ट लॉबी - इलेक्ट्रीकल रुम, जेन्स व लेडीज टॉयलेट, कॉरीडोर सले संपूर्ण अप्पर ब्राऊंड

पहिला मजला. अँकर शॉप दोन (२) व्. पी. सु., जेन्स व लेडीज टॉयलेट.

(१) लिफ्ट लॉबी, कॉरीडोर असे संपूर्ण पहिला मजला.

(२) असे पार्किंगसह लोअर ब्राऊंड, अप्पर ब्राऊंड व पहिला मजला संपूर्ण

- (३) अट-भविष्यात मान्य नकाशाखेरीज कोणतीही बांधकामे (उदा. मॉर्निंग अंतरात व टेरेसवर रोड, पार्टीशन वॉल, करुन अगर ग्रील लावून पार्किंग वंदिस्त करणे इत्यादी) केल्यास कोणतीही पूर्वसुचना न देता सदरची संपूर्ण अनधिकृत बांधकामे पाडण्यात येतील व त्यासाठी येणारा खर्च फ्लॅट धारक/मालक जबाबदार वसूल करण्यात येईल.

सहायक अभियंता,
बांधकाम नियंत्रण क्र.
पुणे महानगरपालिका.

4808



बांधकाम नियंत्रण कार्यालय

क्रमांक : 1000/१४२९/१६

दिनांक : ३/११/२०१६

[मुंबई प्रांतिक महानगरपालिका अधिनियम, १९४९ कलम २६३ (१) अन्वये]

बिलींग नं. २ भोगवटा पत्र पार्ट- ६

श्री. / श्रीमती मे. येरवडा इन्व्हेसमेंट लि. तर्फे आर्कि. फ्री. समीर वाळीके
राहणार १० जानवी अपार्टमेंट, भोडे कोलनी,
फुंडवणा, पुणे-

यांस -

आपणांस मुंबई प्रांतिक महानगरपालिका अधिनियम १९४९, कलमे २५३ / २५४ व एम्. आर. टी. पी. अॅक्ट
कलमे ४५/६९ प्रमाणे पुणे, पेठ येरवडा घरांक फ्लॅट क्र. / B

सर्व्हे क्र. १९० व १९२ (१) टी. पी. स्कीम नंबर यांतइकडील संमती पत्र / कमेन्समेंट सर्टिफिकेट क्रमांक ११४८/१४, दिनांक १४/०७/२०१४

अन्वये बांधकाम करण्यास परवानगी देण्यात आली आहे. सदरील संमती पत्र / कमेन्समेंट सर्टिफिकेटप्रमाणे सर्व /
काही भागाचे काम पुरे झाल्याबद्दल व सदर नवीन बांधलेल्या इमारतीची जागा उपयोगात आणावयास संमती
मिळण्याबाबत दिनांक ०४/०९/२०१६ रोजी अर्ज केल्यावरून आपणांस मुंबई प्रांतिक महानगरपालिका
अधिनियम १९४९, कलम २६३ (१) प्रमाणे कळविण्यात येते की, खालील नमूद केलेल्या अटींवर पुढील वर्णनाचा
इमारतीचा भाग उपयोगात आणण्यास संमती देण्यात येत आहे.

उपयोगात आणावयाच्या बांधकामाचे वर्णन

मान्य नकाशाप्रमाणे बिलींग नं. २
तिसरा मजला - १ रूक बलेक्रीक रूम, २ अ. प्रच. यु,
२ टी ०१ ते २ टी १३ जसे पुढील १३ (तेरा)
शोरूम आणि लेडीज व जेन्स टॉयलेट,
लिफ्ट, लांबी, पॅसेज सह संपूर्ण तिसरा मजला

(१) इसे पार्किंगसह तिसरा मजला संपूर्ण.

(२)

(३)

अट-भविष्यात मान्य नकाशाखेरीज
कोणतीही बांधकामे (उदा. मार्जिनल अंतरात व
टेरेसवर शेड, पार्टीशन वॉल, करून रागर
ग्रील लावून पार्किंग बंदित करणे इत्यादी)
केल्यास कोणतीही पूर्वसूचना न देता सदरची
संपूर्ण अनधिकृत बांधकामे पाडण्यात येतील
व त्यासाठी येणारा खर्च फ्लॅट धारक/मालक
चांजकडून वसूल करण्यात येईल.

सहायक अभियंता

बांधकाम नियंत्रण विभाग ४
पुणे महानगरपालिका.

MAHARASHTRA POLLUTION CONTROL BOARD
SUB REGIONAL OFFICE - PUNE-I

16

Jog Center, 111rd Floor,
Pune Mumbai Road,
Wakadewadi,
PUNE - 411 003

No.ROP/ 2399/06

Date : 13/3/2006

To,
Regional Officer (P & P),
MPCB,
MUMBAI

Sub : Minutes of public hearing for the project of
Shopping Mall "Ishanya" construction project of
M/s Deepak Fertilizer & Petrochemicals Corpn., Ltd.,
Shastri Nagar, Yerwada, Pune

Ref : Board office letter no.BO/RO(P&P)/TB/4350, dated
9-8-2005

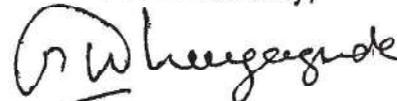
Sir,

Public hearing for the project of Shopping Mall "Ishanya" construction project of M/s Deepak Fertilizer & Petrochemicals Corpn. Ltd., Shastri Nagar, Yerwada, Pune was conducted on 22nd February, 2006 at Collectorate Office, Pune.

As per letter no. BO/RO(P&P)/TB/4350, dated 9th August, 2005, please find enclosed herewith the report of the proceedings along with attendance sheet in triplicate (one original and two Xerox).

This is for your information and further necessary action please.

Yours faithfully,



(P. P. DHAYAGUDE)
Sub Regional Officer,
PUNE-I

D.A. as above
Copy submitted to :
Regional Officer, MPCB, Pune - for information please.
D.A. copy of report

Master file

**MINUTES OF THE PUBLIC HEARING MEETING OF PROPOSED
SHOPPING MALL "ISHANYA" CONSTRUCTION PROJECT OF M/S
DEEPAK FERTILIZER & PETROCHEMICALS CORPORATION LTD.,
C.S.NO.190/192, OPP.GOLF COURSE, SHASTRI NAGAR, YERWADA,
PUNE**

Public Hearing for the proposed shopping mall "Ishanya" construction project of M/s Deepak Fertilizer & Petrochemicals Corporation Ltd., C.S. No.190/192, Opp.. Golf Course, Shastri Nagar, Yerawada, Pune was conducted on 22nd February, 2006 at 11.00 hrs at meeting hall of Collector Office, Pune. Following were the panel members of the public hearing :-

- | | | | |
|----|---|---|----------|
| 1. | Shri Tanaji Shinde
Sub Divisional Officer- Haveli, Dist-Pune
(representative of District Collector, Pune) | - | Chairman |
| 2. | Representative of Environment
Deptt. Govt. of Maharashtra
Mantralaya, Mumbai | - | Member |
| 3. | Shri B. S. Dalvi
(representative of General Manager
District Industries Center, Pune) | - | Member |
| 4. | Shri V. N. Mundhe
Regional Officer, MPCB, Pune
(Representative of Chairman, MPCB) | - | Member |

LOCAL BODY REPRESENTATIVE :-

- | | | | |
|----|---|---|--------|
| 4. | Shri Aaba Nikam
Corporator,
Sangamwadi, Pune | - | Member |
| 5. | Shri Mohansingh Rajpal
Corporator, Yerwada, Pune | - | Member |
| 6. | Mrs Rajlaxmi Bhosale
Corporator, Pune | - | Member |

..2..

(61)

SENIOR CITIZENS :-

- 7. Shri Arun Rajabhau Patharkar
Retd. Director, Town Planning,
Govt. of Maharashtra,
Anant Park Society, Shankarsheth Road,
Pune - Member
- 8. Dr. B. P. Kapadnis,
O.B.11/1, Behind Post Office,
University of Pune Campus,
Pune - Member
- 9. Dr. A.K.Nikumbha,
Rohan Garima, Near Shivaji Hsg.Soc.,
Pune - Member
- 10. Shri P. P. Dhayagude
Sub Regional Office, Pune-I
MPCB, Pune - Convener

Representative from Environment Deptt., Govt. of Maharashtra, Mumbai; Shri Aaba Nikam, Member were unable to attend the public hearing due to their pre-occupations. Leave of absence was considered to them by the Chairman.

Shri P.P. Dhayagude, Convenor of the Committee welcomed Chairman of the Committee, Panel Members, Govt. officials, company representatives and general public who were present and informed that as per the Government Resolution of Govt. of India 27th January, 1994 followed dated 10th April, 1997, public hearing has become mandatory for the listed projects whom requires 'Environmental Clearance' from Deptt. of Environment, India, New Delhi. The Notification dated 27th January,

81

..3..

1994 was further amended on 7th July, 2004 wherein inserted additional entries in the Schedule -I for New Constructions Projects and New Industrial Estates.

Shri Dhayagude informed that as per the amended notification, new townships, industrial townships, settlement colonies, commercial complexes, hotel complexes, hospitals and office complexes for One thousand persons or above or discharging sewage of 50,000/- (Fifty thousand) liters per day or above or with an investment of Rs.Fifty Crores or above shall be required to obtain Environmental Clearance from Ministry of Environment & Forests, Govt. of India.

The Notification further provided that -

- a) New construction projects which were undertaken without obtaining the clearance required under this notification, and where construction work has not come up to the plinth level, shall require clearance under this Notification with effect from the 7th July, 2004;
- b) Any project proponent intending to implement the proposed project mentioned under para 1 in a phased manner or in modules shall be required to submit the details of the entire project covering all phases or modules for appraisal under this Notification. Non compliance or violation of any of above

..4..

(61)

..4..

mentioned provisions is an offence punishable under Section 15 of the Environment (Protection) Act, 1986. Here, said construction project falls under such category.

Shri Dhayagude, further informed that the basic theme of the public hearing is that general public who are going to be affected by the project have been given an opportunity to put up their objections from pollution and environmental safety point to Govt. for its consideration while granting permission/environment clearance.

Shri Dhayagude, Convenor informed that as per the Notification of the public hearing, a one month advance public notice was published in local newspaper in Daily LokSatta dated 21st February, 2006 in Marathi and in Indian Express dated 21st February, 2006 in English. The public in general were appealed to send their objections if any for the proposed Shopping Moll "Ishanya" construction project of M/s Deepak Fertilizer and Petrochemicals Corporation Ltd., at C.S.No.190/192, Opp. Golf Course, Shastri Nagar, Yerwada, Pune. Further the documents were made available at Collector Office, Pune; District Industries Center, Pune; Dett. Of Environment, Mantralaya, Mumbai; Pune Municipal Corporation, Pune; Zilla Parishad, Pune; Sub Divisional Office, Haveli, Dist-Pune and at sub regional and regional offices of MPCB at Pune and at Head Office. He informed that not a single objection is received by the office. He requested Chairman of the Committee to allow to start the

..5..

..5..

proceedings and informed project officials to explain the details about construction activities and environment safety measures in local language Marathi so that common public who are attending the hearing should know the efforts the company is going to take for pollution control.

Chairman of the Committee welcomed all and appealed general public in particular to come forward fearlessly and raise the objections if any about the proposed activity. He also directed company officials to inform the details of proposed construction activities, the activities therein and provision of pollution control devices in local language Marathi, being official language of Maharashtra and local people understands it. He informed that after explaining the details of the project, there will be question and answer session.

Shri Shirish Desai, Vice President of the Deepak Fertilizer & Petrochemicals Corporation Ltd., welcomed all and informed all that India, the world's largest democratic country who has gained the fame through its ceaseless efforts. With basic amenities, it is need of the time that there should be good shopping complexes who can meet the need of the people in proximity of their places of residence or working place. Realizing the need of the time, Deepak Fertilizers & Petro Chemicals Ltd., has decided to develop ISHNAYA, the shopping mall with speciality products and services in the heart of the city. Our experience is that still the common man has not adopted the culture of molls which we think is due to lack of

..6..

18

..6..

right time mall, building design does not attracts it and more over the services. Shri Desai informed that in Ishanya, only shops will not be built, but there will "Knowledge Center." For trade business, we have to think Mumbai, which is commercial capital of our country. We have decided to built it in Pune as Pune, the culture capital of Maharashtra is also becoming business city in IT field etc.,

The company has decided to built the same considering all the positive aspects which will be first in our country. The project proponent has accepted the aim of "green building." And perhaps this project will be first knowledge center of the World. The Ishanya is for creative people. Consumer should not only just come for purchasing, but artistic vastu should satisfy his feelings. Hence natural features, land scaping will be done in large places.

Project proponent Shri Desai informed that international standards will be maintained while constructing the building and extending the services. He informed that "Knowledge Center" means "A Technical Reference Library," "Information Center," "Design Studios," "Mock-Up Spaces," "Exhibition Areas," "Auto Cad Design Studio."

Shri Desai informed that the design is prepared by Indian Institute of Interior Design (IIID) which is one of the famous institutions of the nation. The project proponent has decided to take "Green Building Concept." The project will not be multi stored building. There will be

..7..

22

..7..

lush greenery around the project. Shri Desai further informed that the project proponent has given EIA to Riverinamounts Biosys Pvt. Ltd., Pune . He asked Dr. Bhosale to explain about pollution control and eco-friendly measures the project proponent planned.

Dr. Bhosale welcomed all and informed that City of Pune has a special place in our country from 17th century from Great Maratha Warrior Shri Shivajimaharaj till today. Pune is called Oxford of East due to the large number of quality education institutions. Hence the students from all the over the country and even from middle east, south east asia are coming to Pune for education. As there is availability of quality human resources, this is one of the reasons that some of the best software companies and services are planned to enter in Pune with other automobile giants.

Dr. Bhosale informed that in India our cities are developed as "Ribbon Type Development" i.e. development at both sides of river only. Hence we are facing traffic jams, waste disposal and other urban problems. To overcome this, now our approach in 21st century is "Sector Type Development." After getting independence, now the Central Government has realized that the local municipal bodies are not capable to cope up with the need of the citizens of India. After long discussions, in 1998 the Central Government has declared National Housing Policy in which private groups were also invited. And in 1999-2000, the constructions activities opened to NRIs. The Govt. of Maharashtra, Urban

..8..

237

..8..

Development Department realized the need of development of housing in regulated manner and approved "Special Township Scheme" in the year 2004. "Special Township Scheme" should minimize the burden on common public utility services such as transport, health etc.

Besides good housing, it is necessary to have good shopping complexes meeting the need of the local residents. The project proponent has decided to built the mall which will looked as module in India. Every aspect is considered to keep eco-friendly atmosphere. Dr. Bhosale affirmed that this project will be an integrated product and display center covering the spectrum of construction and interior industry.

This project is an effort to bridge the gap between knowledge, availability and application of right materials and techniques for creation of efficient living, work and recreation environment. Dr. Bhosale desired that this mall should be an engine of growth for Pune which is WISDOM CITY of our country.

Dr. Bhosale, explained all the details of EIA and Environment Management Plan of the project.

Chairman of the committee appealed committee members and general public to ask any objections or can give suggestions if any.

Shri Patharkar, Member raised the objection that in the report, there is no mention that whether the mall will be single stored or multi stored. If it multi stored building, how can it be as it is very near to airport. Secondly, the FSI which is mentioned is totally wrong as it violates the

..9..

272

..9..

town planning norms. Shri Desai, project proponent informed that the mall will be of four storied and the buildings will model to others:

Shri Mundhe and Dr. Kapadnis, Members asked about the water pollution due to this activity. Dr. Bhosale, project consultant informed that waste water is being generated to the tune of 2,45,000 litres will be treated in the well designed sewage treatment plant and treated water shall be reused for the gardening and cooling. Shri Munde, Member asked about the treatment details and details of tertiary treatment. Dr. Bhosale informed that primary, secondary and tertiary treatment will be given to waste water. So also multi media filter, activated carbon and on line chlorination dosing will be provided. Shri Mundhe, Member asked about BOD of treated waste water. Dr. Bhosale, project consultant informed that the BOD will be less than 30 ppm. Shri Mundhe, Member opined that if the project proponent plans for recycle and reuse of treated water, "Reverse Osmosis" system should be adopted. The committee discussed the suggested that the project proponent shall adopt "Reverse Osmosis" system.

Dr. Nikumbha, Member asked about sources of air pollution. Shri Shirish Desai, project proponent informed that there is no industrial activity in the shopping mall. Only source of air pollution is from D.G. set and flue gasses will be released at the higher level. The chimney attached to the D.G. set will be as per the guidelines of MPCB.

.10..

25

..10..

Chairman of the committee opined that when the project proponent is planning such a good project, vehicular pollution should be prevented in the project area. Hence the vehicles whom have valid PUC whether two wheeler or four wheeler as the case may be should only be allowed. All the members welcomed the suggestion. Shri Desai, project proponent informed that the suggestion will be implemented in toto. He informed that vehicular traffic within the complex shall be regulated and all the vehicles will be provided with mufflers to control the dust and gaseous emissions.

Mrs Rajlaxmi Bhosale, Member raised the objection that the project seems to be good, but there is no mention of common toilets blocks for entrants i.e. for transportation officials i.e. drivers, cleaners and others who will come in the mall to deliver the goods. Hence toilet block and bathing space should be provided to them. Shri Desai promised for the same and it is directed to mention the same in detailed plan while approaching to MoEF.

Dr. Kapadnis and Shri Dalvi asked about the treatment and disposal of solid waste. Dr. Bhosale, company consultant informed that solid waste will be generated at the site will be mainly from commercial complexes and cafeteria. The solid waste will be bio-degradable and recyclable. It will be properly segregated and reused and the compostable waste shall sent to the garbage processing area of the project for vermi composting. The composted material shall be reused as manure in the project premises only.

..11..

98

..11..

Shri Patharkar, Member opined that the requirement of water for the completed project should be minimized. Shri Desai informed that rain water harvesting will be implemented. Shri Patharkar and Shri Dalvi, Members opined that as per new Rules, in commercial complexes, providing special facility to physically handicapped/challenged persons is mandatory. Nothing is mentioned here. Shri Desai promised to rectify the same and it will be inserted while approaching to MoEF.

Mrs Rajlaxmi Bhosale, Member expressed the view that there is no mention of packaging material and packaging strips in the solid waste. The volume of the packaging material will be definitely high. It should be segregated on the spot and the packaging material should be disposed of properly as per the guidelines. Project officials promised for the same.

Shri Jayant Joshi, an NGO from Harmony asked about the ground coverage of the project. He pointed out that project proponent will remove the fertile soil and where the soil will be disposed. So also there is no ratio mentioned of removing of fertile land and land fill. Shri Joshi, further asked how much soil will be removed and whether the local body i.e. PMC has any pocket for the land fill site. Project proponent reported that the soil removed will be stored at one side and same will be utilized for gardening. He further added that PMC has land fill site at Devachi Uruli. Shri Joshi reported that the land filling can be done in the pockets mentioned in Regional Plan.

..12..



..12..

Shri Dalvi, Member asked about the total requirement of electrical power. Shri Desai informed that electrical sub station will be installed and requirement of power is calculated for regular load, stand bye load. In case of power failure only, D.G. sets will be used.

Dr. Kapadnis, Member asked the status of ground water quality. Dr. Bhosale informed that the results shows that ground water is unfit to drink. Ground water can be made potable after conventional treatment followed by chlorination.

Dr. Nikumbha, Member asked whether the pipelines will be rusted and what are the preventive measures. Project officials informed that PVC pipe line of good quality will be used to avoid rusting.

Shri Mohan Sing Rajpal, Member expressed the views that the project is so good and it should be completed in the scheduled time. All the members supported for the same.

Mrs Rajlaxmi Bhosale, Member remarked that project officials has not mentioned the numbers of elevator and safety measures properly. She opined that there should be separation that customer and goods should use different elevator. Project officials promised for the same.

Dr. Nikumba, Member opined that in such a good project, there is no mention of solar energy. Solar lamps can be fitted in the garden or in the passages. Project officials promised for the same.

..13..



After detailed discussions, it is resolved that –

- 1) The project proponent will built and maintain the Shopping Mall as promised and eco friendly atmosphere will be maintained.
- 2) Rain water harvesting shall be followed wholeheartedly.
- 3) As promised, the Reverse Osmosis System shall be installed and implemented accordingly.
- 4) Solar energy system shall be implemented.
- 5) The green belt shall be developed while constructing the project as assured in the public hearing;

Thus the project proponent is allowed to approach Ministry of Environment & Forest, Govt. of India for obtaining Environment Clearance;

Chairman of the committee thanked all members and officials for attending this meeting and general public who raised the objections. Meeting ended extending thanks to the Chair.

(D. B. BORALKAR)
Member Secretary

(68)

MAHARASHTRA POLLUTION CONTROL BOARD

☎ : 24020781/2401043/

☎ : 24024068

Visit us at :

<http://mpcb.mah.nic.in>

e-mail: mpcb@vsnl.net



KALPATARU POINT, 3rd & 4th floor,
Opp. Cineplanet, Near Sion Circle,
Sion (East), MUMBAI : 400 022

ORANGE/LSI

Date: 29/04/2006

Consent No. BO/RO (P&P)/414

Consent to Establish is granted to

M/s. Deepak Fertilizer & Petrochemicals Corporation Pvt. Ltd.,
(Shopping "ISHANYA MALL"),
C. S. No. 190 & 192, Opp. Golf Course,
Shastri-Nagar, Yerwada,
Pune.

located in the area declared under the provisions of Water Act (P&CP) 1974, Air Act (P&CP), 1981 and Authorization under the provisions of H.W (M & H) Rules and amendments thereto subject to the provisions of the Acts and the Rules and the Orders that may be made further and subject to the following terms and conditions :-

1. The Consent to Establish is issued to **M/s. Deepak Fertilizer & Petrochemicals Corporation Pvt. Ltd.,**
(Shopping "ISHANYA MALL"),
C. S. No. 190 & 192, Opp Golf Course,
Shastri Nagar, Yerwada,
Pune.

For development of land/plot as new construction activities named as M/s. Deepak Fertilizer & Petrochemicals Corporation Pvt. Ltd., (Shopping "ISHANYA MALL") C. S. No. 190 & 192, Opp. Golf Course, Shastri Nagar, Yerwada, Pune on **42,000 sq.mtrs** including utilities and services such as commercial/residential/educational/health and recreation amenities etc. as per construction commencement certificate issued by local body.

2. CONDITION UNDER WATER ACT :-

The daily quantity of (a) sewage effluent from above construction project including (b) waste water from swimming tank/water sports shall not exceed **255** cubic meters per day.

- (i) **Sewage Effluent Treatment** : The Applicant shall provide a comprehensive sewage treatment plant as is warranted with reference to influent quality and corresponding mode of disposal and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards:-

PARAMETERS	Limit	Standards for sub- streams		
		(A)	(B)	Unit
pH	In between	5.5 to 9	7 to 8.5	
Suspended Solids	Not to exceed	100	10	mg/l
B.O.D. 3 days 27 C	Not to exceed	30	10	mg/l
Oil & Grease	Not to exceed	10	NIL	mg/l
Dissolved Phosphates (as P)	Not to exceed	5	5	mg/l
Dissolved Oxygen	Not less than	5	5	mg/l
R. Chlorine	Not to exceed	0.1	0.1	Mg/l.

:2:

120

Sewage effluent Disposal:-

The treated sewage effluent shall be recycle to the maximum extent for flushing, fire fighting etc. and excess treated effluent shall be disposed of on land for gardening/ irrigation/ lawns/ tree-plantations within own premises, and/or excess treated sewage effluent shall be disposed into to under ground drainage scheme provided by local body. In no case, effluent shall find its way to any water body directly/indirectly at any time.

(iii) Non-Hazardous Solid Waste:-

The total quantity shall not exceed 295 Kg per day and shall be segregated and treated as follows:-

Sr	Type of Segregated solid waste	Quantity Kg/day	Treatment	Disposal
1	Organic	100	In vessel Composting at site only	Self-use
2	Inert	150	Segregation	At approved landfill
3	Paper Packing		Segregation	Sale
4	Rubber		Segregation	At approved landfill
5	Glass		Segregation	Sale
6	Miscellaneous(STP Sludge)	45	Segregation	Sale/At approved landfill

3. Other Conditions:-

- All activities shall be in resonance with the provisions of Indian Forest Act, 1927 (16 of 1927), Forest (Conservation) Act, 1980 (69 of 1980) and Wildlife (Protection) Act, 1972 (53 of 1972), CRZ notification, and special notifications published for Dahanu, Murud Jangira, Matheran and Mahableshwar area wherever applicable and all the Environmental Statutes and Instruments.
- This Consent to Establish is issued only for Developing Construction Project purposes.
- No quarrying activities shall be commenced in the area unless appropriate permissions are obtained for a limited quarrying material required for construction of local residential housing and traditional road maintenance work, provided that such quarrying is not done on Forest Lands and the material is not exported to the outside area.
- There shall be no felling of trees whether on Forest, Government, Revenue or Private lands except as per prevailing Rules.
- Extraction of Groundwater for the residential complex shall require prior permission of the State Ground Water Authority or other relevant authorities, as applicable;
- Near the activities that are related to water (like activity of water parks, water sports) and/or in the vicinity of lake, Dissolved Oxygen shall not be less than 5 mg/liter.
- In order to ensure that the water from this residential complex do not enter into outside environment, the nallas crossing the township/complex premises, shall be lined, covered and made water tight by the applicant within the premises with intermittent inspection of chambers following good engineering practices as per the regulations of local body. This management shall be such as also to help in excluding the external pollutants degrading the internal environment of residential complex.
- The Applicant shall prepare management plan for water harvesting, roof-water reclamation, water/storm water conservation and implement the same before handing over of complex for occupation.
- The Applicant shall draw plans for the segregation of solid wastes into biodegradable and non-biodegradable components. The biodegradable material shall be recycled through scientific in-house composting with the approval of local body and the inorganic material shall be disposed off at approved Municipal Solid Waste landfill site of local body environmentally acceptable location and method. It is clarified that the term solid waste includes domestic, commercial, and garden wastes, but does not include hazardous and bio-medical wastes. The activities of bio-composting and engineered land fill shall be as per the Municipal Solid Waste (M&H) Rules, 2000.

(13)

:3:

10. Applicant shall be responsible to take adequate precautionary measures as detailed in this consent
11. The applicant/generator shall be responsible for safe and scientific collection, transportation, treatment and disposal of Bio-Medical Waste as per the provisions made under the Bio-Medical Waste (Management & Handling) Rules, 1998. Any activity as defined under BMW (M & H) Rules has to obtain a separate Authorization from Maharashtra Pollution Control Board.
12. The applicant, during the construction stage shall provide Septic tank and soak pit of adequate capacity for the domestic effluent generated due to workers residing at site. Proper loading and unloading of construction material, excavated material and its proper disposal as per MSW (M&H) Rules 2000. Cutting of trees is not permitted, however in unavoidable conditions necessary permission from the local body shall be obtained. Green belt of 33% of the open space shall be developed excluding lawns.
4. The Applicant shall comply with all the provisions of, the Water (Prevention and Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules as Amended, 2003 and Rules there under :-
The daily water consumption for the following categories shall not exceed, as under
- | (i) Domestic | From ULB
(In CMD) | From other sources
(In CMD) |
|--|----------------------|--------------------------------|
| a) During construction stage | --- | 150 |
| b) After completion | 636 | --- |
| c) For swimming pool | --- | --- |
| d) For fire fighting (recycled effluent) | 200 | --- |

The Applicant shall regularly submit to the Board, the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

5. CONDITIONS UNDER AIR ACT :-

The Applicant may install one numbers of diesel generating sets (DG Sets), of capacity 750 KVA x 4 nos. , and shall be equipped with comprehensive control system as is warranted with reference to generations of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:-

Standards for emissions of air Pollutants

i)	SPM/TPM	Not to Exceed	150	mg/Nm ³
ii)	SO ₂	Not to Exceed	50	PPM
iii)	NO _x	Not to Exceed	60	PPM

The Applicant shall observe the following fuel patterns

No.	Type of Fuel	Quantity
1	HSD	3.2 KLD

The Applicant shall erect the Chimney (s) of the following specifications

No.	Chimney attached to	Height above roof level
1	D.G. Set (750 KVA x 4 nos.)	5.5 mtrs. each

- a) The Applicant shall provide ports in the chimney 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 chimneys shall be numbered as S-1, S-2 etc and these shall be painted/ displayed to facilitate identification.
- b) Water spraying shall be done on ground to avoid fugitive emissions.
- c) Construction material shall be carried in enclosed vehicles during construction activities.

141

(v) **Conditions for DG Sets :-**

:4:

1. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
2. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall 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 shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
3. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
4. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer;
5. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
7. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
8. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.

(vi) **Conditions For Utilities like Kitchen, Eating Places etc., :-**

1. The kitchen shall be provided with exhaust system chimney with oil catcher connected to chimney through ducting
 2. The toilet shall be provided with exhaust system connected to chimney through ducting. The air conditioner shall be vibration proof and the noise shall not exceed 68 dB(A). The exhaust hot air from A.C. shall be attached to Chimney at least 5 mtrs. higher than the nearest tallest building through ducting and shall discharge into open air in such way that no nuisance is caused to neighbors.
- (a) The Applicant shall take adequate measures for control of noise levels from its own sources within the complex (residential cum Commercial) in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned as between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m. to 6 a.m.
- (b) Construction equipments generating noise of less than 65/90 db(A) are permitted.
- (c) No construction work is permitted during night time.

6. CONDITIONS UNDER HW (M & H) & AMENDMENT RULES 2003

The Applicant shall not generate or handle any hazardous waste.

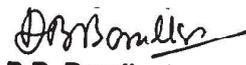
7. The proposed activity comes under Entry 31 (New Construction Project) listed in schedule I of the EIA Notification dated January 27, 1994 (as amended till date) issued by Ministry of Environment & Forest, Govt. of India, New Delhi and therefore, Environmental Clearance from Govt. of India (MoEF) shall be required as per conditions in the amended EIA Notification dated July 07, 2004.
8. The applicant shall certify that the bricks used in construction are manufactured using the ash from Thermal Power stations if it is within a radius of 100 km. from Thermal Power Plant and submit the names of bricks manufacturer.
9. This "Consent to Establish" is issued subject to the planning permission and permission for non-agricultural (N.A.) use from the Competent Authority.
10. The applicant shall obtain Environmental Clearance from MoEF, GOI before taking any steps to develop/ start construction the site.

15

:5:

11. The applicant shall not handover the residential complex unless obtain Consent to Operate/NOC from Maharashtra Pollution Control Board and compliance of Environment Clearance granted by MoEF Government of India.
12. The applicant shall take the proper remediation measures to ensure that the ground water and soil contamination is prevented and follow due diligence at the construction stage.
13. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant;

For and on behalf of the
Maharashtra Pollution Control Board


(Dr. D.B. Boralkar)
Member Secretary

To,
M/s. Deepak Fertilizer & Petrochemicals
Corporation Pvt. Ltd.,
(Shopping "ISHANYA MALL")
C. S. No. 190 & 192, Opp. Golf Course,
Shastri Nagar, Yerwada,
Pune.

Copy forwarded with compliments to

1. The Collector, Pune.

Copy to

1. Regional Officer MPCB, Pune.
2. Sub Regional Officer, MPCB, Pune-I.
3. Chief Accounts Officer, MPCB, Mumbai

Received consent fee of

Amount	DD No.	Date	Drawn on
Rs. 75,000/-	793399	04.08.2005	State Bank of India
Rs. 35,000/-	793643	31.08.2005	State Bank of India

4. Cess Branch, MPCB, Mumbai.
5. Master file.
6. EIC, M.P.C.Board, Mumbai.



**DEEPAK FERTILISERS
AND PETROCHEMICALS CORPORATION LIMITED**

REGISTERED OFFICE :

Opp. Golf Course, Shastri Nagar, Yerawada, Pune - 411 006, India.

Tel. : +91-20-2668 4155 Fax : 26680679

Internet : www.deepakgroup.com

A TQM Driven Company

Ref: - MPCB06-07-4

The Secretary
Ministry of Environment and Forest
Govt. of India
Paryavaran Bhavan
Lodhi Marg
New Delhi

Date: - 15th May 2006

29

Subject: - Application for the Environmental Clearance for our ISHANYA Project at Pune.

Reference: - MPCB Letter No. BO/RO (P&P) /414 dated 29/04/2006 and the Consent to Establish granted after Public Hearing.

Dear Sir,

In connection with obtaining and environmental clearance for our new civil construction project, we had initiated the process of conducting the environmental impact assessment study. On the study being completed, we had applied to the Maharashtra Pollution Control Board for 'Consent to Establish' to be granted to us.

In accordance with the Prescribed procedure, MPCB initiated the process of 'Public Hearing' in respect of our project. The public hearing was held on February 22, 2006. Post the public hearing, a 'Consent to Establish' bearing reference no. BO/RO(P&P)/414 dated 29th April 2006 in ORANGE/LSI category has now been granted to us. We have also been informed that a 'Minutes / Proceedings of the Public Hearing' have also been forwarded to your office by the MPCB directly in keeping with the practice in this regard.

We therefore now apply to your office for the grant of Environment Clearance for our project namely, ISHANYA, promoted by Deepak Fertilisers And Petrochemical Corporation Ltd. at Yerawada in Pune, Maharashtra.

We enclose herewith the following documents to facilitate the processing of our application:

- (a) A copy of the 'Consent to Establish' bearing reference no. Bo/RO(P&P)/414 dated April 29th 2006 granted by the MPCB.

[Handwritten signature]





DEEPAK FERTILISERS
AND PETROCHEMICALS CORPORATION LIMITED

Continuation Sheet

23

- (b) The Questionnaire for the Environmental Impact Assessment for New Construction Projects duly completed and signed.
- (c) A copy of the Rapid Environmental Impact Assessment (REIA) Report as made and submitted to the MPCB as a part of our application for the grant of 'Consent to Establish' and to help initiate the process of Public Hearing. The Report made then will have such observations like 'Public hearing to be held' or 'Consent to Establish to be granted' as the report was made as a part of the Consent to Establish' application. To that extent, these remarks need to be considered revised with Public hearing already held and the consent granted.
- (d) A total of six CDs, three each containing the soft copies of the REIA Report and the Questionnaire referred to at (a) above, respectively. On each of the CD, the title of the file it contains has been marked.
- (e) Executive Summary of the project in English (in CD)

We now request the favor of an early grant the required Environmental Clearance for our project.

Thanking you,

Yours faithfully,
For Deepak Fertilisers And
Petrochemical Corporation Ltd.

SHRISH M DESAI
VICE-PRESIDENT- COORDINATION



Encl.:

EXECUTIVE SUMMARY**RAPID ENVIRONMENT IMPACT ASSESSMENT****PROPOSED SHOPPING MALL "ISHANYA"****YERAWADA , PUNE****BY****DEEPAK FERTILISERS & PETROCHEMICALS CORPORATION LTD.****OPP. GOLF COURSE, SHASTRI NAGAR, YERWADA, PUNE – 411 006**

(31)

Rapid Environment Impact Assessment

SYNOPSIS

1. **Introduction**
2. **Site**
3. **Baseline Environmental status**
4. **Water Environment**
5. **Air Pollution**
6. **Solid waste Generation and Treatment- disposal**
7. **Environment Management Plan**
8. **Sustainable Development**
9. **Conclusion**

Omnesal



32

Rapid Environment Impact Assessment

EXECUTIVE SUMMARY**1. INTRODUCTION**

Pune is the Oxford of the east, primarily due to the large number of quality education institutes in this city has students from all over India coming for studies in different streams of education. The availability of quality human capital is one of the reasons why some of the best software, services and manufacturing companies of India and other countries have their offices in this city. The city has annual take off of over 1 lac Graduates.

Pune, the hub for manufacturing companies who had set up their manufacturing base in the city has now many companies from other sectors like the software sector and other services sectors like banking, insurance etc have also made their presence felt in the city. Pune has finally been able to shed its conservative image and has becoming a modern city with its shopping malls, multiplexes, family entertainment centers, and software parks.

Pune city is cosmopolitan with a healthy mix of people from various parts of the country. The city has good connectivity with other cities specially Mumbai, which is connected by an express highway, reducing the travel time significantly. In the early seventies and eighties, Engineering and Manufacturing industry was the mainstay of economic activity here.

Besides good housing, having good shopping complexes meeting the need of the local residents in proximity of their places of residence or working has emerged an added necessity for the growing working class.

Realizing the need and wants of the population and specialty shopping mall in the heart of the city, Deepak Fertilisers & Petrochemicals Ltd., the project components, decided aptly to develop ISHANYA, the shopping mall with specialty products with speciality products and services in the heart of city and close to the Airport and rail station Pune.

Domdesu



2. SITE

Selection of the site is an important issue for such type of venture. In order to get a Sustainable Development, the project proponents PP kept the following objectives in mind –

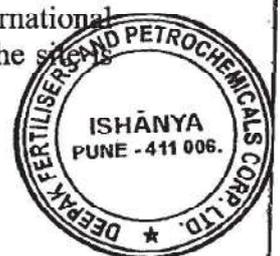
- Water source to be adequate, reliable and not encroaching on the source of others
- Power Supply to be adequate without disturbing the present arrangement
- Be well connected with independent road so that material transportation will not cause risk to the local population
- Land be of gentle slope, suitable for designing, drainage of sanitary waste Water and storm water , and at the same time earthmoving and resultant dust, noise and transport will be less.
- Soil be of satisfactory quality to support the greening drive and support beautification – landscaping and of such availability as creating no need of bringing soil from outside.
- The site should meet all government location policies and hence be environment friendly.
- No forest land to be involved.
- PP have identified the site meeting all these criteria and within the city command area i.e. YERAWADA, a site for the project close to Pune Railway Station @ distance of 2.5 Km. and approx 2 Km. away from the Lohegaon Air Port.
- Both the state highway i.e. Pune Sholapur and Pune Nagar are at a distance of 1.5 Km. and 4 Km. from the project.

ABOUT ISHANYA : A SPECIALITY SHOPPING MALL

The total area under consideration is 10 acres. The project is 'Ishanya', the largest mall in India catering to the construction business. The project promoted by Deepak Fertilizers will be an integrated product and display center covering the spectrum of construction and interior industry. This project will be an effort to bridge the gap between knowledge, availability and application of right materials and techniques for creation of efficient living, work and recreation environment.

The site located on the Airport Road has two approaches, an internal approach from Deepak Fertilisers & Petrochemicals Corporation Ltd. Office Complex and an external one from an 18 m wide road .The plot measuring 10 acres has connectivity with the different parts of Pune city with a new bridge across the river linking Koregoan Park and Airport road. Kalyaninagar, where many international companies are located is only a 5 minute drive from the site. Opposite the site

Omvesh



34

Rapid Environment Impact Assessment

the 18 -hole international standard golf course. The project covering 10 acres of land admeasures approximately 400,000 sq .ft. of rental space, divided in Anchor Stores, Electronics Area, Kund 2 Showrooms, Bazar, Kund Block, Other areas (Foyer and Exhibition spaces, Coffee shops) and Convention Center. A huge basement /stilt admeasuring app 200,000 sq.ft. is for warehouses car parking and services The trade area ,convention center and exhibition spaces and cafetaria are total of 406500 sq ft spread over 4 floors.

TABLE OF AREA STATEMENT.

Description	Area (sq ft)
Total area of the plot	450,000 (10 acres)
Permissible built up area	450,000
Proposed area for shopping mall	406500
Number of floors	1 + 3
Basement	200,000

3. BASELINE ENVIRONMENTAL STATUS

Scientific environmental monitoring is undertaken in the study area of 10 km.diameter locating the monitoring stations. In brief –

1. Air Quality : This was assessed from 7 sampling stations and analyzed for relevant parameters. The quality of the air is found within prescribed standards.
2. Noise Levels : This was assessed from the network of the sampling stations and analyzed for one parameter day and night. The noise levels found within the prescribed standards.
3. Surface Water Quality : This was assessed at the designated places and analyzed for the relevant parameters. The surface water quality was found to be unfit for drinking at certain places.
4. Ground Water Quality : This also was assessed at the places e.g. borewell and the dug well in the locality and found that the overall quality of the water good but needed chlorination before human consumption.
5. Soil : the soil samples tested at the locations indicated that the soil shows moderate to high productivity.

4. WATER ENVIRONMENT

Availability : The main source of the water for the entire project both during and after project shall be the Municipal water supply and in certain cases tanker water shall also be availed.

Somnesh



35

Rapid Environment Impact Assessment

Need : of the water shall be both for the construction purpose and other activities as well e.g. human consumption, cafeteria, gardening, fire fighting, construction, air conditioning, cooling make up water and other uses as well.

Waste water : Water is converted into waste water to the tune of 2,45,000 Ltr. Which will be treated in the well designed and operated STP and the treated water shall be reused for the gardening and cooling make up etc.

Water Environment

The total water requirement of the project is only 311.5 m³/day which will be met by the Pune Municipal Corporation

PART I (WATER REQUIREMENT FOR THE POPULATION LOAD)

No		Water Requirement(in litre)
01	5000 persons x 45 liters /capita/day	225,000 Litres/day
02	Convention centre =450 seats x 15 Liters /seat	6,750 Litres/day
03	Amphitheatre = 350 seats x 15 Litres/Seat	5,250 Litres/day
04	Restaurant &cafeteria requirement@ 2500 Meals /day@ 5 Litres /meal(cooking &dishwashing)	37,500 Litres/day
	Total water requirement	274,500 Litres /day

PART-II (WATER REQUIREMENT FOR THE LANDSCAPING AND WATERBODIES)

No		
01	Soft Landscape Water requirement (4000 M2 @ 3 Litres/day)	12,000 Litres/day
02	Peripheral Landscape requirement for trees etc (2200M2 @ 5 Litres/day)	11,000 Litres/day
03	Water Body Make -up for approx. (700 M3 @ 2%. for losses and makeup)	14,000 Litres/day
	Total Water Requirement	37,000 Litres/day

Therefore the total daily water requirement shall be $2,74,500 + 37,000 = 3,11,500$ Litres/day

Om Desai

7



36

Rapid Environment Impact Assessment

PART-III (A.C.WATER MAKEUP)

A.C. Water Requirement 3,00,000 Litres/day

PART – IV OTHER REQUIREMENTS

Filter / Softening back wash 10,000 Litres/day

From the above it is seen that if we recycle the quantity of waste water emanating from Part I which will be to the tune of 2.45 Lacs Litres/day it will be adequate to meet the partial balance requirement of part II, III & IV. The shortfall will be met by other means.

Disposal : As mentioned earlier the entire treated water shall be reused for gardening and as makeup water for the central air conditioning. No water shall be released in the municipal sewer.

5. AIR QUALITY

There is no industrial activity in this complex and hence no air polluting sources except the D.G. set which will be run on clean fuel and flue gases shall be released at the higher level through the prescribed chimney height. There shall be no process emissions.

The vehicular traffic within the complex shall be regulated and all the vehicles shall be provided with mufflers to contain the dust and gaseous emissions.

There shall be trees and greenery around the complex thus acting as green belt and containing the dust and other emissions.

6. SOLID WASTE GENERATION

The solid waste generated at the site shall be mainly from the commercial complex and the cafeteria which is normally bio degradable and recyclable waste. This shall be properly segregated and reused and the compostable waste shall be sent to the garbage processing area for vermin composting.

Treatment : It is proposed to vermin compost the waste by making vermin compost yard close to the place of generation so that the organic waste shall be treated properly. The composed material shall be reused as manure on our own premises.

Tomerai



37

Rapid Environment Impact Assessment

There will be no generation of HAZARDOUS WASTE within the commercial complex either during the construction phase or after the project completion.

7. ENVIRONMENT MANAGEMENT PLAN

The objective of the EMP is to identify project specific actions that will be undertaken by the project proponent for Mitigation of the specific impacts identified in the project. These are for both phases i.e. construction and operation.

Construction phase : The labour will be either staying on the campus or may be the day labourers in the vicinity shall be provided with all the civic amenities e.g. toiletries, wash room and drinking water etc. Personal protection equipment shall also be provided to the workers to protect them from any injury etc.

Operation phase : Before the places in the mall are let out to the ultimate users, all the pollution control equipment and STP etc. shall be made fully operational to the entire satisfaction of the government authorities. Monitoring shall be regularly done.

Air Environment

1. Record of running of fuel run equipment and DG sets etc. shall be maintained.
2. All the parameters consented by MPCB shall be monitored
3. The plying vehicles shall have the requisite certificates of PUC.

Noise Environment

1. Mufflers shall be fitted to noise generating equipment
2. Noise barriers shall be provided wherever necessary besides a tree fence around the complex

Water Environment

Since the major water supply shall be from the municipal connections, the project do not foresee any need for going for separate water treatment plant for the raw water.

Land development

1. Grass cover is an important protective measure for preventing soil erosion.
2. Rain water shall be harvested
3. Commercial establishments shall store their waste in the bins for recycling

Social Environment

Somnesh

9



Rapid Environment Impact Assessment

It is very important to mitigate the adverse impact on social and economic aspects due to the project.

In order to develop good relationship with the society and the commitment of the enterprise to the society at large we propose to perform the following steps :

1. For all the social activities to be undertaken by the project authorities, collaboration will be sought with the local administration for better co operation and co ordination.
2. All similar activities shall be undertaken e.g. medical camps and free legal advice to the needy economically backward people in the area.

8. SUSTAINABLE DEVELOPMENT

In order to ensure sustainable development, efforts like gardening drive, rain water harvesting etc. and conservation of natural resources shall be well looked after by the shopping mall administration.

For dust control and creating a cool climate around the complex and also to create natural ambience around the complex we have proposed to have tree plantation in rows besides a well laid down garden / lawn.

Selection of species of plants shall be done in accordance with the advice of the afforestation experts considering the bio diversity, native species and some foreign species that have more chances of survival.

Arrangement: Three row curtain on periphery, block of trees at centre avenues, trees near approach road and internal roads, ornamental trees in the garden, bushes on the slopes etc. shall be planted in a most scenic way.

SCHEMES FOR WASTE MINIMIZATION, RESOURCES RECOVERY & RECYCLE

Waste Minimization :

Water meters shall be provided to each dweller and shop so that there will be check on the use of water. Followed by this, an awareness of water conservation and corresponding waste minimization will be automatically be established. The plumbing is so selected that the quality hardware will not allow leaks. Fittings shall also be selected as not to waste excessive water in flushing. Overflow are electronically controlled and operated.

Garden leaves shall be used as mulching in the immediate next garden. This will conserve applied water.

Somesh



Resource Recovery & Recycle :

The waste water shall be reused and recycled as a makeup water for air conditioning and the rest for gardening and to maintain tree plantation.

Organic sludge of the STP shall be utilized as manure on our own land. A well planned rain harvesting project shall be implemented so as to conserve the water source.

CONCLUSION

Enough care has been taken while developing the infrastructure required for this ultra modern project both on the counts of resource utilization and environment part of the project.

Project proponents of ISHANYA have sought the advice of the best available architect designers of the country and the planners have incorporated the aspect of environment preservation and utilization of natural resources at its optimum while planning the structure. The project proponents have formulated a complete scientific and disciplined environment management plan (EMP). This plan should be scrupulously followed so that neither the users of the property nor the surrounding population shall feel the inconvenience. In fact, this pretty Shopping Mall shall be an unique one in the city of Pune and also serve as a welcome addition in the neighbourhood than any unorganized development.

This summary is based on the work of the REIA study and the feasibility study of the experts.

Somesh



(41)



2607

DEVELOPMENT CONTROL RULES

*Sanctioned Under Government Notification
Urban Development Department
No. TPS-1884/1377/CR-220/84/(iii)
UD-7 Dated 5/1/87*

For

DEVELOPMENT PLAN PUNE
(REVISED) (FINAL)

**For Application in
Pune Municipal Corporation Area**

(Price Rs. 300/-)

(42)

Sr. No.	Name of the road	Starting	
		From	To
48.	Open Quadrangular Road, around Bund Garden.	Alankar	Koregaon Park Road.
49.	Nathan Road	Mangaldas junction	Solapur Rly. line
50.	Mangaldas Road	Wadia College Chowk	Blue Diamond Chowk, Except for a portion of the frontage of CTS No. 28 Bund Garden road near its junction with the bund Garden Road.
51.	Naylar Road	Mangaldas junction	Solapur Rly. line
52.	Mundhwa Road	Ghorpadi Rly. crossing	Mundhwa Gaathan New Bridge
53.	Magar Patta Rd.	Solapur Road junction	"
54.	Ghorpadi, Uday Bag	Bharat Forge	Solapur Road junction near St. Patric Town
55.	Shinde Chatri Rd.		through S. R. P. Camp
56.	Riverside Road	Sangam	Shanwarwada
57.	Kondhwa Road MDR-24	Lullanagar	P. M. C. limits near Kondhwa.
58.	All 24 m. (80') & 30 m (100') wide D. P. roads.		

M-3 LOCAL COMMERCIAL AREA/ZONE C1

M-3.1 In commercial zones, buildings, or premises shall be used only for the uses and purposes given in M-3.2 subject to the following conditions:

- (a) All goods offered for sale shall be displayed within the building excluding passages.
- (b) When the commercial zone boundary falls short of a street, the frontage along such street shall not be permitted to be

developed for uses, which would not be permissible along such streets; and

- c) When uses other than those permissible in R1 zone have an access from the side or rear open spaces, the width of such open spaces shall not be less than 7 m.

M-3.2 Use Provisions

- (i) Any uses permitted in R2 zone;
- (ii) Bakeries and establishment for the preparation and sale of eatables not occupying for production an area in excess of 250 sq.m. per establishment and not employing more than 5 persons with no upper floors;
- (iii) Auto part stores and show rooms for motor vehicles and machinery;
- (iv) Repairing garages with the special written permission of the Commissioner, with no residential and institutional uses above and space not more than 50 sq.m. employing not more than 9 persons using power not more than 5 H.P. and not carrying out spray-painting operations.
- (v) Sale of used or second-hand goods or merchandise (not junk, cotton waste, rags or other materials nature.)
- (vi) Club houses or other recreational activities conducted as business;
- (vii) Storage of furniture and household goods;
- (viii) Retailing of building materials, open or enclosed with not more than 500 sq.m. of open area per establishment;
- (ix) Pasteurising and milk processing plant not employing more than 9 persons and 10 H.P. motive power with area not more than 50 sq.m. in these industrial activities.
- (x) As per provisions of Table 25 for Service Industries—A Class.
- (xi) Veterinary dispensaries and hospitals and kennels;
- (xii) Supari and masala grinding/pounding not exceeding 10 H.P. 25 sq.m. with special written permission of Authority;
- (xiii) Animal pounds;
- (xiv) Repairs, cleaning shops and analytical experimental or testing laboratories not employing more than 15 persons in the industrial activity, but not including cleaning and dyeing establishment using a cleaning or dyeing fluid having flash

44

point lower than 138°F and machines with dry load capacity of 30 kg. for any establishment carrying on activities that are noxious or dust, smoke, gas, noise or vibration or otherwise dangerous to public health and safety, provided that the motive power requirement of such establishment does not exceed 10 H.P.;

- (xv) Accessory uses customarily incidental to any permitted principal use, including storage space upto 50 per cent of the total floor area used for the principal use.
- (xvi) Paper box manufacturing including paper cutting not employing more than 9 persons, with motive power not exceeding 5 H.P. and area not more than 50 sq.m.;
- (xvii) Mattress making and cotton cleaning, not employing more than 9 persons, with motive power not exceeding 5 H.P. and area not more than 80 sq.m.;
- (xviii) Establishments requiring power for sealing tins, packages, etc., not employing more than 9 persons, with motive power not exceeding 3 H.P.
- (xix) deleted.
- (xx) deleted.
- (xxi) Ice factories in independent buildings with area not more than 250 sq. m. and power not more than 45 H.P. and number of persons employed upto 20.
- (xxii) deleted.

M-4 DISTRICT COMMERCIAL AREA ZONE — C₂

M-4.1 Provisions of M-3.1 shall apply for premises (Including APM user) building in District Commercial Area Zone C-2. Further the uses permitted as C-2 shall be as follows :

- (i) Any uses permitted in Local Commercial Area Zone C1;
- (ii) Business Offices and exchanges;
- (iii) Whole-sale establishments with storage area not exceeding 200 sq.m. subject to fire protection requirements;
- (iv) Printing, book binding, engraving and block making on an unrestricted scale regarding area and motive power, if the same are in an independent building, subject to any special conditions to be prescribed by the Commissioner in the interest of the adjoining development;
- (v) Major public utility buildings;

- (vi) Headquarters organisations;
(vii) A.P.M. Uses.

M-5 SERVICE INDUSTRIES ZONE

M-5.1 Service Industries Class A: The Service Industries of Class A may be permitted in independent building (in independent designated plot) in R-2 and C-1 zones alongwith the limitation of area permitted maximum number of persons to be employed, maximum permissible power requirement and the special conditions as given in Table 25 for the Service Industries Class A.

However, Service Industries Class A may also be permitted in R-2 zone in conformity with Rule No. M-2-2-1.

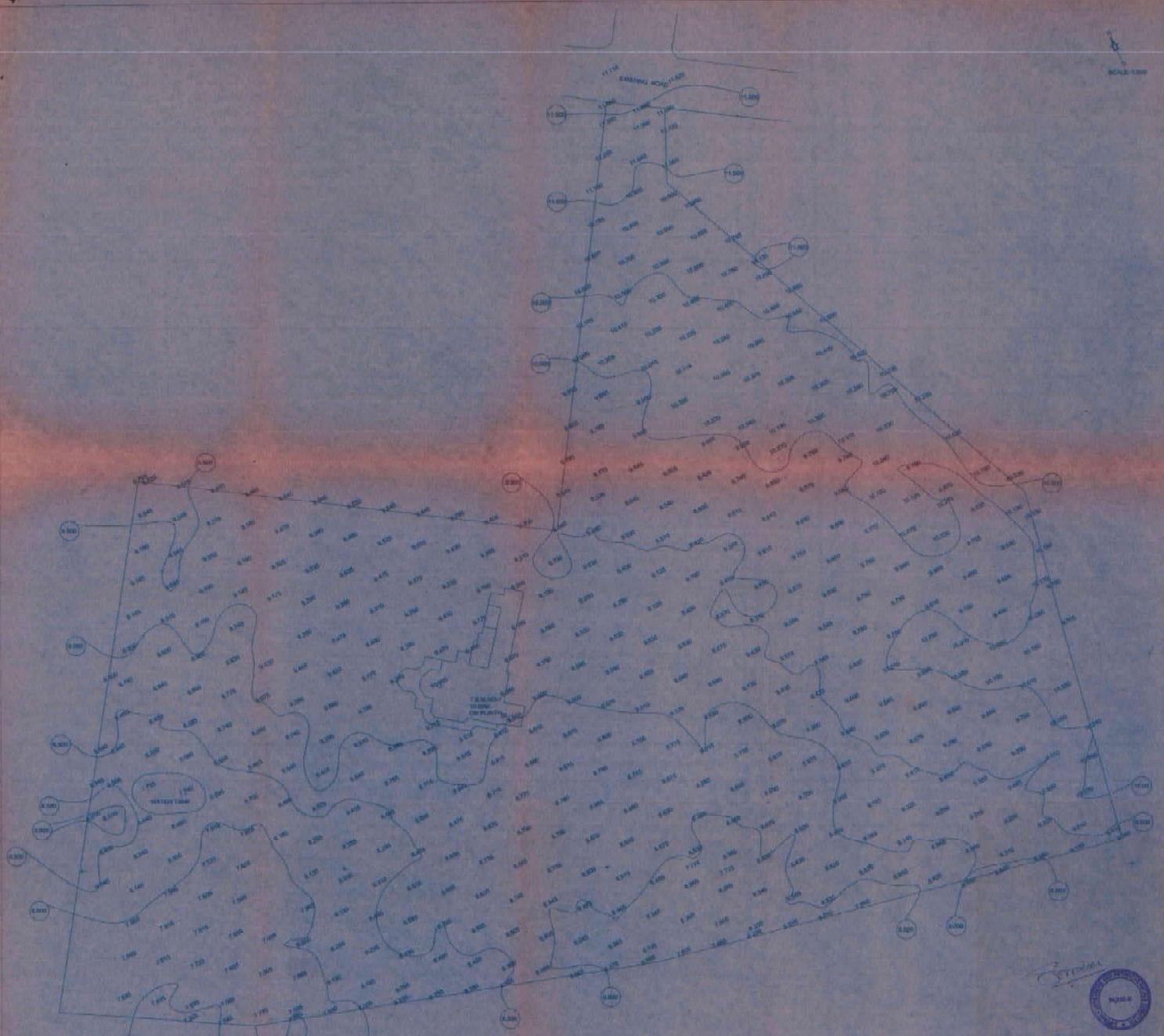
M-5.2 Service Industries Class B in Zone I:

The Service Industries of Class B to be permitted in I Zone in separate independent plots carved out with due approval to the layout in consultation with the Director of Town Planning.

Further watchman's quarters, canteen, banking spaces, can be permitted within the premises of building for service industries in I zone.

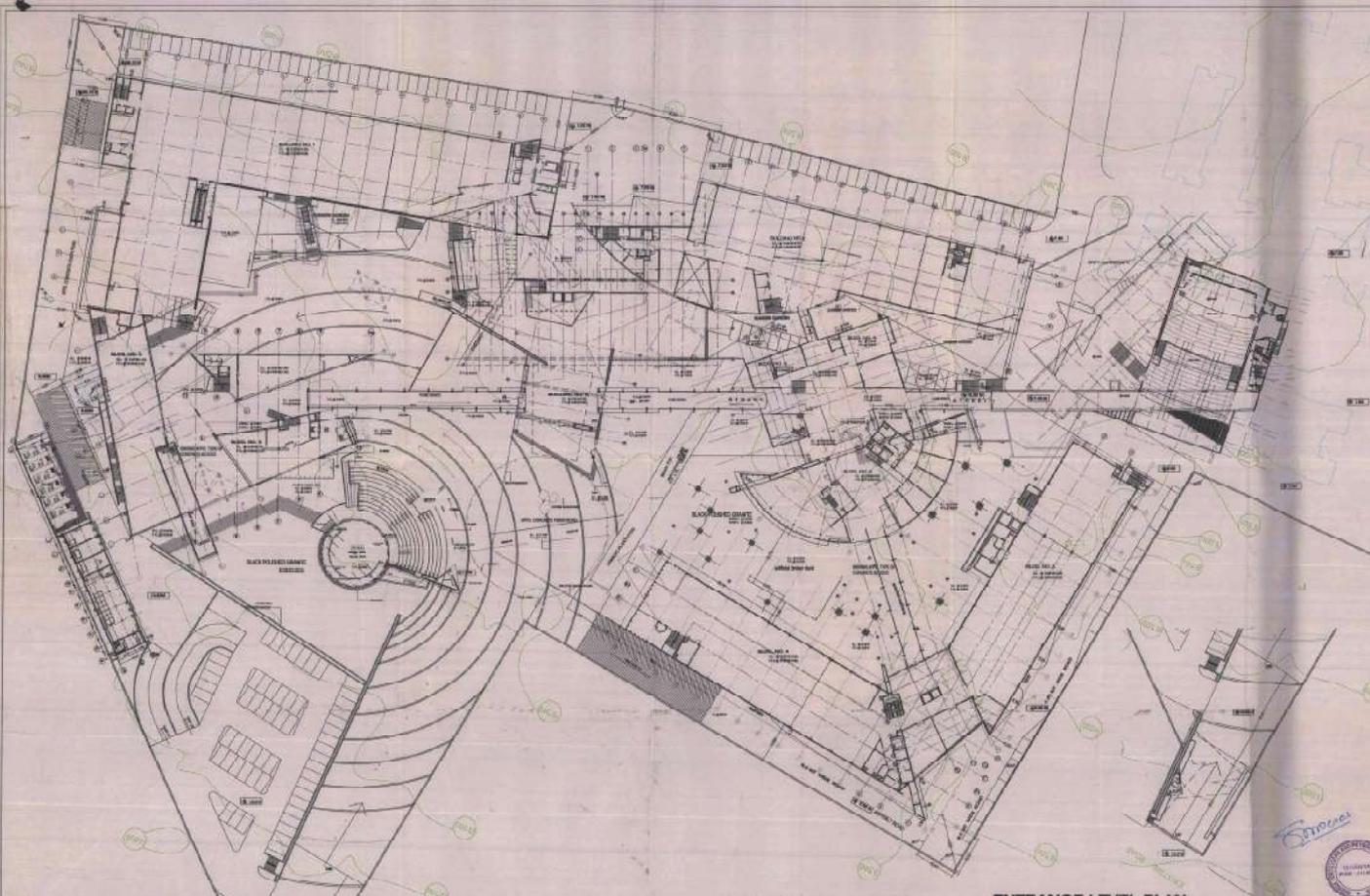


sheet 47



CONTOUR SURVEY AT. TERAWADA, TAL. HARELL, DIST. PUNE CLIENT: DESHAN FERTILISERS & METROCHEMICAL CORPORATION LTD. TERAWADA, PUNE.	INTERVAL'S GRID INTERVAL 10 X 10 M. CON. INTERVAL 0.5 M.	LEGEND ROAD CONTOUR	SHREE ENGINEERS 23, ANAND, TAL. HARELL, DIST. PUNE-41, MOBILE: 909493 PUNE-41, MOBILE: 909493 BATE: 9023094

49



ENTRANCE LEVEL PLAN

GENERAL NOTES

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE S.P. AND B.P. CODES.
2. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE APPROVED BY THE ARCHITECT.
3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.
4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.
5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.
6. ALL UTILITIES SHALL BE PROTECTED AND MARKED PRIOR TO ANY EXCAVATION WORK.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING UTILITIES.
8. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.
9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING FINISHES.
10. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

REVISIONS

NO.	DATE	DESCRIPTION
1	10/10/2010	ISSUED FOR TENDER
2	15/11/2010	REVISIONS TO DRAWING
3	20/12/2010	REVISIONS TO DRAWING
4	10/01/2011	REVISIONS TO DRAWING
5	20/02/2011	REVISIONS TO DRAWING
6	10/03/2011	REVISIONS TO DRAWING
7	20/04/2011	REVISIONS TO DRAWING
8	10/05/2011	REVISIONS TO DRAWING
9	20/06/2011	REVISIONS TO DRAWING
10	10/07/2011	REVISIONS TO DRAWING
11	20/08/2011	REVISIONS TO DRAWING
12	10/09/2011	REVISIONS TO DRAWING
13	20/10/2011	REVISIONS TO DRAWING
14	10/11/2011	REVISIONS TO DRAWING
15	20/12/2011	REVISIONS TO DRAWING
16	10/01/2012	REVISIONS TO DRAWING
17	20/02/2012	REVISIONS TO DRAWING
18	10/03/2012	REVISIONS TO DRAWING
19	20/04/2012	REVISIONS TO DRAWING
20	10/05/2012	REVISIONS TO DRAWING
21	20/06/2012	REVISIONS TO DRAWING
22	10/07/2012	REVISIONS TO DRAWING
23	20/08/2012	REVISIONS TO DRAWING
24	10/09/2012	REVISIONS TO DRAWING
25	20/10/2012	REVISIONS TO DRAWING
26	10/11/2012	REVISIONS TO DRAWING
27	20/12/2012	REVISIONS TO DRAWING
28	10/01/2013	REVISIONS TO DRAWING
29	20/02/2013	REVISIONS TO DRAWING
30	10/03/2013	REVISIONS TO DRAWING
31	20/04/2013	REVISIONS TO DRAWING
32	10/05/2013	REVISIONS TO DRAWING
33	20/06/2013	REVISIONS TO DRAWING
34	10/07/2013	REVISIONS TO DRAWING
35	20/08/2013	REVISIONS TO DRAWING
36	10/09/2013	REVISIONS TO DRAWING
37	20/10/2013	REVISIONS TO DRAWING
38	10/11/2013	REVISIONS TO DRAWING
39	20/12/2013	REVISIONS TO DRAWING
40	10/01/2014	REVISIONS TO DRAWING
41	20/02/2014	REVISIONS TO DRAWING
42	10/03/2014	REVISIONS TO DRAWING
43	20/04/2014	REVISIONS TO DRAWING
44	10/05/2014	REVISIONS TO DRAWING
45	20/06/2014	REVISIONS TO DRAWING
46	10/07/2014	REVISIONS TO DRAWING
47	20/08/2014	REVISIONS TO DRAWING
48	10/09/2014	REVISIONS TO DRAWING
49	20/10/2014	REVISIONS TO DRAWING
50	10/11/2014	REVISIONS TO DRAWING
51	20/12/2014	REVISIONS TO DRAWING
52	10/01/2015	REVISIONS TO DRAWING
53	20/02/2015	REVISIONS TO DRAWING
54	10/03/2015	REVISIONS TO DRAWING
55	20/04/2015	REVISIONS TO DRAWING
56	10/05/2015	REVISIONS TO DRAWING
57	20/06/2015	REVISIONS TO DRAWING
58	10/07/2015	REVISIONS TO DRAWING
59	20/08/2015	REVISIONS TO DRAWING
60	10/09/2015	REVISIONS TO DRAWING
61	20/10/2015	REVISIONS TO DRAWING
62	10/11/2015	REVISIONS TO DRAWING
63	20/12/2015	REVISIONS TO DRAWING
64	10/01/2016	REVISIONS TO DRAWING
65	20/02/2016	REVISIONS TO DRAWING
66	10/03/2016	REVISIONS TO DRAWING
67	20/04/2016	REVISIONS TO DRAWING
68	10/05/2016	REVISIONS TO DRAWING
69	20/06/2016	REVISIONS TO DRAWING
70	10/07/2016	REVISIONS TO DRAWING
71	20/08/2016	REVISIONS TO DRAWING
72	10/09/2016	REVISIONS TO DRAWING
73	20/10/2016	REVISIONS TO DRAWING
74	10/11/2016	REVISIONS TO DRAWING
75	20/12/2016	REVISIONS TO DRAWING
76	10/01/2017	REVISIONS TO DRAWING
77	20/02/2017	REVISIONS TO DRAWING
78	10/03/2017	REVISIONS TO DRAWING
79	20/04/2017	REVISIONS TO DRAWING
80	10/05/2017	REVISIONS TO DRAWING
81	20/06/2017	REVISIONS TO DRAWING
82	10/07/2017	REVISIONS TO DRAWING
83	20/08/2017	REVISIONS TO DRAWING
84	10/09/2017	REVISIONS TO DRAWING
85	20/10/2017	REVISIONS TO DRAWING
86	10/11/2017	REVISIONS TO DRAWING
87	20/12/2017	REVISIONS TO DRAWING
88	10/01/2018	REVISIONS TO DRAWING
89	20/02/2018	REVISIONS TO DRAWING
90	10/03/2018	REVISIONS TO DRAWING
91	20/04/2018	REVISIONS TO DRAWING
92	10/05/2018	REVISIONS TO DRAWING
93	20/06/2018	REVISIONS TO DRAWING
94	10/07/2018	REVISIONS TO DRAWING
95	20/08/2018	REVISIONS TO DRAWING
96	10/09/2018	REVISIONS TO DRAWING
97	20/10/2018	REVISIONS TO DRAWING
98	10/11/2018	REVISIONS TO DRAWING
99	20/12/2018	REVISIONS TO DRAWING
100	10/01/2019	REVISIONS TO DRAWING

PROJECT DATA

PROJECT NAME: [REDACTED]

CLIENT: [REDACTED]

ARCHITECT: [REDACTED]

DATE: [REDACTED]

SCALE: [REDACTED]

ENTRANCE LEVEL PLAN

GENERAL NOTE

FOR INFORMATION OF CONTRACTOR:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE S.P. AND B.P. CODES.

2. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE APPROVED BY THE ARCHITECT.

3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

6. ALL UTILITIES SHALL BE PROTECTED AND MARKED PRIOR TO ANY EXCAVATION WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING UTILITIES.

8. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING FINISHES.

10. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

CONTRACTOR

[Signature]

ARCHITECT

KAMAL S. MALIK

REGISTERED ARCHITECT

MEMBER ARCHITECTS ASSOCIATION OF PAKISTAN

CONSULTANT

SCALE: 1/4" = 1'-0"

DATE: 10/11/2018

PROJECT: [REDACTED]

FIG: [REDACTED]

NO. OF SHEETS: [REDACTED]

ALL DIMENSIONS ARE IN METERS UNLESS OTHERWISE SPECIFIED.

ENTRANCE LEVEL PLAN

GENERAL NOTE

FOR INFORMATION OF CONTRACTOR:

1. ALL WORK SHALL BE IN ACCORDANCE WITH THE LATEST EDITIONS OF THE S.P. AND B.P. CODES.

2. ALL MATERIALS SHALL BE OF THE BEST QUALITY AND SHALL BE APPROVED BY THE ARCHITECT.

3. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

4. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS.

5. THE CONTRACTOR SHALL MAINTAIN ACCESS TO ALL ADJACENT PROPERTIES AT ALL TIMES.

6. ALL UTILITIES SHALL BE PROTECTED AND MARKED PRIOR TO ANY EXCAVATION WORK.

7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING UTILITIES.

8. ALL WORK SHALL BE COMPLETED IN ACCORDANCE WITH THE SPECIFICATIONS AND DRAWINGS.

9. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION AND REPAIR OF ALL EXISTING FINISHES.

10. ALL WORK SHALL BE COMPLETED WITHIN THE SPECIFIED TIME FRAME.

54

क्र.सं.	नांव	हुद्दा
1	मै. दिपक कटिले सादर हाउ पेड्रो डे मिगेल कारिकास लॉ म. प्र. नि. नं. १६०१६२, गोकुळ कॉमिश्नरी, बापसागर, शेखवडा, पुणे.	सादर
2	दिकाय :- गैठु हॉटेल, जिन्हा विठारी कार्यालय पुणे. दि. २२/२/२०१६ नं. ११ ना.	सादर
3	सदर सचिव, म. प्र. नि. मंडळ, मुंबई किंवा त्यांचे प्रतिनिधी.	सादर
4	प्रतिनिधी, पर्यावरण विभाग, मंत्रालय, मुंबई.	सादर
5	मंजुरी प्रो. उप-प्रादेशिक अधिकारी प्रतिनिधी, जिन्हा विठारी पुणे.	सादर
6	वी. एच. देवकी, हयवस्थापक महानगरशासक, जिन्हा उद्योग इ.प, पुणे.	सादर
7	प्रादेशिक अधिकारी, म. प्र. नि. मंडळ, पुणे.	सादर
8	डॉ. व्ही. बी. पी. कापडनीश, पुणे विद्यापीठ, पुणे.	सादर
9	डॉ. ए. के. निकुंभ शेखवडा, सेतापती जायत गार्स,	सादर
10	मि. अ. ग. राणा राणा रा. पाठारकर, निर्मल राणाकर, महाराष्ट्र राज्य वानस्पतिक विभाग, (अनुसंधान) पार्क, खोसावडी, पुणे.	सादर
11	मि. शाबा गिफ्त, नगरशासक, शेखवडा, पुणे.	सादर
12	मि. मोहनसिंग राजपाठ, नगरशासक, शेखवडा, पुणे.	सादर
13	मि. रानतकमी ओसते, नगरशासक, पुणे.	सादर
14	उप-प्रादेशिक अधिकारी, म. प्र. नि. मंडळ, पुणे.	सादर



लोक शिवाय लोड युगावणी.

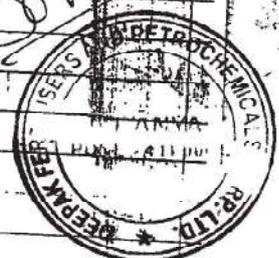
PAGE NO.:

DATE: 22/01/08

शॉपिंग मॉड "इक्षान्य"
 मे. विपक फॅटिलगवकर केंड पेइं. उंमिउ.ल
 कार्पोरेशन लि., इ. कं. निगर येरववा, पुणे.

अपेक्षित नागरिक, पर्यावरण विज्ञ, संस्था व पत्राचार द्विक

क्र.सं.	नांव	
1	शुभिम देसाई	[Signature]
2	प्राणेश चितळे	[Signature]
3	संजय सकसेना	[Signature]
4	किशोर कोळकर	[Signature]
5	रंजना देसाई	[Signature]
6	देवेंद्र काजर	[Signature]
7	H. R. Sutar	[Signature]
8	Cal Sanubhai Patil	[Signature]
9	Mahesh Chitambar	[Signature]
10	Laxman Holkar	[Signature]
11	Animesh Patilwal	[Signature]
12	SANJAY BHANDARE	[Signature]
13	SACHIN SHIRUDE.	[Signature]
15	J. A. Kadam	[Signature]
14	W. M. Bhonde	[Signature]
17	Jayant Joshi "HARMONY"	[Signature]
18	PANJABE S. M. (ASST. ENGR. ENR)	[Signature]



56

NOTICE FOR ENVIRONMENT PUBLIC HEARING

Maharashtra Pollution Control Board has received a proposal for 1) Construction project (shopping mall) of M/s. Deepak Fertilizers & Petro Chemicals Corporation Ltd., C.S. No. 190/192, Yerwada, Pune-6 and 2) Township project of M/s. Magarpatta Township Development and Construction Co. Ltd., Magarpatta City, S. No. 138 to 148, 149 (Part) 288 (Part), 254, 115, 116, 127-130, Hadapsar, Pune-28.

A public hearing is proposed to be conducted from environment angle about this project. All persons including bonafide residents; environmental groups and other located at projects site can participate in the public hearings.

Suggestions, views, comments and objections of the public can be filed at the following address in writing within 30 days from the date of this notice.

- | | |
|---|---|
| <p>1. Regional Office
MPC Board
3rd Floor, Jog Centre,
Wakdewadi,
Pune-Mumbai Road,
Pune-411003.</p> | <p>2. Sub Regional Office,
Pune-1, MPC Board,
2nd Floor, Jog Centre,
Wakdewadi,
Pune-Mumbai Road,
Pune-411003.</p> |
|---|---|

Venue: Meeting Hall, Collector Office, Pune.

Date of Public Hearing: 22.02.2006.

Time of Public Hearing: At 11.00 a.m. & 2.30 p.m. respectively.

Copies of the Executive Summary containing the salient feature of the project both in English and Marathi and other information, documents are available at the following offices.

- 1) District Collector, Pune. 2) District Industries Centre, Pune.
- 3) Zilla Parishad, Pune. 4) Regional Office, MPC Board, Pune.
- 5) Head Office, MPC Board, Mumbai, 4 Kalpataru Point, 3rd/ 4th Floor, Sion-Matunga Scheme Road, No. 8, Sion Circle, Sion (E), Mumbai-400022.
- 6) Environmental Department, Govt. of Maharashtra, Mantralaya, Mumbai-32.
- 7) Sub Regional Office, MPCB Pune-1. 8) Additional City Engineer, Environment Dept., Pune Municipal Corporation, Pune.
- 9) Sub Divisional Office, Tal. Haveli.

Sd/-

Sub Regional Officer, Pune-1.

Maharashtra Pollution Control Board, Pune-411003.

Indian Express
21/1/06



57

'Ishanya'

Rapid Environment Impact Assessment

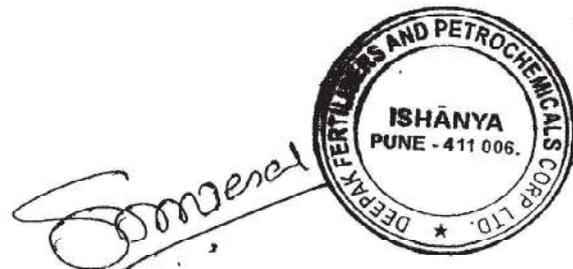
Yerwada	64	50
Ganeshkhind	62	52
Silence Zone		
Sane Guruji Hospital	50	42
Yerwada Hospital	48	40
Ganeshkhind (School)	52	41

4.4 Water Environment

4.4.1 Water Balance

Water requirement for Ishanya Mall at Pune

No	Particulars	
01	Total Ground Area including shops & common areas	11,329 m ²
02	As per D.C. Rules occupancy to be considered is @ 3 m ² / person for ground floor sale areas	3,776 persons
03	Total floor area of 1, 2 & 3 rd floors comprising of Shops & Common areas	33,354 m ²
04	As per D.C. Rules occupancy to be considered is @ 6 m ² / person for upper floor sale areas	5,559 persons
	Therefore total population shall be	9,335 persons
	Considering a diversity factor 0.7 and load factor 0.7, total maximum population will workout to	4,574 persons
	Considering floating population of 10% of the above for drivers, security staff and miscellaneous total population to be considered shall be	5,000 persons /day



'Ishanya'

Rapid Environment Impact Assessment

PART I (WATER REQUIREMENT FOR THE POPULATION LOAD)

No		Water Requirement(in litre)
01	5000 persons x 45 liters /capita/day	225,000 Litres/day
02	Convention centre =450 seats x 15 Liters /seat	6,750 Litres/day
03	Amphitheatre = 350 seats x 15 Litres/Seat	5,250 Litres/day
04	General Drinking water requirement	15,000 Litres/day
05	Restaurant &cafeteria requirement@ 2500 Meals /day@ 5 Litres /meal(cooking &dishwashing)	37,500 Litres/day
	Total water requirement	289,500 Litres /day

PART-II (WATER REQUIREMENT FOR THE LANDSCAPING AND WATERBODIES)

No		
01	Soft Landscape Water requirement (4000 M2 @ 3 Litres/day)	12,000 Litres/day
02	Peripheral Landscape requirement for trees etc (2200M2 @ 5 Litres/day)	11,000 Litres/day
03	Water Body Make -up for approx. (700 M3 @ 2% for losses and makeup)	14,000 Litres/day
	Total Water Requirement	37,000 Litres/day

Therefore the total daily water requirement shall be $2,74,500 + 37,000 = 3,11,500$ Litres/day

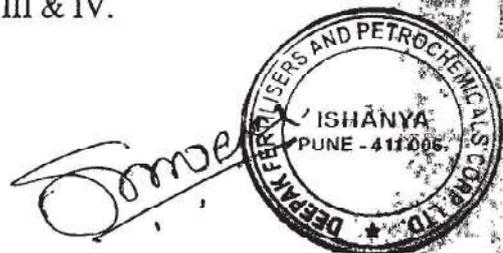
PART-III (A.C.WATER MAKEUP)

A.C. Water Requirement 3,00,000 Litres/day

PART - IV OTHER REQUIREMENTS

Filter / Softening back wash 10,000 Litres/day

From the above it is seen that if we recycle the quantity of waste water emanating from Part I which will be to the tune of 2.45 Lacs Litres/day it will be adequate to meet the partial balance requirement of part II, III & IV.



59

ANNEXURE - I**I. WATER REQUIREMENT FOR ISHANYA MALL AT PUNE**

- | | | | |
|----|--|---|-----------------------|
| 1. | Total Ground Area including Shops & Common Areas | = | 11,329 M ² |
| 2. | As Per D.C. Rules occupancy to be considered is @ 3 M ² / Person for Ground Floor Sale Areas | = | 3,776 Persons |
| 3. | Total Floor area of 1, 2 & 3 rd Floors comprising of Shops & Common areas | = | 33,354 M ² |
| 4. | As Per D.C. Rules occupancy to be considered is @ 6 M ² /Person for Upper Floor Sale Areas | = | 5,559 Persons |
| | Therefore Total Population shall be | = | 9,335 Persons |
| | Considering a diversity factor 0.7 and load factor 0.7 Total Maximum Population will workout to | = | 4,574 Persons |
| | Considering Floating Population of 10% of the above for Drivers, Security Staff and Miscellaneous Total Population to be considered shall be | = | 5,000 Persons/day |

Part - I (Water requirement for the Population Load)

- | | | |
|----|---|---------------------------------|
| 1. | 5,00 Persons x 45 Liters / Capita / Day
(500 staff + 4500 customers on peak days/ day) | 225 m ³ /day |
| 2. | Convention Center = 450 Seats x 15 Litres/Seat | 6.75 m ³ /day |
| 3. | Amphitheater 350 Seats x 15 Litres/Seat | 5.25 m ³ /day |
| 4. | General drinking water requirement | 15.00 m ³ / day |
| 5. | Restaurant & cafeteria requirement @ 2500 Meals/day
@ 15 Litres/Meal (Cooking & Dishwashing) | 37.50 m ³ /day |
| | Total Water requirement | 289.50 m³/day |

Omnesa



60

Part – II (Water requirement for the Landscaping and Water Bodies)

1.	Soft Landscape Water requirement (4000 M ² @ 3 Litres/M ²)	12.00 m ³ /day
2.	Peripheral Landscape requirement for trees etc (2200 M ² @ 5 Litres/M ²)	11.00 m ³ /day
3.	Water Body Make-up for approx. (700 M ³ @ 2% for losses & makeup)	14.00 m ³ /day
	Total Water requirement	37.00 m³/day

Part – III (A.C. Water Makeup)

A.C. Water requirement 300.00 m³/day

Part - IV Other Requirements:

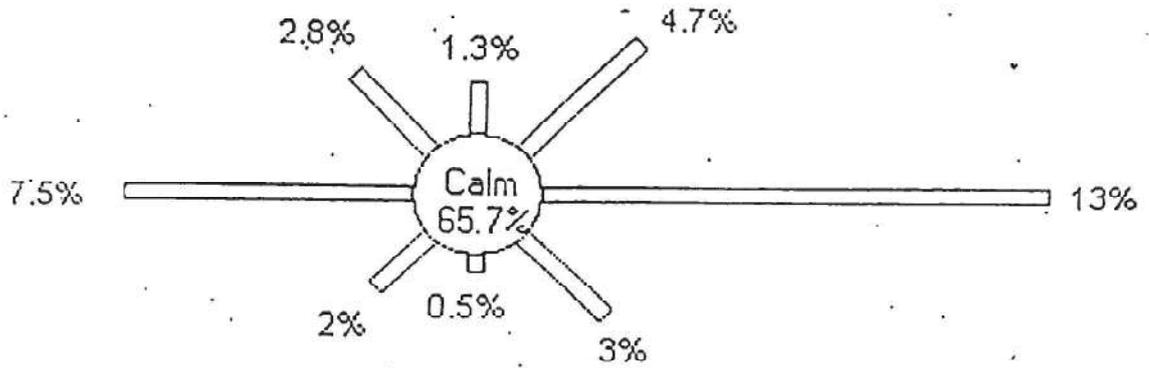
Filter/ Softening back wash 10.00 m³/ day

Note: From the above it is seen that if we recycle the quantity of waste water emanating From Part – I, which will be to the tune of approximately 245 m³/ day it will be adequate to meet the partial balance requirement of part II, III, and IV.

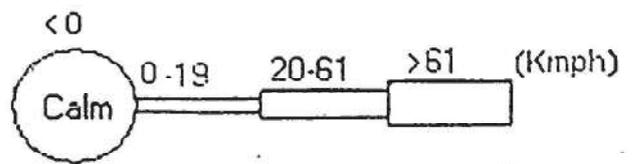
Somasa



61



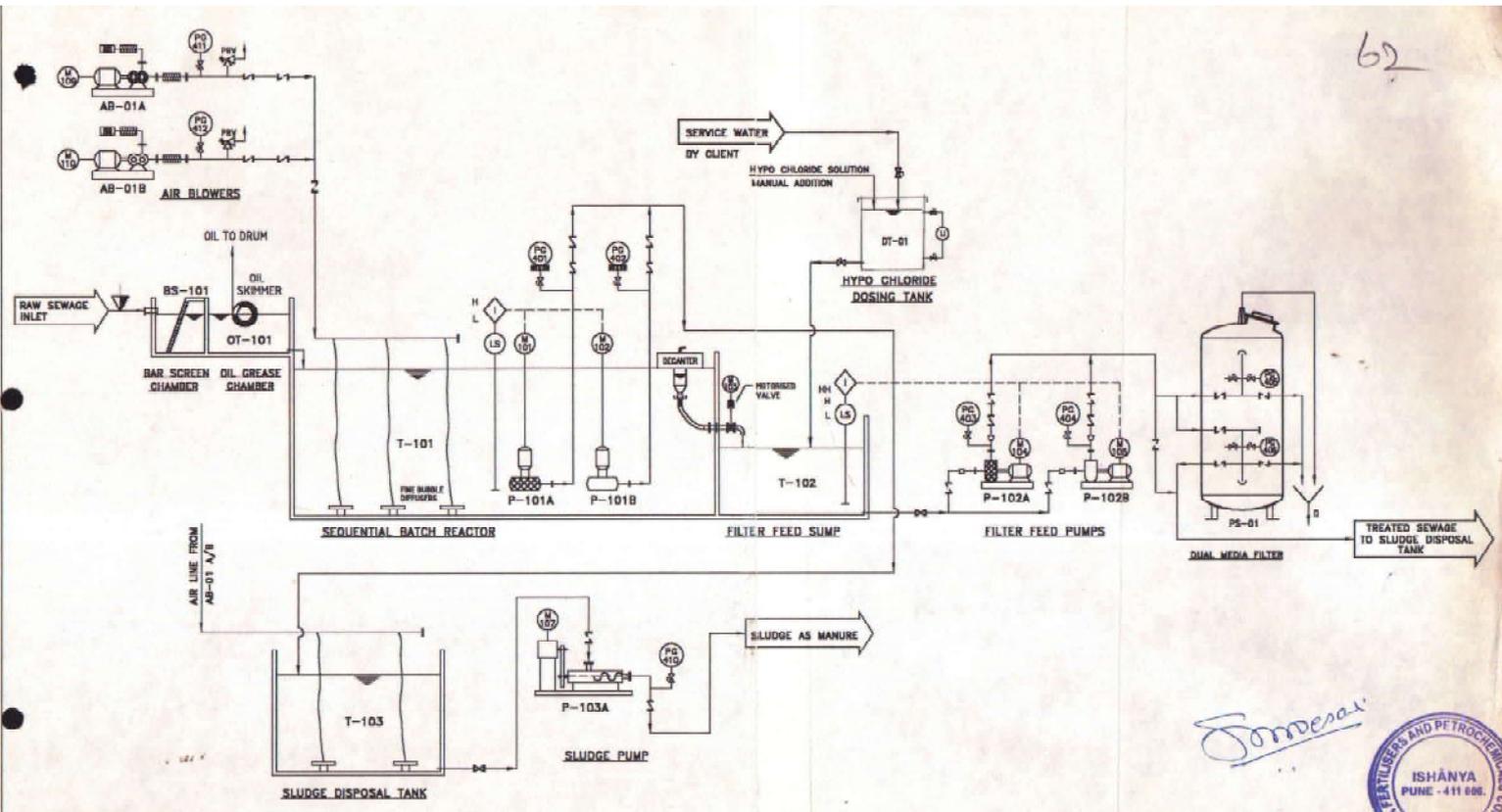
Scale: 0 3 6 9 12 (%)



WIND ROSE



62



INSTRUMENT LEGEND

- ◇ - INTERLOCK
- - FIELD MOUNTED
- ⊙ - GEAR BOX
- PG - PRESSURE GAUGE
- LI - GLASS TUBE LEVEL INDICATOR
- LS - LEVEL SWITCH
- HH - TO START BOTH PUMPS
- H - TO START ONE PUMP
- L - TO TRIP ALL

SYMBOLS		EQUIPMENTS	
⊙	BV BALL VALVE (SCREWED TYPE)	⊙-P	CENTRIFUGAL PUMP
⊙	BV BALL VALVE	⊙-AB	AIR BLOWER
⊙	NRV NON RETURN VALVE	⊙-M	MOTOR
⊙	GV GATE VALVE	⊙-MP	METERING PUMP
⊙	D DRAIN	⊙-AG	AGITATOR
⊙	BFV BUTTERFLY VALVE		
⊙	PRV PRESSURE RELIEF VALVE		

Somasa



REV. No.	REVISIONS	MECH	DATE
HYDRO MECHANICAL CONSULTANTS			
TITLE : SEWAGE TREATMENT PLANT ISHANYA PROJECT AT PUNE		Designed	JOB CODE
		Drawn	SCALE
		Checked	DATE
		Approved	FILE NAME
DWG. NO. SWTP-1		For approval	SHEET
		For information	1 OF 1
		For Construction	R

63

RAPID ENVIRONMENTAL IMPACT
ASSESSMENT STUDY REPORT

PREPARED FOR

'ISHANYA' MALL

YERAWADA,
DIST. PUNE.

PREPARED BY

RIVERINEMOUNTS BIOSYS PVT. LTD.,
DHANALAXMI PARK, PAUD ROAD, KOTHRUD,
PUNE- 411038.

(64)

APPLICATION FORM (SCHEDULE- II)

(See Sub- Para I(a) of Para 2 of the ELA Notification dt 27.1.94)

I A. Name and address of the project proposed: **Deepak Fertiliser & Petro Chemicals Corp Ltd.Opp. Golf Course Shastri Nagar, Yerwada, Pune-411 006.**

B. Location of the Project:
Name of the Place

ISHANYA
C. survey no.
190 &192

District, Tehsil.

Pune

Latitude / Longitude:

18.32⁰N, 73.51⁰E

Nearest Airport / Railway Station:

Pune

C. Site Selection

Alternate Sites examined	N.A.
Reason for selecting the proposed site	Suitable from environmental & infrastructure point of view.

D. Does the site conform to stipulated land use as per local land use Plans:
YES.

II Objective of the project: **To Build a world class Shopping Mall with all amenities & Generate employment and do Good business.**

III A. Land Requirement:

1. Agricultural Land: **N.A.**
2. Forest Land and Density of vegetation: **N.A.**
3. Other (specify): **N.A. plot**

B. 1. Land use in the catchments / within 10kms. Radius of the proposed site: **Residential & commercial Part Agricultural**

2. **Topography of the proposed area**
Indicating gradient, aspects and altitude: Attached
3. **Erodability classification of the proposed Land:** Rocky Strata land for Residential & Commercial use as per Pmc
- C. **Pollution sources existing within 10kms. Radius and their impact on the quality of Air, water and land:** Impact study & Analysis report Enclosed
- D. **Distance of the nearest Park / Sanctuary/ Reserved Forest:** 55 Kms
- E. **Rehabilitation plan for quarries / borrow areas:** N.A.
- F. **Green belt plan:** 33% of open land to covered under green belt
- G. **Compensatory afforestation plan :** N.A.
- IV **Climate and Air Quality**
- A. **Windrose at site-** Attached (Page No 70)
- B. **Max./ Min./ Mean annual temperature.:** max. 37 DEG.C, Min 12 DEG .C
- C. **Frequency of inversion:** Not observed
- D. **Frequency of cyclones / tornadoes / cloudburst:** Not recorded till date
- E. **Ambient air quality data:** Attached
- F. **Nature & concentration of emission of SPM. Gas (CO. SO₂, NO₂, and CH₄ etc.) from project:** Attached
- V **Water balance:**
- A. **Water balance at site:** Attach (Pg 26 REIA)
- B. **Lean season water availability:** Municipal water Supply
- C. **Source to be tapped with competing users (River, Lake, Ground, Public Supply):** Municipal supply

- REIA Pg no 29-31 **66**
- D. **Water quality :**
- E. **Changes observed in quality and quantity of ground Water in the last 15 years and present charging and extraction details:** **No change observed**
- F. **1. Quantum of wastewater to be released with treatment details:** **Attached STP flow sheet**
- 2. Quantum of quality of the water in the receiving body before and after disposal of waste:**
- 3. Quantum of waste water to be released on land and type of land:**
- G. **1. Details of reservoir water quality with necessary Catchment Treatment Plant**
- 2. Command Area Development Plant:** **N.A.**
- VI. **Solid wastes:** **Details given in REIA**
- A. **Nature and quantity of solid wastes generated:** **Domestic sewage Shall be biodegradable alongwith plant, leaves, lawn mowings etc.**
- B. **Solid waste disposal method:** **By composting, Vermicompost used within own premises**
- VII. **Noise and Vibration:** **Attached**
- A. **Sources of noise and vibration**

Rapid Environment Impact Assessment

- B. Ambient noise level:
- C. Noise and Vibration control measures Proposed
- D. Subsidence problem if any with control measures

VIII Power requirement indicating source of supply: MSEB, 750 KWx 2
 DG sets(One
 stand by)

Complete environment details to be furnished
 Separately if captive power unit proposed: N.A.

IX Peak Labour force to be employed giving details of:

Endemic health problems in the area due to waste water / air/soil-borne disease	NOT RECORDED
Health care system existing and proposed	DISPENSORY AND STATE RUN HEALTH FACILITY

- X A. Number of village and population to be displaced: NIL
- B. Rehabilitation master plan: N.A.

XI Risk Assessment Report and Disaster Management Plan: Attached

- XII Reports prepared as per guidelines of MOEF issued from time to time:
- A. Environment Impact Assessment: Attached
 - B. Environment Management Plan: -do-

67

- C. Detailed feasibility report: -do-
 D. Duly filled questionnaire: -do-

XIII Details of Environment Cell:

I here by give an undertaking that the data and information given above are true to the best of my knowledge and belief and I am aware that any if any part of the data/information submitted is found to be false or misleading at any stage, the project be rejected and the clearance given if any to the project is likely to be revoked at our risk and cost:


 (Mr. SHIRISH DESAI)



VICE- PRESIDENT
 CO ORDINATION,

Deepak Fertilisers & Petro Chemicals Corporation Ltd.

Pune

Date :

Signature of the applicant

With Name & full Address

Place : Pune

68

**QUESTIONNAIRE FOR ENVIRONMENTAL APPRAISAL
(INDUSTRY SECTOR PROJECTS)**

Note-1: All information given in the form of annexure should be part of this file
Itself. Annexure as separate files will not be accepted.

Note 2: Please enter x in appropriate box where answer is yes/No

I. General Information

A. Name of the Project:

Ishanya,
Deepak Fertilisers & PetroChemicals Corporation Ltd.
Opp. Golf Course
Shastri Nagar, Yerwada,
Pune-411 006.

B. Plant Capacity (TPA): N.A.

C. Location

Village	Tehsil	District	State
Yerwada	Pune	Pune	Maharashtra

D. Geographical Information

1. Latitude : 18° 34'
2. Longitude: 73° 46'
3. Elevation above Mean
Sea Level (metres): 590 mtr.
4. Total Area envisaged for setting up
of project (in ha.): 4.4095
5. Nature of terrain (hilly, valley, plains, Coastal plains
etc.): Plain

6. Nature of Soil (sandy, clayey, sandy loam etc.): black
cotton, Sandy

89

7. Permeability (cm/sec): Porous

E. Alternate sites considered

- 1. N.A.
- 2. _____
- 3. _____
- 4. _____

F. Reasons for selecting the proposed site based on comparative evaluation of environmental considerations

- SUITABLE FROM ALL ANGLES

II. Environment Setting

A. Current land usage of the proposed project site Area (in hectares). : 4.4095

- 1. Notified Industrial Area / Estate : Residential/Commercial
- 2. Agricultural: N.A.
- Irrigated : N.A.
- Unirrigated : N.A.
- 3. Homestead : N.A.
- 4. Forest : N.A.
- 5. Grazing : N.A.
- 6. Fallow : N.A.
- 7. Marshy : N.A.
- 8. Mangroves -
- 9. Others (Pl. specifies)
- Total:

B. Please indicate area earmarked for each of the following (in ha)

- 1. Plant Facilities:
- 2. Ash Disposal: N.A.
- 3. Storage (Fuel): N.A.

Rapid Environment Impact Assessment

4. Storage (water) : 10,00,000 Ltr(U/G Storage) 70
5. Storage (Hazardous Waste): N.A.
6. Storage (Hazardous Chemical) N. A
7. Storage (Others) N.A
8. Approach Road (s)
9. Township : N.A.
10. Green Belt :
11. Others (Please specify)
- Total:

C. Is the proposed site located in a low-lying area?

Yes _____ No

If yes,

1. Level before filling (above MSL in metres)
2. Level after filling (Above MSL in metres)

Quantity of fill Material Required(in cum)	Source
	N.A.

D. Proximity to sea/water bodies :

	River Mutha	Other Water bodies like River/creek/lake etc.(Please specify)
Distance of site boundary (in m)	2 K.M.	
Distance of plant facilities (in m)	N.A	

*From highest flood line/high tide line.

71

E. Whether any of the following exist within 7k.m of the periphery of the project site. If so, please indicate aerial distance and name of the eco-system as given under the

Table:

Sr. No.	Name	Area falling within 7 km periphery of project (ha.)	Aenal Distance (in km.)
1	National Park/Wildlife Sanctuary	NO	
2	Tiger Reserve/Elephant Reserve/Turtle Nesting Ground	NO	
3	Core Zone of Biosphere Reserve	NO	
4	Habitat for migratory birds	NO	
5	Lakes/Reservoir/Dams	NO	
6	Stream/Rivers	NO	
7	Estuary / Sea	NO	
8	Mangroves	NO	
9	Mountains/Hills	NO	
10	Notified Archaeological Sites	Shaniwar wada	6
11	Any other Archaeological sites	NO	
12	Industries/Thermal power Plants	No	

13	Defense Installation		NO	
14	Airports		Pune Airport	3
15	Railway Lines		Pune rail Station	2
16	National/State Highways		2 KM FROM STATE HIGHWAY	2

*0.5 km from Railway lines/National/State Highway should be maintained.

F. Description of the flora/vegetation within 7 km under following headings

1. Agricultural Crops: Jowar, Sugar cane, ground nut , bajra, etc.
2. Commercial crop: Sugar Cane
3. Plantation: N.A.
4. Natural Vegetation/ Forest Type: Bushy Plants
5. Grass Lands: Grazing on agriculture
6. Endangered species: Nil
7. Others (Please Specify): Nil

G. Description of fauna (non-domesticated) within 7 km under following headings

1. Total listing of faunal elements: N.A.
2. Endemic fauna species: N.A.
3. Endangered Species: N.A.
4. Migratory species: N.A.
5. Route of migratory species of birds and mammals: N.A.
6. Details of aquatic fauna (if applicable): N.A.

III Meteorological Parameters

- A. Seasonal Monitoring Data continuous monitoring for one full season except monsoon should be carried out**

73

1. **Temperature (in °C)**
(a) Maximum: 36 (b) Minimum: 10 (c) Mean: 27
2. **Rain fall (in mm) : 250 MM average during rainy season**
(a) Maximum: 649 (b) Minimum: 73.4 (c) Mean: 180
3. **Mean value of humidity : 25- 60%**
4. **Inversion occurrence**
(a) In percentage: N.A. (b) Height in meters: N.A.
5. **Seasonal Wind-rose pattern (16 points on compass scale) Page No 71**
6. **Hourly Mean Meteorological data (based on one full season data collected at site required as input for air quality modeling)**

Hour	Low/Medium Cloud amount (in OCTAS)	Wind Speed in(Km/H)	Predominant wind direction	Ambient air temperature (in deg K)	Hourly stability	Mixing depth (in m)
1	N.K.	5.4-6.48	WE & NE	298°K	N.K.	N.K.
2	N.K.	5.4-6.48	WE & NE	300°K	N.K.	N.K.
3	N.K.	5.4-6.48	WE & NE	302°K	N.K.	N.K.
4	N.K.	5.4-6.48	WE & NE	298°K	N.K.	N.K.
5	N.K.	5.4-6.48	WE & NE	280°K	N.K.	N.K.
6	N.K.	5.4-6.48	WE & NE	298°K	N.K.	N.K.

N.K. : NOT KNOWN

IV Ambient Air Quality Data

(Frequency of Monitoring should be as per guidelines of CPCB and monitoring should cover one full season (excluding monsoon.)

- A. **Season and period for which monitoring has been carried out (May-June- 2005)**
- B. **Frequency of sampling**
- C. **Number of samples collected at each site**

74

Date Time & Location	Wind Direction & Speed	24 Hourly concentration as monitored (in μ m3)	Permissible Standard(As per EPA/SPCB consent)	Remarks(Name of the instrument and sensitivity)
NO.1	NE - W	SPM- 54-140	SPM - 500	HVS UNIT
NO.2	NE - E	SO ₂ - 25- 31.5	SO ₂ - 120	ACC. 1KG/M3
NO.3	N - SW	NOX- 11 - 22	NOX - 120	
NO.4	W			
NO.5	NW			

D. 24 hourly concentrations (in μ / m3)

Pollutant (s)	Maximum	Minimum	Mean
SPM	72	64	67
RPM	22	17	19
SO ₂	11	8	9
NOX	7	5	6
CO	0.10	0.08	0.09

E. Specific air pollution issues in the project area. : NIL

V Manufacturing Process details : N.A.

A) Raw Materials Including process chemicals, catalysts &additives

List of raw materials to be used at all stages of manufacture	Physical and chemical nature of raw materials	Quality (tones/month) Full production capacity	Source of Materials	Means of Transportation (Source to Storage site) With justification
N.A.				

25

- B) Brief description of the process : N.A.
 C) Details of process technology know how/ collaboration

D) Production profile (tons/year)

Names of Products, Byproducts, & Intermediate Products	Existing	Proposed Activity (new/ Modernization/ Expansion)	Total
	NOT APPLICABLE		

D. Means of transportation of raw material and final products.
 Means of Transport : At Place

	Raw material	Final Product
1. Road 2. Rail 3. Pipeline 4. Others, Please specify	By Road	By Road

76

VI. Water

A. Water Requirement (cum / day)

Purpose	Avg. Demand	Peak Demand	Source	Type Treated/untreated/ Fresh/Recycled	Remarks
1. Project i. Process ii. Cooling water iii. DM water iv. Dust Suppression v. Drinking vi. Green Belt vii. Fire Service viii. other				WATER BUDGET ATTACHED Page No- 26(REIA)	
2. Township i. Green Belt ii. Drinking iii. Others (please specify)					
TOTAL					

B Source of Raw Water Supply

S. No .	Source	Cu. m./ hr	Cu. m./ day
1	Sea		
2	River		
3	Groundwater		
4	Other surface water bodies (Please specify)	Municipal Supply)	289.5 m3/day

C. Lean Season flow in case of surface water source (cusecs / cumecs)

D. Groundwater (a) Recharge Rate/ withdrawal rate

1. Ground water level (meters): N.A.
 - i) Pre monsoon
 - ii) Post monsoon

(To be obtained from Central / State Ground water authorities)

Rapid Environment Impact Assessment

E. **Competing Users of the water Source:** N.A. 77

S.No.	Usage	Present Consumption (cu.m / day)		Addition Proposed as per local plan		Total	
		Surface	Ground	surface	Ground	surface	Ground
1.	Irrigation						
2.	Industry						
3.	Drinking						
4.	Others(Please specify)						
	Total						

G. **Physico- chemical analysis of treated water to be used in project / township:** N.A.

H. **Waste Water Management:** Attached flow sheet and Process Description of the STP

1. Description of water treatment plan with flow chart
2. Characteristics of discharge stream(s) before and after treatment

Item	Characteristics	
	Before	After

3. **Daily discharge (m³ / day) from different sources**

- a) Plant operation
- b) Workshop
- c) D.M. Plant effluent
- d) Domestic : 300 CM / DAY
- e) Other (specify)

Total: 300 M³/DAY

4. **Quantity of water recycled**

- a) (in %): 100
- b) (in cum / day): 290

5. **Details of recycling mechanism: STP followed by filtration and chlorination facility**

6. Mode of final discharge / disposal of treated effluent:

78

Total treated water recycled for
gardening/cooling make up

Mode	Length (in.m.)	Quantity (in m3 / day)
i) Open Channel		
ii) Pipeline		
iii) Others (Please specify)		
Total		289.5

7. Point of final discharge

Final	Quantity discharged(in m3/ day)
Green belt within the plan / township	10 M3/DAY
Agriculture land	-
Fallow land	-
Forest land	-
River / Stream	-
Lake	-
Estuary	-
Sea	-
Total	10M3/DAY

8. Lean season flow rate in case of discharge in a river / stream (cusecs): N.A.

9. Downstream user of water (in case of river, reservoir,lake(cusecs)

- a) Human --
- b) Irrigation --
- c) Industry --
- d) Others (Pl. specify) -- N.A.

Rapid Environment Impact Assessment

10. Analysis of river water 100 meters upstream of discharge point and 100 meters downstream of discharge point (except in rainy / monsoon season) along with details of aquatic life. :

Details in REIA report

11. What is the predicted impact on water quality of the receiving body due to discharge? (Briefly state the prediction tool adopted): N.A.

VII. Solid Waste Management

1. Details

s. no	Source	Qty (TPM)	Form(SLudge / Dry/ Sturry etc.	composition
1	Raw water treatment plant	N.A.	----	----
2	ETP	500KG. STP SLUDGE TO BE COMPOSTED	DRY	----
3	Process	N.A.	----	----
4	Spent Catalyst	----	----	----
5	Oily Studge	----	----	----
6	Others (PLspecify)	N.A.		----

- B. If waste(s) contain any hazardous/toxic substance/radioactive materials provide data and proposed precautionary measures.: N.A.
- C. What are the possibilities of recovery and recycling of wastes? N.A.
- D. Possible user of Solid Waste (s). N.A.
- E. Method of disposal of solid waste (s) : BY MANURE ON OWN GARDEN

	Method	Qty (TPM)
1.	Landfill	---
2.	Incineration	---
3.	Recovery	
4.	Downstream users	

- F. In case of Landfill:** N.A.
1. Is solid waste amenable for landfill N.A.
 2. Dimensions of landfill
 3. Life of landfill _____ Years
 4. Proposed precautionary and mitigative measures along with design features.

- G. In case incineration:** N.A.
1. Details of incinerator
 - i) Type
 - ii) Size
 - iii) Capacity
 - iv) Fuel
 2. Likely composition and quantum of emissions N. A

S.No.	Composition	Quantity (in cu.m/hr)

VIII. Noise Pollution Control and Management

- A. Source: DG set
- B. Level at Source (dB): 75
- C. Level at project boundary capacity (dB): 55
- D. Abatement measures (give source wise details): Dust & noise control system

Rapid Environment Impact Assessment

IX Fuel / Energy Requirements

81

A. Total Power Requirement (MW)

	Project	Township	Other(Pl. specify)	Total
Present(in existing)	NIL	-	-	NIL
Proposed	3600 KVA	N.A.	N.A.	3600 KVA
Total	3600 KVA			3600KVA

B. Source of Power (MW): MSEBOARD SUPPLY AND STAND BY DG SET

	SEB/ Grid (MSEB)	Captive power Plant	DG Sets
Present	NIL	N.A.	-
Proposed	3600 KVA	N.A.	750KVA
Total	3600 KVA		750KVA (Emergency Power)

C. Details of Fuel : Details given in Report

S.No	Fuel	Daily Consumption (TPD)		Calorific value (Keals / kg)	% Ash	% Sulphur
		Existing	Proposed			
1	Gas					
2	Naphtha					
3	HSD			5000	2%	1.2%
4	Fuel Oil					
5	Coal					
6	Lignite					
7	Other (Pl. specify)					

D. Source of Fuel (Distance in km) :

N.A.

1. Port
2. Mine

82

3. Refinery
4. Storage depot / Terminal

E. Mode of transportation of fuel to site

1. Trucks (numbers/ day) : **By Roads**
2. Pipeline (length in km)
3. Railway Wagons (numbers/day)

X. Atmospheric Emissions

A. Flue gas characteristics (SPM,SO₂,NO_x,CO)

S. No.	Pollutant	Source of Emission	Emission rate (kg/hr)	Concentration of Flue gas (g/m ³)
1.	SPM	D.G. Set		Within MPCB NORMS
2.	RPM			--
3.	SO ₂			
4.	NO _x			--
5.	CO			--

B. Size Distribution of SPM at the top of the stack

S.No.	Range	% by weight
1..	Micron	
2.	1-10 Micron	2
3.	10-20 Micron	1.15
4.	< 20 Micron	83

Rapid Environment Impact Assessment

C. Stack Emission Details (All the stacks attached to process units. Boilers captive Power plant, D.G sets, Incinerators both for existing and proposed Activity) 83

Plant Section & Units	Stack No.	Height from ground level(m)	Internal diameters (Top) (m)	Emission Rate(kg/hr)	Temperature of Exhaust Gases (deg K)	Exit velocity (m/sec)	Exhaust Gas			
							Temp	Density	Specific Heat	Volum Flow(t)
D.G. Set	1	7	0.5	50m3	95c	--	--	--	--	
							--	--	--	

Note Please indicate the specific section to which the stack is attached. For e.g. Process Section, D.G set. Boiler, Power plant, Incinerator e.t.c

Emission rate (kg/ hour) for each pollutant (SPM, SO₂, NO, etc should be specified)

D. Details of fugitive emissions (indicate the points of fugitive emissions & quantities estimated) : N.A.

E. Predicted impact on air quality (as per CPCB guidelines for conducting the air quality remodeling): N.A.

XI) Pollution load statement (Applicable to expansion and modernization projects only) :

N.A.

Parameters	Existing Plant	Processed Expansion/modernization	Total	Remarks
1.Land Area (Ha)				
2.Raw water				
3. Power (MW)				
4.Waste Water (Effluent generation) (m3/day)				
a. Process				
b. Domestic				
5.AirEmissions (gm/hr)				
a. SPM				
b. CO				
c. SO2				
d. NOx				
e. Others(like HC, Cl2, NH3 etc)				
6.Hazardous Chemical Storage (give item wise)				

25

7. Solid Waste (TPD)				
a. Non Hazardous				
b. Hazardous				

XII. Storage of chemical (in flammable / explosive / hazardous/substances)

N.A.

S.NO	Name	No. of Storage's	Capacity (TPD)	Physical & Chemical Composition	Consumption (in TPD)	Maximum Quantity of storage at any point of time	Source of Supply	Means transportati

XIII. Occupational Health and Industrial Hygiene. : N.A.

- A. What are the major occupational health and safety hazards anticipated.(Explain briefly)
- B. What provisions have been made/propose to be made to conform to health/safety requirements.(Explain briefly)
- C. Details of personal protective equipment provided/to be provided to the workers.
- D. Details of proposed measures for control of fugitive emission/ odour nuisance from different sources. : n.a.
- E. Details of fire protection and safety measures envisaged to take care of fire and explosion hazards.

XIV. Pollution Control Aspects

- A. Details of Pollution Control System:

Rapid Environment Impact Assessment

86

S.No		Existing	Proposed to be installed
i)	Air	N.A.	
ii)	Water	N.A.	Not Required
iii)	Noise	N.A.	By Attenuation
iv)	Solid Waste	N.A.	By recycle

b. Efficiency of each pollution control equipment/ system installed

1. Existing Unit : N.A. (new unit)

S.No.	Name of the system Equipment	Design Efficiency	Present Working efficiency %
1.			
2.			
3.			

2. Proposed project

S.No.	Name of the system equipment	Design Efficiency %
1.	STP	100
2.		
3.,		

XV. Green Belt Plan

- A. Total area of project/township (in ha.) : 4.4095
- B. Area already afforested (for existing project) in ha: N.A.
- C. Area proposed to be afforested (in ha): 33% OF THE OPEN PLOT
- D. Plant species proposed
1. Indigenous: YES
 2. Exotic:--
- E. Width of green belt (minimum in m.):
1. Along plant boundary : 6 mtr
 2. Roads and avenues within the plant: as per approved plan
 3. Ash Dike

4. Township
5. Other ornamental garden spaces
6. Commercial plantation etc.

F. Trees planted & proposed: 33% of the open area shall be covered

Under green belt

1. Planted:
2. Survival rate
3. List of species planted
4. Proposed
5. List of Species

XVI. Construction Phase Management Aspects

A. Estimated duration of construction in months. : 10 months

B. Number of persons to be employed for construction

1. Peak : 100
2. Average : 60

C. What provision has been made for the sewage treatment for the construction workers?:

USING SITE FACILITY & Municipal toiletries

D. How the fuel (kerosene/wood, etc.) requirement of labour force will be met to avoid cutting of trees from the adjoining areas.:

N.A.

E. Proposed Health care Measures care with emphasis on protection from endemic diseases.:

Local labour

F. Education and other social welfare measures proposed.

87

XVII. Human Settlement

S.No.		Aerial distance from the periphery of the site		
		Upto 500m From Periphery	500m to 3000m From the periphery	3000m to 7000m from the periphery
1	Population	PUNE MUNICIPAL YERWADA AREA RESIDENTIAL AND COMMERCIAL		DETAILS GIVEN IN REIA
2	Number of Houses			
3	Present Occupation Pattern		RESIDENTIAL & AND PART AGRICULTURAL	COMMERCIAL

XVIII. Rehabilitations & Resettlement Plan (Wherever application)**A. Village(s) affected by the project: NIL**

S.No.	Village (Tribal/Others)	Population	Occupation	Average Income per annum

88

B. Population to be displaced: NIL

S.No.	Name of Village	Population	
		Landoustees only: Homestead outees only	Land and Homestead Ousteas

C. Salient features of Rehabilitation Plan

- i) Site where the people are proposed to be resettled
- ii) Facilities proposed at the recruitment site
- iii) Compensation package
- iv) Agency / Authority responsible for their resettlement

XIX. Expenditure on Environmental Measures

- A. Capital cost of the project (as proposed approved by the funding agency / financial Institutions**

(Rs. 110 CRORES)

- B. Cost of environmental protection measures (Rs 25 Lakhs)**

S.No	Recurring Cost Per annum	Capital Cost
1	Air Pollution Control	
2	Water Pollution Control	2.5 LAC
3	Noise Pollution Control	3.5 Lac
4	Environment Monitoring and Management	2 LAC
5	Reclamation borrow / mined area	
6	Occupational Health	

Rapid Environment Impact Assessment

7	Green belt	
8	Others (Pl. Specify)	
	Total	8 LACS

3. Detail of organizational set up / cell for environmental Management and monitoring. : REIA
4. Details of community welfare / peripheral development programmes envisaged / being undertaken by the project proponent.

XX. Public Hearing details:

- A. Date of Advertisement 21.01.2006
- B. Newspapers in which the advertisement appeared
(With copies) Indian Express & Loksatta (Marathi Daily)
- C. Date of Hearing: 22.02.2006
- D. Panel Present: As per list attached
- E. List of public present along with address and occupation As

Enclosed F. Summary / details of Public hearing report

S.No	Issues raised	Recommendation of panel	Response of project proponents
1	Air	Treatment & Disposal	Positive
2	Water	Treatment & Disposal	Necessary action Taken
3	Solid Waste	Treatment & Disposal	

The data and information given in this proforma true to the best of my knowledge and belief

Date:

Place: Pune



signature of the Applicant

with full name & address.

SHRISH M. DESAI
DEEPAK FERTILISERS AND PETROCHEMICALS CORP. LTD.
OPP. Golf Course, Bhamburda
Verawada, Pune 411006.

Given under the seal of

organization on behalf of

whom the applicant is signing

INDEX

Sr. No.	Description	Page No.
	CHAPTER 1	
1.0	INTRODUCTION	1 - 4
	CHAPTER 2	
2.0	PROJECT HIGHLIGHTS	
2.1	Project Brief	5 - 6
2.2	Pune -Key Facts	7 - 9
2.3	Project Setting	9
2.4	Area Distribution	10 - 16
	CHAPTER 3	
3.0	SEWAGE TREATMENT FACILITY	
3.1	Introduction	17
3.2	Sewage Treatment Plant	17
3.3	Process Description	18
	CHAPTER 4	
4.0	BASELINE ENVIRONMENTAL STATUS AND IDENTIFICATION OF IMPACT	
4.1	Environmental Setting of Site	19
4.2	Air Environment	20 - 22
4.3	Noise Environment	23 - 25
4.4	Water Environment	25 - 30
4.5	Land Environment	31 - 37
4.6	Socio Economic Environment	37 - 41
	CHAPTER 5	
5.0	IDENTIFICATION OF IMPACT	42 - 45
	CHAPTER 6	
6.0	PREDICTION OF IMPACT	
6.1	Air Environment	46 - 48
6.2	Noise Environment	48 - 50
6.3	Waste water treatment	50

91

Sr. No.		Description	Page No.
		CHAPTER 7	
7.0		ENVIRONMENT IMPACT STATEMENT & EVALUATION	
	7.1	Environment Impact Statement	51 - 54
	7.2	Environment Impact Evaluation by Matrix method	55 - 58
		CHAPTER 8	
8.0		ENVIRONMENT MANAGEMENT PLAN	
	8.1	EMP during Construction phase	59 - 61
	8.2	EMP during Operation phase	61 - 67
	8.3	Environmental Quality Monitoring	68 - 69
	8.4	Need for Environmental Management	70
	8.5	Conclusion	70

92

LIST OF ANNEXURES

Annexure No.	Title	Page No.
01	Environmental Legislation in India	71 - 80
02	Environmental Legislation, Act, Rules Notifications & Amendments	81 - 82
03	Primary Water Quality Criteria	83
04	Indian standards / specifications for drinking water IS 10500 - 1991	84 - 90
05	Suitability of treated water for irrigation	91
06	CPCB Emission regulations for diesel generator sets	92 - 93
07	General standards for discharge of Environmental Pollutants:Effluent	94 - 99
08	Statistics	100 - 111

93

'Ishanya'

Rapid Environment Impact Assessment

1.0 INTRODUCTION

Picturesque Pune, the peaceful and prosperous city often referred as the 'Queen of the Deccan. It is also termed as the 'Cultural Capital of Maharashtra' as it was once the glorious capital of Maratha empire and the centre of the Maratha awakening. The city is a fine blend of antiquity and modernity as it is booming with all corollaries of modernization and also retains the rich cultural heritage.

Pune or Punyanagari has had a glorious past of nearly 600 years. Deccan plateau, 2500 mts above sea level surrounded by hills valleys and historic forts later emerged as a district named PUNE. A small village inhabited by musicians and artists in 613 A.D. grew into the Deccan capital to rival Delhi. In 750 A.D., the Rashtrakut Dynasty ruled the Punewadi, now called Pune. (Poona to the old diehards). In 1856 the Pune - Mumbai rail track and the Khadakwasala dam in 1857 were constructed. Later on many colleges like the Deccan college, the College of Engineering and the Fergusson college were established. In 1857, the office of Meteorology was shifted from Shimla to Pune. The first textile mill was built in 1893 by Raja Bahadur Motilal Pittie.

Pune was home to some of the fiery personalities who wrote the eventful pages of India's freedom struggle. Mahatma Gandhi rightly said "Pune is a beehive of dedicated workers for a noble cause". At present Pune is the 7th ranking industrial metro of India. Kothrud has achieved a place in the Guinness book of world records for having the fastest urban growth rate.

Pune, located 559 meters above sea level and about 160 km from Mumbai is also known as mini Mumbai due to its proximity to the financial capital of India - Mumbai. It is one of the greenest cities in the country and enjoys the status of being a pensioner's paradise. Pune is the second most progressive city in Maharashtra.

Pune, the hub for manufacturing companies who had set up their manufacturing base in the city has now many companies from other sectors like the software sector and other services sectors like banking, insurance etc have also made their presence felt in the city. Pune has finally been able to shed its conservative image and has becoming a modern city with its shopping malls, multiplexes, family entertainment centers, and software parks.

Pune, the Oxford of the east, primarily due to the large number of quality education institutes in this city has students from all over India coming for studies in different streams of education. The availability of quality human capital is one of the reasons why some of the best software, services and manufacturing

94

'Ishanya'

Rapid Environment Impact Assessment

companies of India and other countries have their offices in this city. The city has annual take off of over 1 lac Graduates.

Pune city is cosmopolitan with a healthy mix of people from various parts of the country. The city has good connectivity with other cities specially Mumbai, which is connected by an express highway, reducing the travel time significantly. In the early seventies and eighties, Engineering and Manufacturing industry was the mainstay of economic activity here.

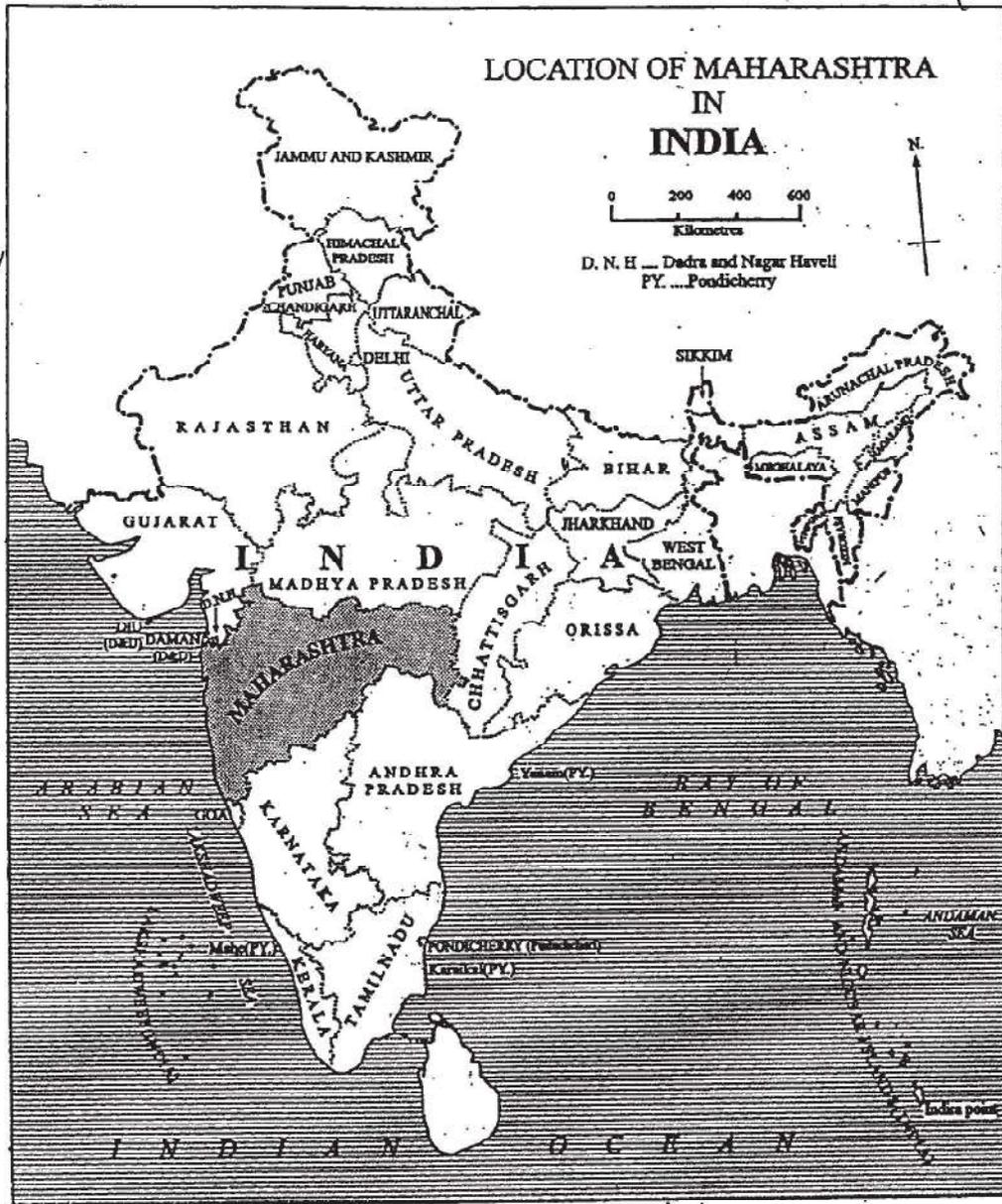
Until the 1960 Pune's socio-cultural life was dominated by intellectuals, writers, journalists, lawyers, theatre and film artistes, poets, painters, professors, research scholars, social reformers and socio-political activists. Today politician and industrialists, merchants and traders, builders and real estate agents, top management executives and technocrats, doctors and chartered accountants are in the fore front while artists and intellectuals take a back seat.

While Kirloskar, Bajaj, Garware, Firodia, Kalyani, Rathi, Pittie, Parkhe, Vaidya, Pudumjee, Sathe, Bafna, Lunkad, Navlakha, Shirke, Sangtani, Sancheti, Wadia etc have been in Pune for a long time some top industrial houses of India like Tata and Birla have invested huge capital in their units here. The multinationals like Philips, Sandvik, Alfa-lava, Atlas Copco, Elpro, S.K.F., K.S.B, Buckau Wolf have also identified Pune as one of the most coveted locales of the world.

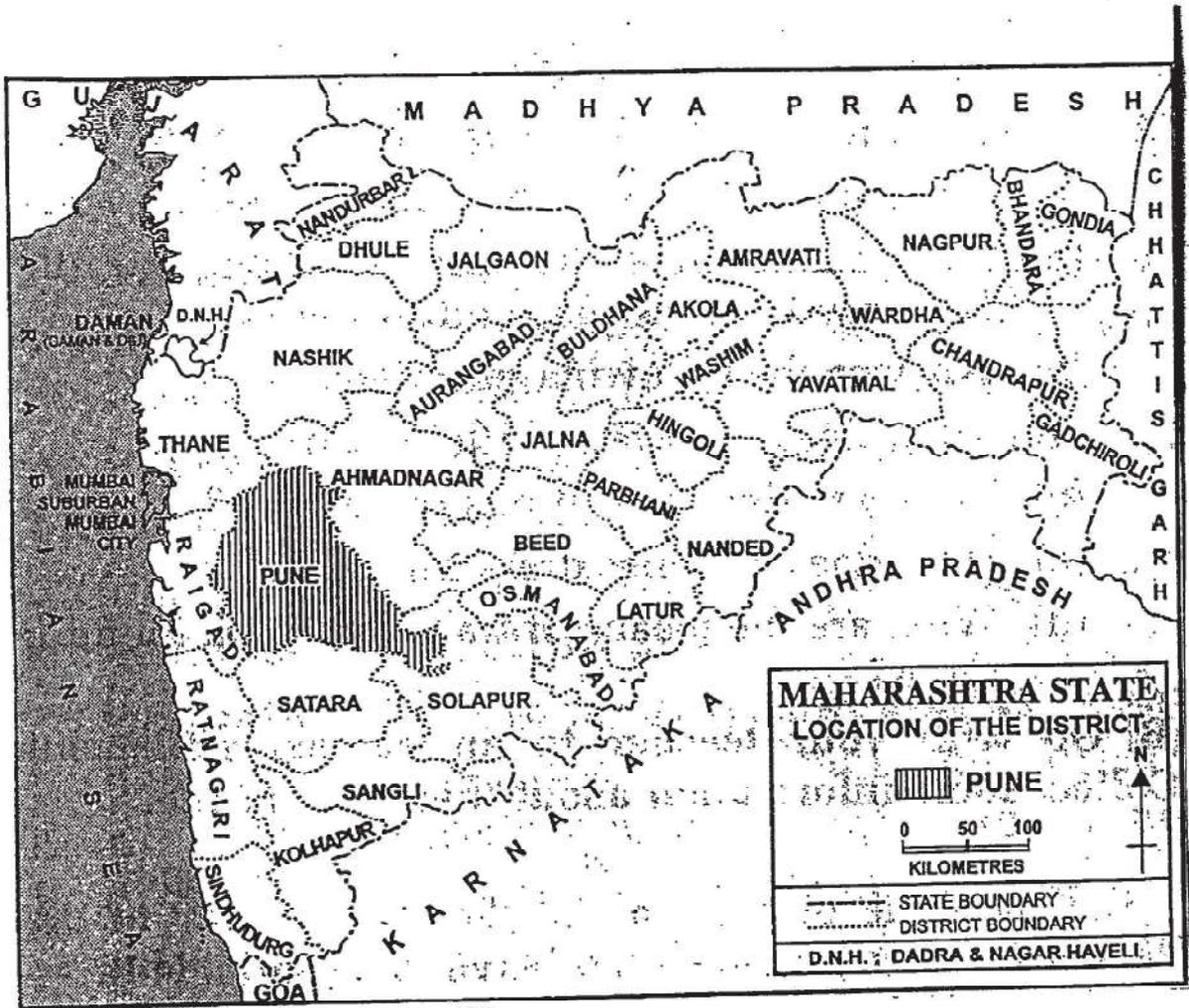
Upcoming industries like Finolex, Thermax, Formica, Indian Card Clothing, Kirloskar, Cummins, Morris Electronics, Siporex, Taru, Lalwani Chemicals, Venkateshwara Hatcheries have produced splendid performance by their amazingly fast rates of growth. No wonder that five among the present blue-chip shares of the stock markets of India belong to Pune.

Thus the scenario totally changed in the 1990 due to the boom in information technology and the city became the center for many IT&ITES companies. Because of many ambitious projects, demand for readymade commercial buildings increased resulting in a huge demand supply mismatch. The demand for build to suit projects in the emerging area and the outskirts increased leading to difficulty in categorizing them as Central Business Districts (CBD), Sub Central Business Districts and Emerging areas. The demand for quality realty estate in the city, in commercial residential, and in retail real estate has increased. The CBD areas of Pune are M.G.Road, Bund Garden Road and East Street. Most commercial developments traditionally were located in the CBD areas but with the expansion of the city, areas in the outskirts have been gaining prominenc. The emerging areas include Aundh, Senapati Bapat road, Kalyani Nagar and Deccan. Hinjewadi, Pimpri-Chinchwad and Kharadi are the software developing centers

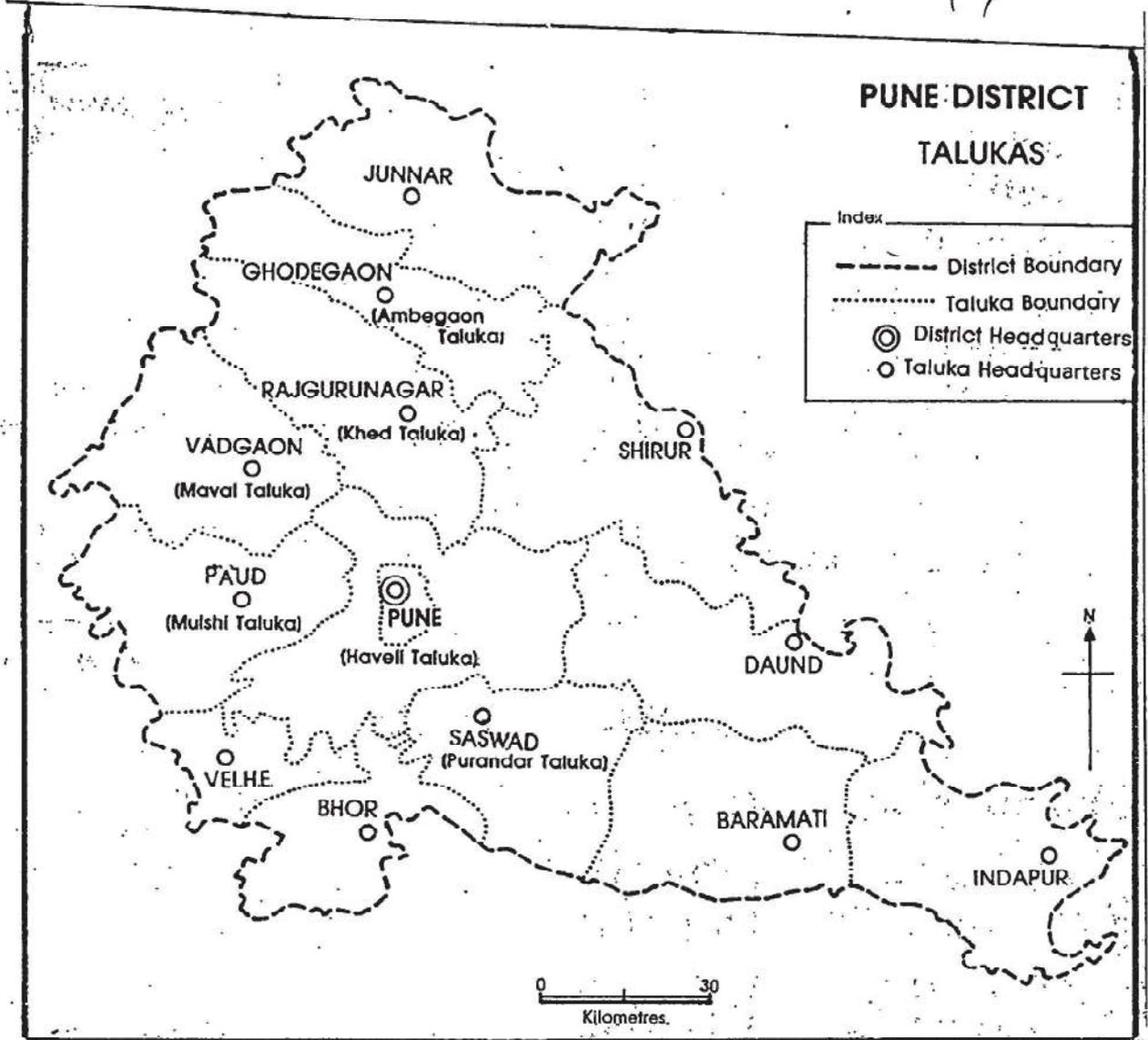
95

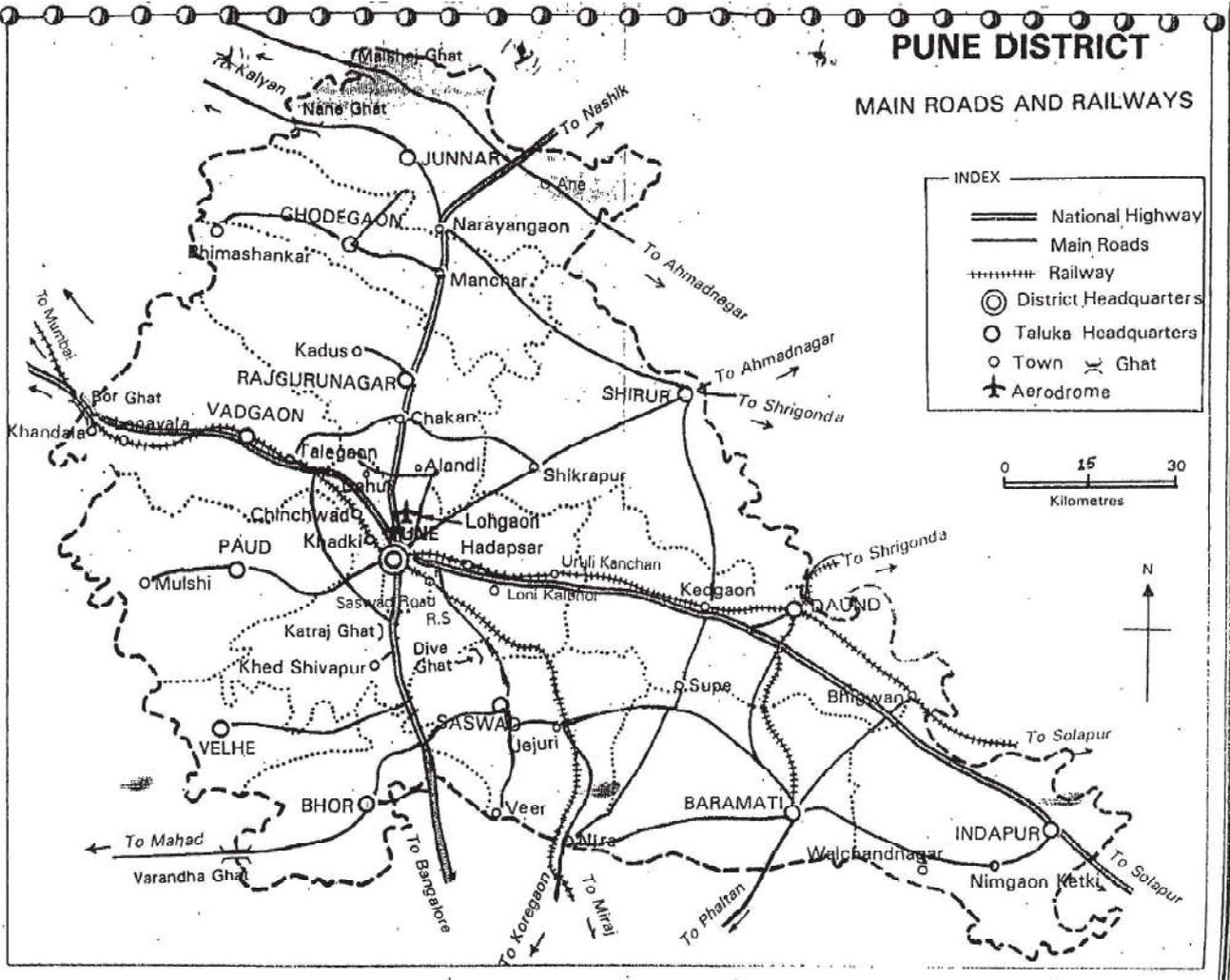


96



97





98

100

'Ishanya'

Rapid Environment Impact Assessment

Pune has now taken the lead in engineering industries, precision instruments machines and machine tools and especially in the automotive and electronics industries and it is bound to be one of the first four industrial cities in India. There are large number of small and medium scale equipment manufacturers who produce basic transistors, semiconductors, electronic components digital equipment process control, communication equipment, television sets, video equipment, computers and computer accessories, both software and hardware. The installation of a super computer in Pune is going to give a great impetus to the information technology.

Various communities have contributed solidly to enrich the industrial, commercial economic and social life of Pune.

In recent years people from different states and non resident Indians have chosen Pune as a city of their permanent settlement. They include retired employees of world organizations, multinational corporations, the merchant navy and aviation companies diplomats, bureaucrats, top brass of the armed force, industrialists, businessmen, top management executives academics of international repute, professional experts, top men from literature, films, theater and the performing arts.

The new Pune has a great potential of prosperity and fame in tomorrow's India. Pune's historical heritage has an infinitely increasing vintage value. Due to these forward and backward linkages to the future and the past, Pune will always enjoy a one up position among all the metros of India.

Pune has a glorious past an enviable present and a very promising future.

Today Pune with a population of more than 4 million has influenced the development of hinterland around it. Due to its industrial development, adjoining areas and the industrial township around areas of khadki, Pimpri Chinchwad etc. also developed rapidly. Mula and Mutha are the major rivers flow through the city and divide the city into two parts.

The Sankhya Vahani project of government of India covers 10 cities in the country connected over a wide band width network range (10GBPS) and Pune is one of them. The first phase of an exclusive software technology park set up at Hinjewadi very close to the city has an 80 mbps earth station set up by the software technology park of India (STPI). A 140 mbps earth station is being set up by Bharat Sanchar Nigam Ltd (BSNL) for the second phase of the park. Pune has a fiber penetration of 4.20 per sq km of area. Pune has a tele density of 14%. BSNL has laid a 580 route km fibre in the city. Vikram, close to Pune is the biggest and first earth station set up by Videsh Sanchar Nigam Ltd (VSNL)

101

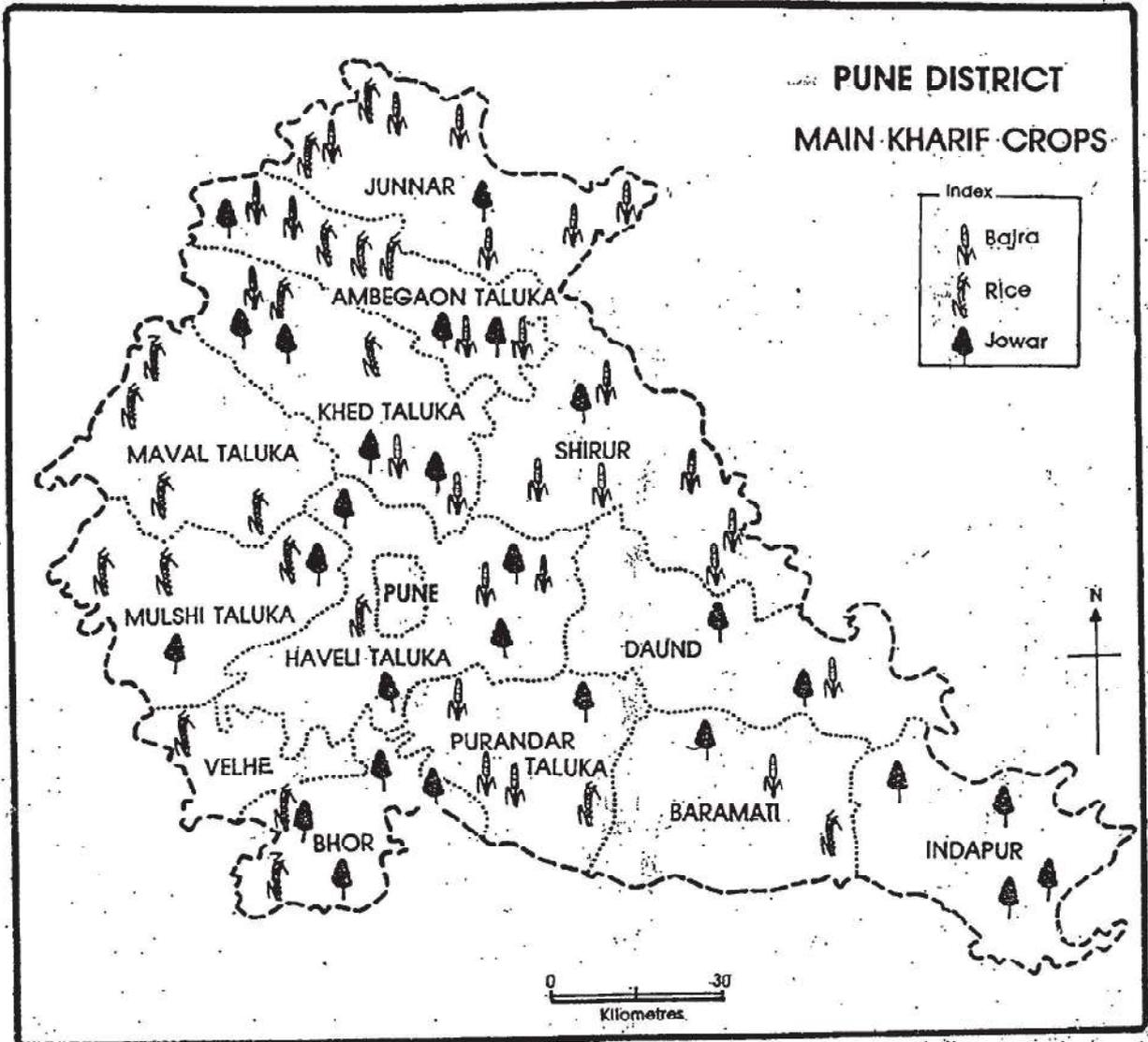
'Ishanya'

Rapid Environment Impact Assessment

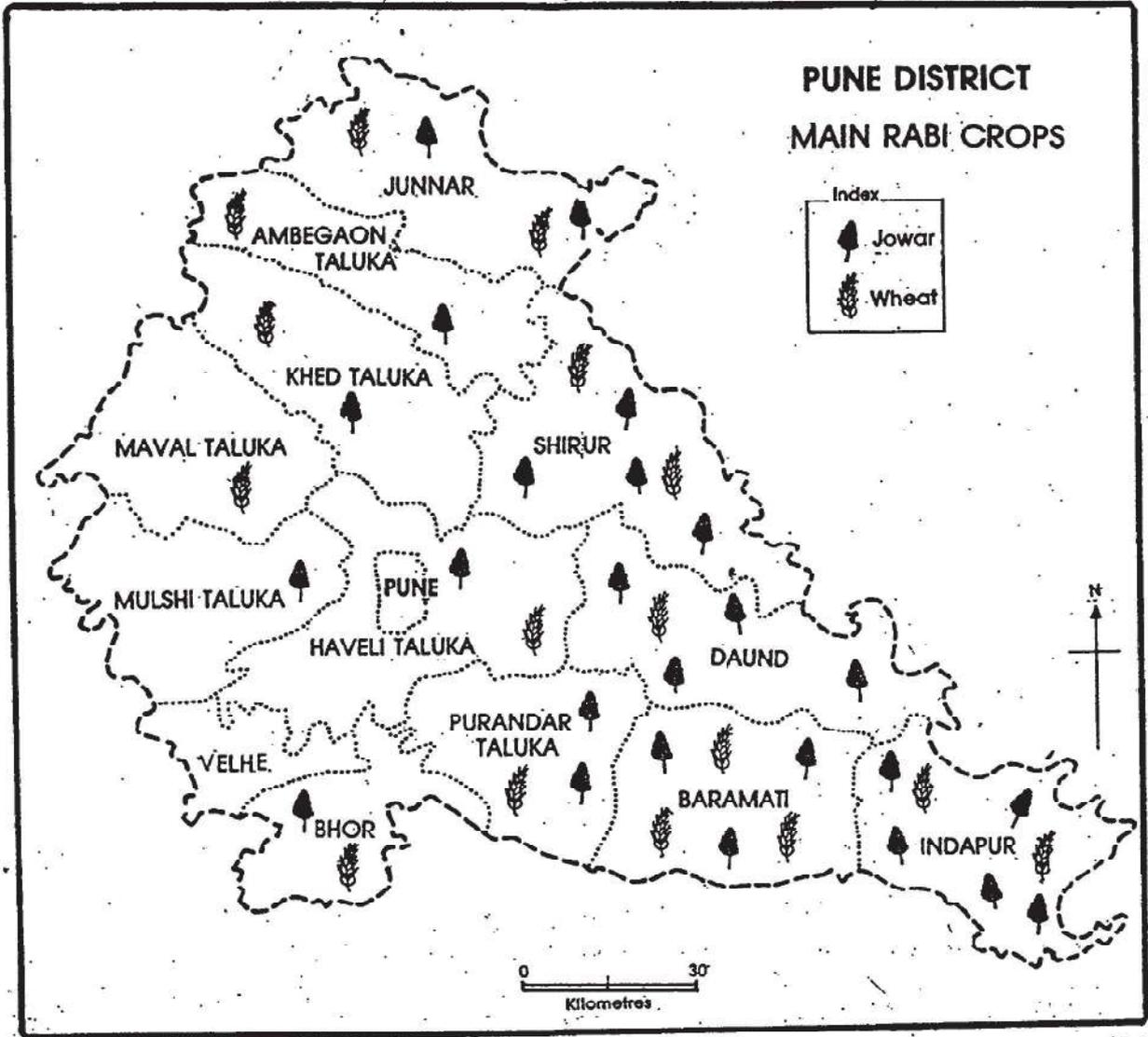
currently the nation's monopoly organisation for international telecommunication. It consists of two standard A antennae and an F3 antenna. This earth station carries the large chunk of VSNI.'S international traffic .

With many industries and software centers setting up their offices in the outskirts of the Pune city people are shifting their residence to the outskirts also High rise apartments and the idea of staying in large developments with amenities that enhance the life style and cater to the security concerns is finding favor with the people. Also the number of educational institutes is increasing with a supersonic speed and along with it the need for their residence. As many of the students are foreign nationals and also from different parts of India, the student community has taken the city by storm .Hence the need for buildings and indirectly here comes the work of the shopping mall which facilitates the customers' needs and their satisfaction. The situation in commercial real estate market started improving with the entry of many new companies showing interest in Pune. Development in Pune is taking place in the suburbs. The establishment of employment centers on the outskirts has lead to the development of houses in close proximity to them and thus leading to tremendous development Real estate developers are promoting several shopping malls, which combine shopping, professional offices and entertainment under one roof.

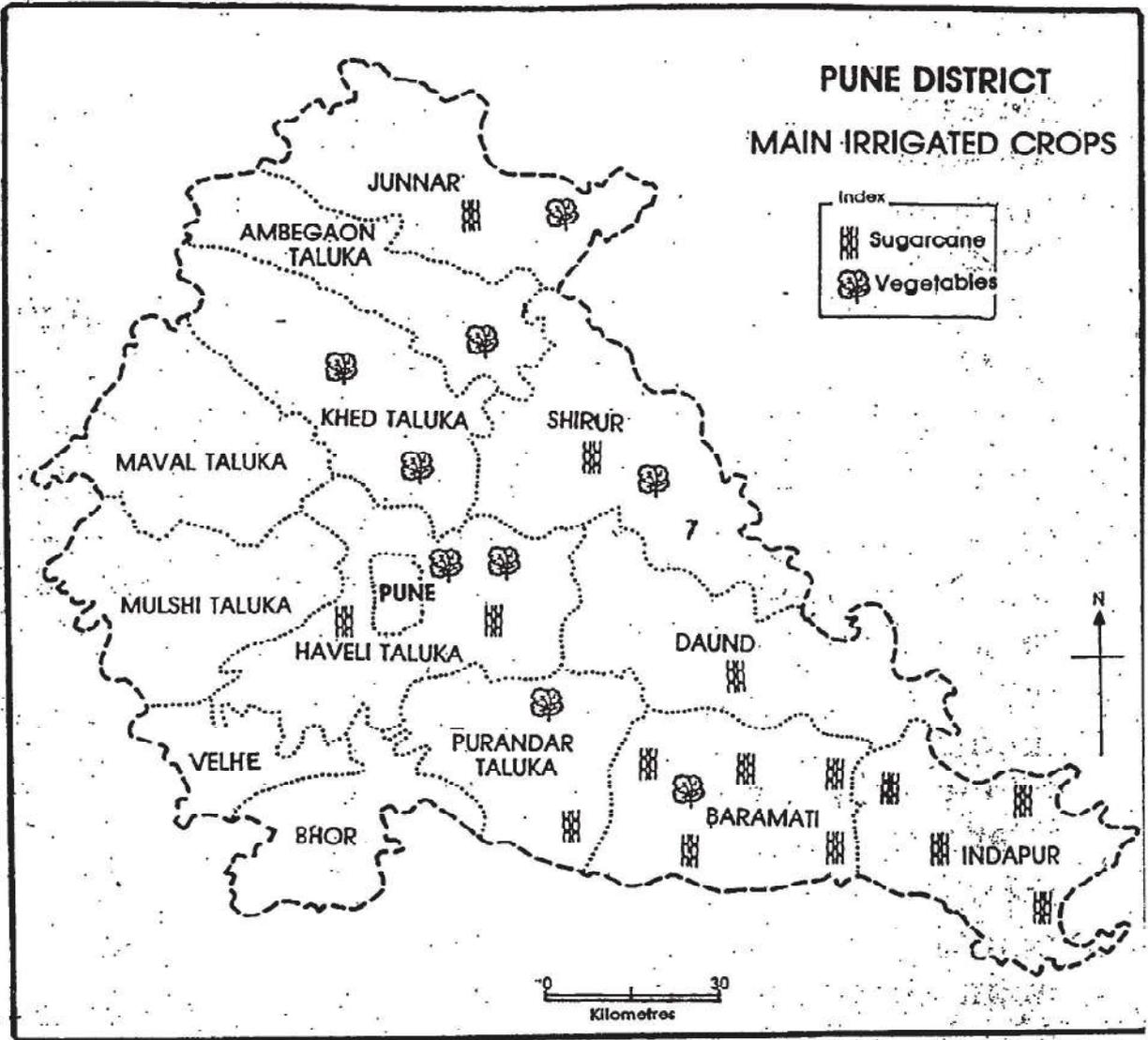
102



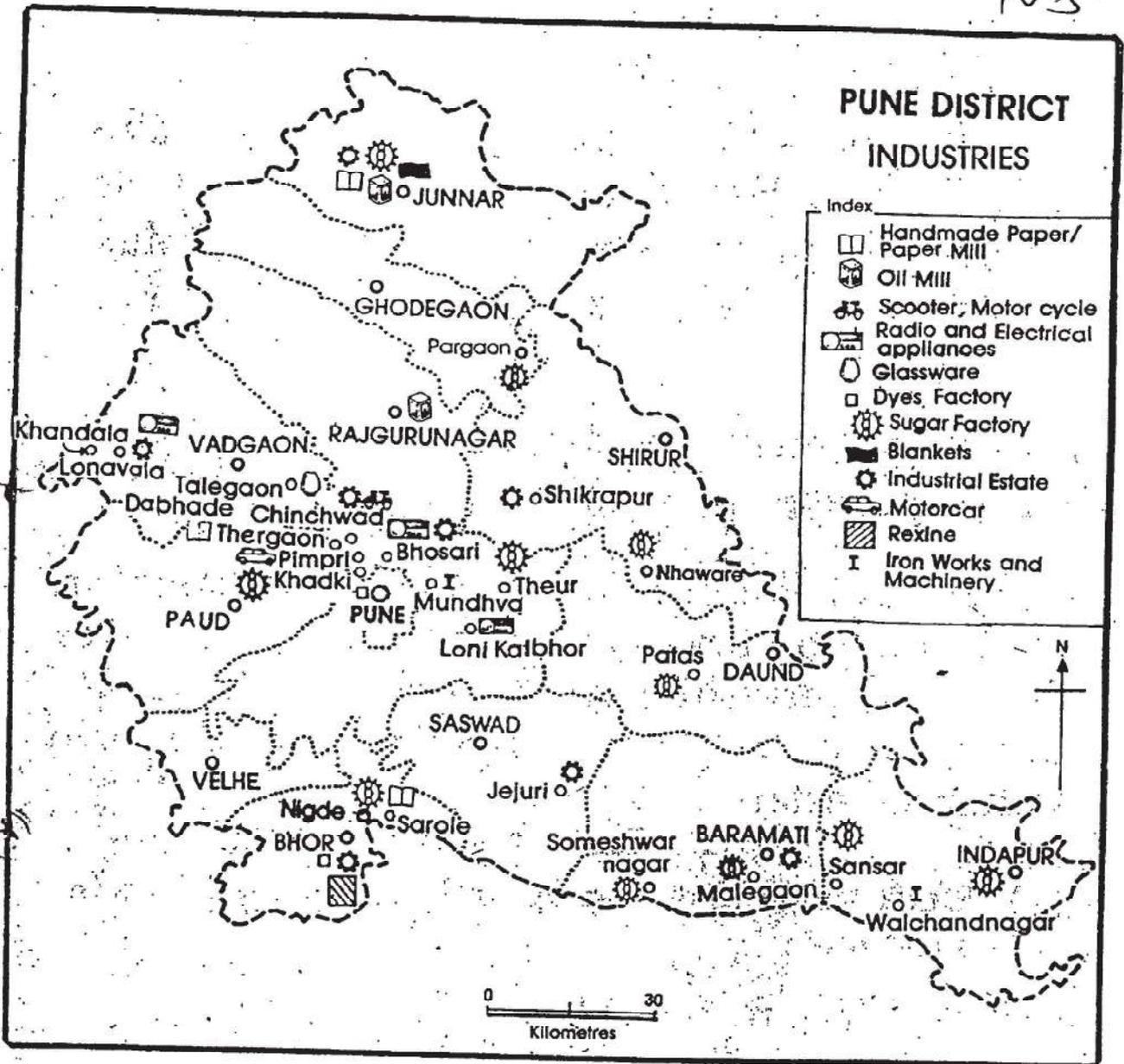
103



104



103-

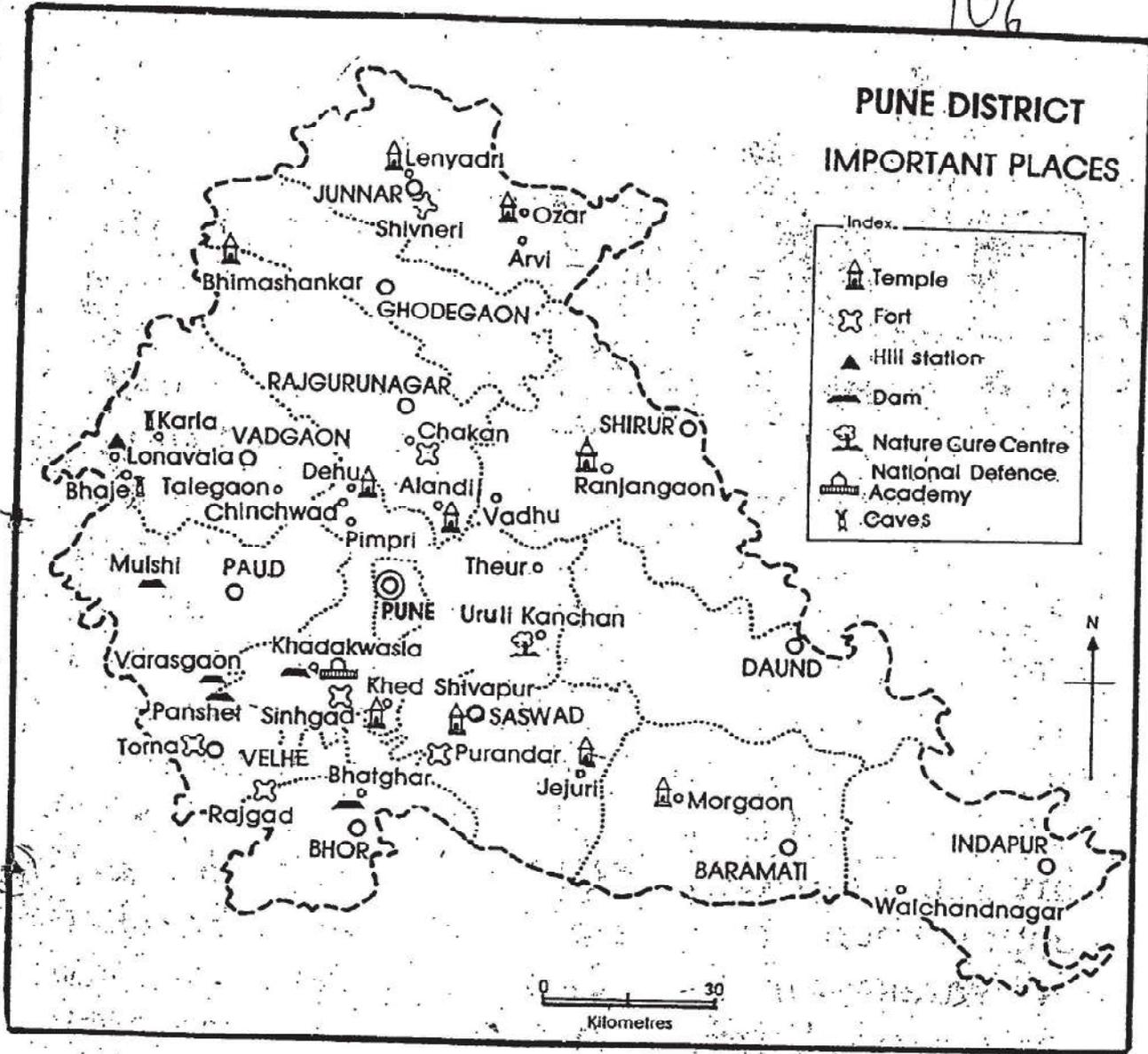


106

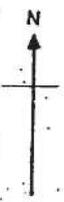
PUNE DISTRICT IMPORTANT PLACES

Index

-  Temple
-  Fort
-  Hill station
-  Dam
-  Nature Cure Centre
-  National Defence Academy
-  Caves



0 30
Kilometres



107



'Ishanya'

Rapid Environment Impact Assessment

2.0 PROJECT HIGHLIGHTS

2.1 PROJECT BRIEF.

Deepak Fertilisers and Petrochemicals Corporation Limited (DFPCL) is a multi-product having its diverse product range especially in the petrochemicals and fertiliser segment and also market leader in most of its businesses. It has multi plants located at Taloja. The company has intrinsic strength, balancing product portfolio and strength of sustainability. In the process of optimizing the existing assets and taking the advantage of its strength, the company decided to utilize the investment made in procurement of FSI [land] at Pune.

Keeping in view the location, the financial position of the company and the optimal usage of the land and after examining the various options like educational institutes, commercial offices, software parks, healthcare facilities, shopping mall etc, it decided to go for speciality mall relating to interior and exterior products and services in completing the house and other construction area for usage.

In India construction is the second largest economic activity after agriculture, Construction investment accounts for nearly 11 percent of the GDP and nearly 50 percent of the GFCP. The Indian construction industry is broadly divided into 3 segments namely infrastructure, industrial segment and the housing and commercial segment.

The demand for interiors and exteriors of various items is going up due to the following reasons

01. The construction line is developing in a rapid pace (housing units, other buildings, bridges, flyovers etc)
02. Increase in the number of nuclear families.
03. The aesthetic sense of the public has increased tremendously. The younger generations have a taste, buying capacity, and assisted by easy financing loans they go in for either renovation of their old houses or go in for new ones. Also commercial complexes including offices, healthcare centers, hotels etc are laying stress on their interiors with taste.

And here comes the role of a shopping mall a speciality mall catering to the needs of the public and making shopping pleasurable, stress free, economic, time saving and satisfactory.

108

'Ishanya'

Rapid Environment Impact Assessment

A primary survey on week days and weekends, in five locations in Pune city, where customer segment was similar to one being targeted at, was surveyed for the potential customers. The survey provided an insight into the perception of the customer expectations; facilities desired and potential trade mix and tenant profile. A secondary survey was carried out among key selected retailers, high street retailers of Pune and certain key personalities to get an insight into their future plans and expectations. Finally a decision was taken to set up a speciality mall catering to the needs of the construction industry.

The issue was also discussed with Architects and interior designers in India. The home owners were receptive to this concept with their buying decision solely depending on price discounts and range, with entertainment emerging as a preference and outlets for other segment an added advantage.

The retailers were receptive, with pricing of the mall to be justifiable to his business, preferring buying of retail outlets in the mall to leasing, Retailers preferred to have 3-4 competitors in their segment of business for the availability of wide choice for their customers, and a demand for providing services of transportation of goods and their storage.

The Manufacturers were receptive to the idea with preference for buying the property, and keen on selling "touch and feel" products.

The design review was done on the basis of the potential trades feasible for the mall and the tenants profile of that trade. The review was done by clustering of the trade activities and providing linkages to them. The space demarcation was done as per the customer desired movement inside the mall. The design review also looked at the traffic circulation i.e. pedestrian, traffic and goods movement. The design looked at aspects like design effectiveness and efficiency, leaseable area calculation space programming, demarcation of space for tenants, communication design.

A conclusion was reached of such a mall which would help clients of Architects and interior designers. The Indian institute of Architect and the Indian Institute of Interior Designers have agreed to be conceptual partners of the mall.

Deepak Fertilisers and Petrochemicals Corporation Ltd. proposes to set up a Speciality mall on Airport road Yerawada, Pune. The land parcel admeasures 367,678 sq. ft. The site is located along the airport road. It is well connected to other locations. It is a progressively growing area, where a lot of residential, commercial and retail developments are happening in the areas surrounding the proposed site. The site is fairly leveled and the compound wall is constructed on all four sides with guarded entrance gates.

109

'Ishanya'

Rapid Environment Impact Assessment

2.2 PUNE - KEY FACTS

Population	3.7 mn	
Area	458 Sq Km	
Population density (per sq km)	8078	
Temperature range	Winter	8C-25 C
	Summer	22C-41C
Average rainfall	680 mm	
Green cover percentage	40	
Languages	Marathi, English, Hindi	
Accessibility	Air(direct flights)	Mumbai,Delhi Bangalore, Ahmedabad, Panaji.
	Rail	Mumbai,Delhi Bangalore , Chennai Ahmedabad,Kochi, Hyderabad,Panaji

The mall will cater to the need of the construction fraternity and will house retailers, manufacturers, and architects etc who are directly or indirectly related to the construction industry in India. It will be the first of its kind to give a one stop solution to the construction industry.

Mall especially Speciality mall is a new concept. Points to be considered include ensuring smooth movement of materials and men, adequate and safe space for parking making purchasing enjoyable and memorable. Market survey and soft marketing exercise indicate high level of business and desire of tenants and ultimate buyers to use the Mall.

Traditionally the materials for interiors and exteriors are available in clusters in different parts of the city. So the buyer has to go to different parts, sometimes the approaches being difficult with hardly any parking spaces and even the ambiance of these clusters not being up to the mark. Generally these clusters have been the domain of the male .In these clusters the female housewife [house interior now being their forte] is not comfortable. This brings lot of stress to the buyers during procurement.

Usually in the construction of buildings, concrete construction takes very little time. But converting this into a home is a very tedious and time consuming job requiring interior and exterior job. There are no ready reckoner for this as they are

110

'Ishanya'

Rapid Environment Impact Assessment

procured only twice or thrice in a life time. Reliable and reasonable source for procurement of these items are required as these purchases are of high value and durable items.

Generally construction items are available in clusters spread almost all over the town. The cluster of electrical items may be at one place, the tiles at another place, kitchen items at still other place and so on. So to complete the interiors one may have to visit a number of places and still they may not get the right choice and to their satisfaction. The concept of speciality mall is to create these things at one place and ensure product reliability and helping in identifying everything at one place without much problem.

Thus the problem of the young, generally employed couples who are main clients are minimized. This one stop shopping is a boon in terms of variety, reliability of product quality, reasonability of prices, finalizing products in time, meeting customer requirement and expectations and ensuring enjoyable stress free completion of project.

In addition to retailing, there would be offices for Architects, Interior decorators, housing finance, logistic persons, service providers.

Thus putting all under one roof and providing all facilities (work of the mall) like parking, and appropriate ambiance, attracts more customers and coupled with right pricing, on the spot financing facilities, availability of logistics and other facilities would make shopping and purchases enjoyable, stress free and memorable. A lot of time and money is saved as the mall will provide all information, and facilities to buy and transport. Even customers from places which are at 4 to 5 hrs drive may frequent these malls. This necessitates the need for good eating joints, washing facility, and entertainment avenues. If the mall provides international brands and puts excellent development center to demonstrate combination of various articles used in interior and exterior completion then it will be frequented even by customers living in the metropolitan and large towns.

The site is well connected to the old city of Pune, the railway station residential pockets and business districts, the airport etc. The lack of an international airport at Pune and not a very good number of daily domestic air flights are a few disadvantageous points. An international airport is proposed at Chakan near Pune.

Two main railway stations - Shivajinagar railway station and Pune railway station link all major cities in India. Six intercity trains run between Bombay and Pune besides other mail and express trains.

'Ishanya'

Rapid Environment Impact Assessment

Mumbai is the closest international port to Pune, on the western coast of India, at a distance of 163 kms.

2.3 PROJECT SETTING

The proposed site for the project is gifted by many advantages such as availability of power, adequate and reliable water resource, good communication system, the gentle slope of the land assisting in control of erosion and drainage of storm and drain water by gravity, the soil quality suitable for the green movement and thus assisting to serve as lungs and in landscaping. The site does not involve forest land neither does it come in high flood zones, CRZ or in sensitive environment fragile zone

The total area under consideration is 10 acres. The project is 'Ishanya', the largest mall in India catering to the construction business. The project promoted by DFPCL will be an integrated product and display center covering the spectrum of construction and interior industry. This project will be an effort to bridge the gap between knowledge, availability and application of right materials and techniques for creation of efficient living, work and recreation environment.

The site located on the Airport Road has two approaches, an internal approach from Deepak Fertilisers & Petrochemicals Corporation Ltd. Office Complex and an external one from an 18 m wide road. The plot measuring 10 acres has connectivity with the different parts of Pune city with a new bridge across the river linking Koregoan Park and Airport road. Kalyaninagar, where many international companies are located is only a 5 minute drive from the site. Opposite the site is the 18-hole international standard golf course. The project covering 10 acres of land admeasures approximately 400,000 sq .ft. of rental space, divided in Anchor Stores. Electronics Area, Kund 2 Showrooms. Bazar. Kund Block, Other areas (Foyer and Exhibition spaces, Coffee shops) and Convention Center. A huge basement /stilt admcaasuring app 200,000 sq.ft. is for warehouses car parking and services The trade area ,convention center and exhibition spaces and cafetaria are total of 406500 sq ft spread over 4 floors.

'Ishanya'

Rapid Environment Impact Assessment

2.4 AREA DISTRIBUTION

2.4.1 Table of Area Statement.

Description	Area (sq ft)
Total area of the plot	450,000 (10 acres) ✓
Permissible built up area	450,000
Proposed area for shopping mall	406500
Number of floors	1 + 3
Basement	200,000

2.4.2 Detail Area Distribution

The available built up spaces on different floors and the distribution of non built up spaces are given in table

Blocks	Ground Floor		First Floor	
	Area SQ M	Area SQ FT	Area SQ M	Area SQ FT
Anchor Stores	3358.78 ✓	36153.91	3415.25 ✓	36761.75
Electronics	3256.13 ✓	35048.98	2602.60 ✓	28014.39
Showroom 1	2242.88 ✓	24142.36	1803.73 ✓	19415.35
Entrance Block	1582.02 ✓	17028.86	603.50 ✓	6496.11
Bazaar	1088.70 ✓	11718.77	645.11 ✓	6943.96
Kund	1105.61 ✓	11900.79	888.50 ✓	9563.81
Total Retail Area	12634.12 ✓	135993.67	9958.69 ✓	107195.37
Other Area	0	0	0	0
Street	0	0	0	0
Convention Centre	0	0	0	0
Grand Total	12634.12	135993.67	9958.69	107195.37

113

'Ishanya'

Rapid Environment Impact Assessment

Blocks	Second Floor		Third Floor	
	Area SQ M	Area SQ FT	Area SQ M	Area SQ FT
Anchor Stores	3444.77 ✓	37079.50	0	0
Electronics	2553.87 ✓	27489.86	1227.82 ✓	13216.26
Showroom 1	1803.73 ✓	19415.35	1803.73 ✓	19415.34
Entrance Block	603.50 ✓	6496.11	0	0
Bazaar	0	0	0	0
Kund	140.59 ✓	0	0	0
Total Retail Area	8546.46 ✓	91994.13	3031.55 ✓	32631.60
Other Area	0	0	0	0
Street	0	0	0	0
Convention Centre	0	0	0	0
Grand Total	8546.46	91994.13	3031.55	32631.60

Blocks	Total Area	
	Area SQ M	Area SQ FT
Anchor Stores	10218.80 ✓	109995.16
Electronics	9640.42 ✓	103769.49
Showroom 1	7654.07 ✓	82388.40
Entrance Block	2789.03 ✓	30021.08
Bazaar 5000	1733.81 ✓	18662.73
Kund	2134.70 ✓	21464.60
Total Retail Area	34170.83 ✓	367814.77

114

'Ishanya'

Rapid Environment Impact Assessment

Blocks	Total Area	
	Area SQ M	Area SQ FT
Other Area	0	0
Street	0	0
Convention Centre	0	0
Grand Total	34170.83	367814.77

2.4.3 Distribution of Non Built up spaces

Sr. No.	Space	Total Area	
		SQ M	SQ FT
01	Landscape area		
a	Water body	2425.35	26106.47
b	Axis	1644.97	17706.46
c	Paving	9064.96	97575.23
d	Open Air Theatre	901.44	9703.10
	Softscape	3256.84	35056.63
2	Stilt / Basement	19575.73	210713.20

While arriving at the conclusion regarding the total development the following parameters were considered

01. Size of the current trading in India, with special reference to Pune and the neighbouring cities.
02. Current shopping areas/modes for these respective trades
03. Potential spin off to Urban Spaces
04. Demand for each category in the mall
05. Estimated area and rental for each trading category
06. Estimated revenue from each trading category.
07. Determination of the positioning of the mall.

115

'Ishanya'

Rapid Environment Impact Assessment

2.4.4 Specialty Mall – The need of the Hour

The needs of the construction and interior industry are met with till date in a small scale as India has no mall dedicated to the construction and interior industry. Hence there are no role models and we have only a few of these in the planning stages. Major organized retailers are setting up their shops in Pune with a preference for organized retailing by the people being clearly visible. At present there is no full fledged Mall development in Pune. As in other retail segments the population will be benefited from the construction mall.

Market survey and soft marketing exercises have indicated high level of business and the desire of tenants and ultimate buyers to use the malls. On the basis of the study a trade and tenant mix was proposed and rentals for each section of the mall were suggested. The gaps in the existing retailing activity and means to fulfill these gaps were identified, the formats which can be blueprinted in the urban spaces context were mapped, and the retailers who fall under these formats were identified. The upcoming retail developments are shown in table

Name of the Mall	Suma Shilp	Pittie	International Convention Centre	Koncord
Location	Erandwane	Sassoon Road	Senapati Bapat Road	Bund Garden Road
Area (sq. ft.)	350,000	600,000	400,000	240,000
Services offered	Shopping Food Court Entertainment	Shopping Food Court Entertainment	Shopping Food Court Entertainment	Shopping Food Court Entertainment
Key Features	4 screen multiplex Double basement car parking Multi cuisine food courts Speciality restaurant	Terrace parking(2 vehicle lifts provided) Glass capsule lifts along with elevators Roman architectural design concepts used in design Bowling alley Video games arcade Pool Tables	100,000 sq ft single floor plate Multi level car parks – 1000 Excellent frontage International mall management	Food Court Shopping Entertainment

116

'Ishanya'

Rapid Environment Impact Assessment

Ishanya will be a mall dedicated to a niche segment viz those who are planning to do up the interiors or exteriors of their homes /offices the outlets that the mall will have is:

No	Particulars
01	Building material-Paints Ceramics etc.
02	Furniture (Home/Office)
03	Furnishing/Fabric-Blinds &Awnings
04	Pipes, Fittings& Fixtures, Hardware-Electrical Fixtures
05	Kitchen &Bathroom Products -Kitchen appliances, Tiles
06	Consumer Durables (White& Brown goods)—Television. Refrigerators, etc
07	Lighting & Accessories
08	Office Equipment—Computer, Fax, Machines
09	Others—Lifts & Escalators , Insulations, Air Conditioning , Metalwork etc.

Besides there will be support outlets such as eating joints and coffee shops, pharmacy, design studio, banks, travel and shipping facilities etc.

2.4.5 Other Facilities

Facilities

These include offices for Architects, consultants, developers and all related services provider, art and sculpture galleries, multipurpose halls for training centers cafeterias, interactive material resources centre would be important features. Informal meeting spaces would be created for healthy interaction between professionals to facilitate trade and quick decision making. Uninterrupted electricity will be provided by standby generators. Drinking water will be supplied by Pune Municipal Corporation's water supply department but arrangements would also be made to exploit the ground water available on site for gardening, firefighting and washing purpose

117

'Ishanya'

Rapid Environment Impact Assessment

Car parking covered

There would be a number of visitors specially on weekends. Therefore easy and comfortable parking would be provided at the basement and stilt level free of cost. Load, unloading platforms for movement of goods sold in the mall and separate parking bays for transport of vehicles will be provided for.

Movement of material.

While planning the circulation of the mall a segregation of humans and material traffic should be taken into consideration Careful handling of both delicate and bulky material should be taken note of .The delivery of building materials and products should be smooth safe and quick The individual trader takes the responsibility of quality but for checking purpose and temporary storage purpose space available in the basement would be provided. The warehouse space available in the basement can also be hired for longer duration.

The comfortable movement of the customers to visit different shops ,cafeterias and other interaction spaces should be taken into consideration while considering the lay out and planning of the speciality. The basement could be used for bulky storage and uninterrupted supply of material .The process of billing, dispatch and delivery will be the responsibility of the individual shop but for providing best services to the customers common arrangements with carrying and forwarding agencies, good transport companies could be worked out.

The mall will be different from the traditional channels like stores, sales representatives and portals as a design and development center will be its integral part. The advantages of the malls will be that a host of building materials, products and services will be available under one roof and the customers selection can be mixed and matched .Individual and corporate customers of architects, interior designers and other professionals could make speedy ,fool proof material selection Utilising the mall and placing bulk orders, the developers and contractors could get discounts. The boring and time consuming process of decision making can be enhanced by a computer aided interaction center.

Mall upkeep

A professional mall management agency which would look after the day to day operational affairs of the mall and also the maintenance, property taxes etc is necessary. This agency will shoulder the responsibility of the mall up keep to the satisfaction of both the customer and the retailer. The agency would also shoulder the responsibility of the control system and security at the mall. If necessary, subcontracting of the tasks can also be done by the agency.

118

'Ishanya'

Rapid Environment Impact Assessment

The tenants would be sharing open to the sky and covered spaces. The water body, landscape area, open-air theatre, etc will have to be taken care of. The customers will have to be kept in good spirit by arranging special programmes on special occasions, weekends etc. Right trade- tenant mix has to be maintained.

119

'Ishanya'

Rapid Environment Impact Assessment

3.0 SEWAGE TREATMENT FACILITY

3.1 Introduction

In order to take care of the waste sewage generated from the complex Ishanya shall have a full fledged STP facility to treat the sewage as per the standards laid down in this regard and re use part of the water as make up water for the central Air conditioning and also for toilet flushings etc.

3.2 Sewage Treatment Plant

It is proposed to install a sewage Treatment Plant of 3,00,000 Liters capacity to recover reusable water of quality, suitable for use as make up water in the cooling towers of the Air-Conditioning System, Gardening and Generating cooling system of the hotel.

The process proposed to be adopted is the extended aeration and contact stabilization by activated sludge recirculation, settling through clarifier and sterilization by chlorination. Sewage Treatment Plant (STP) shall be modular design with state of art Technology to treat Raw Sewage and deliver clear effluent for reuse.

3.2.1 Design Data

Raw Sewage:

The average analysis of the raw sewage is expected to be as follows:

The reacted effluent shall be judged by its suitability as make up water for cooling towers, gardening and flushing and shall have an average concentration not exceeding the following:

WASTE WATER CHARACTERISTICS

PARAMETER	UNITS	IN	OUT
Nature of waste water	Domestic Sewage		
Avg daily flow	300KL/day		
PH	----	6-8.5	7-7.5
Suspended Solids	PPM	200-300 Mg/lit	<50
BOD 5	PPM	200-350 MG/lit	<20
COD	PPM	500-700 MG/lit	<150
Odour	----	Medium to Strong	NIL
Colour	----	Grace Brown	Colourless
Oil&Grease	----	Up to 20 mg /lit	<10 mg /lit

120

'Ishanya'

Rapid Environment Impact Assessment

3.3 Process Description

The raw sewage will be received by gravity from vertical stacks of the building and pumped from the sewage collection tank located at the basement of the building.

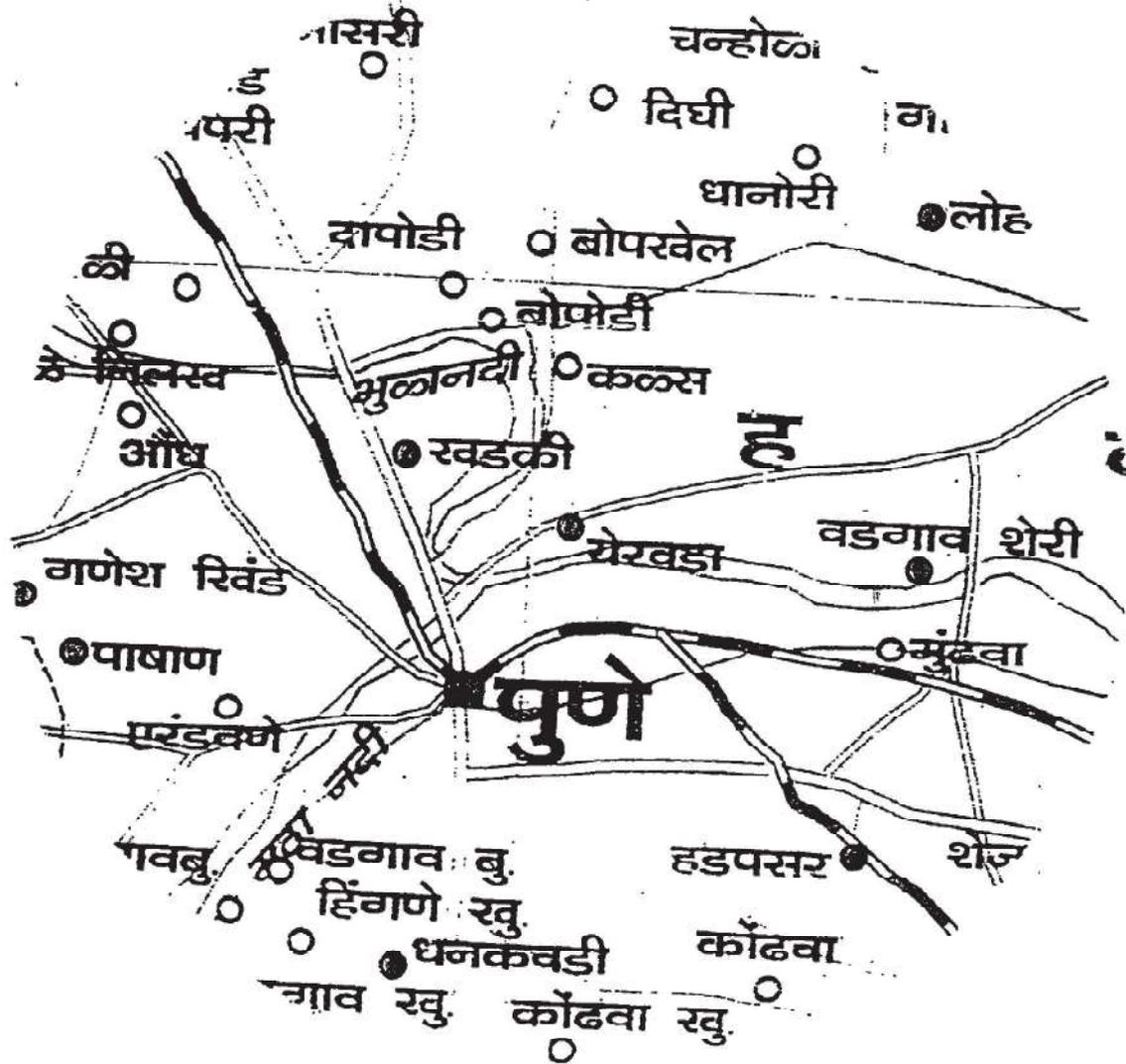
The raw sewage will enter a bar screen chamber with bypass arrangements for discharge of sewage, sludge or other wastes to the municipal sewer. The raw sewage will then enter the contact chamber with aeration grids. The aerated liquid will pass through the clarifier tank from which the return sludge will be pumped back continuously to the screen chamber for re entering the contract chamber or by passed to the municipal sewer if required. The settled effluent from the clarifier will now flow into a digestion chamber after which the same will be allowed to pass through the stabilization chamber.

From the stabilization chamber, the overflow which will have been dosed with alum will pass to a flocculator to improve still further the clarity of the water. The overflow from the flocculator will be collected through the launders and collected in a clarified water storage tank. From this tank, water will be drawn by pumps and will pass through an activated carbon / sand pressure filter. The filtered water will then be pumped through a softener and dosed with chlorine and stored in a clear water reservoir from which the water feed pumps will pump it upto the cooling tower tank and other tanks as required located in the building. A pH adjustment unit for acid addition will be located just ahead of the tanks. The pressure sand filter backwash as well as the softener rinse waste will flow by gravity to the waste pump from where it will be pumped out to municipal sewer as required.

The sludge developed will have to be pumped out and disposed in tankers every 3 - 4 months.

Approximate space requirement for the sewerage treatment plant shall be 20 X 10 X 5 Mt. height

121



124

'Ishanya'

Rapid Environment Impact Assessment

4.0 BASELINE ENVIRONMENTAL STATUS AND IDENTIFICATION OF IMPACTS

4.1 Environmental Setting Of Site

The term "Environment" is defined under Section 2(a) of the Environment Protection Act (EPA) 1986 to include water, air, land, and interrelationship between water, air, land and human beings, other living creatures, plants, microorganisms and property.

These dimensions can broadly be grouped into Physical, social, aesthetic and economic.

Environment includes air, water, land aquatic and terrestrial flora and fauna, infrastructure; public services etc. Social Environment includes demography, community facilities and services, community characteristics, employment centers, commercial facilities serving the area, etc. Aesthetic environment includes existence of historical monuments, archaeological or architectural sites at and in the vicinity of industrial activity, scenic areas, vistas and natural landscape architectural character of present buildings etc.

Economic Environmental covers employment / unemployment levels, sources and levels of income, economic base of the area, land values land ownership etc.

It is necessary to examine environmental scenario before starting any industrial activity in order to determine the assimilative capacity of the environmental dimensions stated above.

As all the environmental dimensions may not be significantly affected by a particular industrial activity; it is necessary to identify the pertinent dimensions for studying in detail. in order to analyze the impact of the industrial activity on them:

For the present EIA study the physical dimensions of the environment such As site location and surrounding, topography, geography, air quality, micrometeorology, noise levels, water quality, land -use pattern and soil quality, terrestrial flora and fauna and all the other dimensions are considered. These environmental parameters are studied to establish an existing environmental scenario of an area covering 10km radius, which is considered as an impact area.

Survey of the present site was carried out for various parameters such air quality, water quality, soil characteristics etc. Similar data was collected from Government departments and other sources for various aspects such as land use pattern,

125

'Ishanya'

Rapid Environment Impact Assessment

micrometeorological data, flora fauna, air and water pollution levels in and around the study area etc.

This chapter gives brief introduction on the existing scenario of various environmental dimensions along – with the statistical data generated.

4.2 Air Environment

To assess the prevailing ambient air quality status, the area surrounding the project site is an indispensable part of environmental impact assessment studies. Superimposing the predicted impact of air pollution from the proposed site on the pre-project air quality status serving as the baseline helps us to derive the post-project status of air environment after commissioning and operation of the proposed development facility. The climatic conditions prevailing in and around the project site mainly control the transport and dispersion of air pollutants during different seasons.

The baseline study for air environment covered identification of specific air pollutants due to the proposed project that would exert significant impacts and assessed their existing levels in ambient air within the study area surrounding the project site, prior to the implementation of the project through systematic air quality surveillance programmed by a well designed ambient air quality monitoring network.

Micro meteorological data at and around project site during study period is also an essential requirement for proper interpretation of baseline air quality status. This data would also be useful for prediction of impacts on ambient air quality through mathematical models. The baseline status within the study area of 10 km radius distance from the site has been studied followed by ambient air quality survey along with meteorological data collection.

4.2.1 Air Quality

Air quality is represented generally in terms of concentration of Suspended Particulate Matter, Sulphur dioxide and Oxides of Nitrogen. A wide variety of sources contribute SPM in ambient air. Some of them are construction activities, vehicular emissions, industrial process emissions, dust storms etc.

It is generally observed that SPM levels are higher in dry weather i.e during summer and winter seasons. Dust storms generally do not occur. SPM concentrations are within permissible limits.

126

'Ishanya'

Rapid Environment Impact Assessment

Sulphur dioxide in atmosphere result from burning of sulphur containing fuels viz. coal, lignite, various types of oils etc. Higher concentration of SO₂ lead to acid rain affecting the flora whereas, they cause respiratory problem in human beings. Such incidences have not occurred in the past.

Oxides of nitrogen are emitted into the atmosphere by the process involving high temperature combustion. Exhaust gas from motor vehicles are also major sources of Nox. Nox plays an important role in formation of photochemical oxidants.

It is therefore necessary to monitor the ambient air quality in terms of above said parameters to establish the background air quality scenario and assess the impact of the mall on the scenario before undertaking any activity.

Ambient air monitoring was carried out in 10 stations within core and buffer zones of the proposed mall, during May 2005 to June 2005 representing Post Summer and pre monsoon season.

In view of the revision of the national Ambient Air quality Standards by Central Pollution Control Board ambient air quality stations were identified and monitored with high volume sampling apparatus.

4.2.2 Micro meteorology

The prevailing micrometeorology at project site plays a crucial role in transportation and dispersion of air pollutants released from the source. The persistence of the predominant wind direction and wind speed at the project site will decide the direction and extent of the air pollution impact zone. The principle variables which affect the micrometeorology are horizontal transport and dispersion (average wind speed and directions), convective transport and vertical mixing (atmospheric stability) and also topographical influences of the area.

Climatological Tables of Observations in India (1969-1980) published by Indian Meteorological Department (IMD) were used to obtain climatological normals for the region .Pune is the nearest meteorological observatory to the project site (approx 5 km aerial distance).

The 24 hourly windroses depicted in figure indicate the predominance of calm conditions and winds from east and west directions. Local prevailing wind pattern during the study period is in conformity with the climatological normal of the region and are mainly influenced by the changed topography and the Physical structures e.g. buildings and the monuments, towers and the tree cover etc.

127

'Ishanya'

Rapid Environment Impact Assessment

4.2.3 Ambient Air Quality Survey

The details of sampling location are presented in Table below. At all the monitoring locations SPM, RSPM, SO₂, NO_x, HC and CO were monitored on 24 hourly basis to enable the comparison with standards, stipulated by Central Pollution Control Board (CPCB) & were found to be within standards.

Ambient Air Sampling Location

Code	Monitoring Station	Direction	Aerial distance w.r.t site (approx in km)
01	Hadapsar	South East	6.0
02	Phursungi	South East	9.2
03	Wanawadi	South	6.5
04	Dhankawadi	South West	7.5
05	Wadgaon Sheri	East	5.5
06	Ganeshkhind	West	8.2
07	Pashan	West	7.9
08	Yerwada	Site	0
09	Lohegaon	North East	6.3
10	Khadki	North West	3.5

Ambient Air Quality Status

Code	SPM	RSPM	SO ₂	NO _x	HC	CO
01	102	45	27	14	2.4	0.39
02	69	27	17	08	1.0	0.20
03	86	30	11	09	2.0	0.30
04	98	20	16	04	1.5	0.25
05	42	28	12	05	1.1	0.21
06	86	25	16	09	2.1	0.29
07	82	23	13	06	1.8	0.25
08	72	22	11	07	1.1	0.23
09	68	26	12	07	2.1	0.25
10	64	22	11	05	1.5	0.28

All values in mg/NM³

128

'Ishanya'

Rapid Environment Impact Assessment

4.3 Noise Environment

Noise has various adverse effects on workers and their activities. The first and foremost effect of noise on workers exposed to high noise level over a long period of severe impulsive noise of short duration is 'loss of hearing'.

This effect is either temporary or permanent in nature upon the length and severity of noise exposure.

Other effects of noise are blood pressure, cardiovascular problems and ulcers. Some studies also point to noise related learning difficulties, reduced work efficiency, irritation, fatigue, increased accidents and errors and socially undesirable behavior.

Noise level is measured in terms of loudness of sound. Sound is form of energy that propagates through an elastic medium at a speed that is determined by the properties of that medium. Since loudness of sound is important to the effects of noise on people, dependence of loudness upon frequency must be taken into account in environmental noise assessments. Several methods have been developed by the researchers using the frequency spectrum of sound to arrive at the loudness index or the given sound. These methods are most complicated and time consuming than required for most of the situations therefore simplified techniques has been developed to account for the dependence upon frequency. This is done by the use of weighing filters in noise measuring instruments, which give direct reading of approximate loudness.

Most common weighing filters are called A,B,C frequency weightings are most commonly used for measurements are reported in dBA (A weighted decibels). Sometimes these units are reported as dB A or dB-A but dBA notation is most commonly used.

As the proposed project is entirely a new one noise level measurements were carried out using sound level meter of Pulsecho systems (Bombay) private limited make in nearby villages to establish there background levels.

Noise levels monitored at these locations were analyzed in tones of residual medium, Peak equivalent Daytime and Night time noise levels and are given below.

A study was conducted with a view to establish the baseline status of the environment with respect to the noise levels within the project site, surrounding population considering the land use pattern and other centres of human activities in the study area. The objective of noise survey was to assess the impact of noise generated by the existing activities and its impact on the human settlements. Noise

'Ishanya'

Rapid Environment Impact Assessment

129

levels in and around the project site, villages ,commercial areas and silence zones were measured using an integrated sound level meter.

4.3.1 Day and Night noise levels in the Study area

Equivalent noise levels Leq(Day) and Leq(Night) were monitored for few residential and silence zones and also at the proposed site. Equivalent Noise Level (Leq) is a scale for the measurement of long-term noise exposure and has been accepted by the International Organization for Standardisation for the measurement of hearing damage risk (ISO 1975) Leq(Day) and Leq(Night) measured at a few locations are given in Table below.

Day and night equivalent noise levels measured for residential ,commercial and silence zones ,are well within the standards prescribed by CPCB.

NATIONAL STANDARDS FOR AMBIENT NOISE

Area	Day Time Limit (dB)	Night Time Limit (dB)
1. Industrial	75	70
2. Commercial	65	55
3. Residential	55	45
4. Silence zone	50	40

Ambient Noise Monitoring Locations

Monitoring Station	Average Noise Level (dBA)	
	Day time	Noise time
Residential Area		
Hadapsar	59	53
Phursungi	56	48
Wanawadi	58	50
Dhankawadi	53	42
Ganeshkhind	59	50
Pashan	50	40
Yerwada site	55	42
Lohegaon	60	50
Khadki	56	49
Commercial Area		
Hadapsar	68	54

130

'Ishanya'

Rapid Environment Impact Assessment

Yerwada	64	50
Ganeshkhind	62	52
Silence Zone		
Sane Guruji Hospital	50	42
Yerwada Hospital	48	40
Ganeshkhind (School)	52	41

4.4 Water Environment

4.4.1 Water Balance

Water requirement for Ishanya Mall at Pune

No	Particulars	
01	Total Ground Area including shops & common areas	11,329 m ²
02	As per D.C. Rules occupancy to be considered is @ 3 m ² / person for ground floor sale areas	3,776 persons
03	Total floor area of 1, 2 & 3 rd floors comprising of Shops & Common areas	33,354 m ²
04	As per D.C. Rules occupancy to be considered is @ 6 m ² / person for upper floor sale areas	5,559 persons
	Therefore total population shall be	9,335 persons
	Considering a diversity factor 0.7 and load factor 0.7, total maximum population will workout to	4,574 persons
	Considering floating population of 10% of the above for drivers, security staff and miscellaneous total population to be considered shall be	5,000 persons /day

'Ishanya'

Rapid Environment Impact Assessment

131

PART I (WATER REQUIREMENT FOR THE POPULATION LOAD)

No		Water Requirement (in litre)
01	5000 persons x 45 liters /capita/day	225,000 Litres/day
02	Convention centre =450 seats x 15 Liters /seat	6,750 Litres/day
03	Amphitheatre = 350 seats x 15 Litres/Seat	5,250 Litres/day
04	General Drinking water requirement	15,000 Litres/day
05	Restaurant & cafeteria requirement @ 2500 Meals /day @ 5 Litres /meal (cooking & dishwashing)	37,500 Litres/day
	Total water requirement	289,500 Litres /day

PART-II (WATER REQUIREMENT FOR THE LANDSCAPING AND WATERBODIES)

No		
01	Soft Landscape Water requirement (4000 M2 @ 3 Litres/day)	12,000 Litres/day
02	Peripheral Landscape requirement for trees etc (2200M2 @ 5 Litres/day)	11,000 Litres/day
03	Water Body Make-up for approx. (700 M3 @ 2% for losses and makeup)	14,000 Litres/day
	Total Water Requirement	37,000 Litres/day

Therefore the total daily water requirement shall be

$$2,89,500 + 37,000 = 3,26,500 \text{ Litres/day}$$

Handwritten notes: 2,89,500 is circled. 3,26,500 is written next to the result. There is also a note "3,26,500 Liters" with an arrow pointing to the result.

PART-III (A.C.WATER MAKEUP)

A.C. Water Requirement

3,00,000 Litres/day

$$3,26,500 + 3,00,000 = 6,26,500 \text{ Litres per day}$$

Handwritten notes: 3,26,500 is written above the equation. 3,00,000 is written below it. The result 6,26,500 is underlined.

PART - IV OTHER REQUIREMENTS

Filter / Softening back wash

10,000 Litres/day.

From the above it is seen that if we recycle the quantity of waste water emanating from Part I which will be to the tune of 2.45 Lacs Litres/day it will be adequate to meet the partial balance requirement of part II, III & IV.

132

'Ishanya'

Rapid Environment Impact Assessment

For assessing the water environment surface and ground water resources within 10 km radius of the study area was collected and analysed for physico-chemical, metals and bacteriological parameters.

The source of water in the study area include the river Mula mutha just passing parallel to the southern part of the site study area.

The total useable recharge to the groundwater system is mainly due to the precipitation that infiltrates and a part of the agricultural return flow; however the agricultural return flow may not necessarily recharge the aquifer but helps in maintaining the higher degree of soil moisture there by reducing the total water requirement for crops within the natural watering cycle. The area falls within the pune region which receives nearly 600mm of rain per year. There is a general trend of groundwater flow which is observed to be in northwesterly direction. It is observed that the water table is only about 3-4 meters below ground level even with the most of the wells pumped continuously and could maintain the levels in summer season also. In the post monsoon period, the groundwater levels are just about 3-5 meter below ground level.

Presence of different organisms has been listed in standard publications according to increasing tropical levels in aquatic environment. Similarly, many organisms have been listed to favour certain physico-chemical conditions viz silicates for diatoms etc. Hence presence of certain groups is also indicative of trophic conditions.

Desmids and Diatoms indicate highly eutrophic conditions. Planktonic rotifers are usually abundant in fresh water. It is believed that when crustacean (copepoda, cladocera, ostracoda etc) and insects outnumber other groups, the situation reflects the enriched organic condition of water. Thus the presence of certain organisms helps in classifying water body in trophic levels in physico - chemical conditions.

Diversity of planktons depends on physico - chemical characteristics of water especially on trophic levels. In oligotrophic water diversity of plankton is high with the increasing levels of pollution such as mesotrophic and eutrophic condition diversity of planktons decreases.

The diversity is also susceptible to other parameters such as turbidity, colour and flow rate particularly in hilly rivers. Thus the results should be interpreted with caution. A widely accepted ecological concept is that communities with large number of species (i.e with high diversity) will have high stability that can resist adverse environmental factors. The maximum value of Shannon Weaver Index of phytoplankton for clean waters has been reported to be around 6, though it may

133

'Ishanya'

Rapid Environment Impact Assessment

differ slightly in different locations. Decrease in the value of index may be thus taken as indicator of pollution.

In order to evaluate baseline status of biological parameters in surface and groundwater within the study area, samples were collected for enumeration of phytoplankton and zooplankton which are the indicators of environmental stress. Phytoplankton population and species identified in different locations are given in Table below and phytoplanktons are recorded in four groups out of which Cyanophyceae, Bacillariophyceae and Chlorophyceae are the dominant species. The Shannon Weaver Diversity Index (SWDI) for phytoplankton in surface samples is found to indicate moderate productivity.

The data on zooplankton and species identified in surface and groundwater samples is presented in Table. Surface and groundwater samples collected over the entire project area show zooplankton population form in two major groups of which are indicated in the table given below.

134

'Ishanya'

Rapid Environment Impact Assessment

Sampling locations for water quality monitoring

Code	Locational Identity
Surface Water	
01	Mula-Mutha River
02	Mula River
Groundwater (Dug well/Bore well/Hand Pump)	
03	Hadapsar
04	Phursungi
05	Mundhwa Ghorpadi
06	Yerwada
07	Ganesh khind

Water Quality

Code	pH	Turbidity	Total Suspended Solids (NTU)	TDS mg/lit	Conductivity u g / cm.
01	8.0	2	6	410	620
02	8.2	3	5	378	600
03	8.1	3	3	816	1400
04	8.0	3	2	1022	1700
05	7.8	2	2	866	1300
06	7.6	2	2	786	1200
07	7.8	2	2	734	1100

Code	Alkalinity	Hardness	Calcium	Chloride	Sulphate	Sodium	Pottasium
01	185	227	110	41	23	18	6
02	167	202	107	34	28	15	5
03	369	477	150	139	38	25	3
04	218	477	267	140	40	35	5
05	253	442	289	160	40	30	3
06	257	434	267	105	38	25	6
07	252	323	107	99	40	30	7

135

'Ishanya'

Rapid Environment Impact Assessment

Code	Nitrate as N	DO	Cd	Cr	Cu	Pb	Fe	Total Coliform	Faecal Coliform
01	7	4.2	ND	0.01	ND	ND	ND	1594	452
02	6	4.8	ND	0.01	ND	ND	ND	1344	398
03	16	3.5	ND	ND	0.01	0.01	0.01	395	102
04	26	3.7	ND	ND	0.01	0.01	0.01	250	128
05	16	4.0	ND	ND	ND	ND	ND	ND	ND
06	17	4.2	ND	ND	ND	ND	ND	45	ND
07	21	3.9	ND	ND	ND	ND	ND	55	ND

* List of Plankton Species identified

	Group	Name of species
PHYTOPLANKTONS	Chlorophyceae	Oocystis, Coelartum, Truchaelomonas, Ankistrodesmus, Chlorella, Micractinum, Tetraedrom, Coelastrum, Chlorococcum, Scenedesmus
	Euglenophyceae	Euglena
	Cyanophyceae	Spirulina, Anacystis, Anabaena, Oscillatoria
	Bacillariophyceae	Nitzochia, Fragillaria, Synedra, Navicula
ZOOPLANKTONS	Rotifora	Brachicnus, Koratolla
	Copepoda	Nauplius

The surface water survey indicated the presence of the above planktons while they were absent in the ground water.

136

'Ishanya'

Rapid Environment Impact Assessment

4.5 Land Environment

The soil profile apparently has the same directional slope as that of the surface topography.

The soil here is Black alluvial soil .The weather is moderate type in this area .The temperature ranges from 15 degree C to 40.7 degree C with annual average rainfall.

The major crops grown in this area are rice, wheat, jowar, bajra, maize, ragi, peas, red gram, green gram, black gram and sugar cane.

4.5.1 Baseline status

Soil samples were collected within a radius of 10 km in the study area . Standard methods have been followed for the analysis of soil samples.

Various ecological cycles in rhizospheric zone of the plant depend upon micrological population. Soils contain a wide variety of microorganisms which include organic matter decomposers, nitrogen fixers, element oxidizers and reducers. They contribute to the chemical and physical properties of soil. The fertility of the soil is basically determined by microorganisms

Sampling locations for Soil Quality Monitoring

Code	Sampling Locations	Direction w.r.t site
01	Phursungi	South East
02	Hadapsar	South East
03	Yerwada (site)	Site
04	Ganeshkhind	South West
05	Lohagaon	North
06	Wagholi	North East
07	Wanawadi	South

137

'Ishanya'

Rapid Environment Impact Assessment

Code	Textural class	Porosity %	Water holding capacity %	pH of 10% suspension	Ca ⁺⁺	Mg ⁺⁺	Na ⁺ meg/100 gm	K ⁺
01	Clay loam	64	8.0	7.44	0.6	1.72	2175	28.5
02	Loam	60	6.0	7.8	1.28	2.42	415	52.5
03	Sandy Loam	59	7.3	7.6	0.66	1.54	100	10
04	Sandy Loam	58	6.1	7.6	0.62	1.84	96	10
05	Sandy Loam	62	6.0	7.4	0.64	2.4	100	12
06	Loam	60	7.2	7.4	0.52	2.12	112	14
07	Sandy Loam	58	6.0	7.62	0.76	1.92	81	80

4.5.2 Biological Environment

The important features of environment are Flora and Fauna. The natural flora and fauna needs to be protected and conserved as they are directly linked to the conservation of environment. Hence study of the biological environment is an important aspect for Environmental Impact Assessment.

Vegetation and wild life present in an area shows certain affinities with its environmental settings and between the species. The plant and animal population in area form recognizable associations called "Natural Communities". Natural communities have structure based on the life forms of the species that make them up. The species composition is referred to the kind of species making up the community. Variety of species and their relative numbers are referred to as species diversity. A community composed of few species is called simple where as that composed of many is called complex.

The vegetation and wild life describes the Environmental Setting in terms of types of communities, community uniqueness and type of species forming each community, dominant species, rare and endangered species, their habitat and vulnerability to various disturbances. Ecological cycle also is an important representation of Biological environmental setting.

Biologically communities are good indicators of climatic and edaphic factors. Details related to pollution impacts and environmental stress on the community structure serves as an inexpensive and efficient early warning system to check the damage to a particular ecosystem.

138

'Ishanya'

Rapid Environment Impact Assessment

Biological communities are dependant on the natural resources and environmental conditions in this habitat region. There are evidences of changes due to variations in environmental quality. A number of variables like temperature, humidity, rainfall, soils characteristic, topography etc are responsible for maintaining the homeostasis of the environment. A change in any one of these variables may lead to stress on the ecosystem. The animal and plant communities exist in their natural habitats in a well organized manner. Their natural settings can be disturbed by any externally induced anthropogenic activities or by naturally induced calamities or disasters etc. So, once this setting is disturbed, it takes a longer time to come to its original state or some time it becomes practically impossible. Plants and animals are more susceptible to environmental stress. A change in the composition of biotic communities is reflected by a change in the distribution pattern, density, diversity, frequency, dominance and abundance of natural species of flora and fauna existing in the ecosystem. These changes over a span of time can be quantified and related to the existing environment factors.

With a goal to reduce environmental pollution and increase aesthetic value, a proper Greenbelt has to be developed in the proposed mall area. Different varieties of species have been suggested keeping in view the attenuation of dust pollution, vehicular emissions and other environmental pollution. Air pollution loads due to various transportation activity can be mitigated and the aesthetic value of the area can also be enhanced by plantation of trees .Dense plantation serves as a nesting and breeding zone for local birds and thus play a role in the overall protection of the terrestrial and adjacent aquatic ecosystem.

The pitting technique is used for planting .The pit size should be either 45cm x 45cm x 45cm or 60cm x 60cm x 60cm. Bigger pit size is preferred on marginal or poor quality soils The pit should be filled with soil mixed with decomposed farm yard manure or sewage sludge at the rate of 2.5 kg(on dry weight basis) and 3.6 kg (on dry weight basis) for the 45cmx45cmx45cm and 60cmx60cmx60cm pits respectively. At least 5-10 days before the actual plantation the pits should be filled with the soil

A few plants which can be planted are given below.

No	Particulars	Example
01	White flowered trees	Albizia, Bauhinia, Magnolla, Plumeria, Moringa, Calophyllum, Mesua, Millingtonia etc
02	Blue flowered trees	Solanum, Bolusanthus
03	Pink flowered trees	Bauhinia, Samanea, Legerstroemie, Hibisus, Cassia etc.
04	Red flowered trees	Bombax, Erythrina, Saraca, Brownea etc.
05	Yellow coloured trees	Cassia, Erythrina, Laburnum Bauhinia, Acacia, Anthocaphalus, Schizolobium etc

138

'Ishanya'

Rapid Environment Impact Assessment

An exhaustive survey was carried out to get an idea of the existing scenario of Flora and Fauna .It is presented in the table given below.

List of Common Flora present in the Area

No.	Local Name	Botanical Name
01	Al or Ashi	Morinda tinctoria
02	Amba	Mangifera Indica
03	Apta	Bauhinia Racemosa
04	Babhul	Acacia Arabica
05	Bel	Aegle marmelos
06	Bakula	Mimusops elengi
07	Bhendi	Thespesia populnea
08	Bhor Jambhul	Ammania baccifera
09	Chambuli	Bauhinia vahlii
10	Char, Charoli	Buchnanania latifoya
11	Chinch	Tamarindus indica
12	Ghatbor	Zizyphus xylopra
13	Jambhul	Eugenia jambolana
14	Karlilimb	Murraya koenigii
15	Karavali	Ficus asperrima
16	Khair	Acacia catechu
17	Kuda	Holarrhena antidysenterica
18	Kumbhi	Careya arborea
19	Mokha	Peltophorum inerme
20	Nandruk	Ficus retusa
21	Nimbara	Melia dubia
22	Palas	Butea frondosa
23	Nagkuda pandarakuda	Tabernaemontana heyneana
24	Pandhra Khair (Kanti)	Acacia ferruginea
25	Pangara	Erythrina Indica
26	Phasi	Dalbergia paniculata
27	Pharadi	Albizzia chinensis
28	Pimpal	Ficus religiosa
29	Ritha	Sapindus emarginata
30	Sag (Teak)	Tectona grandis
31	Satvin	Alstonia scholaris
32	Suru	Casuriana equisetifolia
33	Sawar	Bombax malabarica
34	Shiras	Albizzia lebbek
35	Shisam	Gmelina arborea

140

'Ishanya'

Rapid Environment Impact Assessment

36	Umbar	<i>Ficus glomerata</i>
37	Vad	<i>Ficus benghalensis</i>
	Shrubs	
38	Adulasa	<i>Adhatoda vasica</i>
39	Dhaiti	<i>Woodfordia floribunda</i>
40	Ghaneri	<i>Lantana camara</i>
41	Karvi	<i>Strobilanthus callosus</i>
42	Kaladhotra	<i>Datura fastuosa</i>
43	Kalsunda	<i>Barleria prionities</i>
44	Mogli	<i>Jatropha curcas</i>
45	Nirgudi	<i>Vitex negundo</i>
46	Rui	<i>Calotropis gigantean</i>
47	Shikekai	<i>Acacia concinna</i>
48	Thor	<i>Euphorbia ligularia</i>
49	Toran	<i>Zizyphus rugosa</i>
	Herbs	
50	Anant Mul	<i>Hemidesmus indicus</i>
51	Bhingulia	<i>Indigofera enneaphylla</i>
52	Burada	<i>Blumea lacera</i>
53	Chikara	<i>Desmodium pulchellum</i>
54	Dindi	<i>Leea macrophylla</i>
55	Kajra	<i>Strychnos nux vomica</i>
56	Tivra gandha	<i>Chromolaena odorata</i>
57	Papadi	<i>Pavetta tomentosa</i>
58	Rankanda	<i>Scilla indica</i>
59	Sarp mukha	<i>Tephrosia purpurea</i>
60	Tarota	<i>Cassia tora</i>
61	Vikhara Talimkhana	<i>Asteracantha longifolia</i>
	Climbers	
62	Alsi	<i>Dalbergia volubilis</i>
63	Bhuikolaha	<i>Ipolmea digitata</i>
64	Chilhari	<i>Caesalpinia sepiaria</i>
65	Gunj	<i>Abrus precatorius</i>
66	Gulvel	<i>Tinospora cordifolia</i>
67	Kanguni	<i>Celastrus paniculata</i>
68	Kantharyel	<i>Capparis sepiaria</i>
69	Kusari	<i>Jasminum arborescens</i>
70	Modvel	<i>Combretum ovalifolium</i>

141

'Ishanya'

Rapid Environment Impact Assessment

71	Palasvel	Butea superba
72	Ukshi	Calycopteris floribunda
73	Watvel	Cocculus macrocarpus
	Bamboos	
74	Bundi or Cher	Oxytenantbera monostigma
75	Manvel	Dendrocalamus strictus
	Grasses	
76	Ber	Ischaemum rugosus
77	Bhongrut	Anthistiria ciliate
78	Bhuri	Aristida paniculata
79	Boru	Andropogon halepensis
80	Chirka	Eragrostis tremula
81	Dogari Gavat	Andropogon montocola
82	Harali (Durva)	Cynodon dactylon
83	Kunda	Ischaemum pilosum

Avifauna observed in the Area

No	Common Name	Scientific Name
01	Cattle Egret	Bubulcus ibis
02	Little Egret	Egretta garzetta
03	Night Heron	Nycticorax nycticorax
04	Chestnut Bittern	Ixobrychus cinnamomeus
05	Black winged kite	Elanus caeruleus
06	Pariah kite	Milvus migrans
07	Brahminy kite	Haliastur Indus
08	Shikra	Accipiter badius
09	White backed vulture	Gypse bengalensis
10	Crested Serpent eagle	Spilornis cheela
11	Kestrel	Falco tinnunculus
12	Painted Partridge	Francolinus pictus
13	White breasted water hen	Amaurornis phoenicurus
14	Pheasant tailed Jacana	Hydrophasianus chirurgus
15	Redwattled Lapwing	Vanellus indicus
16	Common Sandpiper	Tringa hypoleucos
17	Green Pigeon	Treron phoenicoptera
18	Blue Rock Pigeon	Columba livia
19	Spotted dove	Streptopelia chinensis
20	Rose ringed parakeet	Psittacula Kramen
21	Blossom headed parakeet	Psittacula cyanocephala
22	Brain fever bird	Cuculus Varius

142

'Ishanya'

Rapid Environment Impact Assessment

23	Koel	<i>Eudynamys scolopacea</i>
24	Crow Pheasant	<i>Centropus sinensis</i>
25	Barred Owlet	<i>Glaucidium radantum</i>
26	Spotted Owlet	<i>Athene brama</i>
27	Palm Swift	<i>Cypsiurus parvus</i>
28	Common Kingfisher	<i>Alcedo atthis</i>
29	White breasted kingfisher	<i>Halcyon smyrnensis</i>
30	Green bee eater	<i>Merops orientalis</i>

4.6 Socio – Economic Environment

The study of the socio economic component of the environment is incorporating various facts viz. Demographic structure, availability of basic amenities such as housing ,education, medical services, occupation, water supply and power supply ,most prevailing diseases in the region as well as features such as places at tourist attraction and monuments of archaeological importance .The study of these parameters helps in identifying predicting and evaluating the likely impacts due to the proposed project activity in that region.

The data is generated using secondary sources viz. Census records, District statistical abstract, Primary Health Centres, Official records etc and primary data collection through field survey as well as field observations. The survey carried out is presented in Annexure.

The demographic structure of the study area is presented which highlights information on population, employment, household, literacy, community structure .The demographic details have been abstracted from Primary Census Abstract – 2001 of Maharashtra .

4.6.1 Infrastructure Resource Base

The infrastructure resource base in the study area with the reference to education ,medical facilities , water supply, post and telegraph, transportation and power supply based on Housing , Household Amenities and Assets, CD 2001 of Maharashtra is presented in the Annexure.

4.6.2 Economic Attributes

The occupation of the people in the study area include service, business, construction work, household industry, and allied activities. The food crops grown include sugarcane, maize, paddy, jowar, bajra etc. The employment pattern of the study area is presented in the Annexure.

'Ishanya'

Rapid Environment Impact Assessment

143

4.6.3 Health status

Health of the people is not only desirable goal, but it is also an essential investment in human resources. As per the National Health Policy (1983), Primary Health Care has been accepted as main instrument for achieving this goal of development and strengthening rural health infrastructure through a three tier system viz. sub centers, primary health care centers (PHCs) and community health centers which have been established.

Lack of building, shortage of manpower and inadequate provision of drug supplies are hampering the operationalisation of these units. The standards to be met according to National Health Policy are given below:

Population	Infrastructure	Personnel
3000 – 5000	1 Sub Center	1 ANM
25,000 – 30,000	1 PHC ,6 beds	2 medical officers
1,00,000	Rural Hospital	Medical Superintendent

During discussion with Medical Officer of Pune Municipal Corporation health department, it was revealed that the general prevailing diseases are malaria, cold cough, diarrhea, dysentery and viral fever. Different health problems are reported during survey which could be attributed to improper sanitation, mosquito nuisance and also water logging leading to malaria. Information regarding morbidity pattern and mortality in Pune district is also presented in the Annexure .

4.6.4 Socio – economic Survey

Sampling method

In order to assess and evaluate the likely impacts arising out of any development projects on socio - environment , it is necessary to gauge the apprehensions of the people in the project area. Socio – economic survey serves as a tool for fulfilling this requirement .Socio – economic survey was conducted in the study area with respect to the project site for the collection of awareness and opinion, by using judgemental or purposive sampling methods representing various socio –economic sections of the community.

The salient observations recorded during the survey are:

01. Most part of the study area comes under Pune Municipal Corporation and people availing all facilities from the town place.
02. Sanitation facilities are good up to satisfactory level.
03. Power supply is regular.

'Ishanya'

Rapid Environment Impact Assessment

144

Project awareness and Opinion

Population in the region are aware about proposed project and have appreciated the project of following points:

01. The value of the land around the project will increase satisfactory as compared with present market rates.
02. There will be an improvement in the status of the roads.
03. Various facilities such as education, roads, transport etc would be created in the area adjacent to the mall, the benefits of which would be extended to nearby villages and the urban population.

Quality of life

Quality of Life (QoL) is a term, which indicates overall status of socio – economic environment in a given area. Quality of Life(QoL) is defined as a function between “objective conditions” and subjective attitudes” involving a defined “area” of concern.

The objective conditions are defined as numerically measurable artifacts of a physical, sociological event or economic event. Objective conditions may be defined as any number, which stands for a given quantity of a variable of interest so long as it is independent of subjective opinion.

Subjective attitude is primarily concerned with affective and cognitive dimensions. It is specifically concerned with how aspects of cognition vary with variation in objective conditions.

Once objective measures are obtained they are transformed to weights assigned to each factor by pair wise technique, by the expert group based to the secondary data and general observations.

For each objective measure, a corresponding subjective measure is developed for each individual of the sample population by asking him to rate his satisfaction scale (value function curve). Weights are assigned to each factor using ranked – pairwise comparison techniques.

145

'Ishanya'

Rapid Environment Impact Assessment

The socio - economic indicators for quality of life assessment are :

1. Income, Employment and working Condition
2. Housing
3. Food
4. Clothing
5. Water Supply and sanitation
6. Health
7. Energy
8. Transportation and Communication
9. Education
10. Environment and pollution
11. Recreation.
12. Social security
13. Human rights

146

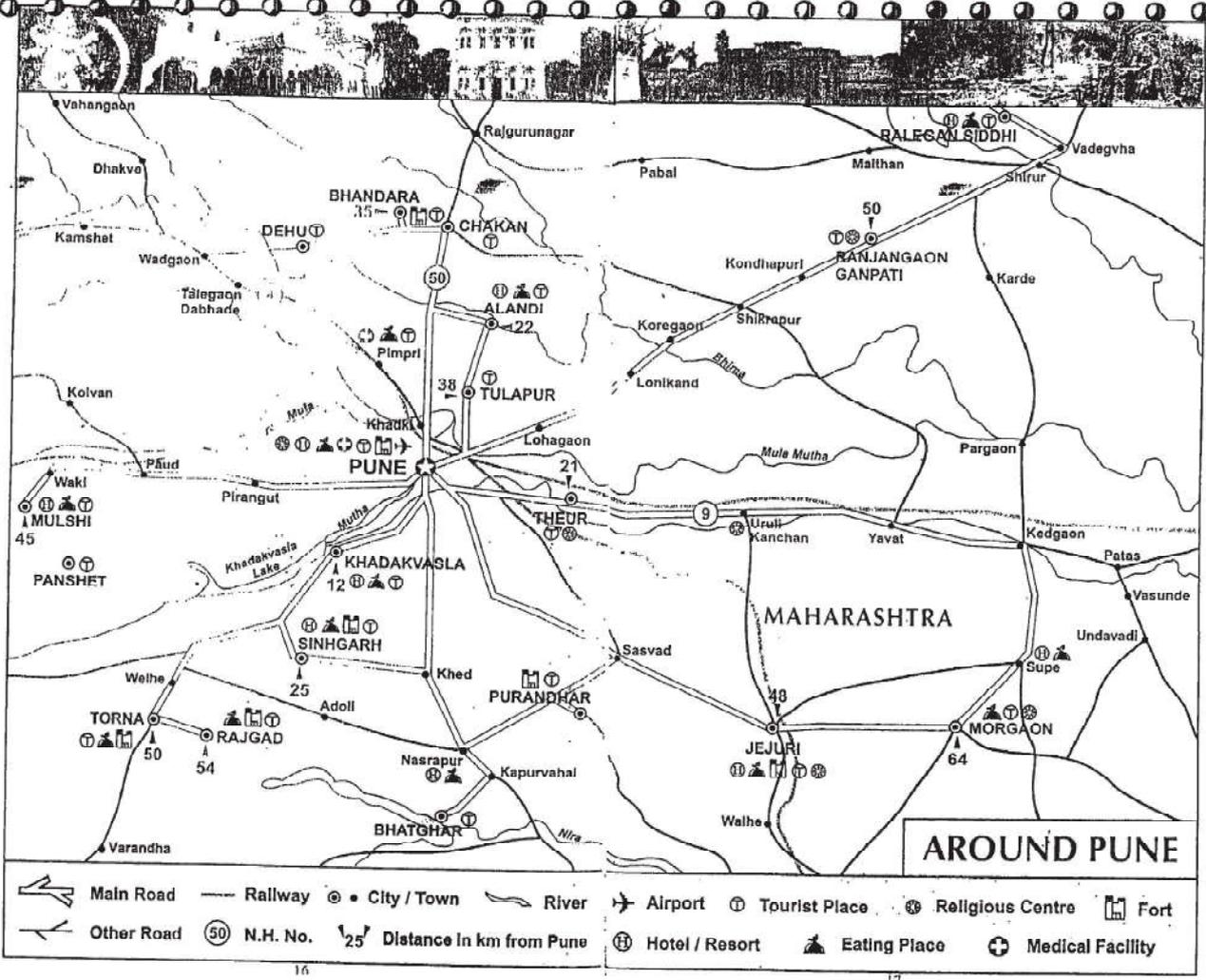
'Ishanya'

Rapid Environment Impact Assessment

Heritage

The Pune district is known for historical and religious background .Important points near & around Pune are recorded below:

Sr No	Significance	Location
1.	Religious	Dehu Alandi Bhimashanker Bhuleshwar Saswad Baneshwar Jejuri Kamar Ali Darvesh Darga ,Khed Shivapur Morgaon Ranjangaon Ozhar Theur Lenyadri
2.	Historical	Fort – Shivaneri Fort – Chakan Fort – Purandar Fort – Rajgad Fort – Torana Fort – Wahad Samadhi
3.	Science	Satellite Centre, Arwi
4.	Health	Nature Cure,Urali Kanchan Talegaon – Eye Hospital Civil and Military Hospitals,Pune
5.	Sanctuary	Bhimashankar Supa



157

5.0 IDENTIFICATION OF IMPACT

The major element involved in the process of environmental impact assessment is identification of impacts as it leads to other elements such as quantification and evaluation of impacts. Although in general number of impacts have been identified while describing existing environmental status it is necessary at this stage to identify the critical impacts that are likely to occur on various components of environmental due to development of proposed Ishanya mall at Yerwada in Pune..

A number of techniques are available for identification of impacts. For the activities proposed to be carried in Ishanya mall ,the "Network Method" has been used. It involves understanding of cause -condition effect relationship between an activity and environmental parameters for identification of impacts. It has been found to be the most appealing tool..

The detailed list of activities and actions described earlier in this report have been taken into consideration for generation of cause -condition effect networks (i.e chain of events). This type of method has been basically advantageous in recognizing the series of impacts that would be triggered by the proposed activities. Thus, this method has provided a "roadmap" type of approach to the identification of secondary and tertiary effects also.

The idea was to account for the project activity and identify the types of impacts which would initially occur. The next was to select each impact and identify the secondary and tertiary impacts which induced as a result. This process was repeated until all possible impacts were identified .The greatest advantage of this type of approach was that it allowed to identify the impacts by selecting the tracing out of the events as they are expected to occur.

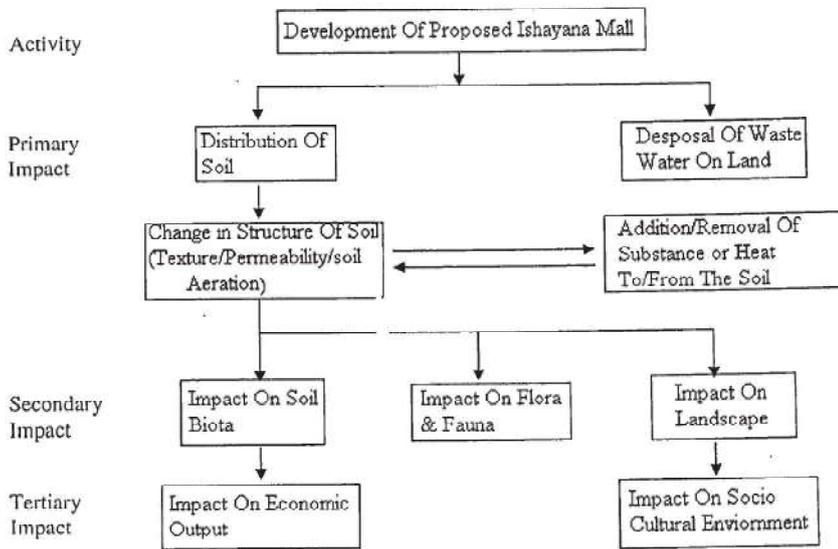
While identifying the impact networks for developmental activities significant activities such as site clearance, site preparation, LPG/Low sulphur diesel generator sets, civil construction and finally development and operation of the mall with state of art amenities have been accounted for.

Creation of Ishanya mall to provide world class facilities/infrastructure to attract home purchaser, traders have been considered for the purpose of economic benefits.

The identified impacts for various components of environment viz water, land and socio-economic are presented in figure .The comprehensive environmental impact network for development of proposed Ishanya mall is presented in fig. It is to be noted that in these illustrations the lines are to be read as "has an effect on".

'Ishanya'

Rapid Environment Impact Assessment

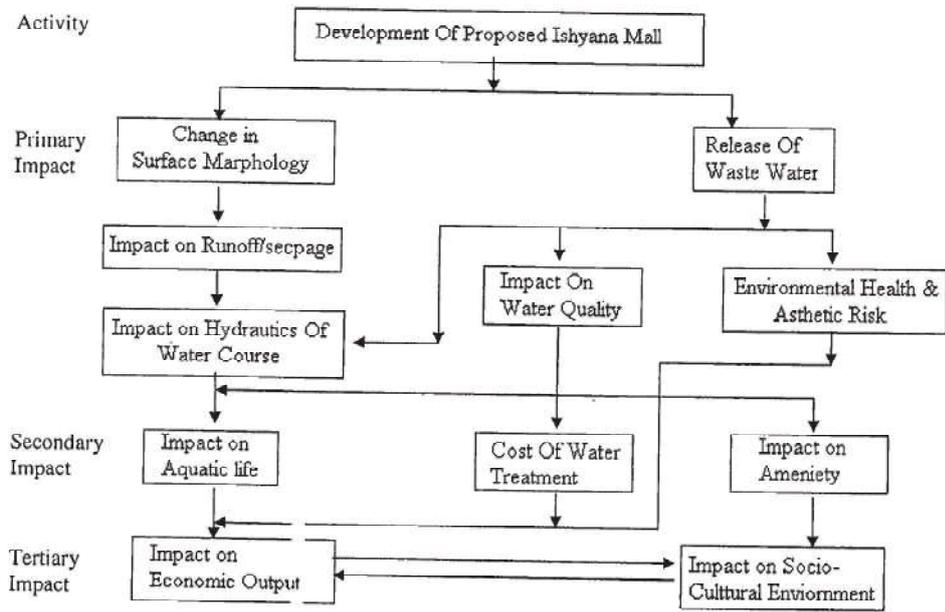


Land Environment --- Impact Network

1/1/19

'Ishanya'

Rapid Environment Impact Assessment

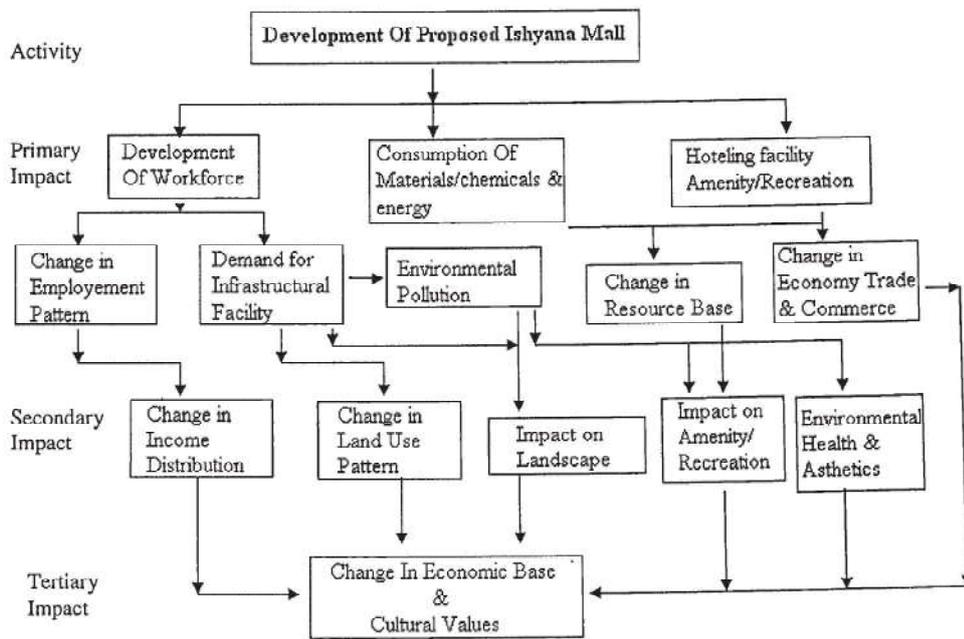


WATER ENVIRONMENT----- Impact Network

158

'Ishanya'

Rapid Environment Impact Assessment



SOCIO-ECONOMIC ENVIORNMENT --- IMPACT NETWORK

15

152

'Ishanya'

Rapid Environment Impact Assessment

6.0 PREDICTION OF IMPACT

Several scientific techniques and methodologies are available to predict impacts of physico – ecological environment and socio –economic environment. Mathematical models are the best tools to quantitatively describe the cause and effect relationship between sources of pollution and different components of environment .In case, it is not possible to identify and validate a model for a particular situation, predictions could be arrived at based extrapolations

6.1 Air Environment

The area to be developed is subjected to moderate wind rainfall and relative humidity. The strong wind blows with the onset of monsoon and influence of south- north monsoon from Arabian sea remains and moderate winds prevailed throughout the year.

The existing baseline status of air pollutants indicates that the concentrations of SPM, SO₂, and NO_x are well below the stipulated standards of CPCB.

The existing possible pollution sources in the study area include LPG/low sulphur DG sets, utility services like Laundries and vehicles. There are no major air polluting industries existing as well as proposed in the study area. Power requirements of the proposed project will be met during construction and operation phase of the project from State Electricity Board and DG sets will remain as standby. The total electric requirement for the mall which will be from State Electricity Board.

6.1.1 Potential Impact on Ambient Air Quality

Construction Phase

The potential impacts on air quality due to the proposed project will be temporary rise in SPM and RSPM levels likely to result from:

1. Fugitive dust emissions near the construction site
2. Use of unpaved roads and truck tracks by the construction vehicles
3. Operation of the Concrete, Asphalt and Hot mix plants.

13

'Ishanya'

Rapid Environment Impact Assessment

Besides SPM and RSPM levels, the air quality impacts also due to increase in gaseous emissions like NO_x, SO₂, CO and HC. Bulldozers, excavators, cranes, DG sets, welding machines will contribute to gaseous emissions through use of diesel as fuel. Gaseous emissions viz. NO_x, SO₂, hydrocarbon are envisaged from these equipments during construction.

The capacity of DG sets that are to be used would be 750 KVA each and the emission of NO_x, SO₂ will be much less than 50mg/m³ and hence will not cause any change in the ambient air quality particularly of the habitations close to the proposed mall. As the emission level is very low, quantitative predictions are not possible due to limitations of the dispersion model. The site being influenced by winds would result in quick dispersal of the pollutants and thereby the impacts due to NO_x and SO₂ emissions during the construction will be negligible. Therefore, considering all the air pollutants, it is not expected that air emissions due to construction will exceed air quality standards (NAAQS).

There might be some impact on air quality that may take place during construction which would be caused by emission of dust during excavation as well as from the earth material stored at the site. The potential for dust in the form of particulate matter to be emitted during construction strongly depends on the type of activities taking place, such as the movements of vehicles, speed, soil stripping, excavation, backfilling and reinstatement. In dry soil conditions, at wind speeds above around 3 m/s, dust particles may be airborne and be transported from their initial source. Of the particles that do become airborne for a typical mean wind speed of 4 m/s particles larger than 100 micro meter diameter are likely to settle within 6 – 10 m and those between 30 -100 micro meter diameter are likely to settle within 100 micro meter of the source. Smaller particles, particularly those below 10 micro meter in diameter are most likely to have their settling rate retarded by atmospheric turbulence and to be transported further from their source.

As the topsoil is clayey sand, the emissions of SPM during the excavation process is likely to contribute to ambient levels of SPM in the stretch. Emissions of particulate shall be minimized by sprinkling water on the deposited earth material. The rate of emission of dust, its predicted rates of deposition and the temporary nature of the dust generating activities is expected to be well within acceptable limits. Also vehicles transporting earth and other construction material to the site will be covered to ensure their dust particles do not escape into the air. During construction all earth material will be kept covered to minimize impact on the ambient air quality.

184

'Ishanya'

Rapid Environment Impact Assessment

Operation phase

Air pollution Impacts due to vehicular Movement

Pollutant	Emission factor (gm/km-vehicle)		Emission (kg/hr-km)		Total Emission (kg/hr-km)
	Four wheelers	Two wheelers	Four wheelers	Two wheelers	
CO	1.39	1.4	2.78	3.5	6.28
HC	0.15	0.7	0.3	1.75	2.05
NO _x	0.12	0.31	0.24	0.775	0.775

a) Vehicular Emissions

The details presented in Table above (showing vehicular movement to & from Ishanya) are considered for vehicular air pollution model.

Emission factors as recommended by Committee under the New Auto Fuel Policy for India have been considered for estimating vehicular emission. The emission factors and emissions due to vehicular movement for various pollutants are given below in Table above. The length of the road is considered to be 1.6 km for air quality modeling

b) Micro meteorology

The micro meteorology data for the region during pre – monsoon season indicates the predominant winds form the S-W sector. Winds from west and North west directions were observed during the study period without significant shift in wind direction.

6.2 Noise Environment**Construction phase**

Construction activities will involve the following

01. Earth Material transportation
02. Road Levelling & Rolling using necessary equipment
03. Air compressor & structural steel handling

The construction activities will not result in any significant increase in noise levels. During construction phase workers will not be continuously exposed to high noise levels and hence exposures will not exceed the stipulated standards of CPCB.

155

'Ishanya'

Rapid Environment Impact Assessment

Operation Phase

The project site is located on the Airport Road, Yerwada section, Pune. Due to post project activities and normal clientele visiting and material delivery times etc. there will be an increase in the traffic to and from the site. Vehicles used for transportation of finished products would be through trucks only whereas utility vehicles used for various purposes would be buses, Jeeps, Cars. The equivalent noise level due to traffic is estimated using Federal Highway administration (FHWA) vehicular noise model

$$Leq(h)_i = Lo_e + 10 \text{ Log } (Ni / Si * Ti) + 10 \text{ Log } (15 / D)^{(1+a)} + So - 13$$

Where,

$Leq(h)_i$ is the Leq at hour h for the i th vehicle type i.e. autos, medium trucks or heavy trucks.

Lo_e is the reference mean energy level for the i th vehicle type. This is the noise emission level for a given vehicle type and is found out by measurement.

Ni is the number of class i vehicle passing during the time T

Si is the average speed of the i th vehicle class in km/ hour.

T is the duration for which Leq is estimated

D is the perpendicular distance in meters from the centerline of the traffic lane to the location where noise level is to be predicted.

a is a factor, which relates to the adsorption characteristics of the ground cover between the road way and the receptor location.

So is the shielding factor such as provided by the noise barrier.

Noise levels for light, medium and heavy vehicles on the roads are calculated using the above equation. Whereas the cumulative effect is computed using following model

$$Leq(\text{Total}) = 10 \text{ Log } (10^{LeqL/10} + 10^{LeqM/10} + 10^{LeqH/10})$$

Where Leq_L , Leq_M , Leq_H are equivalent noise levels for light, medium and heavy vehicles respectively.

'Ishanya'

Rapid Environment Impact Assessment

Vehicular movement to & from Ishanya

Office Staff & Shop owners / workers	
No. of 4 wheelers	250
No. of 2 wheelers	600
Visitors	
No. of 4 wheelers	400
No. of 2 wheelers	1000

Traffic composition is mainly two wheelers and four wheelers. The vehicular speed of heavy vehicles is considered as 40 kmph, for medium vehicles as 45 kmph and light vehicles as 50 kmph. The shielding factor D and factor related to absorption coefficient 'a' is considered to be 3 dBA and 0 dBA.

The noise level predicted using FHWA model is found to be within the permissible limit (50dBA). The above mentioned noise levels have been predicted considering the attenuation of 8 - 10 dBA due to vegetation along the road. Strengthening of green belt, quieter vehicles, change in vehicle speed will further bring down noise levels.

Thus the impact of traffic noise after superimposing on background noise level results in the noise level of 50 dBA, which is less than Maharashtra Pollution Control Board limits for rural and residential area. Hence noise level impact of the traffic is negligible.

6.3 Wastewater treatment

It is clear from the above water budget that the generation of domestic sewage to the extent which has been indicated shall be mainly used for recycling and reuse of water after treatment. The entire sewage shall be treated in a full pledged STP facility. The quality of effluent will be well within MPCB limits. Part of the treated water shall be used for green belt development

Solid Waste

Since there shall not be any toxic/hazardous waste from the mall, the question of disposal as per Hazard Rules does not arise. However the STP sludge generated after treatment shall be used exclusively as manure for the green belt developed within the premises. Hence it is seen that there will not be any impact due to solid waste from the mall either during the construction or operative phase. The municipal waste e.g. canteen and food along with the recyclable material e.g. paper, glass, metal etc. can be safely disposed off as per Municipal norms.

157

'Ishanya'

Rapid Environment Impact Assessment

environment, it is necessary to know how activities of the proposed project will affect the environment and to consider these effects early enough so that changes in plan can be made if the potential impacts warrant them.

Environmental impact assessment provides a vehicle for recording impacts of activities so that knowledge of what adverse changes may occur can be collected and maintained. The purpose of inventory is to ensure disclosure of the impacts on the proposed projects so that concern institutions or individuals will be aware of possible repercussions of the subject activities. Another valuable use for the inventory of impact is to identify the potential cumulative effects of a group or series of activity in an area. Any single activity might not be likely to cause serious changes in the environment but when its effects are added to those of other projects, the impacts of the environment might be severe. The potential for cumulative effects must be identified and in some cases, this may be possible only at the intra agency level, thus to account for cumulative impacts at a programme which covers many projects or activities.

A preliminary assessment will indicate the possible impact areas on which detailed data has to be collected for presenting the results of the preliminary assessment will attempt to answer the impacts on physical or health hazard, economic interest of the existing communities, impact on infrastructure, and future growth pattern in the region for next 20 years.

Air Environment

There is no major air pollution source. Air pollution due to the LPG/Low sulphur Diesel generator sets to be used would be only in construction phase, whereas during operation phase the indirect source of air pollution would be increase in vehicles. However, this impact will be distributed and minimal due to recommendations on use of catalytic converters in the vehicles and the use of clean fuels. It is expected there will not be any significant increase in air pollution due to the implementation of proposed mall.

Noise Environment

The noise generated due to the vehicles will be the only source which will have an impact on the residents and the floating population of the mall site. However, the impact will be distributed and attenuated to normal by improved vegetation cover as a part of development activities around the mall.

158

'Ishanya'

Rapid Environment Impact Assessment

Water Environment

The physico – chemical parameters of ground water resources are well within prescribed limits of drinking water except hardness. Surface water quality was found to be within normal value range. The availability of water would not appear to be a limiting factor for the development of the mall as the PMC will be supplying the required water besides borwell and tanker, if necessary. Rain water harvesting, and augmentation of water resource through groundwater recharge can be done. However maintaining the intrinsic quality of impounded water round the clock throughout the year needs close vigilance on operating mitigation measures and strict adherence to the norms for waste water and solid waste management which otherwise would contaminate the water resource.

Land Environment

The proposed developmental activities at Yerawada for the mall does not envisage procurement of any land. The existing land which is likely to be disturbed due to the construction activities will have to be restored to by improving the aesthetic value of the area. The plantation activities undertaken will add to existing green belt.

The solid waste generated will be separated into compostable and non compostable waste. The composted solid waste will be used as fertilizer whereas recyclable wastes will be sold off to the authorized vendors. Any adverse impact on the land environment due to the waste not envisaged provided waste management practices as delineated in environmental management plan are followed strictly.

Biological Environment

In the study area steps are already being initiated for the development of the greenbelt. The area is fairly covered with vegetation and the steps already initiated for strengthening of existing vegetation cover through contemporary afforestation for any loss of vegetation due to road construction etc would further reduce the possibility of changing the existing ecosystem significantly.

There is no sensitive terrestrial eco – system such as sanctuaries, national parks etc therefore the adverse impact on ecology is not envisaged. The biological component of the area does not include any rare or endangered species. Thus, impact on rare and endangered species of flora and fauna is ruled out.

'Ishanya'

Rapid Environment Impact Assessment

159

Socio – economic environment

The socio-economic status of the people will improve considerably. The population density and job opportunities of the population will be on the rise, the per capita income will improve. Thus the manpower requirements for proposed project will increase the employment opportunities for local population, thus improving their social status. Also there will be indirect employment opportunities due to the proposed activity. There will be positive impact on employment, sanitation, transportation, telecommunication, cultural and entertainment and community health parameters etc. These will not have any negative socio-economic impact but raise their socio-economic status.

The inference regarding quality of life is drawn on the basis of subjective and objective index, the quality of life is judged by calculating the cumulative index. The already high value of cumulative index 0.61 prior to commissioning of project indicates satisfactory level. For further improvement of quality of life, in this region the points to be taken care of are more employment opportunities, transport & communication facilities, educational facilities, regular electric supply recreational facilities etc.

There would be positive impact on Socio –Economic environment due to upliftment with implementation of suggestions given in EMP.

Prediction of Qualitative impacts on Socio Economic Environment

Parameter	Local	Direct	Reversible	Irreversible
Employment	Positive	Positive	Insignificant	Insignificant
Income	Positive	Positive	Insignificant	Positive
Transport	Positive	Positive	Positive	Positive
Education	Positive	Positive	Insignificant	Insignificant
Communication	Positive	Positive	Insignificant	Insignificant
Health	Insignificant	Insignificant	Insignificant	Insignificant
Recreation	Positive	Positive	Insignificant	Positive
Cost of Living	Positive	Insignificant	Insignificant	Positive
Business	Positive	Insignificant	Insignificant	Positive
Per Capita Income	Positive	Positive	Insignificant	Positive
Pollution	Insignificant	Insignificant	Insignificant	Insignificant

150

'Ishanya'

Rapid Environment Impact Assessment

7.2 Environment Impact Evaluation by Matrix Method

A matrix having rows as environmental attributes or impact areas and columns having proposed project activities is constructed. Each action having an impact on environmental attributes is given a weight or Parameter importance unit (PIU) viewed by experts.

Identification of various impacts causing activities and their impacts on environment was discussed in preceding chapter. The net impact of the project activities on the environment is evaluated in this chapter. The evaluation system has been based on Leopold Matrix method. In this method a matrix is prepared to indicate the interaction between impacts causing activities and the impacted environmental factors as per their magnitude (M) of interaction. Both the magnitude and importance are rated on a scale of 0 to 10. 0 indicating insignificant, 1 indicating low, 3 indicating medium low, 5 indicating medium, 7 indicating low high, 8 indicating medium high and 10 indicating high.

Positive magnitude is denoted by (+) sign while negative magnitude or adverse impact is denoted by (-) sign. Though impacted factor is of prime importance such as public safety; impact becomes zero its magnitude becomes insignificant. The impact of an activity, on an impacted environmental factor is the product of 'magnitude' and 'importance'.

Impacts Of Various Project Activites

7.2.1 Impact of Product Manufacture

The impact of the project on regional economy will be beneficial

The importance should be rated as high and the magnitude of the impact is also quite significant.

Thus 'M' is taken as (+5) while 'I' (6). The impact of this mall is quite beneficial since it stimulates growth of upstream and downstream industries. Thus the magnitude even though not high, the importance is significant.

Ishanya mall will provide employment directly / indirectly which includes managers and working staff etc. Here too the magnitude can be taken as medium i.e. 'M' = (+5) and 'I' is taken as (+5).

101

'Ishanya'

Rapid Environment Impact Assessment

7.2.2 Impact of Process Operations

The impact of process operations on public safety is quite low. Hence there will be minimum on site and off site consequences. Thus the impacts can be taken as significant, so 'M' is taken as (-1) and 'I' as (8).

7.2.3 Impact of Raw Materials, Power, Fuel Consumption

The impact from the utilization and conservation of resources will be quite insignificant as far as the depletion of resources is concerned. Therefore, 'M' is insignificant (1) while 'I' is taken as (8).

7.2.4 Impact of Atmospheric Emissions

The mall will be using Electricity as fuel. There will be relatively less negative impact from the point of view of air quality. But since some pollutants might still be emitted although in very minute quantities M is taken as(-1) and I as (+6)

7.2.5 Impact of Liquid Effluent Discharge

There will not be any liquid discharge from the mall. Thus the impact of wastewater discharge on the ground water quality is considered nil in magnitude (M=0) and low in importance (I=6).

7.2.6 Impact of Solid Waste

There will not be any generation of hazardous solid waste near the project site. The waste from sources such as packaging and administrative-use waste like paper, etc. shall be packed for recycling / reuse or sold off. The overall impact can be taken as low in magnitude and importance, so 'M' is taken as (-1) and 'I' as (+6).

7.2.7 Impact of storage and handling of raw materials

Very low impact arises from storage and handling of finished goods etc. Therefore the occupation and health and safety will not be in anyway effected.

7.2.8 Impact from Transportation of Materials

Impact on public safety from transportation is also equally important. The transportation will contribute to the economy and employment which is a positive impact, hence M is (3) and I will be (4). But the transportation will cause some noise and air pollution which will be low and intermittent and hence of low significance.

162

'Ishanya'

Rapid Environment Impact Assessment

7.2.9 Impact of Green Belt

Ishanya will develop a green belt which definitely contributes to improving the air quality and also help to make it aesthetically appealing although these benefits are likely to effect the mall and its immediate surroundings only , the estimated impact of the green belt and each of the above factors is medium in magnitude ($M=+6$) and importance($I=7$).

The individual Magnitude and importance of various activities is summarized in the Table in Matrix form format. The overall impact is the algebraic sum of impact of individual activities due to the mall.

7.2.10 Socio Economic Development:

The socio economic environment exhibits positive impacts. Due to the proposed mall employment to more than 100 people directly or indirectly will be provided. Indirect benefits will also occur to large number during construction phase also. Supportive services in commerce and transport and ancillary trading would provide employment. These will generally improve the life style of the local population compared to the earlier scenario.

The above discussion reveals that the proposed mall is not likely to produce any load on the surrounding environment on account of its activities and any negative effect on the environment is not envisaged in the near future.

'Ishanya'

Rapid Environment Impact Assessment

ENVIRONMENTAL ITEMS IMPACT CAUSING ACTION	SOCIO-ECONOMIC ENVIRONMENT				AIR ENVIRONMENT				WATER ENVIRONMENT				LAND ENVIRONMENT				HUMAN INTEREST				BIOLOGICAL ENVIRONMENT			
	Economy	Employment	Industry	Resource	Air quality	Climate & Temperature	Visual quality	Water quality	Hydrology	Aquatic life	Land	Topography	Soil quality	Physical feature	Noise	Odour	Occupational Health &	Aesthetics	Ecology	Flora	Fauna			
Product Manufacture	+5 6	+5 5	+3 6													0								
Process operation																0 6	-1 8							
R. MatPower & fuelcons ⁿ				1 8	1 8																			
Raw water consumption							0 4	0 6																
Atmospheric emission					-1 6																			
Effluent discharge								0 6																
Solid waste disposal										-1 6		0 4												
Storage of raw material																								
Transportation of material	+3 4				1 4										-1 3	-1 5								
Green belt development					+6 1					+4 5		+3 5					+6 8	+3 5	+4 7	2 3				
Legend	M 1	M: Magnitude 1 : Degree of importance impact										+ indicates beneficial impact - indicates negative impact												

Handwritten signature or initials.

163

8.0 ENVIRONMENTAL MANAGEMENT PLAN

The prosperity of a nation depends upon its productivity and efficiency to utilize the environmental resources to satisfy human needs and expectation. High growth level of consumption and production strains available resources leading to alarming emission of pollutants into the atmosphere.

Development activities interact with environment through short term and long term physical, chemical and biological changes so the environment is to be exploited rationally. Although nature has a tremendous potential of resilience to keep on absorbing continued shocks of pollution and eco-degradation, there is a limit to what it can take. The consequences of indiscriminate over withdrawal of natural resources with continued shocks of pollution pose an alarming threat to our future generation.

Thus there is a need to remind an increasingly urbanized humanity of the delicacy and vulnerability of all living species, of tree and plant, of animal and insect, with which we have to share our planet. As we observe their interdependence, their fragility, their variety and their complexity, it becomes clear that we also form a part of the complex web and that if we try to through the complex biological rhythm and needs of the nature, we may find that we have destroyed the ultimate source of our living.

All development projects have social and environmental implications. Environmental management plan is necessary to ensure sustainable development. Management plan suggests the mitigation measures to be undertaken to minimise the adverse environmental impact. Thus with the available and affordable technology effective control of pollution at source is to be undertaken and treatment measures are to be undertaken so that there will be minimum adverse impact on the environment. Stress is laid on recycling.

The objective of the EMP is to identify project specific actions that will be undertaken by the project proponent for Mitigation of the specific impacts identified in the project. These actions will be incorporated and integrated into the various stages of project development. The EMP here pertains to the project activities of the overall project, and is concerned with the impacts identified for the developmental activities.

The following mitigation measures are to be undertaken so that the impacts are minimized or permanently removed.

164

'Ishanya'

Rapid Environment Impact Assessment

8.1 EMP during Construction Phase

Construction activities related to the project is as given below :

- Land / site clearing and road making.
- Foundations, structural and concrete work.
- Mechanical erection.
- Material handling and storage, water utilization etc.
- Transportation and machinery movement.
- Temporary shed construction etc.

The site selected is fairly level and various structures will be located such that minimum leveling work will be needed before excavation for foundation is started.

The dust nuisance during excavation will be temporary and will be minimized by sprinkling water. Local labor will be employed during the construction phase. The material transporting trucks may give rise to some air pollution mainly during unloading for small periods, which will be confined only to the site.

Environmental pollution during construction phase will be mainly due to activities involving site preparation and construction. During dry weather conditions it is necessary to control the dust nuisance created by leveling and transportation activity.

To ensure that the local inhabitants are not exposed to any of the hazards in the site during construction, the site should be secured by fencing and manned entry points.

Site should be provided with suitable sanitation facilities in order to maintain proper hygiene for the construction personnel. These facilities shall be connected to septic tanks to ensure minimum environmental impact.

The transportation routes should be selected such that the movement of trucks through the inhabited village be reduced. It should be ensured that construction vehicles are properly maintained to minimize smoke in exhaust emissions. The vehicle maintenance area should be located in such a way that contamination of the surface soil/water by accidental spillage of oil/spillage will not take place and dumping of waste oil should be strictly prohibited.

Dust rise during construction should be reduced using water spray on the site.

Construction camps should be located within the site to the extent possible with no interference to the local population.

165

'Ishanya'

Rapid Environment Impact Assessment

Fuel and amenities required for the construction workers should be provided by the project authorities/ their contractors to minimize impact on the local resources.

Construction workers are to be given adequate personal protective equipment like helmets, safety shoes, goggles etc while working in the site to protect themselves from occupational hazards.

Silt traps and other erosion protective measures should be undertaken to minimize erosion of the soil during construction stage.

Top soil of the pipeline route (water, sewer, telephone cables etc) should be stacked along the side to refill the trenched area to bring it near original condition after laying the pipeline.

Hazardous materials such as diesel, lubrication oil and paint materials required at the site during construction activities should be stored as per accepted safety norms.

Monitoring of the environmental quality (air, water, noise and land components) be initiated from the commencement of the civil construction work by establishing safety, Health and Environment management cell. The minimum laboratory facilities, equipment /instruments etc required for environmental quality monitoring are given.

8.2 EMP during Operational Phase

There will not be any impact in the quality of air due to the mall except for some noise which will also be within the prescribed limits.

Air Quality

In the proposed mall the use of D.G. Set may lead to insignificant increase in concentration of SPM, Sox, NOx and temperature as compared to the existing air quality. Some recommendations are being given below to monitor the environment around.

1. Ambient air quality monitoring must be carried out at different locations near and around the mall at regular intervals.
2. Thermal insulations should be provided wherever necessary to minimize heat radiation from , pipings etc.
3. Adequate ventilation should be provided to reduce work temperature and

168

'Ishanya'

Rapid Environment Impact Assessment

humidity.

4. Mall should adopt all possible to avoid any pollution load on air quality.

Noise

Though noise levels at the mall will be within the limits prescribed by OSHA yet some of the mitigation measures to control noise in future are given below:

1. Wherever noise levels exceed 70 dB, the workers must be provided with earmuffs, ear plug, etc.
2. Noise barriers, silencers and enclosures should be incorporated for equipments which noise limit exceeds.
3. All basic equipments should be lubricated to reduce vibrations and noise.
4. In general noise generating items such as fans, compressors, etc. should be provided with vibration isolators to reduce vibration and noise.
5. The green belt will be well developed. So with the attenuation of SPM and gaseous pollutants it will also further decrease the noise level. The noise level at the site should be kept below the prescribed level by the use of earmuff, plugs etc.

Water Quality

At proposed site sanitary facility should be provided for the mall employees including proper toilets and septic tanks. This is necessary to avoid pollution of any water body in near by vicinity.

The management should also go for preventive maintenance of pumps and joints leakages and measures like preventive check ups .

Solid Waste Management

The waste from the sources such as packaging section and administrative use waste like paper, etc. shall be packed for recycling / reuse or sold off.

Biological Environment

Since there is no notified endangered species in the area which will be affected by the proposed project the biological environment is not likely to be affected. The impact due to negligible amount of dust and flue generation is minimized by the well developed green belt in around the mall. Green belt development is one of the essential requirements against pollution although it adds to the initial cost of the project.

167

'Ishanya'

Rapid Environment Impact Assessment

The green belt developed is considered essential since

- Plant act as pollutant sinks.
- Green belt helps in noise attenuation.
- Green belt balance ambient O₂ and CO₂ levels.
- Green belts leads to significant drop in air temperature near the site area.

Air Environment

It is recommended to monitor the consented parameters as per MPCB guidelines. Monitor the vehicles by PUC test. Attenuate the pollutant emissions from generator sets s by developing greenbelt or vegetation.

Noise Environment

It is recommended that while procuring major noise generating equipment such as Generators, Pump sets etc it should be checked that all mufflers are in good working condition and that the manufacturers have taken the normal measures for minimizing the noise levels.

Noise barriers / shields in the form of well berm or sheeting should be provided whenever possible. Use of ear muffs/plugs and other protective devices should be provided to the workforce in noise prone areas. For generator noises occurring in proximity to human settlements, sound deadening barriers must be provided.

Water Environment

STP locations should be selected based on the groundwater flow regime to avoid any leachates from the treatment plant to nearby water bodies.

Full pledged water treatment plant with primary, secondary and tertiary process with disinfection should be constructed before supply to domestic and drinking purposes.

Tertiary treatment of effluent by oxidizing agent to remove residual organics before it is recycled for irrigation is proposed.

Treated sewage after disinfection (residual chlorine 1.0 mg/l) should be used for toilet flushing or gardening purposes and make up water from fire fighting

The pipeline network of wastewater pipe should be leak proof. Strict inspection and vigilance is required during operation period.

168

'Ishanya'

Rapid Environment Impact Assessment

Provision should be made to use wastewater maximum for greenbelt development to avoid any discharges elsewhere.

Regular checkup of raw water through chemical/bacteriological analysis be made before use for drinking purposes.

Land Environment

Conservation Measures to be adopted

The study area has flat terrain and will be subjected to less soil erosion. However suitable drain should be provided to drain the surface runoff.

Grass cover is an important protective measure for stabilization of soil erosion

Provision should be made to harvest rain water by constructing pond at selected site depending on the soil quality, drainage pattern and leaching effect.

Solid Waste Management

Solid waste generation should be reduced by segregating the recyclable, inert and organic waste at source itself

Segregated waste should be stored separately at source itself or transported immediately to common waste collection area.

Recyclable waste should be sold to authorized vendors

Storage facilities suggested are disposable plastic galvanized iron bins with lids.

Commercial establishment should store waste in plastic or galvanized iron bins as the waste is mostly recyclable.

Waste from Hotel and restaurants should be separated from wet and dry waste and shall be kept in separate containers.

The solid waste should not be heaped in open places and should be dumped in the waste collection area identified in the study area.

Compensatory afforestation plan

169

'Ishanya'

Rapid Environment Impact Assessment

The loss of vegetation of vegetation during the construction of project buildings and roads should be evaluated. To conserve soil areas for plantation of trees should be identified

Landscape and Restoration Plan

Areas for development of landscape with project site should be identified and Dimensions of various works for landscaping and beautification (playground with park ornamental flower beds creepers lawns, footpath etc.) should be delineated

Delineation of dimensions of massive plantations, barbed wire fencing, filling and leveling, water drainage channels, creation of benches for restoration of degraded sites.

Identification of species for plantation

1. Identification of shrubs ornamental plants and trees w.r.t elevation water availability and type of soil climatic factor, local need of each identified area for landscaping and beautification and restoration to improve aesthetic quality of life.
2. Integrated landscape & restoration plans partially with green belt development.

Biological Environment

Proper greenbelt has to be developed. Different varieties of species have been suggested keeping in view the attenuation of dust pollution, vehicular emissions and other environmental pollution. At the mall, the goal is to reduce environmental pollution and increase aesthetic value .With this in view, some of the plant species to be planted along the roadside are reported in Table below.

A few plants which can be planted are given below.

No	Particulars	Example
01	White flowered trees	Albizia, Bauhinia, Magnolia, Plumeria, Moringa, Calophyllum, Mesua, Millingtonia etc
02	Blue flowered trees	Solanum., Bolusanthus
03	Pink flowered trees	Bauhinia, Samanea, Legerstroemie, Hibiscus, Cassia etc.
04	Red flowered trees	Bombax, Erythrina, Saraca, Brownea etc.
05	Yellow coloured trees	Cassia, Erythrina, Laburnum Bauhinia, Acacia, Anthocaphalus, Schizolobium etc

170

'Ishanya'

Rapid Environment Impact Assessment

Guidelines for Plantation

The plant species identified for greenbelt development should be planted using pitting technique. The pit size be either 45 cm x 45 cm or 60 cm x 60 cm x 60 cm. Bigger pit size is preferred on marginal and poor quality soils. Soils proposed to be used for filling the pit should be mixed with well decomposed farm yard manure or sewage sludge at the rate of 2.5 kg (on dry weight basis) and 3.6 kg (on dry weight basis) for 45 cm x 45 cm x 45cm and 60 cm x 60 cm x 60 cm size pits respectively. The filling of soils should be completed at least 5 – 10 days before the actual plantation. Healthy seedlings of identified species should be planted in each pit.

Road side Plantation

Roadside plantation plays a very important role in mitigating air pollution loads due to various transportation activities. It also enhances aesthetic value of the area. Thus the approach roads to project site etc can be planted with the flowering trees.

Adequate initiative and appropriate measures for enhancing the greenbelt density in the area helps in mitigating not only the effective pollution load of the region, but also serves as nesting and breeding zone for the local birds, which play a very important role in the overall protection of the terrestrial and adjacent aquatic ecosystem. The species of plants suggested for green belt development is shown in Table.

Socio –economic Environment

It is necessary to formulate certain EMP measures for the smooth initiation and functioning of the project. The suggested measures are given below:

1. Idea about the project should be given to the farmers and local people of the study area.
2. Certain infrastructure facilities should be provided to the workers on the site such as quarters, toilets and sanitation facilities so as to minimize the load on the existing infrastructure facilities.
3. Public awareness campaign must be organized to make the people aware about the proposed project
4. Preference shall be given for employment of the local people during construction phase as well as maintenance activities.

171

'Ishanya'

Rapid Environment Impact Assessment

5. After the construction work is accomplished appropriate measures should be taken to restore the surrounding area to prior construction condition and to remove all temporary structures, equipment, surplus material and construction fencing from the project site.
6. As far as possible local population must be employed in the construction activities.
7. Communication with the local community should be institutionalized and done on regular basis by the proper authorities to provide an opportunity for discussion.
8. Social welfare activities to be undertaken by the project authorities, collaboration should be sought with the local administration, Gram panchayat, block development office etc for better co-ordination.
9. Construction as well as operational phase may lead to increase in vehicular density traffic which need to be attended by traffic management.
10. Care should be taken not to disturb the religious harmony of the region.

Human health and Management Plan

1. Identification of number of migrant construction workers and immigrant influx and propose the basic medical facility infrastructure viz. sub – centre, primary health centre and community health centre.
2. Evaluate existing facility vis-à-vis required facilities for human health care in the study area.
3. Delineate mechanism for periodic survey of prevailing diseases during each phase of the project and assessment of change in pattern of diseases.
4. Delineate mechanism for periodic analysis of water for nutrient and bacteriological parameters to delineate preventive measures.
5. Develop staffing pattern for provision of basic medical facilities, system for periodic surveys for studying prevailing diseases and water quality analysis and emergency preparedness plan.

172

'Ishanya'

Rapid Environment Impact Assessment

8.3 Environmental Quality Monitoring

Monitoring environmental quality in the areas where construction work is in progress as well as areas where development activities are completed and the project is in operation can be done by hiring services of competent agency. It would be appropriate at this stage, that Safety, Health and Environment management cell be formed to undertake monitoring work and keep a close vigil on any deterioration of environmental quality in the project area.

It is necessary to establish laboratory facilities and skilled personnel for environmental quality monitoring of various environmental components.

The recommended laboratory requirements from environmental monitoring point view are given below.

Air Environment

The ambient air quality monitoring network is recommended for monitoring variations in ground level concentrations. A weather station for wind speed, direction, temperature and rainfall is recommended to be installed at a suitable location. The following equipment are recommended for air quality monitoring survey:

High Volume Sampler:

- | | | |
|---|---|---|
| Blower | : | 1.5 m ³ /min capacity with adopter for uniform suction through filter. |
| Voltage stabilizer: | | A properly calibrated monometer assembly for the determination of flow rate through filter paper. |
| Rotameter: | | Calibrated rotameter (0.1 – 2.01 / min) for maintaining flow rate for gaseous sampling |
| Main housing:
SO ₂ Analyser | | Rectangular main housing (29 cm x 36 cm). |
| Minimum Range | : | 0 – 100 microg/m ³ |
| Flow Rate | : | 11 /min |
| Min Detectable
Level | : | 4 ppb |
| Response time | : | 1 min |

172

'Ishanya'

Rapid Environment Impact Assessment

NOx Analyser

Minimum Range: 0 -100 microg/m³
 Min Detectable : 0 -100 microg/m³
 Linearity : + % full scale
 Accuracy : + 2 full scale
 Response time : 25 sec
 Output : 0 – 15 mv DC

Weather recording System to monitor the following parameters:

1. wind speed ,wind direction dry bulb temperature, relative humidity and solar radiations.
2. Signal output should be electrically connected with microprocessor based data analyzer.

Noise Environment

Monitoring of the noise levels is essential to assess the efficiency of maintenance schedules and noise protection measures undertaken to reduce noise levels.

A good quality sound pressure level meter will be essential for this purpose. Audiometric tests are also helpful in monitoring the effectiveness of ear protection devices and of noise abatement programmes. The examination should be performed under the supervision of health officials.

Water and Land Environment

An independent laboratory with facilities for chemical & biochemical analysis should set up at central location away from the crowded and commercial areas. Necessary sampling equipment viz. Niskin type water sampler, soil sampler and means of storage preservation and transportation of samples be provided. The laboratory should have provision for fume – hood and cold room. A separate air-conditioned and dust-proof room will have to be provided for installing analytical instruments. Following instruments need to be incorporated:

1. Single Pan Balance : D.O.analyser.
2. Ph meter : B.O.D Incubator
3. Conductivity meter : Total Organic Carbon Analyser
4. Turbidimeter : UV/VIS Spectorphotometer
5. Ion Analyser : Flame Photometer
: CO & hydrocarbons analyzer

173

'Ishanya'

Rapid Environment Impact Assessment

Sufficient funds should be allocated to maintain pollution monitoring systems and treatment facilities. It is important to appoint safety, Health & Environment Manager to be designated responsible for environmental issues.

8.4 Need For Environmental Management

Environmental management is an interdisciplinary approach to conservation and recycling and acts as a regulatory force on resource exploitation and wasting. Environment Management plan helps to mitigate the adverse effects occurring due to the project. The measures to be taken are being discussed in the following sections.

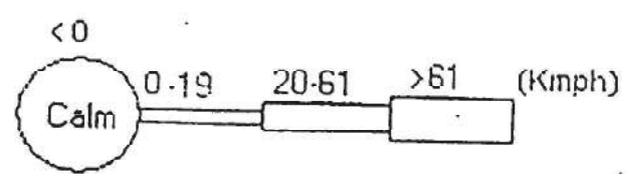
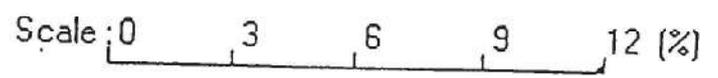
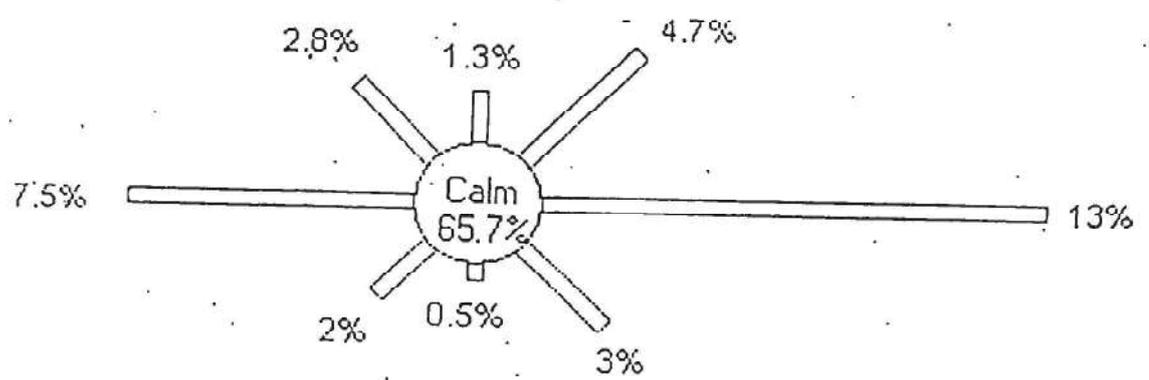
Management System

The management as part of its environment policy its responsibility and commitment to protect the environment and ensure public safety. To realize the implementation of its environmental policy the project management ought to adopt an organizational structure for environmental management where the manager with managerial powers is responsible. For the overall implementation of the company's environmental policy. He will actively interact with other managers on environment and safety matters as safety and environment are inter linked with each other in functions such as production, maintenance, personnel, administration etc. routine air water and soil quality monitoring will be carried out in the laboratory of the mall itself during operational phase along with noise monitoring.

8.5 Conclusion

On the basis of the extensive field study and observations carried out it is felt that the setting up of the proposed shopping mall it is quite safe from environmental aspect and the measures to be adopted by the management for Environment Management are quite sufficient. It is expected that the measures to be adopted will be enough to mitigate any adverse impacts that are likely to arise in the foreseeable future. Hence environmental clearance may be given.

174



WIND ROSE

175

'Ishanya'

Rapid Environment Impact Assessment

ANNEXURE 1: Environmental Legislation in India**1.1 Environmental laws and regulating agencies**

A well developed framework for environmental legislation does not exist in India until after the 1972 UN Conference on human Environmental (Stockholm) took place.

The water (Prevention and Control of pollution) Act 1974 attempted to address pollution issues at the national level ,in an integrated manner. The Air (Prevention and control of pollution) Act 1981 and the umbrella legislation brought out in 1986,namely the Environmental Protection Act, covered the gamut of pollution problems ,laying down the standards for pollution levels etc. It was under the Water Act that the CPCB(Central Pollution Control Board) and the SPCBs(State Pollution Control Boards) were set up. They form a network of bodies responsible for controlling and monitoring environmental quality.

MoEF(Ministry of Environmental and Forests) is the apex administrative body responsible for regulating and ensuring environmental protection in the country.

Desk studies of relevant legislation's and policy documents as well as consultation with local departments and field visits were undertaken.

1.2 Environment and Development

The Ninth Five Year Plan (1997-2002) focuses on sustainable development as one of its objectives .This implies realizing the symbiotic relationship between the processes of environmental protection and improvement ,and that of development.

1.3 Environmental Standards

Standards for ambient air quality, water quality ,noise levels of the vehicles with controlled pollution levels ,specific industries etc are developed to monitor and regulate pollution levels .During the course of the time ,more standards have been introduced regarding which notifications have been issued by the MoEF.

1.3.1 Ambient Air Quality Standards

In India under Section 16(2)(h) of the Air (Prevention And Control Of Pollution)Act 1981,ambient air quality standards have been enforced .Till early 1994 ,these standards were based on the eight -hourly averaging time only .In april 1994 ,these standards were revised to 24 hourly standards .The

176

'Ishanya'

Rapid Environment Impact Assessment

NAAQS(National Ambient Air Quality Standards)are prescribed for 3 distinct areas:

1. Industrial and mixed 2. Residential, rural and other 3. Sensitive .

In the notification brought out in November 1998,the standards for ammonia have been added to the national ambient air quality monitoring.

1.3.2 Water Quality Standards

Drinking water Standards for India were set up by the ICMR(Indian Council Of Medical Research).These are almost similar to the WHO (World Health Organization) drinking water standards.

For industries, surface water is the main source for drawing water for industrial purposes and discharging effluents. The water quality in surface water bodies depends on discharges at various stretches .Based on water quality criteria, the CPCB has designated water uses for Indian rivers. This is done through classification of surface water into five categories namely A,B,C,D and E in decreasing order of quality

Discharges of industrial standards are into public sewers , on land for irrigation ,in river and in coastal regions are regulated through MoEF notification of 1993

1.3.3. Vehicular Emission Standards

Vehicular Emission Standards were first set in 1996 by the CPCB for both petrol and diesel -driven vehicles .These were later revised in 1987 and 1989 .The prevailing standards for petrol driven vehicles for carbon monoxide are 3% for two and three wheelers and 4.5% for four wheelers .The standards for diesel driven vehicles specify limits for smoke as 65 Hartridge Units

The MoST (Ministry of Surface Transport) stipulated, in the notification brought out in 1998. the standards of the respective oils were specified, to be effective from April 1999. Also, pre-mixed fuel (petrol and oil) is being made available at petrol stations .Expansion of the availability of pre-mixed oil dispensers (petrol and 2T oil)shall be undertaken along with a ban on the supply of loose 2T oils at petrol stations and service garages

1.3.4 Hazardous Materials and Wastes Rules

The MoEF has framed the Hazardous Wastes (Management And Handling) Rules 1989,under the Environmental (Protection) Act,1986. It brought out a guide for the manufacture ,storage and import of hazardous chemicals in 1989 and set

'Ishanya'

Rapid Environment Impact Assessment

guidelines for the management and handling of hazardous wastes in 1991. The manufacture, Storage and Import of Hazardous chemicals rules list 434 toxic and flammable and explosive chemicals which required careful regulation.

The Hazardous Wastes Rules list 18 types of waste catalogues with its regulatory quantity, which, if exceeded by any industry has to comply with the various management and handling rules. Amendments were made in 1997 to the Hazardous Waste (Management and Handling) Amendment Rules (1989). The amendment was related to the human beings or animals. Thus, it is the responsibility of hospitals, blood banks, pathological laboratories etc to handle such waste without any adverse effect to the human health and environment.

1.4 Summary Of National Policy

1.4.1 Forest (Conservation) Act 1980

impose very strict control over any new development and carry out the following policies:

- i) Ceasing any regularisation of encroachments after 24.10.1980 and enforcing against illegal encroachment
- ii) Considering extending where feasible the designation of reserved forests where strict control over non forest uses apply
- iii) Applying stringent controls over the de-reservation of those existing areas designated as Reserved Forests
- iv) Adopting more stringent controls over non-forestry uses in other forest areas and
- v) Increasing the degree of central government control over decision making under (ii) & (iii)

1.4.2. Wildlife Protection

Wildlife Protection in India stems from aroused international concern over the decline of wildlife all over the world in the late 1960s and early 1970s due to increased trade and commerce in wild animals and plants. Faced with the threat of species becoming endangered and extinct as a result of uncontrolled trading practices, the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) was set up in 1973 with India being one of the 111

178

'Ishanya'

Rapid Environment Impact Assessment

member countries .The Indian Government enacted the Wildlife Protection Act in 1972 ,with amendments in 1991 in liaison with the policy decisions taken by the convention

It was also recognized however that the depletion or destruction of natural habitats resulting form increased population and demand for housing ,farmland and production of goods and services pose an equal threat to wildlife. This concern prompted the designation of the National Parks and Wildlife Sanctuaries under the Wildlife Protection Act where strict controls were imposed

The Wildlife Protection Act sets a comprehensive framework for Wildlife Protection comprising the control of hunting of wild animals, protection of specified plants, establishment of controls and prohibitions over the trace or commerce of wild animals and trophies of certain animals. The Act also sets out enforcement procedures which were considerably strengthened in amendments to the Act in 1991

1.4.4. Environmental Protection Act 1986

This Act gives a wide range of powers to the Central Government to undertake measures to protect and improve environmental quality. Section 3(1) stipulates that the Central Government shall have the power to take all measures as it deems necessary or expedient for the purpose of protecting and improving the quality of the environmental and preventing, controlling and abating environmental pollution .The generality of these provisions allows rules and regulations to be established to address particular environmental problems or to mitigate impacts form various forms of development

The powers stipulated under the Section 3(2) of the Act mainly to pollution control the setting out of the standards for emissions and discharges of pollutants ,handling of dangerous goods ,monitoring inspections and research into environmental pollution etc spatial controls over industrial activities are also stipulated through measures in elation to areas in which any industrial operations or processes shall not be carried out or shall be carried out subject to certain safeguards [Section 3(2) V].

The act enables the central government by publication in the official gazette to make rules in respect of a wide range of environmental actions [Section (6)] Environmental (Protection) Rules in 1986 specify a number of measures and regulatory actions to be applied to certain areas. Although it has not been possible to acquire these, it is understood that they include regulations for undertaking Environmental Impact Assessment (EIA) for a large variety of development projects .A direct consequence of these rules has been the declaration by central

199

'Ishanya'

Rapid Environment Impact Assessment

government of coastal Regulation Zones (CRZ). These have a significant effect on existing on future development.

1.4.4. Legislation On Forest Land

General Powers

The relevant legislation affecting forest and consists of Forest Act 1927 and the Forest (Conservation) Act 1980 with amendments made in 1998. The Indian Forest Act of 1927 originally provided the means for state government to declare and gazette any forest land or waste land which is government land (or land over which government has property rights) as a reserved or protected forest. It establishes the framework for designating certain types of forest areas in which particular rules and regulations apply. These rules apply to the protection of forests as well as the exploitation of timber and forest produce and the use of land for other purposes.

The forest (Conservation) Act, 1980 stipulates that all the proposals in forest areas for a change of use to 'non forest purpose' the de-reservation or diversion of forest land required approval of the Central Government.

Specifically the Act states, under Section 2, that approval of the Central Government is required for the following activities:

1. To cease designation of a reservation forest
2. To use any forest land or any portion thereof for any non forest purpose
3. To assign by lease or otherwise any forest land to private individuals or NGO and
4. Clearance of trees which have grown naturally for reforestation

As the definition of 'non-forest purpose' in the Act include any purpose other than afforestation, the building of any hotel or tourist facility would require permission from the central government

Reserved Forest

Area designated as reserved forests are subject to strict prohibitions regarding the clearance of forest land for any purpose. Such forests area protected against activities such as illicit felling, cutting and damaging of trees, cultivation and

'Ishanya'

Rapid Environment Impact Assessment

180

grazing of animals, quarrying and development of land for any non-forest purposes and any purpose other than re-afforestation. The Act however makes provisions (under section 27(1)), for which the State Government to cease designation of any reserved forest land (or any portion of which) .Such Action is referred to as 'de-reservation' in the 1980 forest (Conservation) Act

Protected Forest

A greater range of activities is allowed in protected forests ,which are designated under section 29 of the Indian Forest Act ,1927 .Protection Powers include the reservation of the particular trees or class of trees ,the closure of any portion of protected forest through suspension rights to private individuals (for which special rules may be applied) and the prohibition of a range of activities ,including mining and quarrying ,clearance of land for cultivation and building.

Section 32 of the Act, however, also grants the State Government powers to allow and regulate a range of activities in protected forests including the granting of licenses for felling or removing trees or forest produce and clearance and breaking up of the land for cultivation and other purposes.

Other Forests Lands

With regards to forests and lands not under Government ownership, breaking up of land or clearance, pasturing of cattle and clearing of vegetation can be prohibited only for protection purposes against erosion, maintenance of water supply, health purposes and protection of infrastructure.

Enforcement

Penalties and procedures for acts of contravention of laws regarding both reserve and protected forests as well as for contravention of other laws regarding such aspects as the extraction and transit of timber and forest produce and cattle trespass are contained in the Indian Forest Act,1927

1.4.5. Legislation On Wildlife Protection

The protection of wildlife is afforded by Wildlife (Protection) Act ,1972. The Act focuses on two important threats to wildlife ,the loss of natural habitats and the subsequent decimation of natural plant and animal population, and the threat to wildlife resulting from trade in animals ,flora and fauna .It also provides the institutional mechanism for carrying out the recommendations of CITES which aims at banning commercial trade in an agreed list of endangered species and regulating and monitoring trade in other species that might become extinct

187

'Ishanya'

Rapid Environment Impact Assessment

Amendments made on 1991 to this act strengthened its powers by various measuring including

1. Hunting and trapping greatly increased
2. Commercial felling of trees and exploitation of wildlife (flora and fauna) banned in wildlife sanctuaries
3. Firearm licenses not given to persons residing within ten kilometers of a wildlife sanctuary
4. Vehicles, vessels and equipment used by poachers and other offenders to be seized and with court authority became government property and
5. Total ban on export of birds and expanding the number of plant species to be afforded protection

Wildlife Sanctuaries, National Parks and closed Areas can be designated under the Act (Chapter IV)

Wildlife Sanctuaries:

Section 18 permits the state government or Administration of Union Territories to declare its intention to constitute any area, other than the reserve forest, or territorial waters as a sanctuary. The criteria for declaring such areas is broad brush; subsection (1) decrees that a sanctuary may be designated by the State Government 'if it considers that such area is of adequate ecological, faunal, floral, geomorphological, natural or zoological significance for the purpose of protecting propagating or developing wildlife or its environment. In practical terms, the purpose of wildlife sanctuaries has been to protect particular species of flora and fauna and to prohibit killing and capturing of any form of wildlife within a fixed ad sacrosanct boundary

The selection of areas for sanctuaries should be theoretically based on the research into flora and fauna as that carried out by the Zoological Survey Office or any other authorised agency or MoEF. In practice however, a very generalist and superficial approach seems to be undertaken by the administration in designating wildlife sanctuaries.

182

'Ishanya'

Rapid Environment Impact Assessment

Provision is also made under Section 26 for any part of the territorial waters to be included in the sanctuary after consultation with the Chief Naval Hydrographer of the Central Government and taking into account the occupational interests of local fisherman .Under marine sanctuaries and (National Parks) fishing is prohibited

Stringent restrictions are imposed in wildlife sanctuaries over development and activities leading to the destruction or damage to the habitat of any wildlife within the sanctuaries .These include the prohibition of surveys, exploration or investigations works for such developments except with permission

4 Strict controls are also imposed on rights of entry, this being most limited to persons associated with the management or administration of the sanctuary and persons with rights over immovable property, although persons passing through along a public Highway are permitted. Permits may however be granted by the Chief Wildlife Warden for entry into a sanctuary for the following purposes - Study of Wildlife, Photography, Scientific Research, Tourism, Business Activities, with persons residing in the sanctuary

Conditions on entry may be imposed however for eg, restricting visitors to certain specialist parties and to certain viewing areas so as not to threaten the natural habitats of the wildlife

With regards to marine sanctuaries, the rights of innocent passage by vessel or boats is safeguard under section 26

National Parks

4 The State Government of administrator is also empowered under section 35 to declare an area as a national park by reason of its ecological, faunal, floral geomorphological or zoological association or importance .It is an area owned by the state in which conservation policies may apply to satisfy one or several criteria ,including propagation and development of wildlife or the environment is a key purpose of National Parks .According to the wildlife (protection) act (Section 35). Similar powers to control activities as those in wildlife sanctuaries are available to the State Government .In practice however the management of National Parks allows greater recreational uses with fewer entry restrictions than those imposed in wildlife sanctuaries although certain areas may be still restricted to the general public.

183

'Ishanya'

Rapid Environment Impact Assessment

Closed Areas

These are areas which the State Government or Administration may declare closed for Hunting for any specified period. The purpose is to allow depleted wildlife stocks to be replenished. No hunting of any wild animal is allowed in closed areas.

1.5 Change of Use for non forest purpose

Under the present interpretation of the legislation, tourism developments which encroach on the forests(Protection) Act which specifies when a cost benefit analysis would be applicable in considering proposals for diverting or clearing forest land ,lists tourist lodges and complexes(together with habitation ,industrial units and other building construction) as being ' not applicable' , stating that 'as the activities are detrimental to protection and conservation of forest, as a matter of policy, such proposals will be rarely entertained.

Notwithstanding this policy, it is important to report on the procedures for carrying out the changes of use of forest land to non-forest purposes as these would be appropriate should a relaxation of the policy towards tourist projects occur in future.

Proposals for diversion, de-reservation or clearance of forest land for non-forest purposes are sent to MoEF in the form of proposals by the Union Administration .Information to be provided includes a map of the forest area required (scale to 1/50,000 if available) ,Its logical status ,an inventory of species and diameter class-wise abstract of trees to be felled ,with total enumeration required only for projects of below ten hectares .Survey showing the land to be used includes any endangered or threatened species of flora and fauna to be carried out. Should the proposal be deemed by the MoEF to warrant closer examination on account of its environmental impact,(usually in case of large scale projects of over 20 hectares) this may be sent to the Environmental wing of MoEF.

Projects (other than mining and regularization of encroachments) which involve clearance of a forest area of less than 2 hectares and which are devoid of tree cover may be subject to simplified procedures.

As part of the application of the Forest Conservation Act, procedures are laid down to assess the merits, or otherwise of de-reserving or diverting forest and land to other uses. These include a cost/benefit analysis to weigh any ecological and environmental losses against socio-economic gains.

184

'Ishanya'

Rapid Environment Impact Assessment

Compensatory afforestation is included as a condition for changes of use of forest land to non-forest purposes. This is to be carried out over an equivalent area to that taken over by non-forest use, preferably contiguous to or in proximity of reserved Forest or Protected Forest within the same district as the proposals. Where non-forest land is available for compensatory afforestation, this may be carried out over degraded forest land twice in extent of the forest land being diverted or de-reserved.

Wildlife Conservation

The wildlife (Protection) Act provides for the central Government to appoint a Director of wildlife Preservation, whose responsibilities also include the designation of Wildlife Sanctuaries and National parks on behalf of the Central Government (in accordance with section 36 of the Act).

The Board whose composition includes the minister in charge of the forest in the State or Union Government, two members of the State legislature, the Secretary to the State Government and the Chief Wildlife Warden, is responsible for the selection of the areas to be declared as sanctuaries, national parks and closed areas, as well as the formulation of policies for wildlife protection and conservation. The Board can also formulate policies with regard to tribal matters where these are of concern in sanctuaries and national parks.

'Ishanya'

Rapid Environment Impact Assessment

ANNEXURE 2 :Environmental Legislation, Act Rules Notifications and Amendments

General

No	Particulars
01	The National Environmental Appellate Authority Ordinance, 1997
02	The Environmental Clearance Notification, 1994
03	Notification on Environmental Impact Assessment (EIA) of Development Projects , 1994.
04	The Environmental Standards Notification, 1993
05	The Environmental Audit Notification, 1992
06	National Conservation Strategy and the Policy statement of Environmental and Development, 1992
07	The National Environmental Tribunal Bill, 1992
08	Policy Statement on Abatement of Pollution, 1992
09	The public Liability Insurance Act ,Rules and Amendment, 1992
10	The public Liability Insurance Act ,Rules and Amendment, 1991
11	The Environmental (Protection) Act and Rules, 1986

Land

No	Particulars
01	Involvement of village Communities of Voluntary Agencies in Registration of Degraded Forests, 1990
02	National Forest Policy
03	The Industries (Development and Regulation) Act and Amendment, 1987
04	The Coal Mines (Conservation and Development) Amendment Act, 1985
05	The Model Regional and Town Planning and Development Law, 1985
06	The Mines and Minerals (Regulation and Development) Act and Amendment , 1984
07	The Forest (Conservation) Act, 1980
08	The Urban Land (Ceiling and Regulation) Act, 1976
09	The Mines and Minerals (Regulation and Development) Act and Amendment, 1957
10	The Industries (Development and Regulation) Act and Amendment, 1951
11	Provision in State Acts on Town and Country Planning
12	Wildlife Protection Act
13	Draft Notification on Fly Ash Utilization

186

'Ishanya'

Rapid Environment Impact Assessment

Water

No	Particulars
01	The Water (Prevention and Control Pollution) Act, Rules and Amendment, 1992
02	The Coastal Regulation Zone Notification, 1991
03	The Oil Fields (Regulation and Development) Act, 1984
04	The Water (Prevention and Control of Pollution) Act, Rules and Amendment, 1978
05	The Water (Prevention and Control of Pollution) Act, Rules and Amendment, 1978
06	The Water (Prevention and Control of Pollution) Cess Act, 1977
07	The Indian Fisheries Act, 1897

Air

No	Particulars
01	The Air (Prevention and Control of Pollution) Act, Rules and Amendment, 1987
02	The Factories Act and Amendment, 1987
03	The Motor Vehicles (Amendment) Act, 1986
04	The Air (Prevention and Control of Pollution) Act, Rules and Amendment, 1983
05	The Air (Prevention and Control of Pollution) Act, Rules and Amendment, 1982
06	The Atomic Energy Act, 1982
07	The Air (Prevention and Control of Pollution) Act, Rules and Amendment, 1981
08	The Indian Boiler Act, 1923
09	Notification on Restriction of ash content of coal to be used in TPPs

Hazardous Chemicals / Waste

No	Particulars
01	Bio-Medical Waste (Management and Handling) Rules, 1998
02	Draft Hazardous (Management and Handling) Rules, 1997
03	Manufacture, use, Import and Storage of Hazardous Microorganisms, Genetically Engineered Organisms or Cells Rules (1989)
04	The Hazardous Waste (Management and Handling) Rules, 1989
05	Manufacture, Storage and Import of Hazardous Chemicals Rules, 1989

'Ishanya'

Rapid Environment Impact Assessment

187

**Annexure 3: Primary Water Quality Criteria for Class SW-II Waters
For Fishing and Recreation (Non-Contact)**

Parameters	Criteria	Rational/Remarks
pH Range	7.5 - 8.5	Ranges does not cause skin or eye irritation and is also conducive for propagation of a aquatic life.
Dissolved Oxygen	40 . mg/l or 50 percent saturation value ,whichever is higher	Not less than 3.5 mg/l at any time of year for protection of aquatic life.
Colour and Odour	No noticeable colour or offensive	Specially used by chemical compounds like cresols , phenol , naphtha pyridine, benzene, toluene etc causing visible coloration of water and tainting of odour in fish flesh
Floating Matters	Nothing obnoxious or detrimental for use purpose	None in concentration that would impair usages especially assigned to this class
Turbidity	30 NTU (Nephelo Turbidity Unit)	Measure at 0.9m depth
Faecal Coliform	100/100 ml (MPN)	The average value not exceeding 200/100 ml in 20 percent of samples in the year and in 3 consecutive samples in monsoon months
Biomedical Oxygen Demand(5 days at 20 C)	3 mg/l	Restricted for bathing (aesthetic quality of water) also prescribed by IS 2296-1974

'Ishanya'

Rapid Environment Impact Assessment

189

**ANNEXURE 4 : INDIAN STANDARDS /SPECIFICATIONS FOR
DRINKING WATER IS: 10500 - 1991**

Substances or Characteristics	Requirement (Desirable Limit)	Undesirable Effects outside the desirable limits	Permissible Limit in absence of alternate source	Method of Test CI Ref of IS : 3025	Remarks
Essential Characteristics					
Colour : Hazen Unit	5	Over, consumer acceptance decreases	25	4 of 3025, 1983	Extended upto 25 only if toxic substances are not suspected in absence of alternate source
Odour		Objectionable	---	5 of 3025, 1983	a. Test Cold and when heated b. Test at several dilutions
Taste		Agreeable	---	---	Test to be conducted only after safety has been established

190

'Ishanya'

Rapid Environment Impact Assessment

Substances of Characteristic Max	Requirement (Desirable Limit)	Undesirable Effects outside the Desirable limits	Permissible limit in absence of alternate source	Method of Test CI Ref of IS: 3025	Remarks
Turbidity, NTU	5	Above, consumer acceptance decreases	10	8	-
pH value	6.5 – 8.5	Beyond this range the water will affect the mucous membrane and/or water supply system.	No Relaxation	8	-
Total Hardness mg/L as CaCO ₃	300	Encrustation on water supply structure and adverse effects on domestic use	600	---	---
Iron (as Fe), mg/L	0.3	Beyond this limit taste/appearance are affected, has adverse effect on domestic uses and water supply structures & promotes iron bacteria	1.0	32 of 3025, 1964	--
Chlorides (as Cl) mg/l	250	Beyond this limit, taste corrosion and palatability are affected	1000	32 of 3025, 1988	--

191

'Ishanya'

Rapid Environment Impact Assessment

Substances of Characteristic Max	Requirement (Desirable Limit)	Undesirable Effects outside the desirable limits	Permissible limit in absence of alternate source	Method of Test CI Ref of IS: 3025	Remarks
Residual free chlorine, mg/l	0.2			26 of 3025,1986	To be applicable only when water is chlorinated. Tested at consumer end When protection against viral infection
Desirable Characteristics					
Dissolved solids mg/L	500	Beyond this palatability decreases and may cause gastrointestinal irritation	2000	16 of 3025,1984	-
Calcium (as Ca) mg/L	75	-	200	40 of 3025,1984	-
Copper (as Cu) mg/L	0.05	Astringent ,taste discoloration of pipes, fitting and utensils will be caused beyond this	1.5	36 of 3025,1964	-
Manganese (as Mn) mg/L	0.1	Astringent ,taste discoloration of pipes, fitting and utensils will be caused beyond this	0.3	35 of 3025,1964	-

192

'Ishanya'

Rapid Environment Impact Assessment

Substances of Characteristic Max	Requirement (Desirable Limit)	Undesirable Effects outside the desirable limits	Permissible limit in absence of alternate source	Method of Test CI Ref of IS: 3025	Remarks
Sulphates (as SO ₄) mg/L	200	Beyond this causes gastro intestinal irritation when magnesium or sodium is present	400	24 of 3025,1986	May be extended upto 400 provided (as Mg) does not exceed 30mg/L
Nitrates(as No ₃), mg/L	45	Beyond this methaemoglobin emia takes place	100	-	-
Fluoride (as F) mg/L	10	Fluoride may be kept as low as possible. High Fluoride may cause fluorosis	1.5	23 of 3025,1964	-
Phenolic Substances mg/L (as C ₆ H ₅ OH)	0.001	Beyond this it causes objectionable taste and odour	0.002	54 of 3025,1964	-
Mercury (as Hg),mg/L	0.001	Beyond this water becomes toxic	No relaxation	See note on mercury ion analyzer	To be tested when pollution is suspected
Cadmium	0.01	Beyond this	No	See note	To be

193

Rapid Environment Impact Assessment

'Ishanya'

(as Cd),mg/L		water becomes toxic	relaxati on	on mercury ion analyzer	tested when pollution is suspected
Selenium (as Se),mg/L	0.01	Beyond this water becomes toxic	No relaxati on	28 of 3025,1964	To be tested when pollution is suspected
Arsenic (as As),mg/L	0.05	Beyond this, water becomes toxic	No relaxati on	37 of 3025,1988	To be tested when pollution is suspected
Cyanide (as CN),mg/L	0.05	Beyond this water becomes toxic	No relaxati on	27 of 3025,1986	To be tested when pollution is suspected
Lead (as Pb),mg/L	0.05	Beyond this water becomes toxic	No relaxati on	See note 86	To be tested when pollution plumbo - solvency is suspected
Zinc (as Zn),mg/L	5	Beyond this limit It can cause	15	39 of 3025,1964	To be tested when

194

'Ishanya'

Rapid Environment Impact Assessment

		astringent taste and an opalescence in water			pollution is suspected
Anionic Detergents mg/L (as MBAS)	0.2	Beyond this limit it can cause light froth in water.	1.0	Methylene blue extraction method	To be tested when pollution is suspected
Chromium (as Cr+6),mg/L	0.01	May be carcinogenic above this limit	0.05	28 of 3025,1964	To be tested when pollution is suspected
Polynuclear aromatic hydrocarbons (as PAH),mg/L	-	May be carcinogenic	-	-	-

195

'Ishanya'

Rapid Environment Impact Assessment

Substances of Characteristic Max	Requirement (Desirable Limit)	Undesirable Effects outside the desirable limits	Permissible limit in absence of alternate source	Method of Test CI Ref of IS: 3025	Remarks
Mineral Oil, mg/L	0.01	Beyond this limit undesirable taste and odour after chlorination takes place	0.03	Gas chromatographic method	To be tested when pollution is suspected
Pesticides, mg/L	Absent	Toxic	0.001	58 of 3025, 1964	-
Radioactive Materials					
a. Alpha emitters Bq/L	-	-	0.1	-	-
b. Beta emitters pci/L	-	-	1.0	-	-
Alkalinity (as CaCO ₃),mg/L	200	Beyond this limit taste becomes unpleasant	0.03	13 of 3025,1964	-
Aluminum (as Al) mg/L	0.03	Cumulative effect is reported to cause dementia	0.2	31 of 3025,1964	-
Boron (as B),mg/L	1	-----	5	29 of 3025,1964	-

Note: Atomic Absorption spectrophotometric method may be used

'Ishanya'

Rapid Environment Impact Assessment

198

**ANNEXURE 5 : SUITABILITY OF TREATED WASTEWATER FOR
IRRIGATION**

	Tolerance limit for inland surface water for Irrigation	
	MEF, 1993	IS 2296,1982
pH	5.5 – 9.0	6.0 – 8.5
Dissolved solids mg/l	----	2100
Electrical Conductivity (EC)miu S/cm	----	Class – C3
Sodium mg/l	----	----
Percent Sodium	----	60
Sodium Adsorption Ration (*SAR)	----	Class - S1
Sulphates mg/l	----	1000
Chlorides mg/l	----	600
Oil and Grease mg/l	10	----
Bio-Chemical oxygen demand (BOD) mg/l	100	----
Suspended Solids mg/l	200	----
Bioassay	90% survival for 96 hrs in 100% effluent	

EC	Class	SAR	Class
100-200	C1	<10	S1
250-750	C2	10-18	S2
750-2250	C3	18-26	S3
2250-5000	C4	>26	S4

'Ishanya'

Rapid Environment Impact Assessment

197

ANNEXURE 6: CPCB Emission Regulations for Diesel Generator sets

The minimum height of stack to be provided with each generator set can be worked out using the following formula

$$H = h + 0.2 \text{ KVA}$$

H = Total Height of the stack in meter.

h = height of the building in meters where the generator set is installed

KVA = Total Generator capacity of the set in KVA

Based on the above formula the minimum stack height to be provided with different range of generator sets may be categorized as follows:

Table 1

For generator Sets	Total Height of the stack in meter
50 KVA	Height of the building + 1.5 meter
50 - 100 KVA	Height of the building + 2.0 meter
100 - 150 KVA	Height of the building + 2.5 meter
150 - 200 KVA	Height of the building + 3.0 meter
200 - 250 KVA	Height of the building + 3.5 meter
250 - 300 KVA	Height of the building + 4.0 meter

Similarly for the higher KVA ratings a stack height can be worked out using the above formula

The stack height for generators were originally evolved for those to be used in the metropolitan area of Delhi. The objective was to avoid the problem of road side discharge from stacks and build-up of pollutants in the ambient air. However, due to shortage of power factories have installed diesel-based power generating (DG) sets. Many of the factories are away from metropolitan or urban areas where the standards covered above would appear stringent. It is also expected that a DG set is a stand by used only during power breakdowns. For both these reasons the relaxation in the height of the stack from ground level is made two and a half times the building height. This building may be either one which the DG set has housed or a building, with people working, within the premises of the mall. This is also applicable for oil-fired furnaces, engines and equivalent.

The state pollution control board would decide if the plant is sufficiently removed from urban, residential or commercial areas so that this relaxation from above Table 1 is applicable

192

'Ishanya'

Rapid Environment Impact Assessment

It is evident that the stack requirement for coal -fired boilers is more than that required for DG sets. This is necessary because ambient values for sulphur dioxide and nitrogen indicate stricter for sulphur dioxide.

Source: Emission Regulations Part IV, Comprehensive Industry Document series (OINDS/26/86-87) Central Pollution Control Board (CPCB), New Delhi.

199

'Ishanya'

Rapid Environment Impact Assessment

**ANNEXURE 7 : GENERAL STANDARDS FOR DISCHARGE OF
ENVIRONMENTAL POLLUTANTS: EFFLUENT**
(Gazette Notification of MoEF, May 1993)

Sr No.	Parameter	Standards			
		Inland Water	Surface	Public Sewers	Land for Irrigation
		(a)	(b)	(c)	(d)
1.	Color and odour	----	---	----	-----
2.	Suspended solids mg/l max.	100	600	200	a) For process waste-water - 100 b) For cooling water effluent - 10 percent above total suspended matter of influent
3.	Particular size of suspended solids	Shall pass 850 micron IS Sieve	----	----	a) Floatable solids max. 3mm b) Settle able solids max. 850 microns
4	***	*	---	***	---

200

'Ishanya'

Rapid Environment Impact Assessment

5.	Ph Value	5.5 - 9.0	5.5. to 9.0	5.5 to 9.0	5.5 to 9.0
6.	Temperature	Shall not exceed 5 degree C above the receiving water temperature	-----	-----	Shall not exceed 5 degree C above the receiving water temperature
7.	Oil and Grease mg/l max.	10	20	10	20
8.	Total Residual chlorine mg/L max	1.0	----	----	1.0

201

'Ishanya'

Rapid Environment Impact Assessment

N o.	Parameter	Standards			
		Inland Surface Water	Public Sewer	Land for Irrigation	Marine coastal areas
		(a)	(b)	(c)	(d)
9.	Ammonical nitrogen (as N) mg/L	50	50	----	50
10	Total Kjeldahl nitrogen (as NH ₃) mg/L, max	100	-	----	100
11	Free Ammonia (as NH ₃)mg/L, max	5.0	---	----	5.0
12	Biochemical Oxygen (5 days at 20 degree C)mg/l max	30	350	100	100
13	Chemical Oxygen demand mg/L, max	250	--	-----	250
14	Arsenic (as As), mg/L max	0.2	0.2	0.2	0.2
15	Mercury(as Hg) mg/L max	0.01	0.01	----	0.01
16	Lead (as Hg) mg/L max	0.1	1.0	----	2.0
17	Cadmium(as Hg) mg/L max	2.0	1.0	----	2.0

201

'Ishanya'

Rapid Environment Impact Assessment

N o.	Parameter	Standards			
		Inland Surface Water	Public Sewer	Land for Irrigation	Marine coastal areas
		(a)	(b)	(c)	(d)
18	Hexavalent chromium (as Cr+6) mg/L max	0.1	2.0	----	2.0
19	Total Chromium (as Cr) mg/L max	2.0	2.0	----	2.0
20	Copper (as Cu) mg/L max	3.0	3.0	----	3.0
21	Zinc (as Zn) mg/L max	5.0	15	----	15
22	Selenium (as Se) mg/L max	0.05	0.05	----	0.05
23	Nickel (as Ni) mg/L max	3.0	3.0	----	5.0
24	***	*	*	*	*
25	***	*	*	*	*
26	***	*	*	*	*
27	Cyanide (as CN) mg/L max	0.2	2.0	0.2	0.2
28	***	*	*	*	*
29	Fluoride(as F) mg/L max	2.0	15	-	15
30	Dissolved phosphates (as P) mg/L max	5.0	---	---	--

203

'Ishanya'

Rapid Environment Impact Assessment

Sr N o.	Parameter	Standards			
		Inland Surface Water	Public Sewers	Land for Irrigation	Marine coastal areas
		(a)	(b)	(c)	(d)
31	***	*	*	*	*
32	Sulphide(as F) mg/L max	2.0	--	-	5.0
33	Phenolic compounds (as C ₆ H ₅ OH) mg/l max	10	5.0	-	5.0
34	Radio active Materials a) Alpha emitter microcurie/ml	10e-7 10e-6	10e-7 10e-6	10e-6 10e-7	10e-6 10e-6
	b)Beta emitter microcurie/ml				
35	Bio-assay test	90% survival of fish after 96 hours in 100%effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent	90% survival of fish after 96 hours in 100% effluent

204

'Ishanya'

Rapid Environment Impact Assessment

36	Manganese (as Mn) mg/L max	2	2	----	2
37	Iron (as Fe),mg/L	3	3	----	3
38	Vanadium (as V)	0.2	0.2	----	0.2
39	Nitrate Nitrogen mg/L	10	--	----	--
40	***	*	*	*	*

***Omitted by Rule 2 (d)(i) by the Environmental (Protection) Third Amendment
 Rules, 1993 vide notification No.G.S.R. 801 (E) dated 31.12.1993

205

'Ishanya'

Rapid Environment Impact Assessment

ANNEXURE 8 : STATISTICS

(I) (A)

Geographical Location	Pune District	Maharashtra
Latitude	Degrees 17.5-19.2	16.4-22.1
Longitude	Degrees 73.2-75.1	72.6-80.9

(B)

Temperature	2001(Pune District)	2001-2002(Maharashtra)
1) Maximum	Degree cal 37.7	45.9
2) Minimum	Degree cal 10.5	5.6
	Mv. met.	1628.00

(C)

	Pune district	Maharashtra
Tehasil	14	353
Panchayat samiti	13	349
Cities	25	378
Villages (Acc.2001)	1866	43722
Inhabited	1866	43722
Area	Sq km 15642	307583

(II)

	Pune district	Maharashtra
Maha Nagar Palika	2	19
Nagar Parishad	11	224
Katak Mandal	3	7
Gram Panchayat	1401	27805
Police (Thane)(31/12/02)	48	926(31/12/01)
Police Outpost(31/12/02)	45	1769

'Ishanya'

Rapid Environment Impact Assessment

206

(III)

Population(2001)	In Thousand	Pune Dist	Maharashtra
1) Village	000	3029	55732
2) Town	000	4196	41020
3) Total	000	7224	96752
4) Anusuchit(1991) jaati	000	631	8758
5) -do-	%	11.41	11.09
6) Anusuchit Jaamati	000	216	7318
7) - do-	%	3.91	9.27
8) Males Total (2001)	000	3768	50334
9) Female Total (2001)	000	3456	46418
10)Female Male Ratio (2001)	For every 1000 Male	917	922
11)Density (2001)	Every sq.km Area Population	462	314
12)(2001)			
i) Total	%	80.78	77.3
ii) Male	%	88.55	86.3
iii) Female	%	72.32	67.5
iv) Dist. in State	No.	7	-

(IV)

Animal live stock (1997)	In Thousand	Pune Dist	Maharashtra
1) Total Animals	000	2290	39638
2) Cow	000	896	18071
3) Buffalo	000	287	6073
4) Sheep, Goat	000	1058	14802
5) Hen, Cock, Duck	000	3942	35392

(V) Irrigation completed before June 2003

		Dist	Maharashtra
1)Major Project	Num	12	32
2)Medium Project	Num	4	178
3)Minor	Num		2182
4)Lift irrigation (Area)	000H	161	1931

'Ishanya'

Rapid Environment Impact Assessment

(VI) Industrial

Power (31.3.2003)		Dist	Maharashtra (31.3.98)
Cities + village supplied with power	Num	1891	39413
Villages electricity	No	1866	
Pump set supplied with electricity	000		2417
Gober gas plants	Num	28396	

(VII)

Health		(2002-03)	(2002)
Hospitals	Num	38	964
Dispensary.	Num	73	2081
Primary Health	Num	89	1806
Primary Health (mobile)	Num	3.011	174

(VIII) Primary Education

Total P. Schools	Num	4320	67062
Total Students in P. Schools.	000	777	11837
Primary School Teacher	000	21	315
Ratio Of Students of Every teacher	Num	36	38

(IX)

Middle Education	Year	Dist (2001-02)	Maharashtra (2002-03)
Middle school	Num	846	16117
Students in middle school	Num 000	374	9864
Teacher	Num 000	11	267
Ratio no of Stud. For every teacher	Num	33	37

208

'Ishanya'

Rapid Environment Impact Assessment

(X)

Higher Education	Year	2001-2002	2002-2003
Number	Num	40	1786
Total Student	Num 000	23	1035

(XI)

Technical Education

Industrial	Num	44	612
Govt.	-do-	15	347
Non-Govt.	-do-	29	265
Total Capacity	-do	-	93169
Degree colleges	-do-	-	146
Capacity 18+yr	-do-	-	45232
Vocational educational institute	-do-	137	-
Entrance capacity		10250	-

* (XII) Pune district Area, Houses and Population at Haveli talukaArea

	Pune	Pune city	Haveli
Total	15642	184	1337
Urban	621	18	1145
Rural	15021	166	192

Population for every Sq.km (Houses)

	Pune	Pune city	Haveli
Total	462	14657	1007
Urban	6758	16246	5514
Rural	202	0	251

'Ishanya'

Rapid Environment Impact Assessment

209

Population

	Pune District			Pune city		
	Male	Female	Total	Male	Female	Total
Total	3768001	3456223	7224224	1409931	1286937	2696868
Rural	1556133	1472706	3028839	0	0	0
Urban	2211868	1983517	4195385	1409931	1286937	2696868

	Haveli Taluka		
	Male	Female	Total
Total	721420	624926	1346346
Rural	150410	137279	1058657
Urban	571010	487647	287689

'Ishanya'

Rapid Environment Impact Assessment

(XIII) OCCUPATIONAL STRUCTURE

Pune District

	Farmers (cultivators)	Field workers Agri. labour	Foresh work, fisherman, Hinters etc.	Minin g. stone minin g	Household, Industry, Manufactur e Services	Work Other Than	Build Worker s	Busines s Scientif ic Related work	Tranbor t related	Other work
Rural	629562	273087	24827	1720	15205	77220	20138	39304	27864	70800
Urban	14248	14278	8089	1635	15574	257591	92041	161920	70414	236162
Total	643810	287385	32916	3355	30779	334811	112179	201224	9828	306962

Pune city

	Farmers (cultivators)	Field workers Agri. labour	Foresh work, fisherman, Hinters etc.	Minin g. stone minin g	Househol d Industry, Manu- facture services	Work Other Than	Build Worker s	Busines s Scientif ic Related work	Tranbor t related	Other work
Rural	126	240	42	0	33	1105	95	270	225	391
Urban	3193	3314	3601	412	9028	136269	58081	115525	43716	163875
Total	3319	3554	3643	412	9061	137374	58176	115795	43941	164266

210

'Ishanya'

Rapid Environment Impact Assessment

Haveli Taluka

	Farmers (cultivators)	Field workers Agri. labour	Forest work, fisherman , Hinters etc.	Minin g, stone minin g	Househol d Industry, Manu- facture services	Work Other Than	Build Worker s	Busines s Scientif ic Related work	Tranpor t related	Other work
Rural	46716	31189	3428	333	2622	26891	5185	8980	7819	391
Urban	4745	4974	2114	943	4199	102485	28202	27056	17783	16387
Total	51461	36163	5542	1276	6821	129376	33387	36036	25602	16426

211

212

'Ishanya'

Rapid Environment Impact Assessment

Pune Dist

	Population	S.C			S.T			Total	
		Male	Female		Male	Female		Male	Female
Total	631063	325176	305887	216336	111453	104883	847399	436629	41
Rural	224051	114974	109077	177677	90763	86914	401726	205737	19
Urban	407012	210202	196810	38659	20690	17968	445671	230892	21

Pune city

	Population	S.C			S.T			Total	
		Male	Female		Male	Female		Male	Female
Total	254567	131163	123404	18621	9907	8714	273188	141070	13211
Rural	645	349	296	229	118	111	874	467	407
Urban	253922	130814	123108	18392	9789	8603	272314	140603	13171

Haveli Taluka

	Population	S.C			S.T			Total	
		Male	Female		Male	Female		Male	Female
Total	153129	79475	73654	19521	10336	9185	172650	89811	82839
Rural	42194	21781	20413	6224	3244	2980	48418	25025	23393
Urban	110935	57694	53241	13297	7092	6205	124232	64786	59446

213

'Ishanya'

Rapid Environment Impact Assessment

(XV) Rainy Days
2002 (m-m-m)

Pune city

Month	Average	No.of Rainy Days	Rain
Jan	2.0	0	0
Feb	0.9	0	0.0
Mar	3.3	0	0.0
April	14.9	0	0.0
May	31.5	0	0.0
June	104.2	8	201.0
July	178.4	6	32.5
Aug	102.2	11	106.8
Sept	121.8	6	46.9
Oct	78	1	129.0
Nov	29.9	0	0.0
Dec	6.0	0	0.0

(XVI) -Crop

Pune -2002-2003

Crop	Area in Hectares	Yield per Hect. in Kg	Total Yield
Rice	69780	693	400
Wheat	94652	1266	819
Jawar	354612	698	865
Bajri	158071	698	865
Barli	800	350	1
Maka	19744	1913	285
Raagi Nachi	13750	855	103
Other fram		27	16
Harbar	49869	507	277
Tur	4446	476	18
Urad	2825	884	19
Moong	8625	489	38
Masoor	135	329	2
Other sprout		263	54
Kulit	2750		

214

'Ishanya'

Rapid Environment Impact Assessment

Matki	3970		
Chavali	1034		
Vatana	4369		
Sugarcane	63115		
Fruits	13576		
vegetables	57401		

Crop pattern in Pune city & Haveli taluka

Crop	Area in Hectares	
Rice	182	3724
Wheat	138	3502
Jawar	232	938
Bajri	39	9921
Barli	0	0
Maka	259	1469
Raagi	0	212
Nachi		
Harbar	156	3002
Tur	11	220
Urad	30	172
Moong	60	305
Masoor	0	0
Kulit	0	82
Chavali	5	131
Vatana	65	491
Sugarcane	62	1720
Fruits	29	1200
vegetables	200	7115

215

(XVII)
Land use pattern
1998-99

	Taluka	Total geographical Area	Area cover forest land	Non agricultural land	Non cultivable waste land	Total non cultivable land	Cultivable but not used	Pasture land	Land used for fruits
1	Pune district	1562058	171809	63362	104226	167588	32918	65577	25607
2	Haveli taluk	133627	7864	3962	14804	18766	2477	9808	0
3	Pune city	11990	235	9401	670	10071	499	0	0

	Taluka	Barren land	Cultivable Land	Total cultivable
1	Pune district	116095	1156200	1330820
2	Haveli taluka	246	1863	111346
3	Pune city	26245	82624	2608

(XVIII)
Pune dist Birth Death 2002

S.NO	BRITH			DEATH			CHILD DEATH		
	Male	Female	TOTAL	Male	Female	TOTAL	Male	Female	TOTAL
Total	63899	51907	115806	23360	14757	38117	986	758	1744
Rural	18112	13912	32024	6584	4225	10809	50	81	131
Urban	45787	37995	83782	16776	10532	27308	936	677	1613

Year 2002-03	Pune		
	Pune	Pune city	Haveli
Hospital	38	10	8
Dispensary	73	34	19
Maternity ward	40	17	5
Primary health	89	0	10
Sub centres	503	0	59
No. of Doctors	1026	550	296
Nurses	2489	1228	586
No. of cots	7711	4933	1672

Agenda for 175 th Meeting of SEIAA

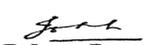
SEIAA Meeting number: 175 Meeting Date September 18, 2019

Subject: Environment Clearance for Shopping mall project by M/s Deepak Fertilisers & petrochemicals Corporation Limited

Is a Violation Case: No

1.Name of Project	Ishanya Mall
2.Type of institution	Private
3.Name of Project Proponent	Mr Mahesh Meenakshisundaram
4.Name of Consultant	M/s JV Analytical Services
5.Type of project	Construction project of Shopping mall
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Yes
8.Location of the project	S. No. 190(part), 192(part), CTS number 2185-A, Plot Number - B, Shastri Nagar, Yerawada, Pune 411 006.
9.Taluka	Haveli
10.Village	Yerawada
Correspondence Name:	Mr Harsh Shah
Room Number:	-
Floor:	-
Building Name:	Ishanya Mall
Road/Street Name:	Shastri Nagar
Locality:	Yerawada
City:	Pune
11.Whether in Corporation / Municipal / other area	PMC
12.IOD/IOA/Concession/Plan Approval Number	Applied IOD/IOA/Concession/Plan Approval Number: - Approved Built-up Area: 95082.28
13.Note on the initiated work (If applicable)	94568.64 m2 As per Previous EC dated 10th April 2007(No.21-243/2006-IA-III)
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Not Applicable
15.Total Plot Area (sq. m.)	59399.43
16.Deductions	18743.77
17.Net Plot area	40655.66
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): 33008.80
	Non FSI area (sq. m.): 62073.48
	Total BUA area (sq. m.): 95082.28
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): 38624.28
	Approved Non FSI area (sq. m.): 33765.47
	Date of Approval: 14-07-2014
19.Total ground coverage (m2)	12505.94
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	21.05 % of Total plot area and 30.76 % of Net plot area
21.Estimated cost of the project	2863500000

22.Number of buildings & its configuration

 Shri. Anil Diggikar (Member Secretary SEIAA)	SEIAA Meeting No: 175 Meeting Date: September 18, 2019 (SEIAA-STATEMENT-000000293) SEIAA-MINUTES-0000002577	Page 1 of 13	 Johny Joseph Shri. Johny Joseph (Chairman SEIAA)
--	--	---------------------	--

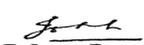
Serial number	Building Name & number	Number of floors	Height of the building (Mtrs)
1	Building-0	LG+UG+2	10.14
2	Building-1	LG+UG+3	17.50
3	Building-2	LG+UG+3	17.50
4	Building - 3 & 4	LG+UG+2+Mezz.	15.00
5	Building - 5	LG+UG+1	7.40
6	Building - 6	LG+UG+2	10.90
7	Building - 7	LG+UG+1	9.30
8	Engg. Building	Ground floor	3.00

23.Number of tenants and shops	Commercial- 50353.72 m2 Restaurant- 13259.20 m2 Multiplex- 3062.60 m2
24.Number of expected residents / users	Commercial Users : 4167 Nos. Restaurant Users : 990 Nos. Multiplex Users : 658 Nos. Total Users : 5815 Nos.
25.Tenant density per hectare	NA
26.Height of the building(s)	
27.Right of way (Width of the road from the nearest fire station to the proposed building(s))	18.30 m wide road
28.Turning radius for easy access of fire tender movement from all around the building excluding the width for the plantation	9m
29.Existing structure (s) if any	Old Existing Houses
30.Details of the demolition with disposal (If applicable)	Old existing House will be demolished & debris will be used for land leveling at site.

31.Production Details

Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable

32.Total Water Requirement

 Shri. Anil Diggikar (Member Secretary SEIAA)	SEIAA Meeting No: 175 Meeting Date: September 18, 2019 (SEIAA-STATEMENT-000000293) SEIAA-MINUTES-0000002577	Page 2 of 13	 Shri. Johnny Joseph (Chairman SEIAA)
--	--	---------------------	--

Dry season:	Source of water	PMC
	Fresh water (CMD):	633.43(One Time)
	Recycled water - Flushing (CMD):	277.08
	Recycled water - Gardening (CMD):	23.00
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	333.35
	Fire fighting - Underground water tank(CMD):	300.00
	Fire fighting - Overhead water tank(CMD):	80.00
	Excess treated water	0.00
Wet season:	Source of water	PMC
	Fresh water (CMD):	610.43(One Time)
	Recycled water - Flushing (CMD):	277.08
	Recycled water - Gardening (CMD):	0.00
	Swimming pool make up (Cum):	NA
	Total Water Requirement (CMD) :	333.35
	Fire fighting - Underground water tank(CMD):	300.00
	Fire fighting - Overhead water tank(CMD):	80.00
	Excess treated water	23.00
Details of Swimming pool (If any)	NA	

33.Details of Total water consumed									
Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
34.Rain Water Harvesting (RWH)	Level of the Ground water table:			Summer Season - 21.67 m. to 24.33 m. BGL.(23.00 m. Average), Rainy Season - 9.33 m. to 15.00 m. BGL.(12.17 m. Average), Winter Season - 15.50 m. to 19.67 m. BGL.(17.59 m. Average)					
	Size and no of RWH tank(s) and Quantity:			NA					
	Location of the RWH tank(s):			NA					
	Quantity of recharge pits:			23Nos					
	Size of recharge pits :			2.0 m. X 2.0 m. X 2.0 m. Depth with 60 m.Deep 6" Dia. Bore Wells via 2 No. of de-Siltation pits of 0.9 X 0.6 X 1.0 m. Depth.					
	Budgetary allocation (Capital cost) :			Rs 23.00 Lakh.					
	Budgetary allocation (O & M cost) :			Rs. 1.15 Lakh /Year					
	Details of UGT tanks if any :			Domestic UG tank Capacity : 558 m3 Flushing UG tank Capacity : 450 m3 Fire UG tank Capacity : 300 m3					
35.Storm water drainage	Natural water drainage pattern:			-					
	Quantity of storm water:			26543.81 m3 / Year. i.e. 530.87 m3 / Day.					
	Size of SWD:			450mm					
36.Sewage and Waste water	Sewage generation in KLD:			300.08					
	STP technology:			MBBR					
	Capacity of STP (CMD):			255 m3/day(Existing) + 55 m3/day(Proposed)					
	Location & area of the STP:			Existing-305 m2 & Proposed-150 m2					
	Budgetary allocation (Capital cost):			255 m3/day(Existing) : Rs 61.16 Lakh & 55 m3/day(Proposed): Rs.23.91 Lakh					
	Budgetary allocation (O & M cost):			255 m3/day(Existing) : Rs 17.34 Lakh/Year & 325 m3/day(Proposed): Rs.4.98 Lakh/Year					

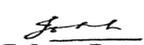
37.Solid waste Management

Waste generation in the Pre Construction and Construction phase:	Waste generation:	45 kg/day
	Disposal of the construction waste debris:	Use for Leveling.
Waste generation in the operation Phase:	Dry waste:	Commercial & Multiplex: 724.00 kg/day, Restaurant: 99.00 kg/day
	Wet waste:	ommercial & Multiplex:483.00 kg/day, Restaurant: 149.00 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	65 kgs/day
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	SWACH
	Wet waste:	Organic waste converter
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Used as Manure after treatment in OWC
	Others if any:	NA
Area requirement:	Location(s):	-
	Area for the storage of waste & other material:	Existing - 12 m2 including Machinery area, Proposed- Storage area:15 m2 & other area:39m2
	Area for machinery:	Proposed-21 m2
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	100 kg/day(Existing):Rs.6.00 Lakh, 750 kg/day(Proposed):Rs.20.25 Lakh
	O & M cost:	100 kg/day(Existing):Rs 1.19 Lakh/year, 750 kg/day(Proposed):Rs.3.86 Lakh/year

38.Effluent Charecteristics

Serial Number	Parameters	Unit	Inlet Effluent Charecteristics	Outlet Effluent Charecteristics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			

39.Hazardous Waste Details							
Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
40.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	DG Sets-500KVA-6 Nos	HSD-111 Lits/Hr	S-1 to S-6	15 m	-	-	
41.Details of Fuel to be used							
Serial Number	Type of Fuel	Existing	Proposed	Total			
1	HSD	111 Lits/Hr	Not applicable	111 Lits/Hr			
42.Source of Fuel		Bharat Petroleum Corporation Limited/Hindustan Petroleum					
43.Mode of Transportation of fuel to site		By Roadway					
44.Green Belt Development							
		Total RG area :	6783.30 m2				
		No of trees to be cut :	NA				
		Number of trees to be planted :	390 Nos				
		List of proposed native trees :	-				
		Timeline for completion of plantation :	-				
45.Number and list of trees species to be planted in the ground							
Serial Number	Name of the plant	Common Name	Quantity	Characteristics & ecological importance			
1	Aegle marmelos	Bel	10	Medicinal Plant			
2	Albizia lebbeck	Siris	10	Flowering Plant			
3	Annona reticulata	Ramphal	20	Fruiting Plant			
4	Adonsonia digitata	Gorakh Imli	20	Fruiting Plant			
5	Bauhinia variegata	Kachnar	20	Flowering Plant			
6	Cassia fistula	Bahava	20	Flowering Plant			
7	Dalbergai latifolia	Black Rosewood	20	Medicinal Plant			
8	Ficus elastica	Rubber	20	Medicinal Plant			
9	Khaya grandis	Benin Mahogany	10	Medicinal Plant			
10	Lagerstromia speciosa	Tamana	20	Medicinal & Flowering Plant			
11	Mangifera indica	Aamba	20	Fruiting Plant			
12	Michelia champaka	Piwala Chafa	20	Flowering Plant			
13	Mimusops elengi	Bakul	20	Flowering Plant			
14	Neolamarckia cadamba	Kadamba	20	Medicinal Plant			

 Shri. Anil Diggikar (Member Secretary SEIAA)	SEIAA Meeting No: 175 Meeting Date: September 18, 2019 (SEIAA-STATEMENT-000000293) SEIAA-MINUTES-0000002577	Page 6 of 13	 Shri. Johnny Joseph (Chairman SEIAA)
--	--	---------------------	--

15	Nyctanthes arbor-tristis	Parijatak	20	Flowering Plant
16	Phyllanthus emblica	Aawla	20	Fruiting Plant
17	Pongamia pinnata	Karanj	20	Medicinal Plant
18	Prosopis cineraria	Shami	20	Flowering Plant
19	Saraca indica	Ashoka	20	Medicinal Plant
20	Syzygium cumini	Jambhul	20	Fruiting Plant
21	Tamarindus indica	Chinch	20	Fruiting Plant
46.Total quantity of plants on ground				
47.Number and list of shrubs and bushes species to be planted in the podium RG:				
Serial Number	Name	C/C Distance	Area m2	
1	-	-	-	

SEIAA-MINUTES-0000002577

48. Energy

Power requirement:	Source of power supply :	MSEDCL
	During Construction Phase: (Demand Load)	-
	DG set as Power back-up during construction phase	-
	During Operation phase (Connected load):	5507 KW
	During Operation phase (Demand load):	2900 KVA
	Transformer:	22 KVA/2000KVA -2 No
	DG set as Power back-up during operation phase:	500 KVA - 6 Nos.
	Fuel used:	111 Liters / Hr
	Details of high tension line passing through the plot if any:	NA

49. Energy saving by non-conventional method:

- Solar lights are provided for common amenities like Street lighting & Garden lighting.
- CFL & LED based lighting are done in the common areas, landscape areas, signage's, Entry gates and boundary compound walls etc.
- Auto Timer Switches will be provided for Street lights, Garden lights, Parking & staircase Lights & Other Common Area Lights, for saving electrical energy.
- Water Level Controllers with Timers will be used for Water Pumps.

50. Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	LED Lamp & Fitting For Common Areas i.e. Bldg. Parking, Staircase, Passage & Terrace Floor.	23917.36 KWH/Annum
2	Bollard Lighter - Light Fitting For Landscape Area.	1226.4 KWH/Annum
3	Recesses Wall Light. - Light Fitting For Landscape Area.	525.6 KWH/Annum
4	Planter Of Lighter - Light Fitting For Landscape Area.	1130.04 KWH/Annum
5	Solar Street Light Fitting - Pole Light On Road Side	1825.00 KWH/Annum
6	Street Light on the Bldg.	6132.00 KWH/Annum
7	-	-

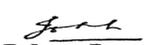
51. Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Air	120 no of trees planted	390 No of trees to be planted & Green belt will be provided.
Water	1 no of 225CMD STP is installed & excess treated water used for flushing & gardening	55 CMD STP will be installed


Shri. Anil Diggikar (Member Secretary SEIAA)

**SEIAA Meeting No: 175 Meeting Date:
September 18, 2019 (SEIAA-
STATEMENT-000000293)
SEIAA-MINUTES-0000002577**

**Page 8 of
13**


**Shri. Johnny Joseph
(Chairman SEIAA)**

Noise	Noise monitoring done in once a fortnight, Acoustically enclosed DG set IS installed.	Traffic management plan to be prepared.
Solid Waste	Existing wet waste is treated in OWC & Dry waste has given to authorized vendor	Proposed Wet Waste will be treated in OWC & Dry Waste will be given to SWACH
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	Rs 103.00 Lakh
	O & M cost:	Rs 2.06 Lakh/year

52.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Air Environment	Water for Dust Suppression, Air & Noise Monitoring	0.50 Lakh/Year
2	Water Environment	Tanker Water for Construction, Water Monitoring	0.50 Lakh/Year
3	Land Environment	Site Sanitation -Mobile toilets	0.50 Lakh/Year
4	Socio-economic	Disinfection- Pest Control, First Aid Facilities, Health Check Up, Creches For Children, Food for children, Personal Protective Equipment	1.00Lakh/Year

b) Operation Phase (with Break-up):				
Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	STP(Existing)	Capacity-255 KLD	61.16	17.34
2	STP(Proposed)	Capacity-55 KLD	23.91	4.98
3	RWH	-	23.00	1.15
4	MSW(Existing)	Capacity-100 kg/day	6.00	1.19
5	MSW(Proposed)	Capacity-750 Kg/day	20.25	3.86
6	Solar System	-	103.00	2.06
7	Landscaping	-	54.00	4.96
8	Post EC Monitoring	-	-	2.50
9	Dry Waste Management	-	-	9.67

52. 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
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

53. Any Other Information

No Information Available

54. Traffic Management

	Nos. of the junction to the main road & design of confluence:	-
--	--	---

Parking details:	Number and area of basement:	NA
	Number and area of podia:	NA
	Total Parking area:	35832.70 m2
	Area per car:	46.65 m2
	Area per car:	46.65 m2
	Number of 2-Wheelers as approved by competent authority:	767
	Number of 4-Wheelers as approved by competent authority:	2448
	Public Transport:	NA
	Width of all Internal roads (m):	6m

SEIAA-MINUTES-0000002577

	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	8(a)
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website	Yes
	Date of online submission	24-12-2016

Brief information of the project by SEAC

Environment Clearance for shopping mall project at S. No. 190(part), 192(part), CTS number 2185-A, Plot Number - B, Shastri Nagar, Yerawada, Pune 411 006 by M/s Deepak Fertilisers & petrochemicals Corporation Limited.

PP submitted their application for prior Environment Clearance for total plot area of 59,399.43 Sq. Mtrs, BUA of 95,082.28 Sq. Mtrs. and FSI area of 33,008.80 Sq. Mtrs. PP proposes to construct 7nos. of building, 1 no. of Engg. building having maximum height of 17.50 Mtrs., 1 nos. of multiplex, 1 nos. of restaurant & commercial area of 50,353.72 Sq. Mtrs

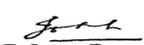
DECISION OF SEAC

Issue was discussed and Committee has asked PP to revalidate the earlier EC dated 10.04.2007.

Hence committee decided to refer the proposal to SEIAA for further action.

Specific Conditions by SEAC:

SEIAA DECISION

 Shri. Anil Diggikar (Member Secretary SEIAA)	SEIAA Meeting No: 175 Meeting Date: September 18, 2019 (SEIAA-STATEMENT-000000293) SEIAA-MINUTES-0000002577	Page 12 of 13	 Shri. Johnny Joseph (Chairman SEIAA)
--	--	----------------------	--

PP obtained Environment Clearance vide letter dated 10.04.2007 from MoEF&CC. Proposal was considered in 68th meeting of SEAC-3. SEAC-3 asked PP to revalidate EC dated 10.04.2007 and referred to SEIAA for further action.

PP stated that they have applied to MoEF&CC for revalidation of EC dated 10.04.2007. MoEF&CC transferred the proposal of revalidation to SEIAA. PP then applied to EC portal for revalidation of EC. PP also stated that, there is change in use in their proposal which is not appraised by the SEAC-3. Hence SEIAA after deliberation decided to refer back the proposal to SEAC-3 for fresh appraisal.

Specific Conditions by SEIAA:

FINAL RECOMMENDATION

SEIAA have decided to refer back the proposal to SEAC due to the above conditions

SEIAA-MINUTES-0000002577



STATE LEVEL ENVIRONMENT IMPACT ASSESSMENT AUTHORITY

Environment department,
Room No. 217, 2nd floor,
Mantralaya, Annexe,
Mumbai- 400 032.
Date: July 20, 2020

To,
Mr Mahesh Meenakshisundaram
at S. No. 190(part), 192(part), CTS number 2185-A, Plot Number - B, Shastri Nagar, Yerawada, Pune 411 006.

Subject: Environment Clearance for Shopping mall project by M/s Deepak Fertilisers & petrochemicals Corporation Limited

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-III, Maharashtra in its 109th 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 201st meetings.

2. It is noted that the proposal is considered by SEAC-III under screening category 8(a) as per EIA Notification 2006.

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

1.Name of Project	Ishanya Mall
2.Type of institution	Private
3.Name of Project Proponent	Mr Mahesh Meenakshisundaram
4.Name of Consultant	M/s JV Analytical Services
5.Type of project	Construction project of Shopping mall
6.New project/expansion in existing project/modernization/diversification in existing project	Expansion
7.If expansion/diversification, whether environmental clearance has been obtained for existing project	Yes
8.Location of the project	S. No. 190(part), 192(part), CTS number 2185-A, Plot Number - B, Shastri Nagar, Yerawada, Pune 411 006.
9.Taluka	Haveli
10.Village	Yerawada
Correspondence Name:	Mr Harsh Shah
Room Number:	-
Floor:	-
Building Name:	Ishanya Mall
Road/Street Name:	Shastri Nagar
Locality:	Yerawada
City:	Pune
11.Whether in Corporation / Municipal / other area	PMC
12.IOD/IOA/Concession/Plan Approval Number	Applied
	IOD/IOA/Concession/Plan Approval Number: -
	Approved Built-up Area: 95082.28

SEIAA Meeting No: 201 Meeting Date: June 23, 2020 (SEIAA-STATEMENT-000000293)
SEIAA-MINUTES-0000003262
SEIAA-EC-0000002310

Page 1 of 14


Shri. Anil Diggikar (Member Secretary SEIAA)

13.Note on the initiated work (If applicable)	94568.64 m2 As per Previous EC dated 10th April 2007(No.21-243/2006-IA-III)
14.LOI / NOC / IOD from MHADA/ Other approvals (If applicable)	Not Applicable
15.Total Plot Area (sq. m.)	59399.43
16.Deductions	18743.77
17.Net Plot area	40655.66
18 (a).Proposed Built-up Area (FSI & Non-FSI)	FSI area (sq. m.): 33008.80
	Non FSI area (sq. m.): 62073.48
	Total BUA area (sq. m.): 95082.28
18 (b).Approved Built up area as per DCR	Approved FSI area (sq. m.): 38624.28
	Approved Non FSI area (sq. m.): 33765.47
	Date of Approval: 14-07-2014
19.Total ground coverage (m2)	12505.94
20.Ground-coverage Percentage (%) (Note: Percentage of plot not open to sky)	21.05 % of Total plot area and 30.76 % of Net plot area
21.Estimated cost of the project	2863500000



Government of Maharashtra

22. Production Details				
Serial Number	Product	Existing (MT/M)	Proposed (MT/M)	Total (MT/M)
1	Not applicable	Not applicable	Not applicable	Not applicable
23. Total Water Requirement				
Dry season:	Source of water	PMC		
	Fresh water (CMD):	633.43(One Time)		
	Recycled water - Flushing (CMD):	277.08		
	Recycled water - Gardening (CMD):	23.00		
	Swimming pool make up (Cum):	NA		
	Total Water Requirement (CMD) :	333.35		
	Fire fighting - Underground water tank(CMD):	300.00		
	Fire fighting - Overhead water tank(CMD):	80.00		
	Excess treated water	0.00		
Wet season:	Source of water	PMC		
	Fresh water (CMD):	610.43(One Time)		
	Recycled water - Flushing (CMD):	277.08		
	Recycled water - Gardening (CMD):	0.00		
	Swimming pool make up (Cum):	NA		
	Total Water Requirement (CMD) :	333.35		
	Fire fighting - Underground water tank(CMD):	300.00		
	Fire fighting - Overhead water tank(CMD):	80.00		
	Excess treated water	23.00		
Details of Swimming pool (If any)	NA			

24.Details of Total water consumed

Particulars	Consumption (CMD)			Loss (CMD)			Effluent (CMD)		
	Existing	Proposed	Total	Existing	Proposed	Total	Existing	Proposed	Total
Domestic	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

25.Rain Water Harvesting (RWH)	Level of the Ground water table:	Summer Season - 21.67 m. to 24.33 m. BGL.(23.00 m. Average), Rainy Season - 9.33 m. to 15.00 m. BGL.(12.17 m. Average), Winter Season - 15.50 m. to 19.67 m. BGL.(17.59 m. Average)
	Size and no of RWH tank(s) and Quantity:	NA
	Location of the RWH tank(s):	NA
	Quantity of recharge pits:	23Nos
	Size of recharge pits :	2.0 m. X 2.0 m. X 2.0 m. Depth with 60 m.Deep 6" Dia. Bore Wells via 2 No. of de-Siltation pits of 0.9 X 0.6 X 1.0 m. Depth.
	Budgetary allocation (Capital cost) :	Rs 23.00 Lakh.
	Budgetary allocation (O & M cost) :	Rs. 1.15 Lakh /Year
	Details of UGT tanks if any :	Domestic UG tank Capacity : 558 m3 Flushing UG tank Capacity : 450 m3 Fire UG tank Capacity : 300 m3

26.Storm water drainage	Natural water drainage pattern:	-
	Quantity of storm water:	26543.81 m3 / Year. i.e. 530.87 m3 / Day.
	Size of SWD:	450mm

27.Sewage and Waste water	Sewage generation in KLD:	300.08
	STP technology:	MBBR
	Capacity of STP (CMD):	255 m3/day(Existing) + 55 m3/day(Proposed)
	Location & area of the STP:	Existing-305 m2 & Proposed-150 m2
	Budgetary allocation (Capital cost):	255 m3/day(Existing) : Rs 61.16 Lakh & 55 m3/day(Proposed): Rs.23.91 Lakh
	Budgetary allocation (O & M cost):	255 m3/day(Existing) : Rs 17.34 Lakh/Year & 325 m3/day(Proposed): Rs.4.98 Lakh/Year

28.Solid waste Management		
Waste generation in the Pre Construction and Construction phase:	Waste generation:	45 kg/day
	Disposal of the construction waste debris:	Use for Leveling.
Waste generation in the operation Phase:	Dry waste:	Commercial & Multiplex: 724.00 kg/day, Restaurant: 99.00 kg/day
	Wet waste:	ommercial & Multiplex:483.00 kg/day, Restaurant: 149.00 kg/day
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	65 kgs/day
	Others if any:	NA
Mode of Disposal of waste:	Dry waste:	SWACH
	Wet waste:	Organic waste converter
	Hazardous waste:	NA
	Biomedical waste (If applicable):	NA
	STP Sludge (Dry sludge):	Used as Manure after treatment in OWC
	Others if any:	NA
Area requirement:	Location(s):	-
	Area for the storage of waste & other material:	Existing - 12 m2 including Machinery area, Proposed- Storage area:15 m2 & other area:39m2
	Area for machinery:	Proposed-21 m2
Budgetary allocation (Capital cost and O&M cost):	Capital cost:	100 kg/day(Existing):Rs.6.00 Lakh, 750 kg/day(Proposed):Rs.20.25 Lakh
	O & M cost:	100 kg/day(Existing):Rs 1.19 Lakh/year, 750 kg/day(Proposed):Rs.3.86 Lakh/year

**Government of
Maharashtra**

29.Effluent Charecterestics					
Serial Number	Parameters	Unit	Inlet Effluent Charecterestics	Outlet Effluent Charecterestics	Effluent discharge standards (MPCB)
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
Amount of effluent generation (CMD):		Not applicable			
Capacity of the ETP:		Not applicable			
Amount of treated effluent recycled :		Not applicable			
Amount of water send to the CETP:		Not applicable			
Membership of CETP (if require):		Not applicable			
Note on ETP technology to be used		Not applicable			
Disposal of the ETP sludge		Not applicable			



Government of Maharashtra

30.Hazardous Waste Details							
Serial Number	Description	Cat	UOM	Existing	Proposed	Total	Method of Disposal
1	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable
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	DG Sets-500KVA-6 Nos	HSD-111 Lits/Hr	S-1 to S-6	15 m	-	-	
32.Details of Fuel to be used							
Serial Number	Type of Fuel	Existing	Proposed	Total			
1	HSD	111 Lits/Hr	Not applicable	111 Lits/Hr			
33.Source of Fuel		Bharat Petroleum Corporation Limited/Hindustan Petroleum					
34.Mode of Transportation of fuel to site		By Roadway					
35.Energy							
Power requirement:	Source of power supply :	MSEDCL					
	During Construction Phase: (Demand Load)	-					
	DG set as Power back-up during construction phase	-					
	During Operation phase (Connected load):	5507 KW					
	During Operation phase (Demand load):	2900 KVA					
	Transformer:	22 KVA/2000KVA -2 No					
	DG set as Power back-up during operation phase:	500 KVA - 6 Nos.					
	Fuel used:	111 Liters / Hr					
	Details of high tension line passing through the plot if any:	NA					
Energy saving by non-conventional method:							
<ul style="list-style-type: none"> Solar lights are provided for common amenities like Street lighting & Garden lighting. CFL & LED based lighting are done in the common areas, landscape areas, signage's, Entry gates and boundary compound walls etc. Auto Timer Switches will be provided for Street lights, Garden lights, Parking & staircase Lights & Other Common Area Lights, for saving electrical energy. Water Level Controllers with Timers will be used for Water Pumps. 							

36.Detail calculations & % of saving:

Serial Number	Energy Conservation Measures	Saving %
1	LED Lamp & Fitting For Common Areas i.e. Bldg. Parking, Staircase, Passage & Terrace Floor.	23917.36 KWH/Annum
2	Bollard Lighter - Light Fitting For Landscape Area.	1226.4 KWH/Annum
3	Recesses Wall Light. - Light Fitting For Landscape Area.	525.6 KWH/Annum
4	Planter Of Lighter - Light Fitting For Landscape Area.	1130.04 KWH/Annum
5	Solar Street Light Fitting - Pole Light On Road Side	1825.00 KWH/Annum
6	Street Light on the Bldg.	6132.00 KWH/Annum
7	-	-

37.Details of pollution control Systems

Source	Existing pollution control system	Proposed to be installed
Air	120 no of trees planted	390 No of trees to be planted & Green belt will be provided.
Water	1 no of 225CMD STP is installed & excess treated water used for flushing & gardening	55 CMD STP will be installed
Noise	Noise monitoring done in once a fortnight,Acoustically enclosed DG set IS installed.	Traffic management plan to be prepared.
Solid Waste	Existing wet waste is treated in OWC & Dry waste has given to authorized vendor	Proposed Wet Waste will be treated in OWC & Dry Waste will be given to SWACH

Budgetary allocation (Capital cost and O&M cost):

Capital cost:

Rs 103.00 Lakh

O & M cost:

Rs 2.06 Lakh/year

38.Environmental Management plan Budgetary Allocation

a) Construction phase (with Break-up):

Serial Number	Attributes	Parameter	Total Cost per annum (Rs. In Lacs)
1	Air Environment	Water for Dust Suppression, Air & Noise Monitoring	0.50 Lakh/Year
2	Water Environment	Tanker Water for Construction, Water Monitoring	0.50 Lakh/Year
3	Land Environment	Site Sanitation -Mobile toilets	0.50 Lakh/Year
4	Socio-economic	Disinfection- Pest Control, First Aid Facilities, Health Check Up, Creches For Children, Food for children, Personal Protective Equipment	1.00Lakh/Year

b) Operation Phase (with Break-up):

Serial Number	Component	Description	Capital cost Rs. In Lacs	Operational and Maintenance cost (Rs. in Lacs/yr)
1	STP(Existing)	Capacity-255 KLD	61.16	17.34
2	STP(Proposed)	Capacity-55 KLD	23.91	4.98

SEIAA Meeting No: 201 Meeting Date: June 23, 2020 (SEIAA-STATEMENT-000000293)
SEIAA-MINUTES-0000003262
SEIAA-EC-0000002310

Page 8 of 14


Shri. Anil Diggikar (Member Secretary SEIAA)

3	RWH	-	23.00	1.15
4	MSW(Existing)	Capacity-100 kg/day	6.00	1.19
5	MSW(Proposed)	Capacity-750 Kg/day	20.25	3.86
6	Solar System	-	103.00	2.06
7	Landscaping	-	54.00	4.96
8	Post EC Monitoring	-	-	2.50
9	Dry Waste Management	-	-	9.67

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
Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable

40.Any Other Information

No Information Available

Government of
Maharashtra

	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	8(a)
	Court cases pending if any	NA
	Other Relevant Informations	NA
	Have you previously submitted Application online on MOEF Website.	Yes
	Date of online submission	24-12-2016

3. The proposal has been considered by SEIAA in its 201st 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	Nil.
II	PP to ensure that CER plan gets approved from Municipal Commissioner.
III	PP Shall comply with Standard EC conditions mentioned in the Office Memorandum issued by MoEF& CC vide F.No.22-34/2018-IA.III dt.04.01.2019.
IV	SEIAA decided to grant EC for - FSI: 32710.04 m ² , Non-FSI: 62073.48 m ² and Total BUA: 94783.52 m ² (Plan Approval no-CC/0027/19, Dated-04.04.2019)

General Conditions:

I	E-waste shall be disposed through Authorized vendor as per E-waste (Management and Handling) Rules, 2016.
II	The Occupancy Certificate shall be issued by the Local Planning Authority to the project only after ensuring sustained availability of drinking water, connectivity of sewer line to the project site and proper disposal of treated water as per environmental norms.
III	This environmental clearance is issued subject to obtaining NOC from Forestry & Wild life angle including clearance from the standing committee of the National Board for Wild life as if applicable & this environment clearance does not necessarily implies that Forestry & Wild life clearance granted to the project which will be considered separately on merit.
IV	PP has to abide by the conditions stipulated by SEAC& SEIAA.
V	The height, Construction built up area of proposed construction shall be in accordance with the existing FSI/FAR norms of the urban local body & it should ensure the same along with survey number before approving layout plan & before according commencement certificate to proposed work. Plan approving authority should also ensure the zoning permissibility for the proposed project as per the approved development plan of the area.
VI	If applicable Consent for Establishment" shall be obtained from Maharashtra Pollution Control Board under Air and Water Act and a copy shall be submitted to the Environment department before start of any construction work at the site.
VII	All required sanitary and hygienic measures should be in place before starting construction activities and to be maintained throughout the construction phase.
VIII	Adequate drinking water and sanitary facilities should be provided for construction workers at the site. Provision should be made for mobile toilets. The safe disposal of wastewater and solid wastes generated during the construction phase should be ensured.
IX	The solid waste generated should be properly collected and segregated. dry/inert solid waste should be disposed off to the approved sites for land filling after recovering recyclable material.

X	Disposal of muck during construction phase should not create any adverse effect on the neighboring communities and be disposed taking the necessary precautions for general safety and health aspects of people, only in approved sites with the approval of competent authority.
XI	Arrangement shall be made that waste water and storm water do not get mixed.
XII	All the topsoil excavated during construction activities should be stored for use in horticulture / landscape development within the project site.
XIII	Additional soil for leveling of the proposed site shall be generated within the sites (to the extent possible) so that natural drainage system of the area is protected and improved.
XIV	Green Belt Development shall be carried out considering CPCB guidelines including selection of plant species and in consultation with the local DFO/ Agriculture Dept.
XV	Soil and ground water samples will be tested to ascertain that there is no threat to ground water quality by leaching of heavy metals and other toxic contaminants.
XVI	Construction spoils, including bituminous material and other hazardous materials must not be allowed to contaminate watercourses and the dumpsites for such material must be secured so that they should not leach into the ground water.
XVII	Any hazardous waste generated during construction phase should be disposed off as per applicable rules and norms with necessary approvals of the Maharashtra Pollution Control Board.
XVIII	The diesel generator sets to be used during construction phase should be low sulphur diesel type and should conform to Environments (Protection) Rules prescribed for air and noise emission standards.
XIX	The diesel required for operating DG sets shall be stored in underground tanks and if required, clearance from concern authority shall be taken.
XX	Vehicles hired for bringing construction material to the site should be in good condition and should have a pollution check certificate and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
XXI	Ambient noise levels should conform to residential standards both during day and night. Incremental pollution loads on the ambient air and noise quality should be closely monitored during construction phase. Adequate measures should be made to reduce ambient air and noise level during construction phase, so as to conform to the stipulated standards by CPCB/MPCB.
XXII	Fly ash should be used as building material in the construction as per the provisions of Fly Ash Notification of September 1999 and amended as on 27th August, 2003. (The above condition is applicable only if the project site is located within the 100Km of Thermal Power Stations).
XXIII	Ready mixed concrete must be used in building construction.
XXIV	Storm water control and its re-use as per CGWB and BIS standards for various applications.
XXV	Water demand during construction should be reduced by use of pre-mixed concrete, curing agents and other best practices referred.
XXVI	The ground water level and its quality should be monitored regularly in consultation with Ground Water Authority.
XXVII	The installation of the Sewage Treatment Plant (STP) should be certified by an independent expert and a report in this regard should be submitted to the MPCB and Environment department before the project is commissioned for operation. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treated effluent emanating from STP shall be recycled/refused to the maximum extent possible. Discharge of this unused treated effluent, if any should be discharge in the sewer line. Treatment of 100% gray water by decentralized treatment should be done. Necessary measures should be made to mitigate the odour problem from STP.
XXVIII	Permission to draw ground water and construction of basement if any shall be obtained from the competent Authority prior to construction/operation of the project.
XXIX	Separation of gray and black water should be done by the use of dual plumbing line for separation of gray and black water.
XXX	Fixtures for showers, toilet flushing and drinking should be of low flow either by use of aerators or pressure reducing devices or sensor based control.
XXXI	Use of glass may be reduced up to 40% to reduce the electricity consumption and load on air conditioning. If necessary, use high quality double glass with special reflective coating in windows.
XXXII	Roof should meet prescriptive requirement as per Energy Conservation Building Code by using appropriate thermal insulation material to fulfill requirement.
XXXIII	Energy conservation measures like installation of CFLs /TFLs for the lighting the areas outside the building should be integral part of the project design and should be in place before project commissioning. Use CFLs and TFLs should be properly collected and disposed off/sent for recycling as per the prevailing guidelines/rules of the regulatory authority to avoid mercury contamination. Use of solar panels may be done to the extent possible like installing solar street lights, common solar water heaters system. Project proponent should install, after checking feasibility, solar plus hybrid non-conventional energy source as source of energy.

XXXIV	Diesel power generating sets proposed as source of backup power for elevators and common area illumination during operation phase should be of enclosed type and conform to rules made under the Environment (Protection) Act, 1986. The height of stack of DG sets should be equal to the height needed for the combined capacity of all proposed DG sets. Use low sulphur diesel. The location of the DG sets may be decided with in consultation with Maharashtra Pollution Control Board.
XXXV	Noise should be controlled to ensure that it does not exceed the prescribed standards. During nighttime the noise levels measured at the boundary of the building shall be restricted to the permissible levels to comply with the prevalent regulations.
XXXVI	Traffic congestion near the entry and exit points from the roads adjoining the proposed project site must be avoided. Parking should be fully internalized and no public space should be utilized.
XXXVII	Opaque wall should meet prescriptive requirement as per Energy Conservation Building Code, which is proposed to be mandatory for all air-conditioned spaces while it is aspiration for non-air-conditioned spaces by use of appropriate thermal insulation material to fulfill requirement.
XXXVIII	The building should have adequate distance between them to allow movement of fresh air and passage of natural light, air and ventilation.
XXXIX	Regular supervision of the above and other measures for monitoring should be in place all through the construction phase, so as to avoid disturbance to the surroundings.
XL	Under the provisions of Environment (Protection) Act, 1986, legal action shall be initiated against the project proponent if it was found that construction of the project has been started without obtaining environmental clearance.
XLI	Six monthly monitoring reports should be submitted to the Regional office MoEF, Bhopal with copy to this department and MPCB.
XLII	Project proponent shall ensure completion of STP, MSW disposal facility, green belt development prior to occupation of the buildings. As agreed during the SEIAA meeting, PP to explore possibility of utilizing excess treated water in the adjacent area for gardening before discharging it into sewer line No physical occupation or allotment will be given unless all above said environmental infrastructure is installed and made functional including water requirement in Para 2. Prior certification from appropriate authority shall be obtained.
XLIII	Wet garbage should be treated by Organic Waste Converter and treated waste (manure) should be utilized in the existing premises for gardening. And, no wet garbage will be disposed outside the premises. Local authority should ensure this.
XLIV	Local body should ensure that no occupation certification is issued prior to operation of STP/MSW site etc. with due permission of MPCB.
XLV	A complete set of all the documents submitted to Department should be forwarded to the Local authority and MPCB.
XLVI	In the case of any change(s) in the scope of the project, the project would require a fresh appraisal by this Department.
XLVII	A separate environment management cell with qualified staff shall be set up for implementation of the stipulated environmental safeguards.
XLVIII	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.
XLIX	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 .
L	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.
LI	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.
LII	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 sector parameters, indicated for the project shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.
LIII	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.

LIV	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.
------------	---



Government of Maharashtra

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. SHRI JOHNY JOSEPH, CHAIRMAN-SEIAA
2. SHRI UMAKANT DANGAT, CHAIRMAN-SEAC-I
3. SHRI M.M.ADTANI, CHAIRMAN-SEAC-II
4. SHRI ANIL .D. KALE. CHAIRMAN SEAC-III
5. SECRETARY MOEF & CC
6. IA- DIVISION MOEF & CC
7. MEMBER SECRETARY MAHARASHTRA POLLUTION CONTROL BOARD MUMBAI
8. REGIONAL OFFICE MOEF & CC NAGPUR
9. MUNICIPAL COMMISSIONER PUNE
10. MUNICIPAL COMMISSIONER SATARA
11. REGIONAL OFFICE MPCB PUNE
12. REGIONAL OFFICE MIDC PUNE
13. MAHARASHTRA STATE ELECTRICITY DISTRIBUTION CO. LTD
14. COLLECTOR OFFICE PUNE
15. COLLECTOR OFFICE SATARA
16. COLLECTOR OFFICE SOLAPUR

Government of Maharashtra

No. Comp-2020/CR-01 /SEIAA
 Environment Department
 217 (Annex), Mantralaya,
 Mumbai- 400 032.
 February 18th, 2020

To,

1) **M/s. YERROWDA INVESTMENTS LIMITED**

Opp. Golf Course, Ishanya Mall,
 Shatri Nagar, Yerrowda, Taluka-Haveli, District-Pune-411008.

2) **M/s. DEEPAK FERTILISERS AND PETROCHEMICALS CORPORATION LTD**

Opp. Golf course, Ishanya Mall,
 Shatri Nagar, Yerrowda, Taluka-Haveli, District-Pune-411008,

Subject: - Withdrawal of Proposed Directions dated 31.01.2020 issued under Section 5 of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.09.2006.

Ref.:- 1. Show cause Notice/Proposed Directions u/s 5 of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.09.2006 issued to you vide letter dated 31.01.2020.

2. Representation submitted by M/s.YERROWDA INVESTMENTS LIMITED dated 10/02/2020.

3. Personal hearing conducted in the chamber of the Principal Secretary, Environment Department on

We refer to the Show Cause notice/proposed directions at reference (1) dated issued to you under section 5 of the Environment (P) Act 1986 r.w. EIA Notification dtd. 14.09.2006 whereby and where under you were asked to show cause as to why your building construction project "**Ishanya Mall**" situated at Survey No. 190(P) & 192(P) of Village-Yerwada, Taluka-Haveli, District-Pune should not be stopped forth with for the violation of EIA Notification dated 14.09.2006, and why further legal action should not be initiated against you under the provisions of Environment (P) Act 1986 and Rules made thereunder.

The complainant has raised various issues in his complaint mainly consisting of –

- a) PP has mislead on account of three different projects comprising of 10 buildings and total BUA of 95082.28 Sq. Mtrs..
- b) That BUA of project was more than 95082.28 Sq. Mtrs. but PP did not applied for expansion of Environment clearance from SEIAA before starting expansion and also not applied for consents from MPCB
- c) PP has not obtained any prior Environment Clearance from SEIAA or MoEF for expansion of project and increased scope of the project from the earlier sanction limit.
- d) PP has not obtained any prior Consent to Establish from MPCB.

- e) That the PP has completed part project in mid of 2009 and expansion in 2015, but did not applied for consent to operate and put the project under enjoyment without Consent to Operate.
- f) PP has carried out the illegal construction of basement for all buildings and caused damage to the ground water level.
- g) PP has carried out the construction of commercial complexes on residential reserved zone in development plan without any permission from competent authority.
- h) PP carried out construction activity without any Environment Impact Assessment.
- i) PP has extracted huge quantity of ground water from five bore wells for construction of project
- j) PP is illegally extracting Ground water without any permission from competitive authority for operational purpose.
- k) PP has not made any test for ground water contamination and quality of water and there is serious ground water contamination.
- l) PP has not provided any solid waste management system and waste generated is dumped to PMC waste yard creating burden on public systems and solid waste is generating various greenhouse gases and there is no scientific disposal of the solid waste generated from project.
- m) PP has not provided any energy conservation system for energy saving like solar system
- n) PP has not provided any rain water harvesting system for ground water recharge against required 21 number of recharge pit.
- o) PP has not preserved top layer of fertile soil and there is no soil test for contamination.
- p) PP has provided mandatory 10% open space for recreational purpose and not made tree plantation as per the norms and around the periphery of the project.
- q) Huge noise causing due to air conditioning equipment like AHU, exhaust fans, cooling towers etc.
- r) Huge traffic congestion in the air causing air pollution.
- s) PP has installed 8 DG sets at project site and operation of DG set is causing air pollution.
- t) Huge quantity of sewage water is generated and there is no scientific treatment of sewage water as PP has not installed.
- u) PP is creating huge burden on the environment due to day to day waste generation by consumption of natural resources and it is causing huge burden on the public facilities and services on account of environment damage.
- v) That the PP has committed the illegal activities and given rise to the violation of environmental protection enactments and further caused degradation of environment & ecology intentionally.
- w) PP has not complied the conditions of commencement certificate mandating prior environment clearance and consents from the MPCB.

- x) PP has not complied the conditions of commencement certificate related to the installation of environment infrastructure to avoid the degradation.
- y) PP has made illegal tree cutting.
- z) There is no approach road for fire engine.
- aa) PP has not provided the slope in the ratio of 1:10
- bb) PP has not provided site margin as per the DC Rules
- cc) PP has not provided fire and safety system at site.
- dd) PP in connivance with PMC officer has violated the provisions of Environment enactment and PMC officers are also equally responsible.
- ee) PP has violated the principle of sustainable development by not installing pollution control devices.
- ff) PP has caused traffic congestion in the area due to this project and cause to air pollution on account of emission from the vehicles.
- gg) PP has not made any environment management plan
- hh) PP has caused substantial damage to environment and ecology more than Rs. 600 Crores, which shall be recovered from PP.
- ii) PP is unapologetic and PP has adopted careless and reckless attitude towards the environment protection.
- jj) Thus it is mandatory to stop the project construction permanently till the compliance / rectification of the above illegal act and removal of the defects from the construction.

We also refer to the representation made by M/s.YERROWDA INVESTMENTS LIMITED under reference (2) above and also the personal hearing conducted in the chamber of the Principal Secretary, Environment Department on in connection with our said show cause notice you have submitted following facts-

1. The entire plot is in the name of Yerrowda Investments Limited situated at S. No. 190, 192A, 192B, Yerwada, Pune. The total plot area as per 7/12 Extract is 88594.00 Sq.mtrs.
2. In 2010 PP obtained layout from P.M.C. & plot has been subdivided into Plot A, B & C. P.M.C. had sanctioned vide No. 0924/10/51 dated – 15/06/10.
3. Subsequently separate property cards of Plot A, Plot B & Plot C, mentioned C.T.S. No .2185 B for Plot A, C.T.S. No .2185 A for Plot B & C.T.S. No .2185 C for Plot C are maintained and have since then taken routine sanction from P.M.C.
4. Bifurcation of Plot A, B & C with information are as follows:

Sr. No.	Plot No.	C.T.S. No.	S. No.	Completion No. & Date	Environmental Clearance No. & Date	Total Construction area (F.S.I. + Non F.S.I.) in Sq.m.	Remarks
1.	A	2185 B	190B	BCO/14/113 Dated – 20.09.1996 BCO/14/113 Dated – 20.05.2004	-----	F.S.I. – 13775.02 Non-F.S.I. – 2,672.40 Total – 16,447.42	Environmental Clearance not required because 20,000.00 Sq.m.
2.	B	2185 A	190 & 192 A	BCO/03/45 Dated- 17.08.2007 BCO/03/92 Dated – 18.12.2007 BCO/YWO/02 Dated - 03/06/2008 OCC/1424/12 Dated - 12/02/2013 OCC/0936/13 Dated - 30/09/2013 OCC/1491/16 Dated - 03/11/2016	No. 21- 243/2006-1A- III Dated – 10.04.2007	F.S.I. – 33,008.80 Non-F.S.I. – 61,559.84 Total – 94,568.64	Environmental Clearance is taken. All work is completed as per EC norms.
3.	C	2185C	190 & 192 A	OCC/0343/11 Dated - 28/06/2011 OCC/0918/11 Dated - 23/11/2011 OCC/0845/12 Dated - 24/09/2012 OCC/0444/13 Dated - 18/06/2013	ESAC- 2010/CR237/ TC.2 Dated – 18.02.2012	F.S.I. – 23,581.79 Non-F.S.I. – 28,078.05 Total – 51,659.84	Environmental Clearance is taken. All work is completed as per EC norms

5. As mentioned earlier, PP intend to use the existing space for multiplex within existing structure. PP also has applied for Environmental Clearance.

6. PP has applied for Environmental Clearance for doing fitouts of a multiplex in Plot B within existing building considering that it is change of use. The same thereof states F.S.I. – 33,008.80 sq.m. + Non-F.S.I. – 61,559.84 sq.m. Total construction area is 95082.28 sq.m.

After examination of the documents submitted by you along with your representation dated 10/02/2020 and 13/02/2020 and the submissions made during the personal hearing conducted on 15/02/2020, it has been observed that the project proponent M/s.YERROWDA INVESTMENTS LIMITED has carried out construction activity in respect of building construction project “Ishanya Mall” situated at Survey No. 190(P) & 192(P) of Village-Yerwada, Taluka-Haveli, District-Pune.

It is clear from the record that project proponent has obtained Environmental Clearance. And also obtained necessary permissions from the concerned departments.

Therefore, there is no case of violation of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.9.2006. Therefore, the Show Cause Notice/Proposed Directions u/s 5 of the Environment Act needs to be withdrawn.

Hence, the Show cause Notice/Proposed Directions u/s 5 of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.09.2006 issued by this office under its communication dated 31.01.2020 as per ref. (1) is hereby withdrawn.


(Anil Diggikar)
Principal Secretary
Environment Department

Copy to-

Commissioner, PMC, Pune.

Withdrawal letter of Proposed Directions dated 31.01.2020 issued under Section 5 of the Environment (P) Act, 1986 r.w. EIA Notification dated 14.09.2006.

MAHARASHTRA POLLUTION CONTROL BOARD

Tel : 2402 0781 / 2401 0437

Fax : 2402 4068

Visit us at :

Website : <http://mpcb.mah.nic.in>

E-mail : mpcb@vsnl.net



Kalpataru Point,
2nd, 3rd & 4th floor,
Opp. Cineplanet,
Near Sion Circle, Sion (E),
Mumbai - 400 022.

Infrastructure Project/LSI.

Consent No. BO/RO (P&F)/EIC No. PN-3461-09 /CC- 441

Date: 24 /11/2009

Consent to Operate is granted to **M/s Deepak Fertilizers & Petrochemicals Corporation Pvt. Ltd**

ISHANYA MALL, C.S. No. 190 & 192, Opp Golf Course, Shastri Nagar, Yerwada, Pune

located in the area declared under the provisions of Water Act (P&CP) 1974, Air Act (P&CP), 1981 and Authorization under the provisions of H,W (M & H) Rules and amendments thereto subject to the provisions of the Acts and the Rules and the Orders that may be made further and subject to the following terms and conditions :-

1. The Consent to Operate is valid up to 31.03.2013.

For shopping mall project named as **M/s Deepak Fertilizers & Petrochemicals Corporation Pvt. Ltd "ISHANYA MALL"**, C.S. No. 190 & 192, Opp Golf Course, Shastri Nagar, Yerwada, Pune, on total plot area of **41806.35 sq mtrs & total Built up area 34170.83 sq. mtrs** including utilities of shopping mall project and services as per Occupancy certificate of local body.

2. **CONDITION UNDER WATER (Prevention & Control of Pollution) ACT, 1974: -**

(i) The quantity of sewage effluent from above construction project shall not exceed **255 M³/Day**.

(ii) **Sewage Effluent Treatment:** The Applicant shall provide a comprehensive sewage treatment plant and treatment as is warranted with reference to influent quality and corresponding mode of disposal and operate and maintain the same continuously so as to achieve the quality of treated effluent to the following standards: -

(1)	pH	Not to exceed	6.5 to 9.0	
(2)	Suspended Solids	Not to exceed	100	mg/l.
(3)	BOD 3 days 27 CC.	Not to exceed	20	mg/l.
(4)	Fecal Coliform	Not to exceed	500/100/l	ml.
(7)	Residual Chlorine	Not to exceed	01	mg/l.
(8)	Detergent	Not to exceed	01	mg/l.
(9)	Floating matters	Not to exceed	10	mg/l
(10)	COD	Not to exceed	50	mg/l

(iii) **Sewage effluent Disposal: -**

The treated domestic effluent shall be 80 % recycled and reused for flushing, fire fighting and cooling of Air conditioners and remaining shall be used for gardening/plantation and excess discharged to PMC sewer. In no case, effluent shall find its way to any water body directly/indirectly at any time.

The project authorities should opt environmental friendly technologies like ozonation, UV treatment etc by replacing chlorination.

(iv) **Non-Hazardous Solid Waste: -**

The total quantity shall be segregated and treated as follows: -

Sr	Type of Segregated solid waste	Quantity	Treatment	Disposal
1	Organic Waste	100 Kg/Day	Composting	Proposed site
2	Paper, Plastic, Rubber, Glass	150 Kg/Day		Sale
3	STP Sludge	45 Kg/Day		Approved Landfill site



:2:

3. Other Conditions: -

1. There shall be no felling of trees whether on Forest, Government, Revenue or Private lands except as per prevailing Rules.
2. Extraction of Groundwater for the complex shall require prior permission of the State Ground Water Authority or other relevant authorities, as applicable;
3. Near the activities that are related to water (like activity of water parks, water sports) and/or in the vicinity of lake, Dissolved Oxygen shall not be less than 5 mg/liter.
4. In order to ensure that the water from this residential complex do not enter into outside environment, the nallas crossing the township/complex premises, shall be lined, covered and made water tight by the applicant within the premises with intermittent inspection of chambers following good engineering practices as per the regulations of local body. This management shall be such as also to help in excluding the external pollutants degrading the internal environment of residential complex.
5. The Applicant shall segregate of solid wastes into biodegradable and non-biodegradable components. The biodegradable material shall be recycled through scientific in-house composting with leak proof & leachate collection arrangements with the approval of local body and the inorganic material shall be disposed off at approved Municipal Solid Waste landfill site of local body environmentally acceptable location and method. The applicant shall ensure that the said activity shall not generate any smell nuisance to near by locality. It is clarified that the term solid waste includes domestic, commercial, and garden wastes, but does not include hazardous and bio-medical wastes. The activities of bio-composting and engineered land fill shall be as per the Municipal Solid Waste (M&H) Rules, 2000
6. Applicant shall be responsible to take adequate precautionary measures as detailed in this consent.

4. The Applicant shall comply with all the provisions of, the Water (Prevention and Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and Rules as Amended, 2003 and Rules there under :-The daily water consumption for the following categories shall not exceed, as under

(i) Domestic	In CMD
a) Domestic	636
b) Agriculture/Gardening	100

The Applicant shall regularly submit to the Board, the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

5. CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981:-

- (i) The Applicant may install 04 no. of diesel generating sets (DG Sets), of capacity 04 x 750 KVA and shall be equipped with comprehensive control system as is warranted with reference to generations of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards: -

Standards for emissions of air Pollutants

i)	SPM/TPM	Not to Exceed	150	mg/Nm ³
ii)	SO ₂ (DG set)	Not to Exceed	07	Kg/day

(ii) The Applicant shall observe the following fuel patterns

No.	Type of Fuel	Quantity
1	HSD	3.2 KLD

(iii) The Applicant shall erect the Chimney (s) of the following specifications

No.	Chimney attached to DG	Height above roof of Bldg
1	DG set 04 x 750 KVA	5.5 mtrs each

(iv) Conditions for DG Sets: -

1. Noise from DG Sets shall be controlled by providing acoustic enclosure or by treating the room acoustically.
2. Applicant should provide acoustic enclosure for control of noise. The acoustic enclosure/ acoustic treatment of the room shall 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 shall be done at different points at 0.5 meters from acoustic enclosure/ room and then average.
3. The Applicant should make efforts to bring down noise level due to DG Set, outside the premises, with ambient noise level requirements by proper setting and control measures.
4. Installation of DG Set must be strictly in compliance with recommendations of DG set manufacturer;



:3:

5. A proper routine and preventive maintenance procedure for DG Set shall be set and followed in consultation with the DG manufacturers, which would help to prevent noise levels of DG Sets from deteriorating with use.
6. The DG set shall be operated only in case of power failure. The applicant shall make arrangement for regular electrical power.
7. The Applicant shall not cause any nuisance in the surrounding area due to operation of DG sets.
8. In case of problems, the D.G. set shall not be operated until it is set back to satisfactory position.
- (v) The Applicant shall take adequate measures for control of noise levels from its own sources within the complex (residential) in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned as between 6 a.m. to 10 p.m. and night time is reckoned between 10 p.m. to 6 a.m.
6. **CONDITIONS UNDER Hazardous Waste (Management & Handling) & AMENDMENT RULES 2008**
The applicant shall not generate hazardous wastes
7. **The applicant shall comply with the conditions of Environmental Clearance granted by MoEF, GOI, vide No. 21-243/2006-IA.III, dated 10.04.2007**
8. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant;
9. **This consent is issued pursuant to the decision of Consent Committee meeting held on 15.06.2009 and approval of Hon'ble Chairman of the Board.**
10. The capital investment for part of the project is Rs. 222/- Crores

To
M/s Deepak Fertilizers & Petrochemicals Corporation Pvt. Ltd
 ISHANYA MALL, C.S. No. 190 & 192,
 Opp Golf Course, Shastri Nagar, Yerwada, Pune

For and on behalf of the
 Maharashtra Pollution Control Board

Mahesh Pathak
 (Mahesh Pathak)
 Member Secretary



Copy forwarded with compliments to:

1. The Collector, Pune

Copy to

1. Regional Officer, MPCB, Pune
2. Sub Regional officer, MPCB, Pune-I
3. Chief Accounts Officer, MPCB,

Received consent fee of

Amount	DD No.	Date	Drawn on
Rs. 222000/-	173060	20.02.2009	IDBI Bank Ltd
Rs. 222000/-	000642	28.08.2009	IDBI Bank Ltd

4. Cess Branch, MPCB, Mumbai.

5. Master file.

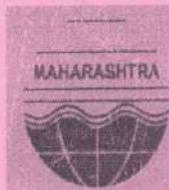
MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24020781 / 24010437

Fax : 24024068 / 24044532

Email : mpcb@vsnl.net

Visit At : <http://mpcb.gov.in>



Kalpataru Point, 2nd, 3rd & 4th Floor,
Opp. Cineplanet, Near Sion Circle,
Sion (E), Mumbai-400022.

Infrastructure Project/Orange/LSI

Consent No. MPCBHQ/ROHQ/Pune/CR/CC/ 621

Date: 21st January 2014

Consent to Operate 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 / Renewal of Authorization under Rule 5 of the Hazardous Wastes (Management, Handling & Transboundry Movement) Rules 2008

CONSENT is hereby granted to,

M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd.,

"ISHANYA MALL"

C.S.No. 190 to 192, Opp Golf Course,

Sbastri Nagar, Yerwada, Pune

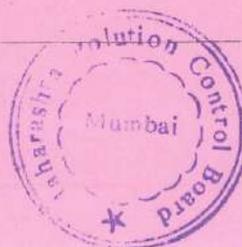
Located in the area declared under the provisions of the Water Act, Air act and Authorization under the provisions of HW(M&H) Rules and amendments thereto subject to the provisions of the Act and the Rules and the Orders that may be made further and subject to the following terms and conditions:

1. The Consent to Operate is granted for a period up to:- **31st January 2015**
2. The Consent to operate is valid for Commercial Project developed by M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd. named as "ISHANYA MALL" at C.S.No. 190 to 192 , Opp Golf Course, Shastri Nagar, Yerwada, Pune, on total plot area of 41,806.35 sq. mtrs and Built up area for operate 34,170.0 sq.mtrs including utilities for development of Commercial Mall Project & Services as per Construction commencement Certificate issued by local body.

3. CONDITIONS UNDER WATER ACT:

- (i) The daily quantity of sewage effluent from the factory shall not exceed: - **255.0 M³**.
- (ii) **Sewage Effluent Treatment:** The applicant shall provide comprehensive treatment system as is warranted with reference to influent quality and operate and maintain the

SRO Pune-I/O/L/23473000 "ISHANYA MALL"



[Handwritten signature]

same continuously so as to achieve the quality of treated effluent to the following standards.

2	Suspended Solids	Not to exceed	100 mg/l.
3	BOD 3 Days 27 degree C	Not to exceed	100 mg/l.
4	Fecal Coliform	Not to exceed	500/100/1 mg/l.
5	Residual Chlorine	Not to exceed	01 mg/l.

(iii) **Sewage Effluent Disposal:** The treated domestic effluent shall be 80% recycled and reused for flushing, fire fighting & gardening and remaining shall be discharged to Municipal sewer. In no case, effluent shall find its way to any water body directly/indirectly at any time.

(iv) **Non-Hazardous Solid Wastes:**

Sr.No	Type of Segregated solid waste	Quantity (Kg/Day)	Treatment	Disposal
1.	Bio Degradable waste	100.00	Composting	Use as Manure
2.	STP Sludge	45.00		
2.	Non Bio-degradable waste	150.00	..	landfill site

4. Other Conditions: -

- All activities shall be in resonance with the provisions of Indian Forest Act, 1927 (16 of 1927), Forest (Conservation) Act, 1980 (69 of 1980) and Wildlife (Protection) Act, 1972 (53 of 1972), and special notification published for area wherever applicable and all the Environmental Statutes and Instruments.
- Extraction of Groundwater for the project shall require prior permission of the State Ground Water Authority or other relevant authorities, as applicable;
- Near the activities that are related to water (like activity of water parks, water sports) and/or in the vicinity of lake, Dissolved Oxygen shall not be less than 5 mg/liter.
- In order to ensure that the water from this project do not enter into outside environment, the nallas crossing the township/complex premises, shall be lined, covered and made water tight by the applicant within the premises with intermittent inspection of chambers following good engineering practices as per the regulations of local body.
- The Applicant shall draw plans for the segregation of solid wastes into biodegradable and non-biodegradable components. The biodegradable material shall be recycled through scientific in-house composting (i.e vermi-composting facility within premises) with the approval of local body. The proper demarked area shall be identified for collection & storage of MSW properly which, shall be finally disposed off at approved Municipal Solid Waste landfill site of local body environmentally acceptable location and method. It is clarified that the term solid waste includes domestic, commercial, and garden wastes, but does not include hazardous and bio-medical wastes. The activities of bio-composting and engineered landfill shall be as per the Municipal Solid Waste (M&H) Rules, 2000.
- Applicant shall be responsible to take adequate precautionary measures as detailed in this consent.
- For disinfections of waste water ultra violet radiation shall be used in place of chlorination



[Handwritten Signature] 2

5. The applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Cess Act, 1977 (to be referred as Cess Act) and amendment Rules, 2003 there under,

The daily water consumption for the following categories is as under:

(i) Domestic	...	636.0 CMD
(ii) Water gets Polluted & Pollutants are Biodegradable	...	0.00 CMD
(iii) Water gets Polluted, Pollutants are not Biodegradable & Toxic	...	0.00 CMD
(iii) Industrial Cooling, spraying	...	0.00 CMD

The applicant shall regularly submit to the Board the returns of water consumption in the prescribed form and pay the Cess as specified under Section 3 of the said Act.

6. CONDITIONS UNDER AIR (Prevention & Control of Pollution) ACT, 1981:

(i) The Applicant may install 7-nos. of diesel generating sets (DG Sets), of capacity 750.0KVA x7 and shall be equipped with comprehensive control system as is warranted with reference to generations of emissions and operate and maintain the same continuously so as to achieve the level of pollutants to the following standards:

7. Standards for Emissions of Air Pollutants:

(i) SPM/TPM	Not to exceed	150 mg/Nm ³
(ii) SO ₂ (DG Set)	Not to exceed	15 Kg/day

(ii) The applicant shall observe the following fuel pattern:-

Sr. No.	Type Of Fuel	Quantity
1.	HSD	3.2 KLD

(iii) The applicant shall erect the chimney(s) of the following specifications:-

Sr. No.	Chimney Attached To	Height in Mtrs.
1.	D. G. Set 750 KVA x7 nos	4.00 Mtrs

(iv) Conditions for D.G. Set

- Noise from the D.G. Set should be controlled by providing an acoustic enclosure or by treating the room acoustically.
- 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.
- The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 75 dB(A) during



day time and 70 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.

4. 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.
5. Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
6. 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.
7. D.G. Set shall be operated only in case of power failure.
8. The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.

(v) Other Condition

- a) 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.
- b) Water spraying shall be done on ground to avoid fugitive emissions.
- c) Construction material shall be carried in enclosed vehicles during construction activities.

8. CONDITIONS UNDER HAZARDOUS WASTE (MANAGEMENT, HANDLING & TRANSBOUNDARY MOVEMENT) RULES, 2008:

- (i) The Industry shall handle hazardous wastes as specified below.

Applicant shall not generate any type of Hazardous Waste.

9. The applicant shall adopt environment friendly technology in development of the project.
10. This Board reserves the right to amend or add any conditions in this consent and the same shall be binding on the Applicant.
11. The applicant shall submit **Bank Guarantee of Rs. 10.0 Lakhs** towards compliance of consent condition at Regional Office, MPCB, Pune within 15-days. BG shall be valid for period upto 31st May 2015
12. PP shall submit an affidavit within 15 days in the prescribed format towards not taking further effective steps prior to obtaining the EC and BG of **Rs. 20.0 Lakh** for ensuring the compliances.
13. As per Para 2 of EIA notification dated-14/09/2006, the effective steps include starting of any construction work or preparation of land by the project management. However as clarified



4

by the MoEF vide office memorandum no. J-1103/41/2006-IA.II(I); Dated-19/8/2010, fencing of the site to protect it from getting encroached & construction of temporary shed(s) for the guard(s) & acquisition of land shall not be treated as an effective steps.

14. The applicant shall submit Board Resolution towards starting of construction work for expansion without obtaining consent to establish from the MPC Board and Environment Clearance thus violated the provisions of Environmental laws and in future, they will not do such violations and B.G. of Rs. 2 lacs towards submission of Board Resolution by 31/01/2014.
15. The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOI, vide no: 21-243/2006-IA-III , dated 10th April 2007.
16. This is issued pursuant to the decision of Consent Committee of the Board in its meeting held on 27th December 2013.
17. The Capital investment of the total project is Rs. 273.70 Cr.



(Rajeev Kumar Mittal) IAS
Member Secretary

To,

M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd.,
"ISHANYA MALL"
C.S.No. 190 to 192 , Opp Golf Course,
Shastri Nagar, Yerwada, Pune

Copy to:

1. Regional Officer, MPCB, Pune - He is directed to obtain necessary Bank Guarantee from the applicant and ensure compliance of consent conditions.
2. Sub Regional officer Pune-I, MPCB, Pune.
3. Chief Accounts Officer, Mumbai, MPCB,
4. Cess Branch, MPCB, Mumbai. 5. Master file

Received Consent fee of

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	547409.0	001479	27/02/2013	IDBI Bank

MAHARASHTRA POLLUTION CONTROL BOARD

512

Phone :- 24010437/24020781/24014701

Fax :- 24044532 / 24023516

Email :- enquiry@mpcb.gov.in

Visit At:- <http://mpcb.gov.in>



Kalpataru Point, 3rd & 4th floor, Sion-
Matunga Scheme Road No. 8. Opp.
Cine Planet Cinema, Near Sion Circle,
Sion (E), Mumbai - 400 022

Orange/L.S.I

Consent order No: Format I.0/BO/ROHQ/CR/PN-23923-14-CC-6579

Date: 03/06/2015

To,

M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd.,

"ISHANYA MALL"

C.S.No. 190 to 192, Opp Golf Course,

Shastri Nagar, Yerwada, Pune

Sub :- Renewal of Consent to Operate in Orange category for Commercial Mall.

Ref :- Minutes of Consent Committee meeting held on 30/05/2015

Your application No. CR1502000135 Date: 26/12/2014

For: Renewal of Consent to operate for Commercial Mall.

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 Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling) Rule 2011 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:

1. The consent to Operate is granted for a period upto:- 31/01/2017
2. The Capital investment of the Project is Rs. 276.70 Crs. (As per CA certificate).
3. The Consent to operate is valid for Commercial Project developed by M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd. named as "ISHANYA MALL" at C.S.No. 190 to 192, Opp Golf Course, Shastri Nagar, Yerwada, Pune, on total plot area of 41,806.35 sq. mtrs and Built up area for operate 34,170.0 sq.mtrs including utilities for development of Commercial Mall Project & Services as per Construction commencement Certificate issued by local body.

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

Sr. no.	Description	Permitted quantity of discharge	Standards to be achieved	Disposal
1.	Trade effluent	Nil	NA	NA
2.	Domestic effluent	255.0 CMD	As per Schedule -I	60% shall be reused & recycled and remaining shall be discharged in municipal sewer.

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

Sr. No.	Description of stack / source	Number of Stack	Standards to be achieved
1.	DG sets (500 *6 KVA)	6	As per Schedule -II



[Handwritten signature]

6. Conditions under Municipal Solid Waste (Management and Handling) Rule, 2000

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1.	Biodegradable Waste	100.0	Kg/Day	OWC	Used as manure
2.	Non Biodegradable Waste	150.0	Kg/Day	Segregation	By sale

7. Condition under E-Waste (Management & Handling) Rule 2011.

S. No.	Type Of E-Waste	Qty	UOM	Treatment	Disposal
1	E-Waste	1.0	MT/A	Nil	Authorized recyclers

8. This Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government agencies.
10. The applicant shall comply with the conditions stipulated in Environment Clearance granted by GOI, vide no: 21-243/2006 IA-III, dated 10th April 2007.
11. The applicant shall extend existing bank Guarantee of Rs. 10 lakhs towards Operation and Maintenance of pollution control system.

For and on behalf of the
Maharashtra Pollution Control Board



Mirashe
3/6/14
(P. K. Mirashe)
Member Secretary

Received Consent fee of-

Sr. No.	Amount(Rs.)	DD. No.	Date	Drawn On
1	5,53,510.0	002846	22/12/2014	IDBI Bank

Copy to:

1. Regional Officer, MPCB, Pune. And Sub-Regional Officer, Pune-I, 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-ITerms & conditions for compliance of Water Pollution Control:

- 1) A] As per your consent application, you have provided the sewage treatment system with the design capacity of 255.0 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.
- 2) The Board reserves its rights to review plans, specifications or other data relating to plant setup for the treatment of water, works 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 an extension or addition thereto.
- 3) The firm 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.
- 4) In case, the water consumption of the project is not covered under the water consumption of local body, in that situation, the project proponent shall submit the CESS Returns in the prescribed format given under the provision of Water (Prevention & Control of Pollution) Cess Act, 1977 and Rules made thereunder for various category of water consumption.

In case the water consumption is duly assessed under the quantity of water consumption of local body, the project proponent shall submit certificate to that effect from the concern local body with the request not to assess CESS on their water consumption, being already assessed on the water consumption of local body.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Domestic purpose	289.50



Handwritten signature

Schedule-II

Terms & conditions for compliance of Air & Noise Pollution Control:

1. As per your application, you have erected following stack (s) and to observe the following fuel pattern-

Sr. No.	Stack Attached To	Height in Mtrs. (Above roof top)	Type of Fuel	Quantity
1.	DG sets (500x6KVA)	6.0	HSD/ Diesel	176.0 Lit/Hr.

* D.G. Set shall be operate only in case of power failure.

2. 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	150.00 mg/Nm ³ .
--------------------	---------------	-----------------------------

3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement/alteration well before its life come to an end or erection of new pollution control equipment.
4. 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)

[Handwritten Signature]



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	Renewal	Rs. 10.0 lakhs	15 days	Rs. 10.0 lakhs towards Operation and Maintenance of pollution control system. (Applicant shall extend existing Bank guarantee)	31/01/2017	31/05/2017



[Handwritten signature]

Schedule-IV

General Conditions:

- 1) The applicant shall provide facility for collection of samples of 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) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Municipal Solid Waste (Management & Handling) Rule 2000 and E-Waste (Management & Handling) Rule 2011.
- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) The applicant shall install a separate meter showing the consumption of energy for operation of sewage treatment plants and air pollution control system. A register showing consumption of chemicals used for treatment shall be maintained.
- 5) 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) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
 - d) 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.
 - e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - f) 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.
 - g) D.G. Set shall be operated only in case of power failure.
 - h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - i) The applicant shall comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Municipal Solid Waste (Management & Handling) Rule 2000 & E-Waste (M & H) Rule 2011.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The industry shall submit official e-mail address and any change will be duly informed to the MPCB.
- 9) The treated sewage shall be disinfected using suitable disinfection method.
- 10) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 11) The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.



MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 4010437/4020781
/4037124/4035273
Fax : 24044532/4024068 /4023516
Email : rohq@mpcb.gov.in
Visit At : <http://mpcb.gov.in>



Kalpataru Point, 3rd & 4th floor, Sion- Matunga
Scheme Road No. 8, Opp. Cine Planet Cinema, Near
Sion Circle, Sion (E),
Mumbai - 400022

Infrastructure /LSI

Consent order No: Format1.0/BO/RO-HQ/1808000611

Date- 14/08/2018

To,
M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd,
"ISHANYA MALL"
C.S. No. 190 to 192, Opp. Golf Course,
Shastri Nagar, Yerwada, Dist.- Pune.

Subject: Renewal of Consent to Operate for Commercial Mall under Red Category.

Ref :

1. Earlier Consent to Operate granted vide letter no. Format 1.0/ BO/ROHQ/CR/PN-23923-14-CC-6579 dated 03.06.2015.
2. Minutes of Consent Committee meeting held on 26/09/2017

Your application MPCB-CONSENT-0000017119 Dated: 7/12/2016

For: Renewal of Consent to Operate for Commercial Mall 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 and Other Wastes (M & TM) Rules, 2016 and Municipal Solid Waste (Management & Handling) Rule, 2000 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:

1. The renewal of consent to operate is granted for a period from 1.2.2017 up to 31.01.2019.
2. The capital investment of the project is Rs. 282.46 Crs. (As per C.A. Certificate submitted by project proponent)
3. The Renewal of Consent to Operate is valid for Commercial Mall by M/s. Deepak Fertilisers & Petrochemicals Corporation Ltd, named as "ISHANYA MALL", C.S. No. 190 to 192, Opp. Golf Course, Shastri Nagar, Yerwada, Dist.- Pune. on total plot area of 41806.35 sq.m. and construction built up area 34170 sq. mtrs. including utilities and services as per commencement certificate issued by local body.
4. 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	NIL	NA	NA
2.	Domestic effluent	255	As per Schedule -I	60% should be reused & recycled and remaining should be discharged in municipal sewer

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

Sr. No.	Description of stack/ source	Capacity	Number Of Stack	Standards to be achieved
1	DG Set	6 x 500 KVA	6	As Per Schedule -II

6. Conditions under Solid Waste Management Rules, 2016:

Sr. no.	Type Of Waste	Quantity & UoM	Treatment	Disposal
1	Bio-degradable	100 Kg/Day	OWC	Use as Manure
2	Non-biodegradable	150 T/Day	Segregation	Segregate and Hand over to Local Body for recycling
3	STP sludge	Kg/day		Use as manure

7. Conditions under Hazardous and Other Wastes (M & TM) Rules, 2016 for treatment and disposal of hazardous waste; NIL.

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

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

10. Project Proponent shall comply with the conditions stipulated in Environmental Clearance obtained vide no. 21-243/2006 IA.III dated 10.04.2007.

For and on behalf of the
Maharashtra Pollution Control Board

(Dr. P. Anbalagan, IAS)
Member Secretary

Received Consent fee of -

Sr. No.	Amount(Rs.)	DD /DR No.	Date
1	564935	HIDC4957255982	13.12.2016
2	589935	7612860	30.7.2018

Copy to:

1. Regional Officer, MPCB, Pune and Sub-Regional Officer, MPCB, Pune-I-- 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 installed Sewage Treatment Plants (STP with the design capacity of 255 CMD.
- B] The Applicant shall operate the effluent treatment plant (STP) to treat the sewage 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
		Limiting Concentration in mg/l, except for PH
01	BOD (3 days 27oC)	10
02	Suspended Solids	50
03	COD	100

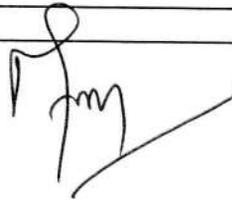
C) The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, firefighting, on land for gardening etc and remaining shall be discharged in to the municipal sewerage system.

D] Project proponent shall operate STP for five years from the date of obtaining occupation certificate.

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 should 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

- 2) **Project proponent shall install online monitoring system for monitoring of BOD, TSS & flow at the outlet of STP within a period of three months and submit BG of Rs. 5 lakh towards the compliance of the same.**
- 3) The industry should 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.
- 4) The water consumption of the project is as under

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Domestic purpose	289.5



Schedule-IITerms & conditions for compliance of Air Pollution Control:

1. As per your application, you have provided the Air pollution control (APC) system and also 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
1	DG Set (6 x 500KVA)	Acoustic enclosure	6 * each	Diesel	176	Lit/Hr	-	

* Above roof of the building in which it is installed.

2. The applicant should 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	150 mg/Nm ³
--------------------	---------------	------------------------

3. The Applicant should obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement alteration well before its life come to an end or erection of new pollution control equipment.
4. 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	Renewal of Consent to Operate	Rs. 5 lakh	15 Days	Towards installation of online monitoring system	Three months from date of issue of consent	31.5.2019
2	Renewal of Consent to Operate	Rs. 10 lakh *	15 Days	Towards O & M of Pollution Control System	Continuous	31.5.2019

* Existing BG of Rs. 10 lakh shall be extended

Handwritten Signature

Maharashtra Pollution Control Board

Schedule-IVGeneral Conditions:

- 1) The applicant should provide facility for collection of samples of sewage effluents, air emissions and hazardous waste to the Board staff at the terminal or designated points and should pay to the Board for the services rendered in this behalf.
- 2) The firm should strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Solid Waste Management Rules, 2016 and E-Waste (Management) Rules, 2016.
- 3) Drainage system should be provided for collection of sewage effluents. Terminal manholes should be provided at the end of the collection system with arrangement for measuring the flow. No sewage should be admitted in the pipes/sewers downstream of the terminal manholes. No sewage should find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 5) 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) should 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) The industry should take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
 - d) 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.
 - 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 should 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 should comply with the notification of MoEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste – The applicant should provide onsite municipal solid waste processing system & should comply with Solid Waste Management Rules, 2016 & E-Waste (M) Rules, 2016.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The industry should submit official e-mail address and any change will be duly informed to the MPCB.
- 9) The firm should submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 10) **The applicant shall make an application for renewal of the consent at least 60 days before the date of the expiry of the consent.**



MAHARASHTRA POLLUTION CONTROL BOARD

Tel: 24010706/ 24010437
 Fax: 24023516
 Website: <http://mpcb.gov.in>
 E-mail: cac-cell@mpcb.gov.in



Kalpataru Point, 2nd - 4th Floor
 Opp. Cine Planet Cinema,
 Near Sion Circle, Sion (E)
 Mumbai-400 022.

Consent order No. Format 1.0/BO/CAC-Cell/UAN No. 0000062157/CR/13th CAC-1905001048

Date- 17/05/2019

To,

M/s Deepak Fertilizer's and Petrochemicals Corporation Ltd. "Ishanya Mall",
 C.S. Nos. 190 & 192, Opp. Golf Course, Shastri Nagar, Yerwada,
 Tal. Haveli, Dist. Pune - 411 006.

Subject: Grant of renewal of Consent to Operate for Ishanya Mall" in Red Category.

Ref.: 1. Previous Consent to Operate No. Format 1.0/BO/RO-HQ/CC-1808000611 dtd. 14/08/2018.
 2. Minutes of Consent Appraisal Committee meeting held on 11/03/2019.

Your application No. 0000062157 Dated 07/12/2018

For: grant of Consent to Operate 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 6 of the Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 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 to Operate is valid for period up to **31/01/2020**.
- The capital investment of the project is Rs. 298.46.09 Crs as per C.A. Certificate submitted by project proponent.
- The Consent to Operate is valid for Commercial Mall "Ishanya Mall" of M/s Deepak Fertilizer's and Petrochemicals Corporation Ltd. on total plot area of 41,806.35 Sq. Mtrs. for total construction BUA of 34,170 Sq. Mtrs. as per Environmental Clearance No. 21-243/2006 IA.III dtd. 10/04/2007 and Commencement Certificate issued by Local Body including utilities and services.

4. 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	NIL	NA	NA
2.	Domestic effluent	255	As per Schedule -I	60% of treated sewage shall be recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting, gardening etc. and remaining shall be connected to the sewerage system provided by local body.

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

Sr. No.	Description of stack/ source	Number Of Stack	Standards to be achieved
1	D.G. Sets (6 x 500 KVA)	6	As Per Schedule -II

6. Conditions under Solid Waste Management Rule, 2016:

Sr. no.	Type Of Waste	Quantity	Treatment	Disposal
---------	---------------	----------	-----------	----------

1	Biodegradable	600 Kg/day	OWC followed by composting	Used as Manure
2	Non-Biodegradable	As actual Kg/day	---	Segregate and Hand over to Local Body for recycling
3	STP Sludge	As actual Kg/D	---	Used as Manure

7. Conditions under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 for treatment and disposal of hazardous waste

Sr. No.	Type Of Waste	Quantity	UOM	Treatment	Disposal
1	Used/ Spent Oil	As actual	Ltrs/A	--	Sale to Auth. Party/ Recycler

8. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same shall be binding on the industry.
9. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
10. Project Proponent shall operate STP so as to achieve the treated domestic effluent standard for the parameter BOD- 10 mg/lit.
11. The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting, gardening etc. and remaining shall be connected to the sewerage system provided by local body.
12. Project Proponent shall operate organic waste digester along with composting facility and compost obtained shall be used as manure in their own garden/ plantation.
13. Project Proponent shall extend existing Bank Guarantees of Rs. 15 Lakh towards O&M of pollution control systems and towards compliance of the Consent conditions.
14. This Consent is issued as per Board's Office Order No. E-736/2019 dtd. 06/05/2019.

For and on behalf of the
Maharashtra Pollution Control Board

Mirash
16/5/19
(P.K. Mirashe)
Member Secretary

Received Consent fee of –

Sr. No.	Amount	DR/ DD/ RTGS/ NEFT/ TRXN No.	Bank Name	Date
1	Rs. 5,96,931/-	7618657	SBI	26/12/2018
2	Rs. 50,000/-	663616 (NEFT/SK/AXSK191240027173/269/MAHARASHTRA POLLUTIO)	--	04/05/2019

Copy to:

1. Regional Officer(Pune)/ Sub-Regional Officer (Pune-I), M.P.C. Board.
-They are directed to ensure the compliance of the consent conditions.
2. Chief Accounts Officer, MPCB, Mumbai.
3. CC/CAC desk- for record & website updating purposes.

Schedule-I**Terms & conditions for compliance of Water Pollution Control:**

1) A] As per your application, you have provided STP of designed capacity 255 CMD with extended aeration technology for the treatment 255 CMD of domestic sewage.

B] The Applicant shall operate the Sewage Treatment Plant (STP) 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:

Sr. No.	Parameters	Standards prescribed by Board
		Limiting Concentration in mg/l, except for pH
01	BOD (3 days 27°C)	10
02	Suspended Solids	20
03	COD	50
04	Residual Chlorine	1 ppm

- C] The treated domestic effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, cooling tower make up, firefighting etc. and remaining shall be utilized on land for gardening and connected to the sewerage system provided by local body. In no case, effluent shall find its way to any water body directly/indirectly at any time. Project proponent shall provide flow meter to ensure 60% recycling of treated sewage and shall maintain the record with data logging system. **PP shall achieve the treated domestic effluent standard for the parameter BOD- 10 mg/lit.**
- 2) 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.
- 3) 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.
- 4) **The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, 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	0.00
2.	Domestic purpose	289.5
3.	Processing whereby water gets polluted & pollutants are easily biodegradable	0.00
4.	Processing whereby water gets polluted & pollutants are not easily biodegradable and are toxic	0.00

Schedule-IITerms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to installed the Air pollution control (APC) system and also 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	SO ₂
1	D.G. Sets (6 x 500 KVA)	Acoustic Enclosure	6.0* each	HSD	176 Kg/Hr	84

* Above roof of the building in which it is installed.

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

Total Particulate matter	Not to exceed	150 mg/Nm ³
--------------------------	---------------	------------------------

3. The Applicant shall obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement alteration well before its life come to an end or erection of new pollution control equipment.
4. 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).

[Signature]

Maharashtra Pollution Control Board

Schedule-III
Details of Bank Guarantees

Sr. No.	Consent (Renewal Of C to O)	Amt of BG Imposed	Submission Period**	Purpose of BG #	Compliance Period	Validity
1	C to R	Rs.15 Lakh	Within 15 Days	Towards Operate & Maintenance of the pollution control system and towards compliance of Consent conditions	31/01/2020	Extend up to 31/05/2020 after expiry

* The above Bank Guarantee(s) shall be submitted by the applicant in favour of Regional Officer at the respective Regional Office within 15 days of the date of issue of Consent.

Pink

Maharashtra Pollution Control Board

Schedule-IVGeneral Conditions:

- 1) The applicant shall provide facility for collection of samples of 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) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and Environmental Protection Act 1986 and Solid Waste Management Rule 2016, Noise (Pollution and Control) Rules, 2000 and E-Waste (Management & Handling Rule 2011).
- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 5) 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) Applicant 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) Applicant should make efforts to bring down noise level due to DG set, outside their 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.
- 6) Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rule 2016 & E-Waste (M & H) Rule 2011.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) Applicant shall submit official e-mail address and any change will be duly informed to the MPCB.
- 9) The treated sewage shall be disinfected using suitable disinfection method.
- 10) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 11) **The applicant shall make an application for renewal of the consent at least 60 days before date of the expiry of the consent.**

-----0000-----



MAHARASHTRA POLLUTION CONTROL BOARD

Phone : 24010437/24020781
/24037124/24035273
Fax : 24044532/24024068
/24023516
Email : jdwater @mpcb.gov.in
Visit At : <http://mpcb.gov.in>



Kalpataru Point, 3rd & 4th floor,
Sion- Matunga Scheme Road No. 8,
Opp. Cine Planet Cinema, Near Sion Circle,
Sion (E), Mumbai - 400022

Infrastructure /Red/LSI

Date 8 / 7 /2020

Consent order No: Format1.0/BO/JD (WPC)/UAN-084024/CO/CC- 2007000603

To,
M/s. Deepak Fertilisers and Petrochemicals Co. Ltd.
C.S.No.190 & 192, Opp. Golf Couse, shastri Nagar,
Yerwada, Tal: Haveli, Dist: Pune.

Sub: Renewal of Consent to operate for Construction of Residential Projects is granted under Red category.

- Ref:** 1. Your Application vide UAN No. 084024 dt. 02/12/2019.
2. renewal of Consent to operate granted vide no. Format1.0/BO/CAC-Cell/UAN-062157/CR/13thCAC- 1905001048
3. Minutes of Consent Committee Meeting held on 26/05/2020.

For: Renewal of Consent to Operate for Construction of Residential Projects 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 and Other Wastes (M & TM) Rules, 2016 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:

1. Renewal of Consent to operate is granted from 01/02/2020 to 31/03/2022.
2. The proposed capital investment of the project is **Rs.301.96 Cr.**
(As per CA certificate submitted by project proponent)

The Renewal of Consent to operate is valid for Construction of Residential Projects named as **M/s. Deepak Fertilisers and Petrochemicals Co. Ltd. S C.S.No.190 & 192, Opp. Golf Couse, shastri Nagar, Yerwada, Tal: Haveli, Dist: Pune,** for total plot area **41,806.35 Sqm** & total construction **BUA 34,170.00 Sqm** including utilities and services and As per commencement certificate issued by local body.

3. 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	NIL	NA	NA
2.	Domestic effluent	255.0	As per Schedule -I	60% should be reused & recycled and remaining should be discharged in municipal sewer

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

Sr. No.	Description of stack/ source	Capacity	Number Of Stack	Standards to be achieved
1.	DG Set	500 KVA	6	As Per Schedule -II

5. Conditions under Solid Waste Management Rules, 2016:

Sr. no.	Type Of Waste	Quantity & UOM	Treatment	Disposal
1	Wet garbage	600.00 Kg/Day	Organics waste Converter with composting facility / Biogas digester with composting facility	Used as Manure
2	Dry garbage	300.00 Kg/Day	--	Segregate and Hand over to Local Body for recycling
3.	STP sludge	30.00 Kg/day	STP	Used as manure

6. Conditions under Hazardous and Other Wastes (M & TM) Rules, 2016 for treatment and disposal of hazardous waste; NIL.
7. The Board reserves the right to review, amend, suspend, revoke etc. this consent and the same should be binding on the industry.
8. This consent should not be construed as exemption from obtaining necessary NOC/permission from any other Government authorities.
9. Project Proponent shall comply the Construction and Demolition Waste Management Rules, 2016 which is notified by Ministry of Environment, Forest and Climate Change dtd.29/03/2016.
10. Project Proponent shall submit an affidavit in Board's prescribed format within 15 days regarding the compliance of conditions of EC/CRZ clearance and C to E.
11. Project Proponent shall install online monitoring systems for BOD, TSS and flow at the outlet of STP.
12. Project Proponent shall Operate and maintain Organic waste digester with composting facility or Biogas digester with composting facility.
13. The applicant should comply with the conditions stipulated in Environmental Clearance Obtained from SEIAA, Environment Department, Government of Maharashtra, dtd. 10/04/2007 for total plot area 41,806.35 Sqm & total construction BUA area 34,170.00 Sqm.

For and on behalf of the
Maharashtra Pollution Control Board

(E. Ravendiran, IAS)
Member Secretary

Received Consent fee of -

Sr. No.	Amount (Rs.)	Transaction. No.	Date	Drawn On
1	12,07,834/-	AXTB193511505206	17/12/2019	online

Copy to:

1. **Regional Officer, MPCB, Pune:** He is directed to forfeit 50 % operational BG towards exceeding of JVS of treated effluent samples and top up with BG of Rs.5.0 lakh and make total BG of Rs .15 lakh towards O and M of pollution control system and compliance of EC and consent conditions.
2. **Sub-Regional Officer, MPCB, Pune-I :** He is directed to ensure the compliance of the consent conditions.
2. **Chief Accounts Officer, MPCB, Mumbai.**
3. **CC desk-** for record & website updating purposes.

Schedule-I

Terms & conditions for compliance of Water Pollution Control:

1) A] As per your application, you have installed of Sewage Treatment Plants (STP) with the design capacity of **255.00 CMD**

B] The Applicant shall operate the effluent treatment plant (STP) to treat the sewage 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.

1.	pH	Between	6.5 to 9.0
2.	Total Suspended Solids	Not more than	20 mg/l.
3.	BOD 3 Days 27 degree C	Not more than	10 mg/l.
4.	Chemical oxygen Demand (COD)	Not to more than	50 mg/l.
5.	NH4 N	Not more than	5 mg/l.
6.	N Total	Not more than	10 mg/l.
7.	Fecal Coliform MPN/100 MI	Less than	100.0

C) The treated effluent shall be 60% recycled for secondary purposes such as toilet flushing, air conditioning, firefighting, on land for gardening etc and remaining shall be discharged in to the municipal sewerage system.

D] Project proponent shall operate STP for five years from the date of obtaining occupation certificate.

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 should 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

2) The industry should 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.

3) The Applicant shall comply with the provisions of the Water (Prevention & Control of Pollution) Act, 1974 and as amended, by installing water meters and other provisions as contained in the said act.

Sr. no.	Purpose for water consumed	Water consumption quantity (CMD)
1.	Domestic purpose	289.00

4) 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.

Schedule-II

Terms & conditions for compliance of Air Pollution Control:

1. As per your application, you have proposed to install the Air pollution control (APC) system and also proposed to erect 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
1.	DG Set (6X500 KVA)	Acoustic enclosure	6.00 * each	HSD	176.0	Lit/Hr	--	--

* Above roof of the building in which it is installed.

2. The applicant should 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	150 mg/Nm ³ .
--------------------	---------------	--------------------------

3. The Applicant should obtain necessary prior permission for providing additional control equipment with necessary specifications and operation thereof or alteration or replacement alteration well before its life come to an end or erection of new pollution control equipment. 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).

Maharashtra Pollution Control Board



Schedule-III
Details of Bank Guarantees

A. BG Histy

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Operate for renewal	Rs. 10 lakh [forfeit 50 % operational BG towards exceeding of JVS of treated effluent samples and top up with BG of Rs.5.0 lakh and make total BG of Rs .15 lakh towards O and M of pollution control system and compliance of EC and consent conditions.]	15 Days	Towards Compliance of EC and consent conditions	Continuous	31.05.20220

B. Proposed BG

Sr. No.	Consent (C to E/O/R)	Amt of BG Imposed	Submission Period	Purpose of BG	Compliance Period	Validity Date
1	Consent to Operate for renewal	Rs. 10.5 lakh	15 Days	Towards Compliance of EC and consent conditions.	Continuous	31.03.2022

Schedule-IV

General Conditions:

The following general conditions shall apply as per the type of the industry.

- 1) The applicant shall provide facility for collection of samples of 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) The firm shall strictly comply with the Water (P&CP) Act, 1974, Air (P&CP) Act, 1981 and environmental protection Act 1986 and Solid Waste Management Rules, 2016 and E-Waste (Management) Rules, 2016.
- 3) Drainage system shall be provided for collection of sewage effluents. Terminal manholes shall be provided at the end of the collection system with arrangement for measuring the flow. No sewage shall be admitted in the pipes/sewers downstream of the terminal manholes. No sewage shall find its way other than in designed and provided collection system.
- 4) Vehicles hired for bringing construction material to the site should be in good condition and should conform to applicable air and noise emission standards and should be operated only during non-peak hours.
- 5) 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) The industry shall take adequate measures for control of noise levels from its own sources within the premises in respect of noise to less than 55 dB(A) during day time and 45 dB(A) during the night time. Day time is reckoned between 6 a.m. to 10 p.m and night time is reckoned between 10 p.m to 6 a.m.
 - d) 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.
 - e) Installation of DG Set must be strictly in compliance with recommendations of DG Set manufacturer.
 - f) 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.
 - g) D.G. Set shall be operated only in case of power failure.
 - h) The applicant should not cause any nuisance in the surrounding area due to operation of D.G. Set.
 - i) The applicant shall comply with the notification of MOEF dated 17.05.2002 regarding noise limit for generator sets run with diesel.
- 6) Solid Waste – The applicant shall provide onsite municipal solid waste processing system & shall comply with Solid Waste Management Rules, 2016 & E-Waste (M) Rules, 2016.
- 7) Affidavit undertaking in respect of no change in the status of consent conditions and compliance of the consent conditions the draft can be downloaded from the official web site of the MPCB.
- 8) The treated sewage shall be disinfected using suitable disinfection method.
- 9) The firm shall submit to this office, the 30th day of September every year, the environment statement report for the financial year ending 31st march in the prescribed Form-V as per the provision of rule 14 of the Environmental (Protection) Second Amended rule 1992.
- 10) The applicant make an application for renewal of consent at least 60 days before the date of the expiry of the consent.



Application for Consent/ Authorisation

Sir,
I/We hereby apply for*

1. Consent to Establish/Operate/Renewal of consent under section 25 and 26 of the Water (Prevention & Control of Pollution) Act, 1974 as amended.
2. Consent to Establish/Operate/Renewal of consent under Section 21 of the Air (Prevention and Control of Pollution) Act, 1981, as amended.
3. Authorization/renewal of authorization under Hazardous and Other Wastes (Management and Transboundary Movement) Rules, 2016 in connection with my/our/existing/proposed/altere/ additional manufacturing/processing activity from the premises as per the details given below.

Consent Information

UAN No: MPCB-CONSENT-0000095259
Application submitted on: 24-07-2020

Industry Information

Consent To: Establish (Expansion)	IIN No.:	Submit to: SRO - Pune I	
Type of institution: Industry	Industry Type: O21 Building and construction project more than 20,000 sq. m built up area	Category: Orange	Scale: L.S.I
EC Reqd. No	EC Obtained Yes	EC Ref. No. SEIAA-EC-0000002310 dated 20/07/2020	
Whether construction-buildup area is more than 20,000 sq.mtr.(Existing Expansion Unit)		No	

General Information

1. Name, designation, office address with Telephone/Fax numbers, e-mail of the Applicant Occupier/Industry/Institution / Local Body.

Name Shashidhar Shetti	Address Opp Golf Course, Shastri Nagar, Yerawada, Pune
Designation DGM - Engineering Services	Taluka Haveli
Area Yerawada Pune	District Pune
Telephone 9822101687	Fax 020-40004299
Email shashidhar.shetti@ishanya.com	Pan Number AAACD1388D

2. (a) Name and location of the industrial unit/premises for which the application is made (Give revenue Survey Number/Plot number name of Taluka and District, also telephone and fax number)

Industry name
M/s Deepak Fertilisers & Petrochemicals Corporation Limited.

Location of Unit

S. No. 190(part), 192(part), CTS number 2185-A, Plot Number - B, Shastri Nagar, Yerawada, Pune 411 006.

Survey number/Plot Number

S. No. 190(part), 192(part), CTS number 2185-A, Plot Number **537**

Taluka

Haveli

District

Pune

(b) Details of the planning permission obtained from the local body/Town and Country Planning authority/Metropolitan Development authority/ designated Authority.

Planning permission

PMC

Planning Authority

PMC

Name of the local body under whose jurisdiction the unit is located and Name of the licence issuing authority

Name of Local Body

PMC

Name of the licence issuing authority

PMC

3. Names,addresses with Telephone and Fax Number of Managing Director / Managing Partner and officer responsible for matters connected with pollution control and/or Hazardous waste disposal.

Name of Managing Director

Mr Mahesh Meenakshisundaram

Telephone number

9822101687

Fax number

0

Officer responsible for day to day business

Mr. Shashidhar Shetti

4. (a.) Are you registered Industrial unit ?

Yes

Registration number

BO/ROHQ/CR/PN-23923-14-CC6579

Date of registration

May 31, 1979

5. Gross capital investment of the unit without depreciation till the date of application (Cost of building, land, plant and machinery). (To be supported by an affidavit/undertaking on Rs.20/- stamp paper, annual report or certificate from a Chartered Accountant for proposed unit(s), give estimated figure)

Gross capital (in Lakh)

30195.78

*** Verified**

CA Certificate

*** Terms**

1

*** Consent Fee**

603916.00

6. If the site is located near sea-shore/river bank/other water bodies/Highway, Indicate the crow fly distance and the name of the water body, if any.

Distance From	Distance(Km)	* Name
SH/NH	0.00	--NA--
River	0.00	--NA--
Human Habitation	0.00	--NA--
Religious Place	0.00	--NA--
Historical Place	0.00	--NA--
Creek/Sea	0.00	--NA--

6b. Enter Latitude and Longitude details of site

Latitude

73534194

Longitude

18332306

7. Does the location satisfy the Requirements Under relevant Central/State Govt. Notification such as Coastal Regulation Zone. Notification on Ecologically Fragile Area, Industrial Location policy, etc. If so, give details.

Location	Approved Industry Area	Sensitive Area	If Yes, Name Of Area	Industry Location with Reference to CRZ
Yerawada	No	No	NA	A2

8. If the site is situated in notified industrial estate,

		Details
(a) Whether effluent collection, treatment and disposal system has been provided by the authority.	Yes	STP
(b) Will the applicant utilize the system, if provided.	Yes	STP
(c) If not provided, details of proposed arrangement.	NA	

9.

(a) Total plot area (in square meter)	(b) Built up area and (in square meter)	(c) Area available for the use of treated sewage/ trade effluent for gardening/irrigation. (in square meter)
59399.43	95082.28	12505.94

10. Month and year of commissioning of the Unit.

2020-07-31

11. Number of workers and office staff

Workers	staff	Hrs. of shift	Weekly off
5815	25	8	Sunday

12.

(a) Do you have a residential colony Within the premises in respect of Which the present application is Made ?	No	0	
(b) If yes, please state population staying			
Number of person staying	Water consumption	Sewage generation	Whether is STP provided?
0	0	00	No
(c) Indicate its location and distance with reference to plant site.			
Number of person staying	Water consumption		
0	0		

13. List of products and by-products Manufactured in tonnes/month, Kl/month or numbers/month with their types i.e.Dyes, drugs etc. (Give figures corresponding to maximum installed production capacity)

Products Name and Quantity

Product Name	UOM	Product Name	Existing	Consented	Proposed Revision	Total	Remarks
OTHERS	--NA--	Construction of Commercial project Ishanya Mall with 8 nos. of buildings.	0	0	0	0	0

Products Name and Quantity

Product Name	UOM	Quantity	Remarks
NA	--NA--	0	0

14. List of raw materials and process chemicals with annual consumption corresponding to above stated production figures, in tonnes/month or kl/month or numbers/month.

Name of Raw Material	UOM	Quantity	Hazardous Waste	Hazardous Chemicals	Remarks
Building Material	--NA--	0	No	No	0

15. Description of process of manufacture for each of the products showing input, output, quality and quantity of solid, liquid and gaseous wastes, if any from each unit process.

Construction of Commercial project Ishanya Mall with 8 nos. of buildings.

Part B : Waste Water aspects

16. Water consumption for different uses (m3/day)

Purpose	Consumption	Effluent Generation	Treatment	Remarks	Disposal	Remarks
Domestic Pourpose	633.00	300.00	STP	0	Recycle	Fresh water 333 CMD & Recycled water 300 CMD
Water gets Polluted & Pollutants are Biodegradable	0	0	--NA--	0	--NA--	0
Water gets Polluted, Pollutants are not Biodegradable & Toxic	0	0	--NA--	0	--NA--	0
Industrial Cooling, spraying in mine pits or boiler feed	0	0	--NA--	0	--NA--	0
Others	0					

17. Source of water supply, Name of authority granting permission if applicable and quantity permitted.

Source of water supply	Name of authority granting permission	Qauntity permitted
PMC	PMC	650.00

18. Quantity of waste water (effluent) generated (m3/day)

Domastic	Boiler Blowdown	Industrial	Cooling water blowdown
300.00	0	0	00
Process	DM Plants/Softening	Washing	Tail race discharge from
0	0	0	0

* 19. Water budget calculations accounting for difference between water consumption and effluent generated.

Water Budget attached

20. Present treatment of sewage/canteen effluent (Give sizes/capacities of treatment units).

Capacity of STP (m3/day)

310

Treatment unit	Size (mxm)	Retention time (hr)
255 CMD Capacity Existing, Bar Screen, Equalization, Aeration, ,Settling Tank, ASF, ACF and Ozonation	228.93	24

21. Present treatment of trade effluent (Give sizes/capacities of treatment units) (A schematic diagram of the treatment scheme with inlet/outlet characteristics of each unit operation/process is to be provided. Include details of residue Management system (ETP sludges)

Capacity of ETP (m3/day)

0

Treatment unit	Size (mxm)	Retention time (hr)
0	0	0

22.

(i) Are sewage and trade effluents mixed together? No

If yes, state at which stage-Whether before, intermittently or after treatment. 0

23. Capacity of treated effluent sump, Guard Pond if any.

Capacity of treated effluent sump (m3) 0

Effluent sump/Guard pond details No 0

If yes, state at which stage-Whether before, intermittently or after treatment. No 0

24. Mode of disposal of treated effluent With respective quantity, m3/day

(i) into stream/river (name of river)	00	(ii) into creek/estuary (name of Creek/estuary)	0
(iii) into sea	0	(iv) into drain/sewer (owner of sewer)	0
(v) On land for irrigation on owned land/ase land. Specify cropped area.	23.00	(vi) Connected to CETP	0
(vii) Quantity of treated effluent reused/ recycled, m3/day Provide a location map of disposal arrangement indicating the outler(s) for sampling. Treated effluent reused / recycled (m3/day)	300		

25. (a) Quality of untreated/treated effluents (Specify pH and concentration of SS, BOD,COD and specific pollutants relevant to the industry. TDS to be reported for disposal on land or into stream/river.

Untreated Effluent

pH	5.5-9
SS (mg/l)	250-350
BOD (mg/l)	300-350
COD (mg/l)	350-450
TDS (mg/l)	2200

Specific pollutant if any	Name	Value
1	0	0

Treated Effluent

pH	5.5-9
SS (mg/l)	50.0
BOD (mg/l)	30.0
COD (mg/l)	50.0
TDS (mg/l)	2100.0

Specific pollutant if any	Name	Value
1	0	0

(b) Enclose a copy of the latest report of analysis from the laboratory approved by State Board/ Committee/Central Board/Central Government in the Ministry of Environment expected characteristics of the untreated/treated effluent

NA Proposed Unit

26. Fuel consumption

Fuel Type	UOM	Fuel Consumption TPD/LKD	Calorific value
HSD	Ltr/Hr	666.00	0
Ash content	Sulphur content	Quantity	Other (specify)
0	0	1	0

27. (a) Details of stack (process & fuel stacks: D. G.)

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
1	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.
0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be provided	SPM	Will be Provided	500

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
2	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.
0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be Provided	SPM	Will be Provided	500

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
3	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.

0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be Provided	SPM	Will be Provided	500

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
4	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.
0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be Provided	SPM	Will be Provided	500

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
5	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.
0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be Provided	SPM	Will be Provided	500

(a) Stack number(s)	(b) Stack attached to	(c) Capacity	(d) Fuel Type
6	DG Set	500	HSD
(e) Fuel quantity (Kg/hr.)	(f) Material of construction	(g) Shape (round/rectangular)	(h) Height, m (above ground level)
111	MS	Round	6.0
(i) Diameter/Size, in meters	(j) Gas quantity, Nm³/hr.	(k) Gas temperature °C	(l) Exit gas velocity, m/sec.
0.01	0	0	0
(m) Control equipment preceding the stack	(n) Nature of pollutants likely to present in stack gases such as Cl₂, Nox, Sox TPM etc.	(o) Emissions control system provided	(p) In case of D.G. Set power generation capacity in KVA
Will be Provided	SPM	Will be Provided	500

27. (B) Whether any release of odoriferous compounds such as Mercaptans, Phorate etc. Are coming out from any storages or process house.

No

28. Do you have adequate facility for collection of samples of emissions in the form of port holes, platform, ladder etc. As per Central Board Publication "Emission regulations Part-III" (December, 1985)

Port hole No **Details** Will be provided

Platform	No	Details	Will be provided
Ladder	No	Details	Will be provided

29. Quality of treated flue gas emissions and process emissions. Quantity of treated flue gas emissions and process emissions.

Sr. No	Stack attached to	Parameter	Concentration mg/Nm3	flow (Nm3/hr)
1	DG	SPM	0	0

(Specify concentration of criteria pollutants and industry/process-specific pollutants stack-wise. Enclose a copy of the latest report of analysis from the laboratory approved by State Board/Central Board/Central Government in the Ministry of Environment & Forests. For proposed unit furnish expected characteristics of the emissions..

NA New Unit

Part - D: Hazardous Waste aspect

30. Information about Hazardous Waste Management as defined in Hazardous Waste (Management & Handling) Rules, 1989 as amended in Jan.,2000. Type/Category of Waste as per

Waste (Annually) Schedule I

Cat No	Type	Qty	UOM
NA		0	--NA--
Max	Method of collection	Method of reception	Method of storage
	NA	NA	NA
Method of transport	Method of treatment	Method of disposal	
NA	NA	NA	

Waste (Annually) Schedule II

31. Details about use of hazardous waste

Name of hazardous waste/Spent chemical	Quantity used/month	Party from whom purchased	Party to whom sold
NA	0	0	0

32.

a. Details about technical capability and equipments available with the applicant to handle the Hazardous Waste

00

b. Characteristics of hazardous waste(s) Specify concentration of relevant pollutants. Enclose a copy of the latest report of analysis from the laboratory approved by State Board/Central Board/Central Govt. in the ministry of Environment & Forests. For proposed units furnish expected characteristics

0

33.

Copy of format of manifest/record Keeping practiced by the applicant.

0

34.

Details of self-monitoring (source and environment system)

0

35. **Are you using any imported hazardous waste. If yes, give details.**

00

36.

Copy of actual user Registration/certificate obtained from State Pollution Control Board/Ministry of Environment & Forests, Government of India, for use of hazardous waste.

0

37.

Present treatment of hazardous waste, if any (give type and capacity of treatment units)

0

38. Quantity of hazardous waste disposal

(i) Within factory

0

(ii) Outside the factory (specify location and enclose copies of agreement.)

00

(iii) Through sale (enclosed documentary proof and copies of agreement.)

0

(iv) Outside state/Union Territory, if yes particulars of (1 & 3) above.

0

(v) Other (Specify)

0

Part - E: Additional information

39.

a. Do you have any proposals to upgrade the present system for treatment and disposal of effluent/emissions and/or hazardous waste.

NO

b. If yes, give the details with time- schedule for the implementation and approximate expenditure to be incurred on it.

NA

40.

Capital and recurring (O & M) expenditure on various aspect of environment protection such as effluent, emission, hazardous waste, solid waste, tree- plantation, monitoring, data acquisition etc. (give figures separately for items implemented/to be implemented).

Capital - Rs. 309.12 lakh, Recurring Cost - 52.20 Lakhs/Years

41.

To which of the pollution control equipment, separate meters for recording consumption of electric energy are installed ?

STP

42.

Which of the pollution control items are connected to D.G. Set (captive power source) to ensure their running in the event of normal power failure

43. Nature, quantity and method of disposal of non- hazardous solid waste generated separately from the process of manufacture and waste treatment. (Give details of area/capacity available in applicant's land)

Type	Quantity	UOM	Treatment	Disposal	Other Details
Dry Waste	823	Kg/Day	NIL	Sale	0
Wet Waste	632	Kg/Day	OWC	Use as a Manure	OWC of Capacity 100 & 750 Kg/Days

44. Hazardous Chemicals – Give details of Chemicals and quantities handled and Stored.

(i) Is the unit a Major Accident Hazard unit as per Mfg.Storage Import Hazardous Chemicals Rules ?

No

(ii) Is the unit an isolated storage as defined under the MSIHC Rules ?

NA

(iii) Indicate status of compliance of Rules 5,7,10,11,12,13 and 18 of the MSIHC Rules.

No

(iv) Has approval of site been obtained from the concerned authority?

NO

(v) Has the unit prepared an off-site Emergency Plan? Is it updated ?

NA

(vi) Has information on imports of Chemicals been provided to the concerned authority?

NO

(vii) Does the unit possess a policy under the PLI Act?

NO

45. Brief details of tree plantation/green belt development within applicant's premises (in hectares)

Open Space Availability	Plantation Done On	Number of Trees Planted
12505.94 Square meter	6783 Square meter(54 %)	510

46.

Information of schemes for waste Minimization, resource recovery and recycling - implemented and to be implemented, separately.

NO

47.

(a) The applicant shall indicate whether Industry comes under Public Hearing, if so, the relevant documents such as EIA, EMP, Risk Analysis etc. shall be submitted, if so, the relevant documents enclosed shall be indicated accordingly.

EC Obtained

(b) Any other additional information that the applicants desires to give

NO

(c) Whether Environmental Statement submitted ? If submitted, give date of submission.

NA

48.

I/We further declare that the information furnished above is correct to the best of my/our knowledge.

49.

I/We hereby submit that in case of any change from what is stated in this application in respect of raw materials, products, process of manufacture and treatment and/or disposal of effluent, emission, hazardous wastes etc. In quality and quantity; a fresh application for Consent/Authorization shall be made and until the grant of fresh Consent/Authorization no change shall be made.

546

50.

I/We undertake to furnish any other information within one month of its being called by the Board

Yours faithfully

Signature : SD
Name : Mr. Shashidhar Shetti
Designation : DGM

Additional Information

Air Pollution

Sr No.	Air Pollution Source	Pollutants	APCS Provided	Remark
1	DG	SPM	Will be Provided	0

Separate EM Provided	No	Other Emission Sources	NO
Measures Proposed	Will be Provided	Foul Smell Coming Out	No
Air Sampling Facility Details	Will be Provided		

D.G. Set Details

Description	Capacity(KVA)	Remarks
DG	500	6 nos

Hazardous Waste Generation

Hazardous Waste	Quantity	UOM	Treatment	Disposal	Other Details
-----------------	----------	-----	-----------	----------	---------------

CHWTSDF Details

Member of CHWTSDF	CHWTSDF Name	Remarks
-------------------	--------------	---------

Cess Details

Cess Applicable	Cess Paid	If Yes, UpTo
No	No	Jan 1 1900 12:00:00:000AM

Legal Actions

Legal Action Taken	Legal Record Of Company	Legal Action Details	Remarks
No			