# **EXECUTIVE SUMMARY**

Of

### **Draft Environmental Impact Assessment Report**

**Baseline Monitoring: Winter 2023** 

# PM MITRA Textile Park adjacent to @Addl. Amravati Industrial Area located at

### Dist. Amravati, Maharashtra

### **Project Proponent**

Maharashtra Industrial Development Corporation (MIDC), Amravati Division



### January 2024



Environmental Consultant Aditya Environmental Services Pvt. Ltd., Mumbai www.aespl.co.in QCI- NABET Accredited EIA Consultant Accreditation No.: NABET/EIA/2225/RA 0262 dated 18<sup>th</sup> October 2022, valid up to 1<sup>st</sup> May 2025

**Environmental Laboratory** 

Aditya Environmental Services Pvt. Ltd. NABL Accredited Laboratory ISO 9001:2015 Certified OHSAS 18001:2007 Certified P-1, MIDC Mohopada, P.O. Rasayani, Dist. Raigad Pin 410207 Envirotech Research Pvt. Ltd. 47,Kahalkar Complex, Shastri Layout,Subhash Nagar, Hingna Road, Nagpur-440022

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#### 1.1 Project Background

This proposal is mooted by **Maharashtra Industrial Development Corporation (MIDC)**, which was established in 1962, under Maharashtra Industrial Development Act of 1961 as the premier industrial infrastructure development agency of Government of Maharashtra. MIDC has been designated as Special Planning Authority (SPA) under Maharashtra Regional and Town Planning Act 1966.

The mission of this proposed project for setting up the prestigious Prime Minister Mega Integrated Textile Region and Apparel (PM MITRA) parks scheme by Ministry of Textile, Government of India inspired by the 5F vision of Hon'ble Prime Minister – Farm to Fibre to Factory to Fashion to Foreign.

The total land available for development comprises of 410.02 Ha. The proposed development will be carried out by Maharashtra Industrial Development Corporation (MIDC).

Proposed Textile Park will house all types of manmade fibre units including Rayon (Category 5d as per EIA Notification) under Red category as per CPCB classification under Category A, Activity 7c as per the Schedule to the EIA Notification of Ministry of Environment Forest & Climate Change (MoEF & CC), dated 14/09/2006 and subsequent amendments. Therefore, the proposed development requires obtaining Environmental Clearance from Ministry of Environment & Forest (MoEF & CC).

#### 1.2 **Project Description**

#### 1.2.1 Project Brief

The proposed project site is located on the National Highway-6 at MIDC, Amravati, Maharashtra. Amravati (Nandangaonpeth) Industrial area is an existing textile industrial park next to the proposed site. Development of PM MITRA Textile Pak will be taken up in 2 villages Pimpalvihir and Dighargavhan.

There is no land cutting/ filling envisaged – plots will be sold on "as is" basis, the overall development will be governed by Development Control Regulations of MIDC, of 2009.

Development proposal includes area development plotting and zoning and development of land infrastructure. Description of the proposed zones and land infrastructure is as follows:

- Manufacturing Zone of 257.14 Ha to house textile industries
- Supporting infrastructure within Utility (9.54 Ha) and Logistics Zone (4.85 Ha)
- Housing & Social Infrastructure zone of over 17 Ha to help create good residential facilities for MIDC staff and employees
- Developing Green Belt and green spaces over 122.27 Ha area

- Upgradation of access to MIDC from the existing National Highway (NH53) and providing internal roads of spine road of 60 m RoW of 4 lanes, other 45 m and 30 m width roads. Total area under roads over 38.25 Ha area
- Construction of Training and R & D, Incubation labs, testing zone of 5.34 Ha area
- Common Sewage Treatment Plant (STP) (4 MLD capacity) and Municipal Solid Waste Treatment (MSW) facility to treat 5.1 TPD biodegradable solid waste will be developed for residential area
- Internal water supply network (to provide water to Member industries and residential zone)
- External water supply network (Jackwell from upper Wardha reservoir). Irrigation department has approved abstraction of 10 MCM from Upper Wardha Reservoir). Piped water supply will also be made available to villages within the overall layout and those adjacent to MIDC
- Streetlighting power supply upto plot etc.

#### 1.2.2 Summary of Project Details

The project brief is summarized in the table below.

#### Table 1: Project summary at a glance

Sr.	Description	Details			
No.					
Ι.	Proposal	IA/MH/INFRA1/447555/2023 and File No.: 10/69/2023-IA.III			
	Number				
П.	Name of	PM MITRA Textile Park adjacent to @Addl. Amravati Industrial Area at			
	Project	MIDC Industrial Area, Old Bypass Road, Amravati, Maharashtra 444607			
III.	Project	7(c) Industrial estates / parks / complexes / areas, Export Processing			
	category	Zones (EPZs), Special Economic Zones (SEZs), Biotech Parks, Leather			
		Complexes			
IV.	Project	Maharashtra Industrial Development Corporation (MIDC), Amravati			
	Proponent	Division			
V.	Location of	Additional Amravati Industrial Area at MIDC Industrial Area, Old Bypass			
	the project	Road, Amravati, Maharashtra 444607			
		Taluka Amravati, Villages Digargavhan and Pimpalvihir			
VI.	Connectivity	Site is adjacent to Site along NH 53 highway			
		Nearest railway station: Amravati Railway Station at 6.3 km			
		Nearest Airport: Dr. Babasaheb Ambedkar International Airport, Nagpur			
		125 km			
VII.	Government	Land acquisition Notifications for Additional Amravati Industrial Area,			
	Order	dtd. 5 <sup>th</sup> Sept., 2019			
	relating to				
	the site				
VIII.	Project Cost	Rs 614.00 crore			
IX.	Latitude and	Between 77° 53' 45.287" and 77° 55' 56.626" East Longitude			
	Longitude	Between 21° 2' 29.151" and 21° 1' 29.447" North Latitude			
Х.	Plot Area	410.02 На			

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Sr.	Description	Details							
No. XI.	Area	Sr. No.	Zone/ Land use			Sr. No. Zone/ Land use		Ar	ea
	Statement	••••••	Manufacturing Zone			На	%		
		1.				257.14	62.88		
		2.	Utilities			9.54	2.85		
		3.	Comme	ercial Development		8.18	2.70		
		4.	1	g & Social Infrastruc	ture	17.00	4.65		
		5.	Logistic	-		4.85	1.80		
		6.	-	g,R&D & Testing		5.34	1.30		
		7.	Roads			38.25	9.85		
		8.	Green A	Area		55.87	10.58		
		9.	Green I	Belt Area		13.85	3.39		
			Total			410.02	100.00		
XII.	Water	45.98 ML	.D						
	Requirement								
XIII.	Source of	Irrigation	Departn	nent, Government o	f Mahar	ashtra dtd 09	9.02.2004 for		
	water	supply of	10 MCN	1					
XIV.	Sewage	3.41 MLC	)						
	Generation								
XV.	Effluent	22.42 ML	22.42 MLD						
	generation								
XVI.	STP Capacity	4 MLD Ca	ipacity, S	BR Technology					
	& Technology								
XVII.	Solid Waste	Тур	be	Quantity (Kg/d)	•	Treatment /	disposal		
	Management	Dry waste	e	As & when	Recyc	lable dry was	ble dry waste will be		
	during			generated	hande	handed over to authorized			
	Construction				-	ecyclers. Inerts will be disposed			
	Phase					landfill site through local			
					agenc				
		Wet wast	te	As & when	Comp	osting			
				generated					
		C&D was	te		Disposal in compliance with				
						ruction & De			
						-	nt Rules, 2016		
						nrough MPCB	authorized		
0.000	Tabal Calla	-			recycl				
(VIII.	Total Solid	Тур		Quantity (Kg/d)		Treatment /	•		
	Waste	Dry waste		5631 kg/ day	Recyclable dry waste will be				
	Quantities					handed over to authorized recyclers. Inerts will be disposed			
	with type during				-		-		
	Operation		to landfill site through agencies.			ugii iocai			
	Phase	Wet wast	0	5104 kg/ day	-	treated in pr	onosed		
	i nase		.c	JTO4 Kg/ Udy		ethanation pl	•		
		F_\//acto		19 kg/ day		•			
		E-Waste		49 kg/ day		•	orized vendor		

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Sr.	Description	Details					
No.							
		STP Sludge (dry)	551 kg/ day	Dried slud	ge from STP will be		
				used as ma	nure		
		Hazardous	• Used oil/	Disposal at	Butibori,		
		Waste	spent oil: 139	Nagpur			
			ltr/day				
			Chemical				
			sludge from ETP				
			71,181 kg/day				
			Textile				
			chemical				
			residue: 26,376				
			kg/day <ul> <li>Discarded</li> </ul>				
			containers/				
			barrels/ liners				
			(no.): 1656.6				
XIX.	Green belt		(				
	details	Area under Green Belt			(Ha)	(%)	
		Green Area			55.87		
		Green Belt Area			13.85		
		Total			69.72	17%	
	Green area in large size plot (Area = 302.05 Ha)			802.05 Ha)	48.33	16%	
		Green belt area			4.22		
		Total Green Are			122.27	33%	
			Existing trees on plot: 945				
		Number of trees t					
		-	trees to be cut: 182				
XX.	Power	Number of trees to be planted: 15,466 Total Electricity requirement during operation phase is 30MWA					
700	requirement	Total Electricity requirement during operation phase is solwing					
XXI.	Energy	Energy efficient fixtures and use of solar energy for streetlighting,					
	Efficiency	•••	on, admin buildings a	•.	-	<b>.</b>	
station and public toilets etc.				ets etc.			
		Efforts to reduce Carbon Footprint through installation of Solar					
			ter heating system ir	order to co	onserve non-	-	
		renewable energy					
XXII.	EMP Cost	a) Construction Pl					
		Capital Cost: Rs 523.16 lakh, O&M Cost: Rs. 52.32 lakh/annum					
		b) Operation Phase: Capital Cost: Rs. 689.30 lakh, O&M Cost: Rs. 154.22 lakh/annum					
		Lapital Cost: Rs. 6	89.30 lakn, U&M Cos	ST: KS. 154.2	z iakh/annu	m	

#### 1.2.3 Water Teatment Plant

Based on water quality of raw water from jackwell in backwater of Upper Wardha Reservoir, conventional water treatment plant will be proposed. The treated water quality will be in accordance with IS: 10500 -2012 norms.

#### 1.2.4 Industry wise water requirement

During operation stage, water required will be catered through pumping from the existing jackwell in backwater of Upper Wardha Reservoir. An agreement has been signed with the Irrigation Department, Government of Maharashtra dtd 09.02.2004 for supply of 10 MCM.

Zone	Estimated Water consumption			Green belt	Grand Total	
	Total water (MLD)	Processs (MLD)	Domestic (MLD)	Cooling (MLD)	(*) (MLD)	(MLD)
Manufacturing Zone	42.14	28.87	1.80	7.67	0.69	39.07
Utilities	0.15		0.15	0.01	0.03	0.18
Commercial Development	0.37		0.35	0.02	0.02	0.39
Housing and Social Infrastructure	1.50		1.50		0.05	1.54
Logistics	0.22		0.21	0.01	0.01	0.23
Training, R&D & Testing	0.24		0.23	0.01	0.02	0.26
Roads	0.19				0.10	0.10
Green Areas	0.94				0.94	0.94
Green Belt Area	0.23				0.23	0.23
Total	45.98	28.87	4.23	7.71	2.09	41.98

#### 1.2.5 Wastewater Generation

#### **Construction Stage**

The wastewater generation during construction stage due to domestic activities will be around 25.5 cmd. Sewage will be treated in septic tank - soak pits /packaged type sewage treatment plant of 27 cmd capacity.

#### **Opeartion Stage**

#### INDUSTRIAL WASTEWATER

The total industrial effluent generation is 22.42 MLD.

Expected type of effluent: Effluent to be received from textile industries only

a) Dye bath effluent having High TDS upto 34000 ppm.

b) Non Dye Bath effluent TDS value upto 4000 ppm.

**Quantity of effluent**: The existing CETP will be expanded suitably to take care of the effluent from proposed PM MITRA Park. Provision will be made to treat the high TDS effluent during the expansion.

The CETP is at present 5 MLD, which is proposed to be expanded to 15 MLD as part of Phase II. Further Phase III will be undertaken by 2026, whereby it is proposed to be expanded by another 15 MLD.

The industrial effluent quantity as presented in the above table is 22.42 MLD considering the functioning of all the industries within the proposed PM MITRA Textile Park at a high rate of water consumption. Rate of water consumption for the different industries varies depending on the process category. As the proposed industries will be of varied process category and will be established over a period of time, the rate of effluent generation will also increase proportionately. Thus the effluent will be accommodated within the CETP for treatment as its capacity is enhanced over Phase II and Phase III as mentioned above.

**Effluent conveyance system**: The industrial effluent will be disposed into the existing CETP. Effluent will be collected & conveyed through the underground HDPE collection lines diameter ranges from 200 mm to 500 mm.

#### Treatment and reuse of Effluent

The description and performance of the existing CETP is discussed under **Section 2.8.4** above. As per the discussions above, effluents from the textile industries proposed in Manufacturing zone of PM MITRA park will be treated in the CETP to obtain a TDS level < 500 and thus can be safely recycled back and reused for industrial processes, cooling and flushing. Recycled water from proposed STP will also be reused for flushing and gardening within premises, thus making the system ZLD.

#### DOMESTIC WASTE WATER

Domestic wastewater (sewage) is about 3.41 MLD. The domestic sewage will be treated in the proposed STP of 4 MLD within the Utility Zone. This will be designed on SBR technology.

#### 1.2.6 Municipal Solid Waste and Hazardous Waste

#### **Construction Phase**

Total solid waste i.e. Municipal waste (domestic and or commercial wastes): 5 kg/day from labour camp. Substratum removed will be used back in road construction.

#### **Operation Phase**

#### **Waste Generation**

The total waste generated from the proposed development is classified as below:

Туре	Quantity (Kg/d)	Treatment / disposal	
Dry waste	5631 kg/ day	Recyclable dry waste will be	
		handed over to authorized	
		recyclers. Inerts will be	
		disposed to landfill site	

#### Table 3: Classification of Solid Waste generated during Operation Phase

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Туре	Quantity (Kg/d)	Treatment / disposal
		through local agencies.
Wet waste	5104 kg/ day	To be treated in proposed
		biomethanation plant at site
E-Waste	49 kg/ day	Sale to MPCB authorized
		vendor
STP Sludge	551 kg/ day	Dried sludge from STP will be
(dry)		used as manure
Hazardous	<ul> <li>Used oil/ spent oil: 139 ltr/day</li> </ul>	Disposal at CHWTSDF,
Waste	• Chemical sludge from ETP: 71,181	Butibori, Nagpur
	kg/day	
	• Textile chemical residue: 26,376	
	kg/day	
	• Discarded containers/ barrels/	
	liners (no.): 1656.6	

#### 1.2.7 Waste Management

Units will be required to take membership of CHWTSDF, Butibori, Nagpur and dispose off the waste to MPCB Authorized facilities nearby according to the Authorization granted by MPCB.

For management of MSW, facility will be provided for segregation of waste and collection of inert wastes like Plastic waste, e- waste etc. The biodegradable waste will be treated in Biomethanation/ anaerobic digestor and inert waste disposed off by landfill. Segregated recyclable waste will be disposed off to MPCB authorized recyclers.

#### 1.2.8 Energy Conservation Measures

MIDC as the planning authority will enforce use of Energy Efficient Fixtures and Non-Conventional Energy Use during Project Development Phase.

MIDC will also ensure use of solar energy for streetlighting, pumps for irrigation etc. where ever possible.

#### 1.2.9 Green Belt Area Development

Green belt of 33% 122.27 Ha is proposed. Green area of 69.72 Ha will be planned as part of the Master Plan of which 55.87 Ha is proposed as a green zone around the various processing and non-processing zones.

The existing natural streams and percolation tanks will also be surrounded by a green zone. The entire plot will have a 15 m wide Green Belt area of 13.85 Ha. Roads will have avenue plantation as well as green medians of about 4.22 Ha.

An additional green area will be developed by individual plot (Indutrial unit) owners. This will comprise of 48.33 Ha which is about 16% of the plotted development.

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Sr. No.	Area under Green belt	Ar	ea
		(Ha)	(%)
1.	Green Area as part of Master Plan	55.87	
2.	Green Belt around the proposed plot	13.85	
		69.72	17.00
3.	Green area in large size plot (Area = 302.05 Ha)	48.33	16.00
4.	Green belt area along the road	4.22	
	Total Green Area	122.27	33.00

#### Table Error! No text of specified style in document.-1: Green Area details

This will be developed as green belt by planting trees which are indigenous to the local area. - The proposed plot will have a 15 m wide Green Belt area of 13.85 Ha.

- Buffer zone of 10m is left for all seasonal streams in order to protect the streams as per MIDC DCR, 2009 (Sec 17.1) provisions Buffer zone/Green belt around all water reservoirs ensuring that they are protected
- Avenue plantation along all roads and plantation on median verge
- In addition, open space will be provided in 16% of total area in large size plot (Area = 302.05 Ha) of 48.33 Ha area..

#### 1.2.10 Baseline Data Collection

For the purpose of assessing the impacts, a study area of 10 km radius around the proposed plot boundary was identified for the baseline studies as per MoEFCC guidelines.

Each of the environmental aspects: Land, Air & Noise, Ecology & Biodiversity and Socio Economics are considered.

A Survey of India (SOI) Toposheet with 1:50,000 scale is used to identify topographic features within 10 km radius around project site. Survey of India toposheet numbers 55H13, 55K4, 55G16 and 55L1 cover the 10 km study area around proposed project site.

#### 1.3 Environmental Monitoring Program

In case of accidental spill & leak of hazardous chemicals, monitoring of the environment for detection of the spilled/leaked chemical will be carried out in the affected area. In such case, soil & groundwater sample of the affected area will be collected and analyzed for detection of the spilled / leaked chemicals at regular interval for the period as required to ensure safe level of contamination.

#### 1.4 Budgetary Provisions for EMP

Environment Management Cell will inspect the necessity & availability of the materials, technologies, services & maintenance works regularly. The cell will make appropriate budget for the purpose. Regular record review for change in financial requirement of environment management will be done and appropriate budgetary provisions will be made. Budget for environmental management will be prepared and revised regularly.

The developing authority [MIDC] has made budgetary provision for the proposed project as a part of their initial planning. The environment protection measures of proposed development are to be initited during the construction stage itself.

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#### 1.5 Benefits due to the Project

#### **Financial Benefits**

The proposed PM MITRA Park will help in creating world-class industrial infrastructure that would attract large scale investment including foreign direct investment (FDI) and encourage innovation and job creation within the sector,

Nearly 1 lakh direct & 2 lakh indirect employment due to business, leading to stimulation of economic growth within the area,

Stimulating local economy due to direct & indirect impact of industries and related business.

#### **Social Benefits**

Provide alternate employment opportunity to population in Amravati Region,

Creation of new jobs (training, and social upliftment),

Skill development and technical expertise enhancement possibilities due to influx of industries and skilled manpower.

#### **Environmental Benefits**

Reducing transportation costs of raw material transport since proposed site is within cotton belt,

Creation of environmentally friendly and sustainable development in and around existing Amravati MIDC

#### 1.6 Environmental Management Cell (EMC)

#### 1.6.1 Organizational set-up of EMC

Since the proposed development is completely new, there will be a proposed Environmental Management Cell (EMC) for the effective implementation and monitoring of environmental management systems at site.

MIDC will assign responsibility to officer from various disciplines and cadres to perform and co-ordinate the activities concerned with management and implementation of Environmental control measures for the project.

#### 1.6.2 Functions of EMC

In compliance with the requirement of EP Act and Factories Act, Environmental Management Cell (EMC) will keep close watch on the performance of the pollution control equipment, emissions from the sources and the quality of surrounding environment in accordance with the monitoring program. MIDC will carry out detailed inspection/ survey report in respect of Accident & Safety aspect through Directorate of Industrial Safety & Health, Maharashtra State (DISH).

The cell will include safety cell for observing, inspecting and regulating the safety measures within the plant campus.

#### 1.7 Environmental Management Plan (EMP)

Environmental pollution during construction phase will be considerably less than that when the development will be fully operational. However, it is a good practice to develop procedures for control of pollution for the entire phasing of the project.

#### 1.7.1 EMP for Land environment management

#### Measures for soil protection and pollution due to surface runoff

Erosion protection measures to prevent soil erosion will be adopted. Soil contamination through fuel/ lubricant will be prevented by avoiding runoff from affected areas into natural drains. Use of silt traps is also suggested.

Pollution of surface water bodies/ rivers or streams in the vicinity due to runoff containing oil and grease from vehicles may be avoided by provision of oil and grease traps at the drainage sumps. Regular maintaenance of the sumps is recommended.

#### Solid Waste Management

Solid waste will be treated in proposed Common Municipal Solid Waste Treatment Facility within the Utility zone of the PM MITRA park site. Non-degradable waste will be disposed in closest landfill site and biodegradable waste will be treated in Bio methanation plant/anerobic digestor to be set up at site.

The sludge produced in primary and secondary settlers and tertiary treatments units is separately collected and suitably disposed of after appropriate treatment. In case it contains toxic chemicals it has to be disposed of at land-fill sites built specially for such wastes.

#### 1.7.2 EMP for Air environment management

#### Industrial emissions:

- All member industries should provide adequate stack heights for boilers, furnaces and DG sets.
- Phenolic chemicals which impart bad odour and taste to the water mass should be removed to prevent any chances of stream water becoming unsuitable for agricultural, domestic and industrial use. The operations should carry out pre-aeration for odour control. Pollutants, coloured substances, odours and microorganisms are directly destroyed by oxidation, without creating harmful chlorinated by-products or significant residues, hence it is suggested to use ozonation process.
- Individual industrial units should install appropriate air pollution equipments viz. bag filters, scrubbers etc. for controlling emissions from process. Bulk material should be transported in closed trucks to avoid wind entrainment.
- specifically designed vacuums should be sued to safely vacuum toxic dusts. Equipped with filter with high efficiency (efficiency of 99.995% on 0.2 micron) so there is no risk of exposure or contamination for the operator or the environment.

Effective Traffic management: Internal roads would be maintained in good conditions to control the dust emissions. Awareness will be raised amongst the employees for use of low sulphur fuel. Green belt development/plantation.

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#### **1.7.3** EMP for Water environment management

#### Water consumption

Water requirement for the project is anticipated to be 45.98 MLD. It will be sourced partially from the existing jackwell in backwater of Upper Wardha Reservoir and balance from recycled treated effluent and sewage (22.42 MLD + 3.41 MLD).

#### Water conservation measures

#### • Reduction in fresh water consumption within processing units

The reduction of water input can be done by two ways;

1. Optimization of process parameters: Optimization of process parameters will result in reduced water consumption which is quite possible by the use of latest developments in process technology and with low liquor ratio processing equipments, smart washing cycle, and proper controls.

2. Water recycling - Water recycling between several processes is possible, but its potential has not been exploited by textile units. This is possible at two stages:

• Recycling of water internally in selective processes.

• Recycling of treated effluent by setting a UF/RO/Nano filters at the end-of- pipe line Such reduction in fresh water consumption within processing units at various stages will reduce the pollution load on ETP and improve the quality of treated effluent.

#### Wastewater generation, treatment and disposal

Developing authority [MIDC] is committed for the following:

- Adequate wastewater treatment in CETP to remove all contaminants to enable recycle of effluents
- Proper housekeeping practices will be followed in the unit to maintain clean and clear environment and prevent contamination of surface runoffs and storm waters.
- Plants will be provided with well-structured storm water drainage network for preventing surface run-offs from mixing into sewers during monsoon.

All plant buildings handling chemicals will be provided with drains which will be connected to separate collection tank for storage of such unexpected effluents. This effluent will be analyzed in laboratory for giving suitable treatment in controlled manner in the ETP.

#### 1.7.4 EMP for impacts on ecological environment

- 1. Tree cutting to be kept minimal. Appropriate permissions by plot owners shall be taken from the concerned authority and the local administration. Similarly, the number of trees felled or cleared shall be recorded, and as many trees shall be planted through compensatory afforestation, at designated locations. Of the 91 trees falling within proposed roads, maximum will be transplanted and for trees to be cut, total 2 trees for every tree cut will be planted i.e. about 182 trees.
- 2. New trees to be planted @ minimum of 1 tree for every 80 sqm of land i.e. total 15,284.
- 3. It is recommended that the mandatory greenbelt is developed by plot owners.

- 4. The area supports percolation tanks during the monsoons. While these disappear after monsoon, these puddles, nonetheless, serve as important breeding grounds for invertebrate and amphibian species, and also support ephemeral diversity. The areas that support such percolation tanks need to be managed.
- 5. A greenbelt along the borders of the study site shall be developed. The development of greenbelt will follow published protocols. Accordingly, planting saplings of trees that grow tall and produce thick canopy will be avoided along the immediate edges of the road, as such plantation could reduce on-road visibility, which may lead to accidents.
- 6. The species for greenbelt development must be meticulously chosen. Care must be taken to avoid plantation of exotic, invasive species. Native species which support multiple faunal and floral components (keystone species) could be chosen. A list of species that can be used for greenbelt development is provided.
- 7. The industries could include the conservation of the Reserve Forests in vicinity as a part of their CSR activity, in co-operation with the Forest Department.
- 8. A part of the proposed area could be reserved for the establishment of nursery, which can serve as a reservoir of native plants for plantation purposes.
- 9. Implementing advanced water treatment technologies to remove harmful chemicals and dyes from wastewater. - Encouraging water recycling and reuse within the textile manufacturing process. Monitoring and regular testing of wastewater effluents to ensure compliance with water quality standards.

#### 1.7.5 EMP for socio economic environment

- Mitigation measure for air and noise pollution to be followed.
- Proper procedure for safe decommissioning shall be established as part of project development with training to employees
- Wastes generated will have to be identified and disposed off safely
- Have a designated procedure to ensure that workers do not suffer in eventuality of accidents
- Activities are outlined under the proposed CER program. A component of the water supply scheme which will be developed for the proposed PM MITRA Textile Park will cater to provide clean drinking water throughout the year (at concessional rate) to the 15 villages within the site. Also, fire station will be set up will cater to fight fire in affected villages and nearby areas and also help to fight accidents due to truck/ tanker movement.
- CER Plan proposal for improvement in nearby vicinity will include creation of infrastructural facilities which are lacking with special emphasis on health, education, environment, water, Sanitation & hygiene, road & skill development.

#### **1.8** Summary and Conclusions

#### 1.8.1 FINDINGS AND RECOMMENDATIONS

The upcoming project is notable on account of the following:

1. This will be a large textile park development housing entire value chain at one location, attract investment, generate employment and augment export potential.

- 2. The scheme will develop integrated and modern industrial infrastructure facility would attract large scale investment including foreign direct investment (FDI) and encourage innovation and job creation within the sector.
- 3. The park will offer an excellent infrastructure, plug, and play facilities as well as training and research facilities for industry.
- 4. With a vision to be located at a site having inherent strength for textile industry to flourish and the necessary linkages to succeed, this textile park will offer an opportunity to create an integrated textiles value chain right from spinning, weaving, processing/ dyeing, and printing to garment manufacturing at a single location.
- 5. Large green spaces (73.94 Ha) (>17%) will be provided as per CPCB/ILFS Guidelines for development of Industrial Estates to protect forest patches and rivers/water bodies and ensure continuity of green patches.
- 6. Elaborate mitigation measures prescribed during construction phase for controlling water pollution will ensure low impact during construction.
- 7. MIDC will install infrastructure to reduce pollution during operation phase include:
  - setting up STP, MSW treatment facility in utility zone
  - solar power generation and energy efficient fixtures for use in infrastructure facilities
- 8. Improvements in the physical infrastructure available to the local populace

The impacts are also manageable and almost all of them can be minimized through engineering solutions incorporated in the design and implementation of the EMP and monitoring plan.

#### 1.8.2 CONCLUSION

The positive impacts of the project include:

- 1. Improvements in the infrastructure and quality of life for the local populace
- 2. Huge employment potential during construction and operational phase for skilled, semiskilled and unskilled labour
- 3. Huge entrepreneurial opportunity in supply and service industries, contracting, etc.
- 4. Improvement of the economic condition of the area.

The negative impacts identified are:

- 1. The area will lose its rural character and the local population may lose their traditional livelihood/lands
- 2. Reduction of open spaces
- 3. Pollution may impact health and vegetation

The project Developing authority [MIDC] and appointed contractor undertakes to take efforts to save the environment and ecology of the surrounding area. Benefits of the project include generation of employment opportunities, development of infrastructural facilities, improvement in quality of life etc. which is essential for sustainable development.

The proposed and recommended mitigation measures for the project are sufficient. If implemented, all negative impacts, during and post construction can be properly mitigated and no comprehensive, broad, diverse or irreversible adverse impacts will be generated.

In view of this, it may be concluded that proposed project presents no major environmental and ecological concerns.