

**EXECUTIVE SUMMARY**  
**OF**  
**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

**For**  
**Proposed Common Bio-Medical Waste**  
**Treatment Facility**

**At Khasra No. 395/3/A, village-Chitpur (Dhargaon), Taluka & District-Bhandara**  
**Maharashtra**

**BY**  
**DASHIN ASEPTICS**

**EIA Consultant**  
**SMS Envocare Ltd. Pune**

## EXECUTIVE SUMMARY

### A. BRIEF DESCRIPTION PROJECT

SL. NO.	PARAMETERS	DESCRIPTION
1.	Project	<b>Proposed Common Biomedical Waste Treatment Facility (CBWTF)</b>
2.	Category	The proposed project falls under Category “B” Projects of activity 7 (da) as per amendment dated 17 <sup>th</sup> April, 2015 of EIA Notification dated 14 <sup>th</sup> September, 2006.
2.	Project Proponent	Dashin Aseptics
3.	Brief Description of the Project	A Common Biomedical Waste Treatment Facility is a set- up where biomedical waste, generated from a number of healthcare units, is suitably treated as per the prescribed procedures& norms laid down in the Biomedical Waste Management Rules, 2016. Biomedical waste is generated from all health care institutions; hospitals, nursing homes, clinics, dispensaries, veterinary institutions, animal houses, pathological laboratories, blood banks and so on.
4.	Proposed Plant Capacity	Incinerator (Rotary Kiln): <b>250 Kg/ hr</b> Autoclave: <b>500 Liters/ batch</b> Shredder: <b>100 Kg/hr</b> Effluent Treatment Plant (ETP): <b>10 KLD</b>
5.	Total Land Area	1 Acre <i>(Land Ownership documents are enclosed as Annexure-1. NA Certificate is enclosed As Annexure-2 and Company Registration document is enclosed As Annexure-3).</i>
6.	Location	Khasra No. 395/3/A, Village Chitapur (Dhargaon), Taluka & District Bhandara, Maharashtra

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE-CHITAPUR (DHARGAON), TALUKA & DISTRICT-BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS**

**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

SL. NO.	PARAMETERS	DESCRIPTION
7.	Water Requirement	5 KLD Sourced from Municipal Council, Bhandara <i>(Water Supply Certificate is enclosed as Annexure-8)</i>
8.	Manpower	During Construction phase, the labours and workers will be hired from nearby villages. Total 40 persons are proposed to be hired for plant operations including officers, skilled and unskilled workers.
9.	Electricity/Power Requirement	Quantity: 80 kW Power requirement will be sourced from MSEDCL Company Ltd. D. G. set of 100 KVA will be installed as back up supply
10.	Total Project Cost	2.15 Crore (215 Lakhs)

**Environmental Setting**

1.	Toposheet No.	550/12 & 550/16, of SOI
2.	Geographical Coordinate	<b>LATITUDE:</b> 21° 6'25.03" N <b>LONGITUDE:</b> 79°44'37.99" E <b>ELEVATION (MSL):</b> 267 m
3.	Topography	Almost plain with few hilly area within 10 km radius area towards NE direction
4.	Nearest Town	Village Dhargaon - 1 Km South direction Village Chitapur - 1 Km North direction
5.	Nearest Highway	NH-6 at 1.0 km S direction
6.	Nearest Railhead	Bhandara Road Railway Station at 17.00 Km towards NW direction
7.	Nearest Airport	Dr. Babasaheb Ambedkar International Airport, Nagpur at 73.00 Km towards W direction
8.	Nearest Water Body	Wainganga River at 9.0 Km NW direction

SL. NO.	PARAMETERS	DESCRIPTION
10.	Eco Sensitive Zone (National Park, Wildlife Sanctuary, Biosphere Reserve, Wild Life Corridors etc.)	Koka Wildlife Sanctuary: Boundary of WLS is started at around 5 Km towards NE direction. The Core of WLS is situated at 10 Km NE direction from the project location. <i>(Declaration of Koka Wildlife Sanctuary has been secured from division forest office, enclosure is enclosed As Annexure-4).</i>
4.	Historical & Archaeological Important Place, Defence Establishment	Not within 10 km radius from Project boundary

## **B. BENEFITS OF PROJECT**

- Installation of individual treatment facilities requires comparatively high capital investment so that CBWTF will become feasible and cost effective option to manage the Biomedical Waste
- Separate manpower and infrastructure required for operation and maintenance of the BMW Facility so that, CBWTF will offer the complete solution of BMW at a single place which save land, infrastructure and other facilities
- Monitoring pressure on regulatory agencies like MPCB shall be reduced as monitories of individual unit are not feasible and it is time taking task. CBWTF will allow the easy monitoring system at a place to regulatory authorities
- By running the treatment equipment at CBWTF to its full capacity, the cost of treatment of per kilogram gets significantly reduced
- Job opportunities shall be generated during construction and operation of the plan

## **C. LOCATION OF PROJECT**

Proposed CBWTF project is located at C Khasra No. 395/3/A, Village Chitapur (Dhargaon), Taluka & District Bhandara, Maharashtra. The project site and 10 km radius study area is covering with toposheet no. 55O/12 & 55O/16, O/11, O/15 of SOI.

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE-CHITAPUR  
(DHARGAON), TALUKA & DISTRICT-BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS  
DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

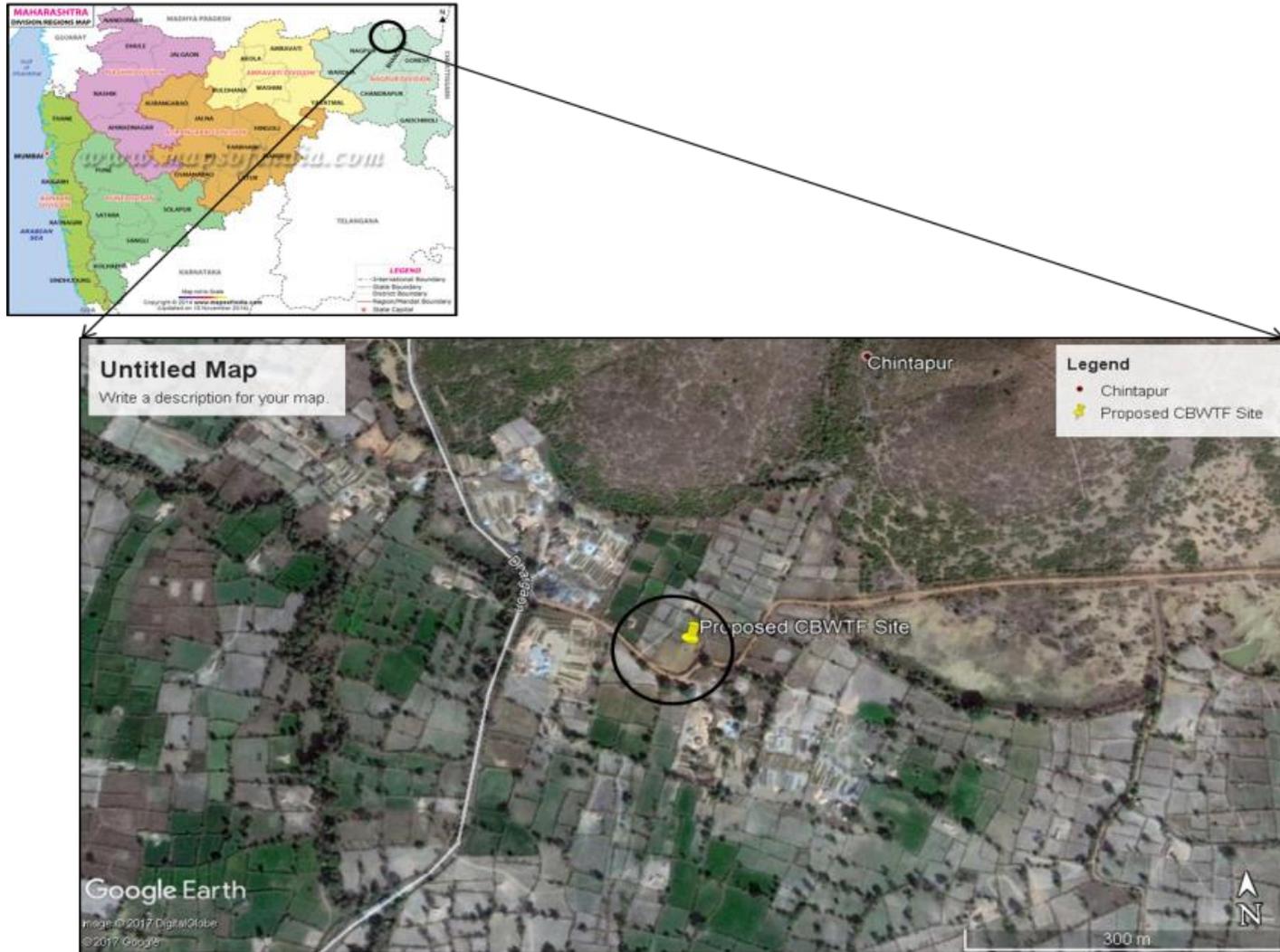


Figure No. 1: Project Location

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE-CHITAPUR (DHARGAON), TALUKA & DISTRICT-BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS**  
**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

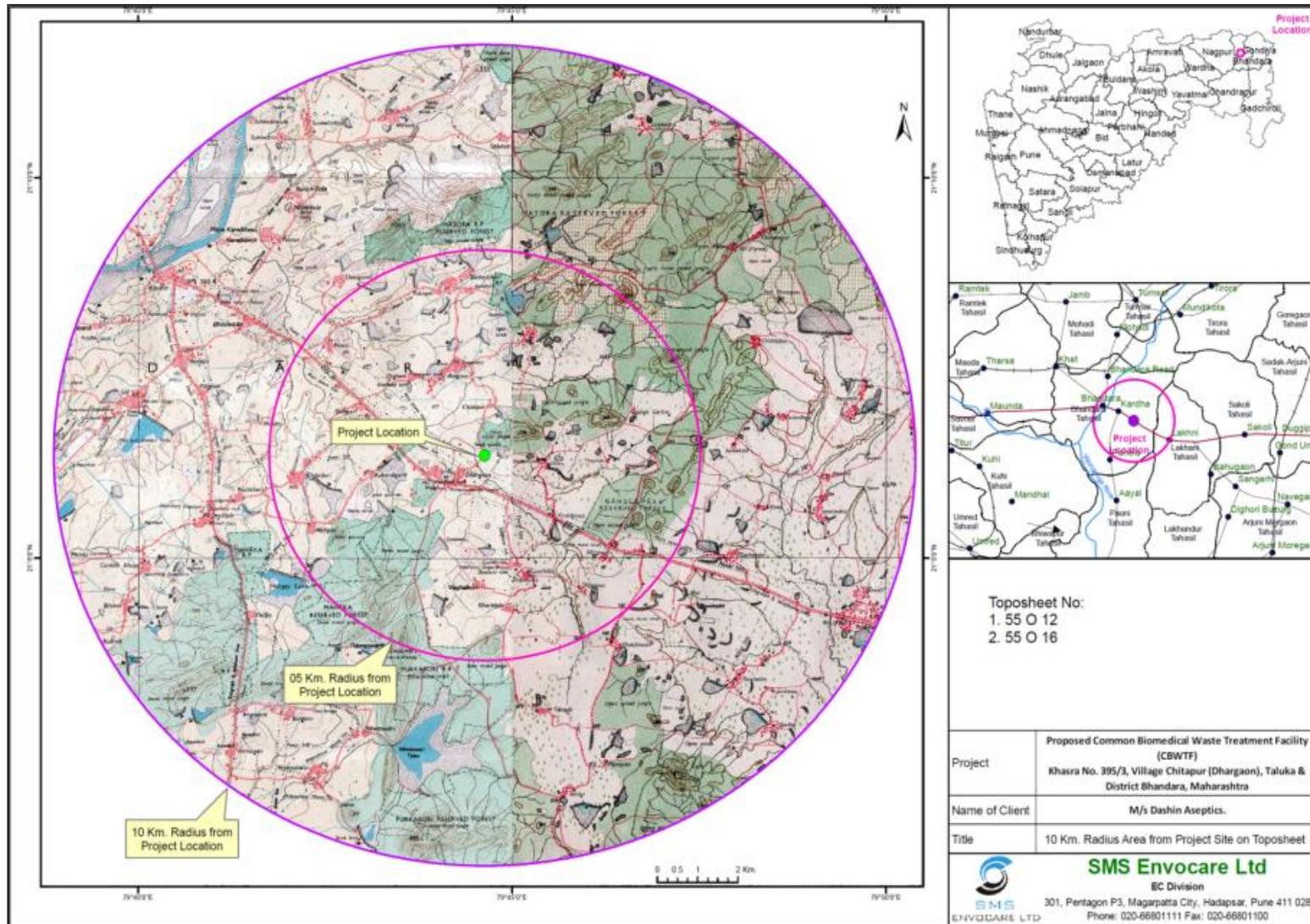


Figure No. 2: 10 km radius Toposheet map

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE-CHITAPUR (DHARGAON), TALUKA & DISTRICT-BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS**  
**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

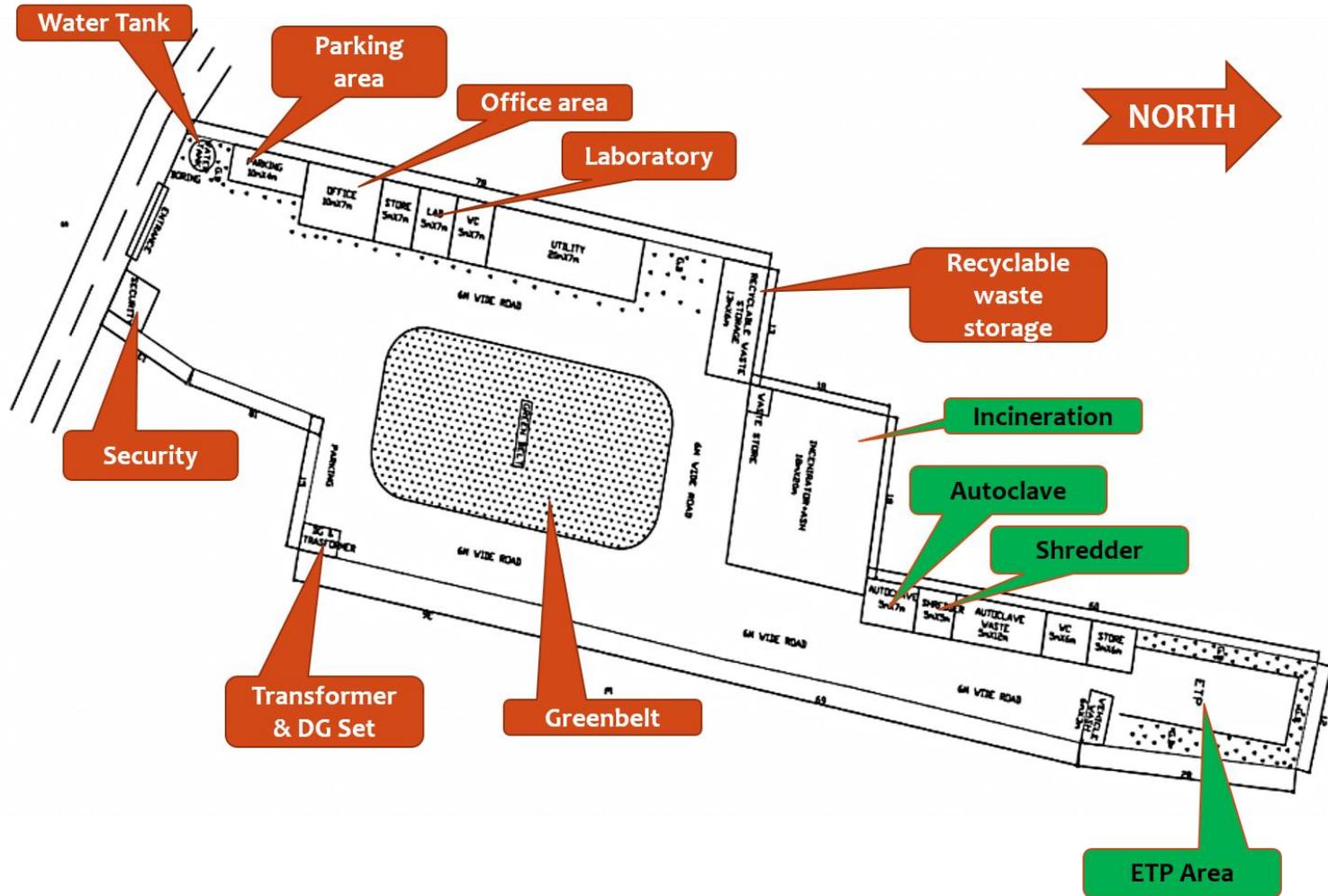
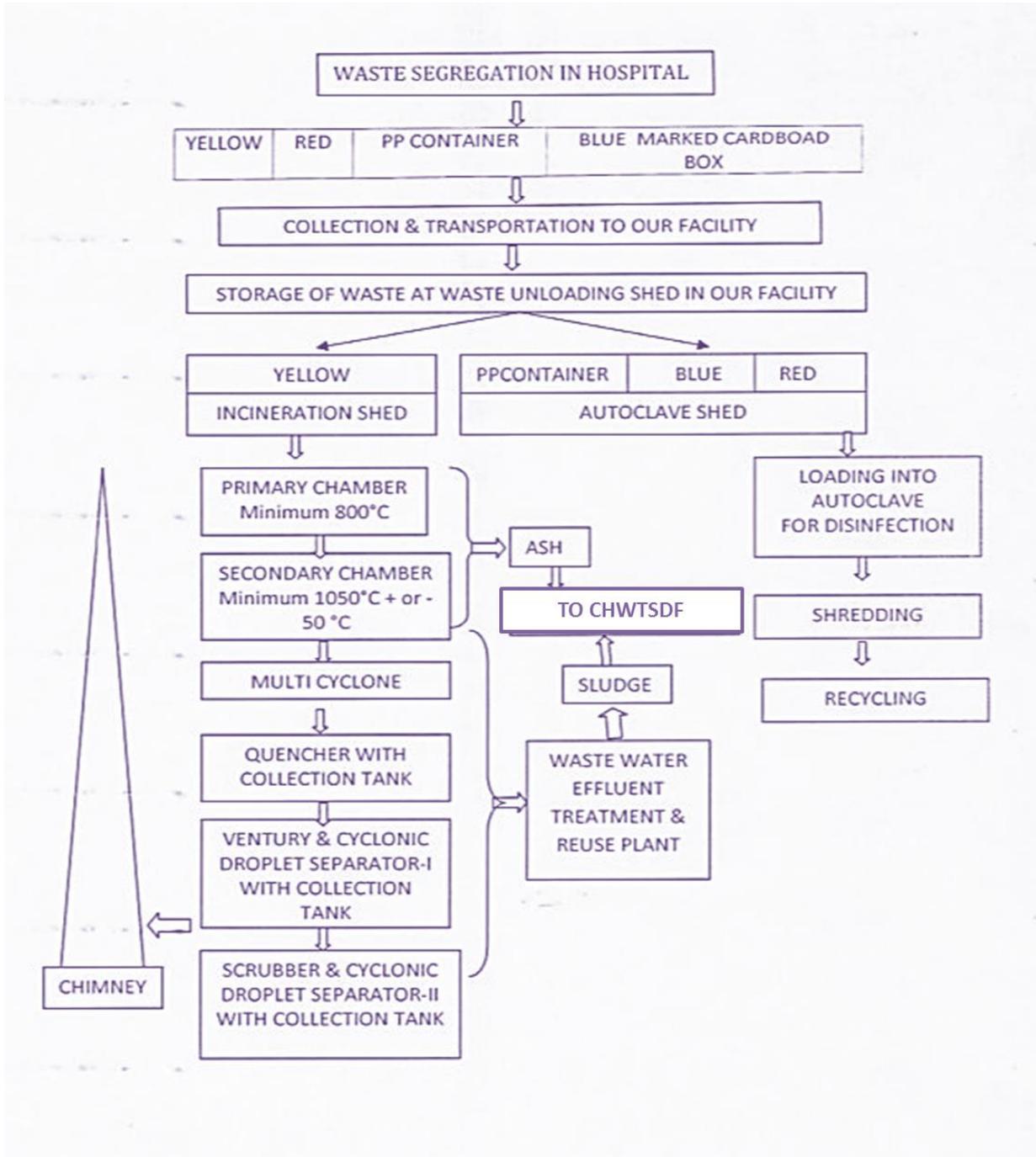


Figure No. 3: View of Plant Layout

**D. PROJECT PROCESS**

The process of Common Biomedical Waste Treatment Facility (CBWTF) is displayed below:



**Figure No. 4: Complete Treatment Process**

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE CHITAPUR (DHARGAON), TALUKA & DISTRICT BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS**  
**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

**E. BASELINE STATUS OF ENVIRONMENT**

Summary of the Environmental monitoring undertaken at different locations during post monsoon Season (October 2019 to December 2019) are given below for various parameters:

**Table 1: Environmental Baseline Monitoring Results**

Parameter	Location	Results	Standards		
Ambient Air Quality	8 Location	PM <sub>2.5</sub> : 12.3 - 31.5 µg/m <sup>3</sup> PM <sub>10</sub> : 34.5 - 67.3 µg/m <sup>3</sup> SO <sub>2</sub> : 6.3 - 17.6 µg/m <sup>3</sup> NO <sub>x</sub> : 6.4 - 19.3 µg/m <sup>3</sup>	PM <sub>2.5</sub> : 60 µg/m <sup>3</sup> PM <sub>10</sub> : 100 µg/m <sup>3</sup> SO <sub>x</sub> : 80 µg/m <sup>3</sup> NO <sub>x</sub> : 80 µg/m <sup>3</sup>		
Noise Level	8 Location	Day: 44.1 dB (A) to 50.1 dB (A). Night: 35.7 dB (A) to 45.5 dB (A).	Industrial	Day:75 dB(A)	Night:70 dB(A)
			Residential	Day:55 dB(A)	Night:45 dB(A)
Water Quality	Ground Water: 8 Location	pH : 7.0 to 7.50 TDS : mg/l: 732.0 to 956 TH : mg/l: 100.0 to 188.0	6.5 to 8.5 2000 mg/l		
	Surface Water: 1 Location One samples	pH : 7.82 TDS : mg/l: 989.8 TH : mg/l: 312.2			
Soil Quality	8 Location	The analysis results shows that the soil is neutral to slightly alkaline in nature with pH value ranging from 6.73 to 7.96. The soil of the area is Black with Clay loam texture. Soil of the area good for agriculture.			

## **F.ENVIRONMENTAL MANAGEMENT PLAN**

Environmental Management Plan consists following aspects:

### **Water & Wastewater Management**

- ✦ ETP of 10 CMD for treatment of Effluent and waste water
- ✦ Regular chemical analysis of Effluent at inlet and outlet point shall be conducted
- ✦ Treated effluent will not be discharged from outside the plant. All treated effluent shall be utilized in the plant process and other non-portable domestic purpose
- ✦ If required, inlet and out let shall be provided with on line monitoring facility for important parameters or as suggested by the MPCB

### **Air Pollution Management**

- ✦ Stack with adequate height will be provided with Incinerator and D.G. Set.
- ✦ The Venturi scrubber and droplet separator shall be provided
- ✦ A lean concentration of NaOH Solution and water will be used to neutralize the flue gasses/solutions
- ✦ Quencher followed by Venturi Scrubber with droplet separator and then packed bed scrubber shall be provided as pollution controlling system
- ✦ All storage, handling & transfer shall be done with properly designed facilities
- ✦ Based on the waste type appropriate storage facility shall be provided
- ✦ Regular water sprinkling shall be carried out in and around the plant site
- ✦ Thick green belt in 33% of Total Plot Area shall developed to control the air pollution

### **Solid & Hazardous Waste Management**

- ✦ Removed top soil shall be stored separately and further will be used for plantation
- ✦ Construction waste (metallic and non-metallic) shall be stored separately and will be sent to recyclers
- ✦ Wooden waste can be given to local people as fuel wood, if the wish to utilize
- ✦ ETP sludge shall be stored in designed pit for evaporation. Dried sludge shall be sent to CHWTSDF
- ✦ Incineration ash and disinfected needles shall be stored separately and also shall be sent to CHWTSDF

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE CHITAPUR (DHARGAON), TALUKA & DISTRICT BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS**  
**DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

- ✦ Construction waste shall be managed as per Construction and Demolition Waste management Rule, 2016
- ✦ Electronic waste generated during construction and operation phase will be managed as per E-Waste Management Rule, 2016
- ✦ Municipal solid waste generated during construction & operation phase will be managed as per Solid Waste Management Rule, 2016

**Noise and Vibration Management**

- ✦ The operator's cabins shall be properly insulated
- ✦ Provision of acoustic enclosure
- ✦ Use of Silencers
- ✦ Transportation of raw martial during day time
- ✦ High noise generating sources will be insulated
- ✦ All rotating items shall be lubricated
- ✦ Green belt shall be developed
- ✦ Ear-muffs/plugs shall be provided where ever required

**Odor Management**

- ✦ Odor generally generated from the Biomedical waste if stored for long time
- ✦ As per New Bio-medical Rule, waste shall be treated within 48 hrs. of generation
- ✦ Regular cleaning and washing of vehicles, containers, storage area floor, and plant area
- ✦ While collection of BMW, closed containers and covered vehicles shall be used
- ✦ Personal Protective Equipment shall be provided
- ✦ Thick green belt shall be developed
- ✦ Ensure the proper housekeeping
- ✦ Proper aerobic condition will be maintained in Effluent Treatment Plant
- ✦ Continuous disposal of sludge shall be ensured
- ✦ Spraying of anti-odor chemicals wherever required

**Occupational Safety and Health**

- ✦ Rotating equipment shall be covered to avoid the traps
- ✦ Proper training to operators and supervisors
- ✦ Regular safety training for handling of waste

**PROPOSED COMMON BIO-MEDICAL WASTE TREATMENT FACILITY AT VILLAGE CHITAPUR  
(DHARGAON), TALUKA & DISTRICT BHANDARA, MAHARASHTRA BY M/S. DASHIN ASEPTICS  
DRAFT ENVIRONMENTAL IMPACT ASSESSMENT REPORT**

- ✚ Pre - Employment & Periodical health checkup
- ✚ Provision of first aid boxes
- ✚ Emergency alarm system
- ✚ Fire hydrant, detector and Extinguishers
- ✚ Emergency preparedness plan & periodical mock drills
- ✚ Provision of PPEs as and when required

**Cost of Environmental Management Plan (EMP)**

Total 60.0 Lakhs has been secured as capital cost of environmental management plan and total 27.0 Lakhs/year as recurring cost for the same.

