

Pollution Control Management (PCM) for Unit Investor
of Economic Zone

Name of Industry:

Name of Economic Zone:

Type of Industry:

Project Category According to ECR'97:



Bangladesh Economic Zones Authority (BEZA)

Prime Minister's Office

www.beza.gov.bd

Abbreviation

CETP	:	Central effluent Treatment Plant
DoE	:	Department of Environment
ETP	:	Effluent Treatment Plant
PCM	:	Pollution Control Management
STP	:	Sewage Treatment Plant
mmcf/d	:	Million Cubic Feet per Day

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1 Outline of the Project

1.1 Summary of the Project

The following information must be filled up to provide an overall image of the project:

Table 1.1: Brief Summary of the Project

Name of the Project	
Name of the Investor	
Location of the Project	
Name of the Economic Zone	
Village	
Thana	
District	
Latitude and Longitude	
General Climatic Conditions	
Monthly Mean Maximum Temperature	
Monthly Mean Minimum Temperature	
Relative Humidity	
Annual Rainfall	
Accessibility	
Road Connectivity (Nearest National Highway)	
Nearest Airport	
List of Nearest Industries within the EZ	
Nearest Bodies of Water	
Name of nearest River	
Distance of nearest river from site	
Number of water bodies located within the vicinity of Project site	
General Information of the Project	
Project Category	<input type="checkbox"/> Green <input type="checkbox"/> Orange-A
Type of Project	
Total Area of Land	
Name of Product	
Fuel Requirement	
Water Requirement & Source of Water	
Quantity of Discharge Water	

1.2 Description of the Site

1.2.1 Location of the Site

Location map must be attached with the document with distance of nearest establishments (**Annexure 1.2.1**). Details of the position and environmental setting of the site. The following information must be filled up to describe the environmental setting:

Table 1.2: Environmental Setting of the Proposed Project Site

Project Location	
Site Coordinates	
General Elevation	
Plant Site Topography (On site land type)	
Present land use at the site	
Name and Distance of the Nearest Highway	
Name and Distance of the Nearest Railway Station	
Name and Distance of the Nearest Airport	
Name and Distance of the Nearest Seaport	
Name and Distance of the Nearest Major Water Bodies	
Name and Distance of the Nearest Town/ City	
Name and Distance of the Nearest Village	
Seismicity	<input type="checkbox"/> Zone I <input type="checkbox"/> Zone II <input type="checkbox"/> Zone III
Hills/Valleys	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Distance from Site (if checked "Yes"):
Archaeologically important places within 5 km Radius	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Distance from Site (if checked "Yes"):
Critically Protected areas	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Distance from Site (if checked "Yes"):
Reserved/ Protected Forests	<input type="checkbox"/> Yes <input type="checkbox"/> No
	Distance from Site (if checked "Yes"):

Defense Installations within 5 km radius	<input type="checkbox"/> Yes	<input type="checkbox"/> No
	Distance from Site (if checked "Yes"):	

1.2.2 Photographs of Site

Four photographs covering the entire site is inserted below:

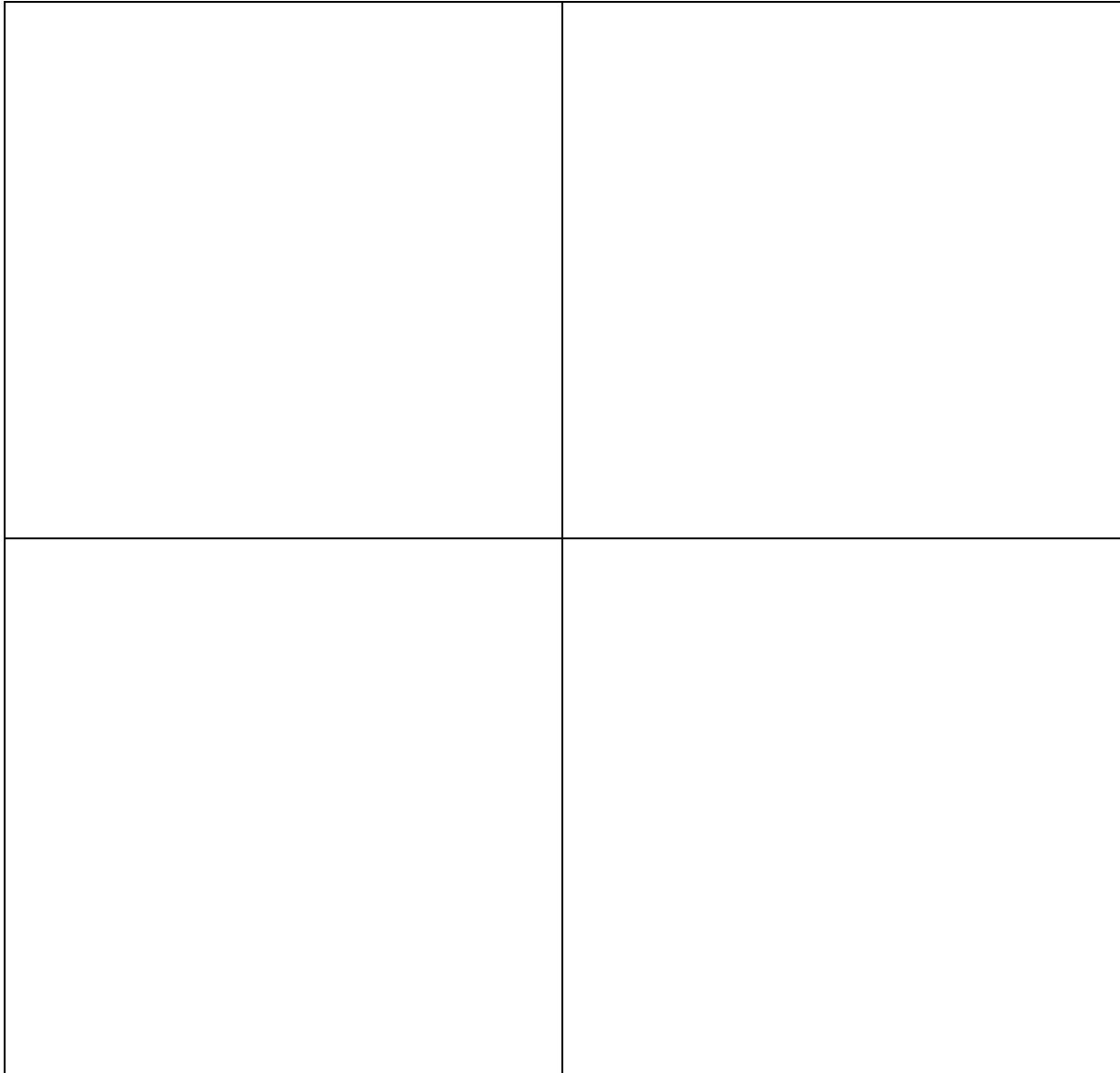


Figure 1.1: Photographs of the entire Project Site

1.2.3 Planned Area Occupancy

List of Land Occupancy of each individual infrastructure of the project are listed below. Please leave the box blank if any the infrastructure is not applicable for the project.

Table 1.3: List of Area Occupancy of each individual infrastructure of the project

SL No.	Infrastructure	Occupancy (m ²)	Total Percentage of Land Use
(a)	<input type="checkbox"/> Office/Administrative Building		
	<input type="checkbox"/> Factory/Production Space		
	<input type="checkbox"/> Effluent Treatment Plant (ETP)		
	<input type="checkbox"/> Sewage Treatment Plant (STP)		
	<input type="checkbox"/> Raw Material Storage		
	<input type="checkbox"/> Generator		
(b)	<input type="checkbox"/> Paved Ground (e.g. Internal road, open parking, driveway, underground)		
(c)	<input type="checkbox"/> Vacant Space/ Green Space		

Note: According to Bangladesh Economic Zones (Construction of Building) Rules, 2017, the rules mentioned below must be followed:

- a) Maximum 50% of the total area shall be covered by factory building, power house, storage, covered parking, ETP, overhead STP etc.;
- b) 30% of the site shall be covered by the drive way, open parking, 50 sqm guard room, fire command center, cycle stand, internal roads, underground water tank and septic tank; and
- c) 20% of the sit shall be open to sky soak area; provided that soaking soft pave may be used instead of green grass or naked earth in the open space.

1.2.4 Layout of the Project

The layout plan of the proposed Project/Factory must be attached with the document (**Annexure 1.2.3**). The layout will include:

- Details of proposed Project including associated facilities (e.g. ETP)
- Inventory of nearby existing industries

1.3 Details of Product

Table 1.4: Product Detail of the Proposed Industry

Particulars	Description
Name of Product	
Amount to be Produced	
Name of By-product	
Amount Produced (by-produced)	

1.4 Raw materials

Table 1.5: Details of Raw Materials for the Proposed Industry

Particulars	Description
Name of Raw Material	
Amount to be Required (t/day or m ³ /day)	
Reason for the Choice of Raw Material	

1.5 Production Process

1.5.1 List of Main Production Equipment

All the production equipment will be listed below. Please add more rows if necessary.

Table 1.6: List of the Main Production Equipment for the Proposed Industry

SL No	Name of Equipment	Number
1		
2		
3		
4		
5		

SL No	Name of Equipment	Number
6		
7		
8		
9		

1.5.2 Process Flow Diagram

The project flow diagram will be attached with this document (**Annexure 1.5.2**). The diagram is a representation of the whole production process.

1.5.3 Details of Workforce

The number of people working in different departments needs to be listed in the table below.

Table 1.7: Details of Workforce for the Proposed Industry

Particulars	Number of Persons
Office	
Officer	
Office Employee (Workers)	
Factory	
Supervising Officer	
Production Worker	
Maintenance Worker	
Transportation	
Supervisor	
Transportation Worker	

1.6 Energy consumption

Please leave the fields which are not applicable for the industry blank.

Table 1.8: Description of Energy Consumption

Particulars	Description
Fuel	
Type of fuel	
Amount to be required (t/day or m ³ /day or mmcfd)	
Method of transportation	

Particulars	Description
Storage Capacity (t/day or m ³ /day or mmcf/d)	
Electricity	
Required amount (units/day) *1 Unit = 1 kWh	
Source of electricity	
Water	
Source of Water	<input type="checkbox"/> Supplied <input type="checkbox"/> Surface Water <input type="checkbox"/> Groundwater <input type="checkbox"/> Recycled Water <input type="checkbox"/> Harvested Rainwater <input type="checkbox"/> Others: _____
Area of Rainwater Harvesting (m ²)	
Amount to be required (m ³ /day)	

Note: According to Article 22 of Bangladesh Economic Zones (Construction Building) Rules, 2017, the plot must incorporate a rainwater harvesting system designed to capture roof run – off from a minimum of 200 m² (or 50% of the available roof catchment area for roof areas less than 400 m²) during regular rainfall events.

1.7 Description of the wastes

Table 1.9: Details of Wastes Produced in the Proposed Industry

Particulars	Description
Effluent	
Amount of Effluent (m ³ /day)	
Contents of Effluent	
Solid Waste	
Amount of Solid Waste (t/day)	
Contents of Solid Waste	

1.8 Schedule of the Industry

1.8.1 Construction Schedule

Table 1.10: Construction Schedule of the Proposed Project/ Industry

Particulars	Description
-------------	-------------

Date of Starting Construction	
Date of Completion of Construction	
Total Construction Period	

1.8.2 Operation Schedule

Table 1.11: Operation Schedule of the Proposed Project/ Industry

Particulars	Description
Date of Starting Trial Operation	
Date of Starting actual Operation	
Number of Shifts	
Total Number of Working Hours in Each Shift	

2 Impact Identification

For impacts that are assumed to be caused by the project, please check the box “Assumed” bellow. If the impact is not likely to be caused by the project, please check “None”. For each assumed impact, please check the box that implies the nature of the impact; either “Adverse” or “Beneficial”.

Table 2.1: Checklist for Impact Identification

Project Phase	Action Affecting Environmental Resources & Values	Significant Environmental Impacts		Type		Comments
		None	Assumed	Adverse	Beneficial	
Construction Stage	Run off erosion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Occupational Health and Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Sanitation diseases hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Noise/vibration hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Traffic congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Air Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Employment (Social)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
Operation Stage	Water Quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Impact of solid waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Air quality	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Occupational health and Safety	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Odor hazard	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Traffic congestion	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

Project Phase	Action Affecting Environmental Resources & Values	Significant Environmental Impacts		Type		Comments
		None	Assumed	Adverse	Beneficial	
	Noise and Vibration	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Impact of Hazardous waste	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	
	Employment (Social)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	

3 Implementation structure of PCM

For PCM to take effect, it is necessary to identify people responsible for performance of impact mitigation/prevention actions, and also those responsible for having control over the given actions. Their roles must be defined at all stages of the project implementation. Personnel involved in the implementation must be listed in the “Roles and Responsibility” Sections below:

3.1 Implementation Structure at Construction Phase

3.1.1 Roles and Responsibility of PCM Implementation Team

Table 3.1: Roles and Responsibility of PCM Implementation Team in Construction Stage

Function or Responsibility	Name
Responsible Section/ Position for PCM Implementation/ Environmental Conservation	
Environmental Monitoring	
Responsible Section/ Position for Occupational Health & Safety	

3.2 Implementation Structure at Operational Phase

3.2.1 Roles and Responsibility of PCM Implementation Team

Table 3.2: Roles and Responsibility of PCM Implementation Team in Operation Stage

Function or Responsibility	Name
Responsible Section/ Position for PCM Implementation/ Environmental Conservation	
Environmental Monitoring	
Responsible Section/ Position for Occupational Health & Safety	
Responsible Section/ Position for Energy Saving	

4 Mitigation Measures

4.1 Water Quality Management

4.1.1 Erosion Management during Construction Stage

Please put check mark in the box(s) suggesting mitigation measure for storm water runoff below.

Table 4.1: Erosion Management during Construction Stage

Issue during Construction	Mitigation Measures	Responsible Party
Storm water Runoff	<input type="checkbox"/> Sediment Trap* by Digging temporary pond in the construction site	<input type="checkbox"/> Investor <input type="checkbox"/> Contractor
	<input type="checkbox"/> Sediment Trap by using Steel Tank	

***Sediment Trap:** An artificial pond that collects runoff. As the sediment sinks to the bottom of the pond, the clean water on top can be pumped out.

4.1.2 Wastewater Management System during Operation Phase

Please fill up only the boxes containing the types of wastewater and the corresponding mitigation measures listed below that are applicable for the project. If the industry doesn't produce any particular type of wastewater, then please leave the boxes blank.

Table 4.2: Wastewater Management System during Operation Phase

Water Input	Type of Wastewater from Production Process	Output – 1 Before Treatment	Treatment Process*	Output – 2 After Treatment	Responsible Party
Supplied _____ m ³ /day	Effluent from Production Process	<input type="checkbox"/> Organic		Direct Discharge into a Waterbody _____ m ³ /day	<input type="checkbox"/> Developer <input type="checkbox"/> Investor <input type="checkbox"/> Outsourced Third Party
Recycled _____ m ³ /day		<input type="checkbox"/> Heavy Metal		Sent to CETP _____ m ³ /day	
Other _____ m ³ /day		<input type="checkbox"/> Acid <input type="checkbox"/> Alkali		Recycle _____ m ³ /day	
	Sewage	Flow Rate _____ m ³ /day		Discharge into a Waterbody _____ m ³ /day	<input type="checkbox"/> Developer <input type="checkbox"/> Investor <input type="checkbox"/> Outsourced Third Party
				Sent to STP _____ m ³ /day	

*List of Effluent Treatment Processes:

Table 4.3: List of Possible Effluent Treatment Technologies

Type of Treatment Process	Name of Treatment Process
Physical	<input type="checkbox"/> Screening (To remove fiber and solid material)
	<input type="checkbox"/> Equalization (To equalize water quality and flow as a pretreatment)
	<input type="checkbox"/> Grit Removal (To remove large sized solid material)
	<input type="checkbox"/> Oil-Water Separator (To separate oil from the waste water and removing)
	<input type="checkbox"/> Sedimentation (To remove solid pollutant in the sedimentation tank)
	<input type="checkbox"/> Others:-
Chemical	<input type="checkbox"/> Adsorption (To remove pollutant with adsorption materials such as active carbon)
	<input type="checkbox"/> Disinfection (To disinfect pathogenic bacteria using chlorine / chemical agent)
	<input type="checkbox"/> pH Correction (To neutralize treated water using acid /alkali)
	<input type="checkbox"/> Flocculation/Coagulation (To remove pollutant from the waste water with using coagulation /flocculation agent)
	<input type="checkbox"/> Chemical Oxidation (To oxidize organic pollutants to less dangerous or harmless substances.)
	<input type="checkbox"/> Others:-
Organic	<input type="checkbox"/> Sequencing Batch Reactor (SBR) (To remove organic compound through repeating several treatment processes with activated sludge)
	<input type="checkbox"/> Activated Sludge (To remove organic compound through biological process which is activated by aeration)
	<input type="checkbox"/> Aerated Lagoon (To remove organic compound in the pond with artificial aeration for promoting biological oxidation)
	<input type="checkbox"/> Biological Contactor (To remove organic compound in the wastewater by contacting with biological layer which grow in the surface of the material such as rotated disk)
	<input type="checkbox"/> Trickling Filter (To remove organic compound in the waste water through the fixed bed of rocks, lava, coke, gravel, slag, polyurethane foam with aerobic condition)
	<input type="checkbox"/> Stabilization Pond (To remove organic compound in the pond)
	<input type="checkbox"/> Anaerobic Digestion (Method for treating sludge produced at sewage treatment plants to reduce volume of the sludge)
	<input type="checkbox"/> Others:-
Sludge Treatment	<input type="checkbox"/> Thickening
	<input type="checkbox"/> Heat-Drying
	<input type="checkbox"/> Burning in Kiln
	<input type="checkbox"/> Digestion
	<input type="checkbox"/> Dewatering
	<input type="checkbox"/> Others:-
Other Processes	<input type="checkbox"/> Ion Exchange
	<input type="checkbox"/> Membrane Filtration
	<input type="checkbox"/> Reverse Osmosis
	<input type="checkbox"/> Activated Carbon Adsorption
	<input type="checkbox"/> Electrocoagulation (To remove emulsified oil, total petroleum hydrocarbons, refractory organics, suspended solids, and heavy metals)
	<input type="checkbox"/> Septic Tank and Soak Well
	<input type="checkbox"/> Others:-

4.2 Solid Waste Management

Please fill up only the boxes containing the types of wastes and the corresponding mitigation measures that are applicable for the project. If the industry doesn't produce any particular type of waste, then please leave the boxes blank.

Table 4.4: Solid Waste Management System

Type of Waste	Category	Amount of the Waste	Generated Process/Facility	Content/Substances	Treatment Method	Responsible Party
Sludge	<input type="checkbox"/> Non-Hazardous	_____ T/day	<input type="checkbox"/> ETP <input type="checkbox"/> STP	<input type="checkbox"/> Organic Carbon <input type="checkbox"/> Fibers	<input type="checkbox"/> Heat-Drying <input type="checkbox"/> Burning in Kiln <input type="checkbox"/> Digestion <input type="checkbox"/> Dewatering <input type="checkbox"/> Dumping in Landfill <input type="checkbox"/> Others:-	<input type="checkbox"/> Investor <input type="checkbox"/> Outsourced Third Party
	<input type="checkbox"/> Hazardous	_____ T/day	<input type="checkbox"/> ETP	<input type="checkbox"/> Heavy Metal <input type="checkbox"/> Acid	<input type="checkbox"/> Heat-Drying <input type="checkbox"/> Burning in Incinerator <input type="checkbox"/> Dewatering <input type="checkbox"/> Others:-	
Liquid	<input type="checkbox"/> Hazardous	_____ T/day				
General Solid Waste	<input type="checkbox"/> Hazardous	_____ T/day	<input type="checkbox"/> Production Process	<input type="checkbox"/> Heavy Metal <input type="checkbox"/> Flammable substance	<input type="checkbox"/> To hand over to authorized vendors	
	<input type="checkbox"/> Non-Hazardous	_____ T/day	<input type="checkbox"/> Production Process <input type="checkbox"/> From common facilities (Kitchen,	<input type="checkbox"/> Scrap Metal <input type="checkbox"/> Scrap Fabric	<input type="checkbox"/> To sell for Recycling <input type="checkbox"/> To hand over to authorized collectors	

Type of Waste	Category	Amount of the Waste	Generated Process/ Facility	Content/ Substances	Treatment Method	Responsible Party
			Canteen etc.)	<input type="checkbox"/> Biodegradable Waste	<input type="checkbox"/> To dump in Designated Landfill	
E-waste	<input type="checkbox"/> Hazardous	_____T/day	<input type="checkbox"/> Used Battery <input type="checkbox"/> Production Process <input type="checkbox"/> Old Electronics	<input type="checkbox"/> Lead (Pb) <input type="checkbox"/> Acid	<input type="checkbox"/> To sell for Recycling <input type="checkbox"/> To hand over to authorized vendors	
	<input type="checkbox"/> Non-Hazardous	_____T/day	<input type="checkbox"/> Battery Parts <input type="checkbox"/> Old Electronic parts	<input type="checkbox"/> Plastic <input type="checkbox"/> Glass <input type="checkbox"/> Cables	<input type="checkbox"/> To dump in Landfill <input type="checkbox"/> To sell for Recycling <input type="checkbox"/> To hand over to authorized collectors	

4.3 Air Quality Management

Please fill up only the boxes containing the Air Pollutants and the corresponding mitigation measures that are applicable for the project. If the industry doesn't produce any particular type of Air Pollutants, then please leave the boxes blank.

Table 4.5: Air Quality Management System

Phase of Project	Concerns	Mitigation Measures	Responsible Party
Construction Phase		<input type="checkbox"/> Sprinkling Water	<input type="checkbox"/> Investor

Phase of Project	Concerns		Mitigation Measures	Responsible Party
	Dust Control		<input type="checkbox"/> Road Sweeping around construction site	<input type="checkbox"/> Contractor
			<input type="checkbox"/> Installing Wheel Washing System* on the entrance of construction site	
			<input type="checkbox"/> Vegetation of the empty place	
			<input type="checkbox"/> Other_____	
Operation Phase	Emission Gas Flow Rate (m ³ /h)***	Pollutants	Mitigation Measures	<input type="checkbox"/> Investor <input type="checkbox"/> Outsourced Third Party
_____m ³ /h	<input type="checkbox"/> Dust/Soot**			
	<input type="checkbox"/> Chlorine			
	<input type="checkbox"/> Lead			
	<input type="checkbox"/> Mercury			
	<input type="checkbox"/> Sulfur Dioxide****			
	<input type="checkbox"/> Other _____			

*Wheel Washing System: A wheel washing system is a system for cleaning the tires of trucks when they are leaving a site, to control and eliminate the pollution of public roads.

**Any of the following measures can be used for mitigation of dust in operation stage:

Cyclone Scrubber: Removes Particulate Matter (PM) from air, gas or liquid stream without the use of filters through vortex separation.

Wet Scrubber: In a wet scrubbing process, liquid or solid particles are removed from gas stream by transferring them to liquid.

Venturi Scrubber: A Venturi scrubber consists of three sections: a converging section, a throat section, and a diverging section. The inlet gas stream enters the converging section and, as the area decreases, gas velocity increases. Liquid is introduced either at the throat or at the entrance to the converging section.

Electrostatic Precipitator: An electrostatic precipitator is a type of filter that uses static electricity to remove soot and ash from exhaust fumes before they exit the smokestacks.

Bag Filter or Baghouse: A typical Baghouse or Bag Filter has a tube sheet to which the bags are attached, an inlet for dirty air and an outlet for clean air, and an opening at the bottom for collected dust to drop out.

*** The condition for measuring exhaust flow rate is SATP (25°C, 1 bar)

**** For reduction of SO₂, the following method can be used:

Flue-gas desulfurization (FGD): FGD is a technology of removing SO₂ from flue gas by dissolving the SO₂ in an alkaline sorbent, such as limestone or lime, or seawater.

4.4 Occupational Health and Safety Measures

Please put check mark in the boxes that suggest safety measures for occupational health. If any protective gear is not to be used for occupational safety, please leave the box blank.

Table 4.6: Occupational Health and Safety Measures

Phase of Project	Measures to be taken for Occupational Safety	Responsible Party
Construction Phase	<input type="checkbox"/> Helmet	<input type="checkbox"/> Contractor <input type="checkbox"/> Investor
	<input type="checkbox"/> Safety Boots	
	<input type="checkbox"/> Safety Belts	
	<input type="checkbox"/> Safety Gloves	
	<input type="checkbox"/> Safety Vest	
	<input type="checkbox"/> Ear Plug	
	<input type="checkbox"/> Safety Goggles	
	<input type="checkbox"/> Health and Safety Training	
	<input type="checkbox"/> Others _____	
Operational Phase	<input type="checkbox"/> Helmet	<input type="checkbox"/> Investor <input type="checkbox"/> Outsourced Third Party
	<input type="checkbox"/> Safety Boots	
	<input type="checkbox"/> Safety Belts	
	<input type="checkbox"/> Safety Gloves	
	<input type="checkbox"/> Safety Vest	
	<input type="checkbox"/> Ear Plug	

Phase of Project	Measures to be taken for Occupational Safety	Responsible Party
	<input type="checkbox"/> Safety Goggles	
	<input type="checkbox"/> Health and Safety Training	
	<input type="checkbox"/> Others _____	

4.5 Noise Pollution Management Plan

Please put check marks on the possible sources of noise and the corresponding mitigation measures for the noise pollution. If the project is not likely to cause noise pollution at any stage, please leave that box blank.

Table 4.7: Noise Pollution Management Plan for Proposed Project

Phase	Noise Source	Mitigation Measures	Responsible Company/ Institution
Construction	<input type="checkbox"/> Trucks, Vehicle	<input type="checkbox"/> Contractor will establish the speed limit in the site and all drivers must follow the standard.	Contractor
		<input type="checkbox"/> Contractor will set the sign board of the maximum speed in the site.	
		<input type="checkbox"/> Contractor will instruct drivers to stop engine when vehicles is parked.	
		<input type="checkbox"/> Other _____	
Construction	<input type="checkbox"/> Construction Machinery	<input type="checkbox"/> Contractor will instruct drivers to stop engine when vehicles in the parking.	Contractor
	<input type="checkbox"/> Site Generator	<input type="checkbox"/> Other _____	
Operational	<input type="checkbox"/> Trucks, Vehicle	<input type="checkbox"/> Entrepreneur will establish standard of the cruise speed in the site and all drivers must follow the standard.	Investor
		<input type="checkbox"/> Entrepreneur will set the sign board of the maximum speed in the site.	
		<input type="checkbox"/> Entrepreneur will instruct drivers to stop engine when vehicles in the parking.	

Phase	Noise Source	Mitigation Measures	Responsible Company/ Institution
		<input type="checkbox"/> Other _____	
	<input type="checkbox"/> Processing Machinery	<input type="checkbox"/> Processing machines will be installed in the building.	Investor
	<input type="checkbox"/> Water pump of ETP	<input type="checkbox"/> If machines will be installed out of the building, entrepreneur should improve the sound proof enclosure to these machines.	
	<input type="checkbox"/> Cooling Tower	<input type="checkbox"/> Other _____	

5 Monitoring Plan

5.1 Construction Phase

Please list the monitoring plan for the construction phase of the project below.

Table 5.1: Monitoring Plan for Construction Phase

Issue/Impact	Monitoring parameters/Items	Monitoring method	Time/ Frequency	Standards/Monitoring Indications	Responsibility

5.2 Operational Phase

Please list the monitoring plan for the construction phase of the project below.

Table 5.2: Monitoring Plan for Operation Phase

Issue/Impact	Monitoring parameters/Items	Monitoring method	Time/ Frequency	Standards/Monitoring Indications	Responsibility