

CHECK-LIST

INFORMATION REQUIRED FOR THE PREPARATION OF THE PROPOSAL FOR INCINERATION PLANT

1. Proposed Site Map

- 1.1 General description of site location and plant area, ash disposal area, water intake etc.
- 1.2 The topographic map with 1:1000 or 1:2000 scales used for general layout drawings.
- 1.3 The topographic map of ash disposal area and water intake.

2. Access to Site

- 2.1 The fuel and limestone transportation ways which need to be specified by drawings or descriptions (if it's transported by trucks, the loading capacity of the truck and the access load condition should be submitted).
- 2.2 The oversize equipments transportation ways which need to be specified by drawings or descriptions.
- 2.3 The existing transportation conditions round the proposed site including road, railway, airport, river ways.

3. Site Conditions

- 3.1 Topographical condition and elevation.
- 3.2 Geological conditions, Soil physic-mechanical features.
- 3.3 Seismology.

4. General Climate Conditions

The ambient climatic conditions are as follows:

- Barometric pressure, mbar:
 - Mean:
 - Maximum:

5. Cooling Water Source Information

- 5.1 What kind of cooling water source will be used for the power plant, river (lake) or underground water?
- 5.2 The highest water level or flood level, the average and the lowest water level.
- 5.3 The minimum water flow in whole year. The average and min. flow.
- 5.4 The maximum, average and minimum water temperature.
- 5.5 If the underground water will be the cooling water source, please provide the quantity and quality of underground water.

6. Water Conditions							
unit		mg/L		unit		mg/L	
item	mg/L	(CaCO ₃)	mmol/L	item	mg/L	(CaCO ₃)	mmol/L
cation	Please provide the information on the preliminary water quality for the power plant, referring to the following yellow highlighted blanks. If possible, please fill in the table mentioned below:			Hardness	Total hardness		
	K ⁺				Non-carbonate hardness		
	Na ⁺				carbonate hardness		
	Ca ²⁺				Negative carbonate hardness		
	Mg ²⁺			Acidity and Alkalinity	M Alkalinity		
	Fe ²⁺				P Alkalinity		
	Fe ³⁺				acidity		
	Al ³⁺				pH		
	NH ₄ ⁺				Others	N-NH ₃	
	Ba ²⁺			Free carbon dioxide			
	Sr ²⁺			COD _{Mn/Cr}			
	Σ						

7. MSW

- 7.1 Please kindly provide transport information of MSW to plant. Including cars and size.
- 7.2 MSW specification

Table for MSW Analysis		
Item	Design	Range
Physical Component Analysis (As Received)		
Wood (% By Weight)		
Paper (% By Weight)		
Plastic (% By Weight)		
Proximate Analysis (As Received)		
Total Moisture (% By Weight)		
Ash (% By Weight)		
Volatile Matter (% By Weight)		
Fixed Carbon (% By Weight)		
Ultimate Analysis (As Received)		
Carbon (% By Weight)		
Hydrogen (% By Weight)		
Oxygen (% By Weight Difference)		
Nitrogen (% By Weight)		
Sulfur (% By Weight)		
Chlorine (% By Weight)		
Calorific Value (As Received)		
High Heat Value (kJ/kg)		
Low Heat Value (kJ/kg)		
Ash Analysis		
SiO ₂ (% By Weight)		
Al ₂ O ₃ (% By Weight)		
Fe ₂ O ₃ (% By Weight)		
MgO (% By Weight)		
CaO (% By Weight)		
Na ₂ O (% By Weight)		
MnO(% By Weight)		
TiO ₂ (% By Weight)		
P ₂ O ₅ (% By Weight)		
SO ₃ (% By Weight)		
K ₂ O (% By Weight)		
Base / Acid Ratio		
Ash Fusibility Characteristics		
Initial Deformation (°C)at Reduced Atm		
Softening Temperature (°C)		
Fusion Temperature (°C) at Reduced Atm		

8. Electrical

8.1 Local power grid information relation to power station:

8.1.1 The power grid nominal voltage classification from HV to LV.

8.1.2 The voltage level, quantity and direction of outgoing transmission line linking the proposal power plant to Grid.

8.1.3 Owner's requirement to main electrical connection of proposal power plant.

9. Flue Gas Emissions, Waste Water Discharge, Noise Emission Limits

9.1 Please provide the local standards for flue gas emissions and waste water discharge and noise emission limits.

9.2 Please provide requirement for ash discharge.

11. Code and Standard

The information of the local forced executive code and standard, such as fire fighting, environmental protection, etc.

Finance and estimation		
1	Potential project on-grid price, whether including tax, if included, what about the tax rate?	
2	Price for potential project collects MSW to site. Or MSW price to site	
3	How much allowance for burning MSW? How to handle ash? How much will be charged for ash discharge? How much for water? How much for waste water discharge? How much for waste gas vent?	
4	Project construction and operation tax policy, including tax categories, tax base and tax rate	
5	Project construction and operation policy, including people, machine and related fee.	
6	Requirement for supply and certification of equipments and material.	
7	Unit price of local site land expropriation and unit price of construction land renting	
8	Temporary water and electricity price.	
9	Project financial structure, rate and repayment.	
10	Insurance requirement for project construction and operation.	
11	Project implements method, EPC, BOT or PPP?	
12	Local requirement on fire fighting, safe and environment protection, and related increased cost. Including classification and preliminary cost estimate.	
13	The price of material in proposed area, such as: concrete, cement, steel, sand, stone, etc, and labor price in local area.	