#### **Terms of Reference/Scope Of Work**

## I. Background Information

Trash has long been a major problem in big cities. Domestic waste produced by households needs proper handling. In addition to household waste, there is also waste generated by chemical processes. This type of waste needs to be handled more thoroughly because of its toxic nature.

There is also a positive aspect of the waste. It has economic value, as waste can be recycled and reproduced to be other goods. Knowing this value, it is suggested that when managing waste, as much as possible we need to recycle the waste. However, we need to make sure that the recyclers know how to handle the waste and are able to separate the hazardous materials and the materials that can be used further.

PBDE (*Polybromo Dyphenil Ethers*) & UPOPs (*Unintentional Persistant Pollutants*) Project is a project focusing on the reducing of release of PBDE and UPOPs. The project is managed by UNDP with Ministry of Industry, and funded by Global Environment Facility (GEF). One activity conducted by PBDE & UPOPs Project is developing mini depots, as the centers of waste management and processing, including preventing the transmission of hazardous chemical substances, especially PBDE.

PBDE & UPOPs Project has established one unit mini depot in Cirebon. The mini depots built by PBDE & UPOPs Project will function as intermediary posts and they have crucial functions such as:

- 1. Preventing the transmission of dangerous pollutants;
- 2. Helping the community and/or local government in managing waste, especially plastic and electronic wastes;
- 3. Increasing the value of waste. Some of the waste can be processed and transformed into new products;
- 4. Bringing economic benefit for the management of the depot, by selling the useful waste (mostly plastic);
- 5. Becoming learning center.

# II. Description of required service

The service required is the renovation of building in mini depot in Bandung. The mini depot will be the center of waste management and the activities such as waste collection, waste sorting, and waste transportation for disposal.

#### III. Location of work

Jl. Cicukang Holis No.19, Caringin, Kec. Bandung Kulon, Kota Bandung, Jawa Barat 40214.

#### IV. Objectives of the Program

- 1. To manage waste effectively and to prevent the spread of PBDE and other hazardous waste;
- 2. To increase the value of plastic waste by processing it into crushed material that has better value in the market;

3. To manage electronic waste in compliance with regulations.

# V. Expected Outputs of the Mini Depot

- 1. Mini depot is expected to support the government in managing electronic and plastic wastes and decrease the negative impacts of such wastes;
- 2. The depot will prevent the spread of PBDE and other hazardous waste, and it will be a learning center for electronic and plastic wastes management.

# VI. Period of Performance: 60 calendar days

# VII. Scope of Work

For the mini depot in Bandung, PBDE & UPOPs Project will not construct a new building. Instead, we will rehabilitate a part of building (roof and floor) which will be utilized for mini depot. The detail of works to be done include:

- 1. Renovation work for the roof and floor at mini depot in Bandung (please refer to work description on Bill Of Quantity/BoQ and detail drawing attached to this RFQ).
- 2. Mobilization of adequate workers.
- 3. Provision of building materials and transportation to project sites.
- 4. Final clearing work upon completion of renovation work.
- 5. Two (2) months of defect and liability period.
- 6. Reporting and documentation.
- 7. All labors should be equipped with standard safety equipment (Safety First K3)

# **Details on the Renovation**

No	Work Description	Specification	Unit	Volume
I	MANPOWER			
1	Supervisor		person	1,00
2	Foreman		person	1,00
3	Labor		person	4,00
II	PRELIMINARIES WORKS			
1	Site Clearance after project finished		Is	1,00
2	Mobilization and Demobilization		ls	1,00
III	DISMANTLING WORKS			
1	Dismantling existing roof		m2	482,56
2	Dismantling Existing purlin		kg	3.305,81
3	Debris Clearance		Is	1,00
IV	FLOOR WORKS			
1	Site clearance		m2	259,20
2	Demolish/remove existing floor		m2	6.8 x 7.2
3	Plastic formwork (plastik cor)		m2	259,20
4	Concrete Floor 200 mm	K-250 Concrete ex. Pioneer. Leveling 1 degree toward drainage. Pouring method divided into two zones, including cutting every two locals (columns)	m2	259,20
5	Trowel Finish	Trowel Finish for concrete floor	m2	259,20
V	STEEL FRAME WORKS			
1	Purlin C 150.50.20.2,3	CNP Channel	kg	3.655,47
2	Purlin Voute	Steel plate thickness 4 mm	bh	192,00
3	Sagrod dia. 10 mm	Rebar dia. 10 BJTP 24	btg	528,00

4	Plate 12 mm + 10 mm + 8 mm & 6 mm	Steel plate thickness 12, 8, 10, 6 mm	kg	292,44
5	Black bolt dia. 12 x 1" – HTB bolt	10,011111	pcs	600,00
6	Roof cover	Zincalume thickness 0.35 mm ex. Kepuh Kencana Arum	m2	482,56
7	Roof top ( Nok )	Mild Plate thickness 5 mm	m'	41,60
8	Zincromate Paint (Include Column and Rafter) this include formwork and removing the existing paint		Is	1,00
9	Finish Paint (Include Column and Rafter)	Finish Paint ex. Kansai Paint	Is	1,00
10	Transportation cost		ls	1,00

## VIII. Qualification

- Contractor with legal company certificate.
- Contractor with classification for building construction work who has minimum 3
  years of experience by providing at least three (3) previous construction works. The
  information should consist of Work Description, contract amount, duration of work,
  client and location
- Personnel/Manpower availability.
- Availability of construction equipment.

#### IX. Personnel

The contractor should provide the following personnel:

- 1. Supervisor
- 2. Foreman
- 3. Skilled Labors

## X. Supervision, Monitoring and Reporting

- The contractor should maintain daily supervision.
- The daily activity should be compiled in one specific format in weekly basis (Weekly report).
- Prepare monthly report as progress report in monthly basis and the supporting document for payment installment.
- Final report upon completion of construction work and first hand over note.
- Second hand over note upon completion with full satisfactory of defect and liability period.

## XI. PAYMENT SCHEDULE

Payment will be made after satisfactory acceptance by UNDP the services provided on the following schedule:

- First payment 40% of the total contract value upon the completion on 50% of the total work volume and first construction work progress has been approved by PBDE Project.
- 2. **Second payment 50% of the total contract value** upon the completion on 100% of the total work volume and upon the acceptance of certificate of substantial completion by PBDE Project.
- 3. **Final payment 10% of the total contract value** after the completion of defect and liability period for 2 (two) months (60 calendar days) and upon the acceptance of second handover statement by PBDE Project.

<b>ATTACHMENT</b>	:
Drawing	