



**Government of the People's Republic of Bangladesh
Ministry of Local Government, Rural Development and Co-operatives
(Local Government Division)**

**Environmental and Social Screening Report
On
Construction of Latrines with Composting Biogas plant' including O&M**



Emergency Multi-Sector Rohingya Crisis Response Project (GoB-WB)

Location: Shahpuri Police Fari, Ukhiya Sub-project (Package No.): EMCRP/WD-05



Department of Public Health Engineering (DPHE)



Abbreviation and Acronyms

ACF	Action Against Hunger
BBS	Bangladesh Bureau of Statistics
BD	Bangladesh
BMD	Bangladesh Meteorological Department
CIC	Camp in Charge
DC	Deputy Commissioner
DO	Dissolved Oxygen
DoF	Department of Forest
DPD	Deputy Project Director
DPHE	Department of Public Health Engineering
DRP	Displaced Rohingya Population
DTW	Deep Tubewell
DTTW	Deep Tara Tubewell
EC	Electrical Conductivity
EE / XEN	Executive Engineer
EMCRP	Emergency Multi-sector Rohingya Crisis Response Project
ERP	Emergency Response Plan
ESMF	Environmental & Social Management Framework
ESMP	Environmental and Social Management Plan
FAO	Food and Agriculture Organization
FGD	Community consultation
GBV	Gender-Based Violence
GoB	Government of The People's Republic of Bangladesh
GRC	Grievance Redress Committee
GRM	Grievance Redress Mechanism
GPS	Global Positioning System
GW	Ground Water
HDPE	High Density Polyethylene
HH	Household
IEF	Important Environmental Feature
IOM	International Organization for Migration



ISCG	Inter Sector Coordination Group
IUCN	International Union for Conservation of Nature
NGO	Non-Government Organization
NGOF	NGO Forum
LGED	Local Government Engineering Department
PD	Project Director
PM	Particulate Matter
PMU	Project Management Unit
PPE	Personal Protective Equipment
PSC	Project Steering Committee
PTW	Production Tube well
PVC	Polyvinyl Chloride
ROW	Right of Way
RRRC	Refugee Relief and Repatriation Commission
SAE	Sub-Assistant Engineer
SMC	School Management Committee
SW	Surface water
TDS	Total Dissolved Solids
TSS	Total Suspended Solids
TTW	Test Tube Well
UN	United Nations
UNFPA	United Nations Fund for Population Activities
UNHCR	United Nations High Commissioner for Refugees
uPVC	Un plasticized Polyvinyl Chloride
VfM	Value for Money
WASH	Water, Sanitation and Hygiene
WB	World Bank
WDZ	Water Distribution Zone
WFP	World Food Programme
WSC	Women's Studies Center

EMCRP (DPHE part)

Environmental and Social Screening Form

Sub-Project Description Form

Introduction: Under EMCRP (DPHE), WD -05, thirty (30) 'latrine with composting biogas plant' will be constructed at different DRP camps. This screening report is prepared for sites of one (01) 'Community latrine with composting biogas plant' at Shahpuri Police Fari, Raja Palong Union, Ukhiya, Cox's Bazar.

Name of Sub-project: Construction of Camp based 'latrine with composting biogas plant' including Operation and Maintenance Scheme under WD-05 for Police Camp at Ukhiya Upazila, Cox's Bazar. The police members of this fari station are assigned to serve the Displaced Rohingya People (DRP)/ Rohingya Camps Ukhiya .

Implementing Agency/Agencies: Department of Public Health Engineering (DPHE).

Estimated total cost per 'Community latrine with composting biogas plant' (in Taka): 21,98,035.00 Taka

Estimated construction period duration: 12 (Twelve) months.

Estimated Operation and Maintenance period (life of sub-project): 24 (Twenty-Four) months Operation and Maintenance period but Project Design life more than 10 (Ten) to 15 (Fifteen) years.

District: Cox's Bazar

Sub-District: Ukhiya

Union: Raja Palong

Name of Community/Local Area: Shahpuri Police Fari, Raja Palong, Ukhiya

Description of proposed sub-project activities (incl. type of activities, footprint area, natural resources required, etc.):

In the proposed sub-project areas 'Community latrine with composting biogas plant' schemes activities, the following interventions would be taken place:

- Construction of Latrine block, kitchen room, Soak well & Hand washing facilities.
- Construction of Bio gas plant (Human excreta inlet pit, digester, hydraulic chamber, slurry pit. Depth of digester will be 2.4 m & dia will be 2.2 m (inner). Inlet pit will be connected to digester with 150 mm dia PVC pipe. Depth of hydraulic chamber & slurry pit shall be 1.5 m & 0.675 m respectively.
- Sanitary and Water supply works, incl 1000L plastic water tank.
- Construction of kitchen with cooking facilities
- Internal Electrification
- Installation of Deep Tube Well (DTW)
- Supply and Installation of Solar pump solution
- Supply sanitary accessories
- Environmental Mitigation Works
- Post Commissioning Operation & Maintenance work

Detail plan section are incorporated within **Appendix: 4**

Estimated footprint / land area per 'Community latrine with composting biogas plant': Construction of 'Community latrine with composting biogas plant' with kitchen room, digester chamber, hydraulic chamber, inlet pit, soak well and deep tube well, will require 60 square meter



land. Each ‘Community latrine with composting biogas plant’ will be used by around 80 to 85 police staff.

Brief description of sub-project site: (e.g., present land use, Important Environmental Features (IEFs) near site, etc.:

The proposed ‘Community latrine with composting biogas plant’ are located at Shahpuri Police Fari. The proposed lands are owned by government. Due to construction of the community Latrine with associates’ facilities will not to be impacted any trees, structures and community properties. The buildup infrastructures in and around the subproject site include open space, only police camp related structures are there. There is a pucca road (east) is very close to the police camp.

Noted that, the location is adjacent to DRP camps of Ukhiya (specialized DRP area). The Shahpuri Police is completely dedicated to provide security support for the DRP community of Ukhiya Camps. This sub-project was proposed to construct at Shahpuri Police fari along with special consent of the RRRC and respective CICs.

Effort has been given for listing the major environmental and infrastructural features around the subproject sites. The key environmental and infrastructural features are given in the following table:

Camp No	Latitude	longitude	Side/ Direction	Surrounding Features
Shahpuri Police Fari, Ukhiya	21.229009	92.161335	East	Police Barrack
			West	Open Space
			North	Open space
			South	Newly constructed police barrack

Overall Comments:

Proposed ‘Community latrine with composting biogas plant’ will be used by Bangladesh police (engaged for security of DRP & local community). The sub-project is environmentally sustainable and socially acceptable. DPHE, together with IWM Environmental & Social safeguard team, PMU Social & Environmental Consultant, have conducted consultation meeting with DRP communities and their community representative, CiC, Camp WASH area focal, Camp area focal, SAE & Mechanic, and relevant stakeholders (**Appendix- 2 & 3**).

Taking into account the suggestion/ opinion made by the police personnel, potential environmental and social impact for implementing the proposed intervention, and sensitivity of the sites location to protected area/ archeological sites/sensitive receptor, this site has been selected for constructing the proposed ‘Community latrine with composting biogas plant’. There will be no impact on the ecosystem and biodiversity for constructing the planned intervention. No agricultural land/ activities or fish farming will be disturbed, due to the construction of the sub-project. The ‘Community latrine with composting biogas plant’ schemes construction works will be restricted to within the boundary of police camp.

‘Community latrine with composting biogas plant’ site selection process:

For conducting the subproject screening process, DPHE Officials along with IWM Specialists & EMCRP Consultants jointly visited the proposed Police Camp area. The team primarily selected the site on the basis of transect view, police opinion, existing structures, improved water supply coverage. Also, the E&S safeguard team considered the initial probable E&S impact, easy



access to the police. So, the team finally proposed location (with GPS) among the other alternative locations.

DPHE is implementing agency of the project which the financial assistance of World Bank. After establishing the proposed per 'Community latrine with composting biogas plant' scheme in the area about 80-85 police will be benefitted as well as to meet their sanitation & cooking requirements.

Types of waste to be generated during construction and operation phase:

During construction phase solid and liquid waste will be generated due to construction activities. The types of wastes are uPVC pipe, concrete, tiles, iron, tin, earth, liquid drilling mud and lubricants etc. Quantity of the solid waste to be generated during construction phase may vary from 30-50 kg/day. On the other hand, operation of 'Community latrine with composting biogas plant' will generate fecal sludge and liquid waste i.e., Urine.

Sensitive environmental, cultural, archaeological, religious sites near (within 1km) of site including elephant migration routes and remaining forests:

During site visit, any sensitive environmental or archaeological sites within the 1km periphery are not identified. In addition to this, within the subproject area include open space. Draft map of elephant migration road set by IUCN reveals, there is no elephant migration routes within scheme area (**Map-2**).



EMCRP-WD 05

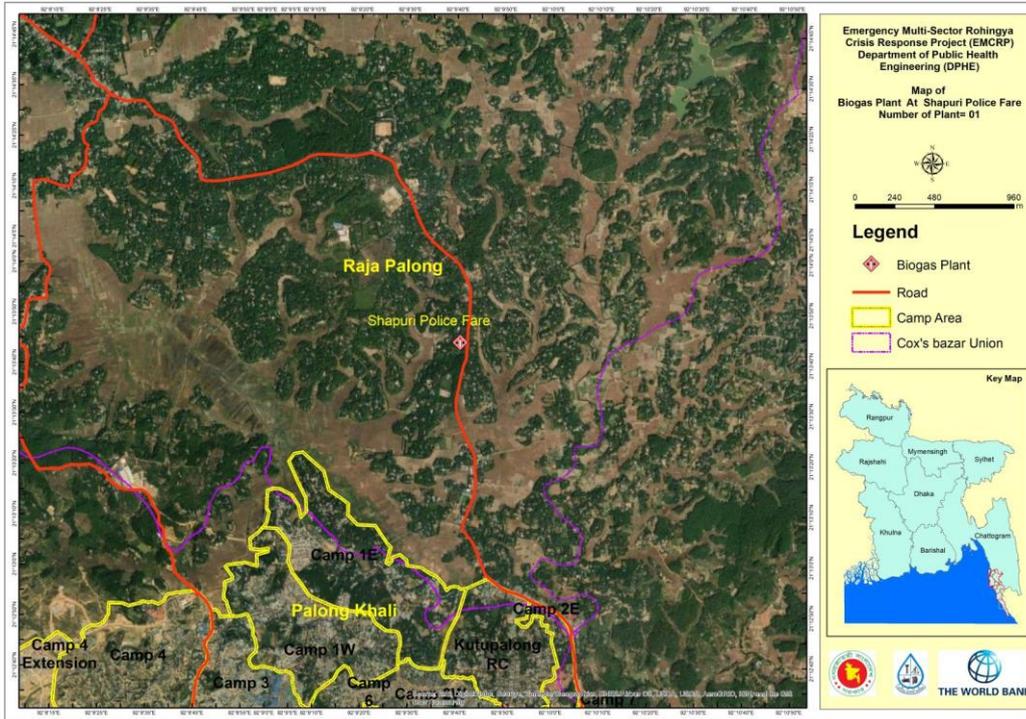


EMCRP-WD 05

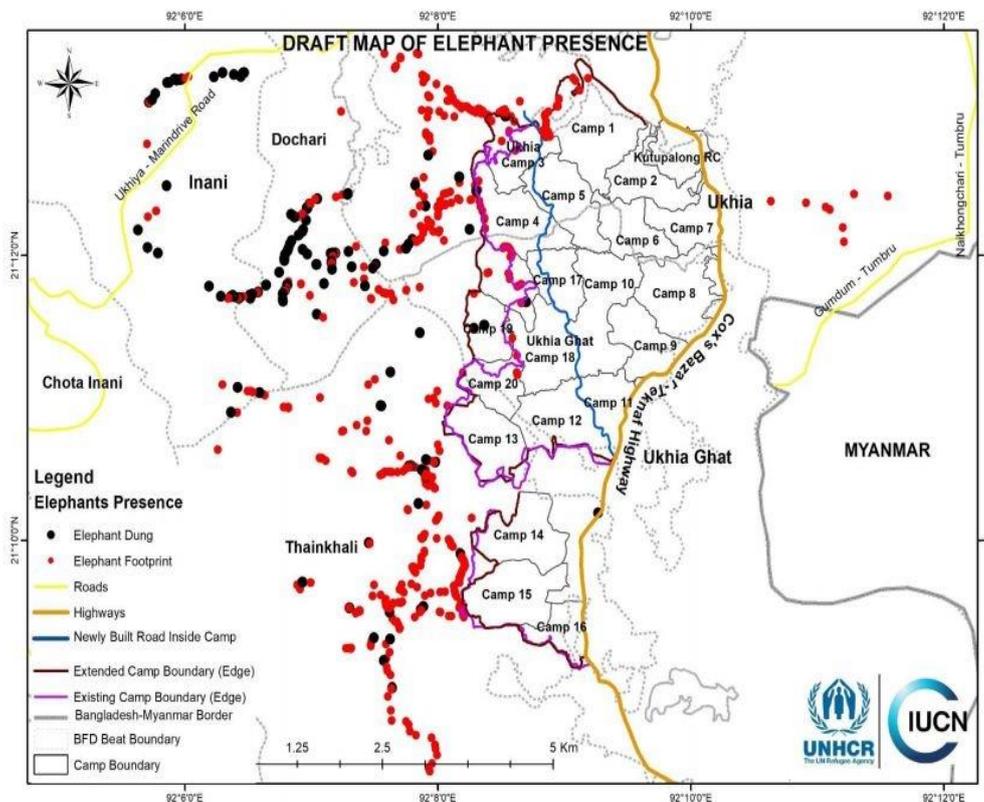
Figure-1: Proposed 'Composting bio-gas plant with community latrine' Site at Shahpuri Police Fari



Completed environmental and social (E&S) screening forms and respective E&S Management Plan are given below:



Map-1: Sites selected for 'Community latrine with composting biogas plant' at Shahpuri Police Fari



Map-2: Map of Elephant Presence in Camp area



Environmental and Social Screening Form

Section A: 'Community latrine with composting biogas plant' Work Overview

Description of sub-project/component interventions:

- Construction of Latrine block, kitchen room, Soak well & Hand washing facilities.
- Construction of Bio gas plant (Human excreta inlet pit, digester, hydraulic chamber, slurry pit. Depth of digester will be 2.4 m & dia will be 2.2 m (inner). Inlet pit will be connected to digester with 150 mm dia PVC pipe. Depth of hydraulic chamber & slurry pit shall be 1.5 m & 0.675 m respectively.
- Sanitary and Water supply works, incl 1000L plastic water tank.
- Construction of kitchen with cooking facilities
- Internal Electrification
- Installation of Deep Tube Well (DTW)
- Supply and Installation of Solar pump solution
- Supply sanitary accessories
- Environmental Mitigation Works
- Post Commissioning Operation & Maintenance work

Sub-project Location:

Community Latrines are located at Shahpuri Police fari at Rajapalong Union under Ukhiya Upazila of Cox's Bazar District. The proposed site is high land. Pucca road is very close to the site.

Land ownership: Lands are owned by Government of Bangladesh.

Expected construction period: 12 (Twelve) months.

Description of project intervention area and project influence area with schematic diagram (where relevant, indicate distance to sensitive environmental areas such as elephant corridors, water bodies, etc. and historical or socio-cultural assets):

- Adjacent of the scheme site under the sub-project intervention area: Shahpuri Police Fari.
- Impacted area: Approx. 60 square meters per 'Community latrine with composting biogas plant'
- No structures, trees and livelihoods will be affected
- DRP shelter relocation is not required.



- Influence area: The influence area is within the scheme area of 500 to 550 square meter per 'Community latrine with composting biogas plant' (According to Layout diagram)
- Environmental sensitivity: Within the influence area of the sub-project no historical sites were identified. There is no evidence of presence of elephants in the sub-project influence area (checked with local IUCN representative).
- Every selected 'Community latrine with composting biogas plant' locations have one alternative location and 50 meters to 120 meters away from the final selected locations. Alternative locations are narrow, congested, low land and close to the foot hill.

Section B: Environmental Screening

B.1: Environmental feature of 'Community latrine with composting biogas plant' location

Description of cultural properties (if applicable, including distance from site):

There are no sensitive cultural, archaeological or religious sites in the area.

Location of environmentally important and sensitive areas:

This location used to be environmentally important and sensitive as protected forest but now there is no forest at all. Erosion/land slide may occur when moderately to highly sloping earth excavation will be disturbed for the construction of 'Community latrine with composting biogas plant' and deep tubewell. The impacts are negative but very small scale, site-specific within a relatively small area and adjustable by mitigation measures.

(1) Within/near Elephant Migration Routes Yes/No*:

No. According to UNHCR/IUCN prepared elephant migration route map, no elephant corridor/route is there at present because of deforestation and settlement of DRP.

(2) Potential impacts on remaining forests in/around camps Yes/No*:

No. There are no original forests in this area now. Afforestation works have been started and some plantation is ongoing by different organizations.

(3) Other issues:

No more mentionable issues raised.

Dust: Ambient air quality data was not readily available. In the proposed site the existing air quality is almost dust free except for few months in the dry season (November to March).



<p>Noise: Noise in the sub-project area is not a major concern based on the consultations. Noise is originating from communication among the DRP, service providers and relief distributors.</p>
<p>Baseline soil quality:</p> <p>Soil types are alluvial reddish brown, muddy & sandy soil and Dupitila formation. The soils developing from the weathered sandstones tend to be sandy to clay loams. Presence of organic matter content in the soil is moderate.</p> <p>Landslide potential (high/medium/low, with explanation)</p> <p>Medium. There is a chance of landslide only when moderate to high sloping earth excavation will be disturbed for the construction of bio gas digester (2.4 m). Land slide may occur during monsoon. The impacts will be negative but very small scale, short-term, site-specific within a relatively small area and minimized by mitigation measures</p>
<p>Baseline surface water and groundwater quality (FE, TDS, fecal coliform, pH):</p> <p>Surface water quality: No surface water.</p> <p>Groundwater quality: Groundwater is the main source of potable water in the Sub-project area. The shallow depth is about 100 feet and deep tubewell depth is 500ft to 750ft. In the sub-project area, groundwater is saline free and arsenic free. Shallow tubewell of surrounding the sub-project area are iron concentration is little high pH_7.5 to 8.50, DO_2.20 to 8.50mg/l, TDS_25.50 to 320 mg/l, EC_ 25 to 450 µs/cm, Fe_0.50 to1.5 mg/l, Mn_0.01 to 0.08 mg/l, Chloride_10 to 65 mg/l and AS_ Nil to 0.001 mg/l. (Tubewell depth: 500 ft. to 750 ft.). Many shallow tube wells have been installed in the camp area. This has resulted in excessive withdrawals of water from the shallow aquifer and a drying up of some of the wells.</p> <p><i>*Data source: Secondary data and field survey</i></p>
<p>Status of wildlife movement:</p> <p>None</p>
<p>State of forestation:</p> <p>To establish the Police Camp, no forest was cut as because the camp is besides the pucca road (almost highway type road).</p>
<p>Summary of water balance analysis (For water supply scheme only):</p> <p>N/A</p>



B.2: Pre construction Phase

<p>Information on Ancillary Facilities (e.g., status of access road or any other facility required for sub-project to be viable):</p> <p>Regarding ancillary facilities at the concerned 'Community latrine with composting biogas plant' scheme area under this sub-project the main camp connecting pucca road is very close to the sub-project area. However, the site is accessible and existing pucca road is the most suitable way of carrying the construction materials (pipes, rigs, bamboo, breaks, cement, rods, solar panel, Steel Color Coated Industrial Roofing Sheet, sanitary materials, iron & wooden frame and bentonite sacs etc.) to the construction site.</p>
<p>Requirement of accommodation or service amenities (latrine, water supply, electricity) to support the work force during construction:</p> <p>There are scarcity of Latrines and water supply, but electricity supply system is available in the sub-project area.</p>
<p>Possible location of labor camps:</p> <p>Within the scheme area and very close to the sub-project sites.</p>
<p>Requirement and type of raw materials (e.g., sand, stone, wood, etc.):</p> <p>i) Bricks, ii) Sand iii) Cement iv) uPVC pipe vi) Gravel vii) Tiles viii) Sanitary materials ix) Water x) Iron flat bar xii) solar panel xiii) Steel Color Coated Industrial Roofing Sheet etc. are the most common type materials used in construction.</p>
<p>Identification of access road for transportation (Yes/No): Yes. This selected site is very close to the pucca road.</p>
<p>Location identification for raw material storage:</p> <p>Adjacent to the 'Community latrine with composting biogas plant' locations.</p>
<p>Type and quantity of waste generated (e.g., Solids wastes, liquid wastes, etc.):</p> <p>Solid waste: i) Bricks, ii) Sand iii) uPVC pipes iv) Bamboo & wood and v) earth or mud. It is difficult to give exact figures of pre-construction waste produced on a 'Community latrine with composting biogas plant' construction site. However, 400 kg of waste may be produced per site.</p>
<p>Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:</p> <p>No valuable vegetation presence in proposed sub-project construction sites (approx. 60.00 square meter land per 'Community latrine with composting biogas plant').</p>
<p>Possibility of stagnant water bodies in borrow pits, quarries, etc. encouraging for mosquito breeding and other disease vectors: (High/Medium/Low with explanation):</p>



None.
Disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes): (High/Medium/Low with description): Low. Beside the 'Community latrine with composting biogas plant' location of (EMCRP-WD 05), there is a natural canal. But there is no natural drainage system beside others 'Community latrine with composting biogas plant' locations. During pre-construction phase impact is low.
Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development: (High/Medium/Low with description): Low. Under this scheme establishment interventions, the effect of destruction or damage of endangered species is low.
Activities that can lead to landslides, slumps, slips and other mass movements inroad cuts: In pre-construction phase, stock piling of raw materials can lead to localized land slips. The impacts can be minimized by careful selection of stock pile locations and ensuring large amounts are not stored in one place.
Describe possible traffic movement impacts on (unwanted) light, noise and air pollution: No traffic movement impacts on light but low effects of noise and air pollution.

High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low Likely to cause little, short-term damage and over small area (<0.5sqkm)

B.3: Construction Phase

Type and quantity of waste generated (e.g., Solids wastes, liquid wastes, etc.): Solid waste: i) Bricks, ii) Sand iii) uPVC pipes iv) Bamboo & wood and v) earth or mud vi) Tiles vii) Sanitary materials viii) Iron flat bar ix) solar panel x) Steel Color Coated Industrial Roofing Sheet etc. It is difficult to give exact figures of construction waste produced on a 'Community latrine with composting biogas plant' and Deep Tubewell construction site. However, 450 kg of waste may be produced per 'Community latrine with composting biogas plant' site. Liquid waste: Drilling mud and drilling fluid waste water. During construction period, fecal sludge will be generated from labor camp. It is difficult to give exact figures of construction waste produced on a Deep Tubewell construction site. However, 750 kg of waste may be produced.
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<p>Type and quantity of raw materials used (wood, bricks, cement, water, etc.):</p> <p>i) Bricks, ii) Sand iii) Cement iv) uPVC pipe vi) Gravel vii) Tiles viii) Sanitary materials incl. 1,000L plastic tank ix) Water x) Iron flat bar xii) solar panel xiii) Steel Color Coated Industrial Roofing Sheet etc. However, 650 kg of raw materials may be required.</p>
<p>Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:</p> <p>No valuable vegetation presence in proposed sub-project construction sites. So, vegetation will not be affected by construction work.</p>
<p>Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors: (High/Medium/Low with description)</p> <p>Medium. Construction of water reservoir for drilling works may cause of stagnant water in the site. However, this may occur for short period of time and small context and particularly in monsoon period.</p>
<p>Disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes): (High/Medium/Low with description)</p> <p>Low to Medium. Beside the 'Community latrine with composting biogas plant' location of (EMCRP-WD 05), there is manmade drain and no natural canal. The water body can be contaminated if generated waste of scheme sites gets contact with manmade drain water by runoff of precipitation or disposal of waste into drain. However, it would be minimal because contractor will dispose the generated waste into designated waste dump site regularly.</p>
<p>Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development: (High/Medium/Low with description):</p> <p>Low/medium. Under this scheme establishment interventions, the effect of destruction or damage of endangered species is very low except EMCRP-WD 05 site.</p>
<p>Erosion of lands: (High/Medium/Low with description):</p> <p>Medium. Depth of digestion chamber is 2.4 m. So, during earth excavation land erosion may occur.</p>
<p>Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:</p> <p>Construction material carrying vehicles mobilization will follow schedule time mainly at day time. So, Impact on light for traffic movement impacts is none. But movement of these vehicles may spread dust blowing and noise nuisance to the nearby sensitive receptor if any, thus some temporary, localized effects on noise and air pollution is expected due to truck movements.</p>



High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)

B.4: Operation Phase

Activities leading to health hazards and interference of plant growth adjacent to roads by dust raised and blown by vehicles:

In Operation phase of 'Community latrine with composting biogas plant' schemes, improper use of personal protective equipment (PPE) and lack of safety procedures may cause injuries. Plant growth adjacent to scheme areas can be affected during maintenance of 'Community latrine with composting biogas plant'. However, this will be a localized and temporary activity.

**Chance of long-term or semi-permanent destruction of soils:
(High/Medium/Low with description):**

Low. Low change of long-term or semi-permanent destruction of soils for 'Community latrine with composting biogas plant' schemes area.

**Possibility of odor and water, soil quality impacts from SWM and FSM disposal system:
(High/Medium/Low with description):**

Low. Sludge from 'digester & slurry pit will be generated. The sludge will be disposed properly in camp waste management facilities.

**Possibility of stagnant waterbodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors:
(High/Medium/Low with explanation):**

Low. There are very low possibilities of stagnant water deposition in operation period. It may occur due to leaking of latrines, slurry pit, digester, tube wells and/or water storage tanks.

Likely direct and indirect impacts on economic development in the project areas by the sub-project:

'Community latrine with composting biogas plant' with water supply system will be helpful for the police and improve their health condition.

**Extent of disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes):
(High/Medium/Low with description):**

Low. This project location contains no natural drainage system. The water body (EMCRP-WD_05) can be contaminated if generated waste from septic tank or sock well, slurry pit, digester, get contact with canal water by runoff of precipitation. It will be possible because of septic tank leakage or improper disposal of generated sewage waste from 'Community latrine with composting biogas plant'. But this chance is minimal. This impact is very much site specific & with proper management it is possible to mitigate.



Extent of destruction or damage of terrestrial or aquatic ecosystem so endangered species directly or by induced development:

(High/Medium/Low with description):

Low. Operation and maintenance activities of 'Community latrine with composting biogas plant' schemes will be localized and temporary in nature.

Activities leading to landslides, slumps, slips and other mass movements inroad cuts:

N/A

Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains:

(High/Medium/Low with explanation):

Low. Potential erosion may occur when moderately to highly sloping terrains are disturbed for the development of 'Community latrine with composting biogas plant' and Deep Tubewell. The impacts are expected to be negative, small scale, site-specific within a relatively small area and minimized by mitigation measures.

Describe possible traffic movement impacts on *(unwanted)* light, noise and air pollution:

Temporary, localized impacts on noise and air pollution from maintenance vehicles movement can occur. All maintenance works will be conducted during daytime – so no light impacts expected.

High = Likely to cause long-term impacts or over large area (>1sqkm); Medium = Likely to cause temporary damage or over moderate area (0.5 to 1sqkm); Low = Likely to cause little, short-term damage and over small area (<0.5sqkm)



Section C: Social Screening

C.1 General Labor Influx Screening

Key Screening questions	Aspects to Consider
Will the project potentially involve an influx of workers to the project location, and will the influx be considered significant for the local community?	The number of total skilled Labor is 3-4 and unskilled labor 4-5 per 'Community latrine with composting biogas plant'. All the unskilled labor will be engaged from the DRP community. No additional foreign labor will be engaged. All the skilled labor will be staying at labor shed within the camp. The size of the labor shed will be 225 square feet.
Is the project located in a rural or remote area?	The project area is in police camp demarcated by the Government and belongs to police camp (security purpose of DRP & Local community) in a specialized area.
Based on the socioeconomic, cultural, religious and demographic qualities of the local community, Rohingya population and the incoming workers, is there a possibility that their presence or interaction with the local community could create adverse impacts?	No. Police camp is a restricted area, so it is not expected that the presence of the skilled (local) and unskilled labor may generate any adverse impacts. There will be a code of conduct for the labors to follow, which will be monitored by the PMU on a regular basis.
Consultation with DRP Community People and relevant stakeholders (SH)	During screening and site identification DPHE has conducted individual consultation with the stakeholders. The stakeholders include RRRC, WASH Sector, Site Management Committee representatives, Contractor team and Bangladesh Police.

C.2 Land acquisition and stakeholder screening

Probable Involuntary Resettlement Effects	Yes	No	Not	Remarks



			Known	
Involuntary Acquisition of Land/ Land Donation/ Land Taking				
1. Will there be any land acquisition?		√		No, land acquisition will not be required for this sub-project 'Community latrine with composting biogas plant' at the police camp site.
2. Is the project construction site known?	√			Construction sites are within Bangladesh Police (engaged for security of local & DRP community) Camp area
3. Who manages the land?	√			The ownership of the land is Government of Bangladesh
4. Will easement be utilized within an existing Right of Way (ROW) or land? CRP (Common Resource Property)		√		N/A
5. Will there be loss of DRP tent, agricultural crops, trees, and other productive or fixed assets due to project intervention?		√		N/A
6. Will there be loss of businesses or enterprises due to project intervention?		√		N/A
7. Will there be loss of income sources and means of livelihoods due to project intervention?		√		N/A
Involuntary restrictions on land use or on access to legally designated parks and protected areas				
8. Will people lose access to natural resources, communal facilities and services?		√		No
Information on Displaced Persons:				
9. Any estimate of the likely number of persons that will be displaced by the Project? <i>If yes, approximately how many?</i> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes				



10. Are any of them poor, female-heads of households, or vulnerable to poverty risks?	[√] No []Yes
11. Are any displaced persons from indigenous or ethnic minority groups?	[√] No []Yes
During Screening, project authority will conduct consultation with the primary and secondary stakeholders and provide their observations in the following sections (12 to 16)	
12. Who are the stakeholders of the project? Please provide a summary of consultation meetings with stakeholders and the affected community. For determining the environmental and social impacts associated with subproject implementation, DPHE, PMU unit give great importance on involving primary and secondary stakeholders of the subproject area. Therefore, to collect local knowledge for baseline conditions, understand perceptions of the community regarding impact significance, and propose meaningful mitigation measures during survey of Environmental Screening, an attempt has been made to consult with relevant stakeholders and DPHE officials to obtain their views on subproject interventions. This is a police camp area, so it was not possible to conduct group consultation meeting. Only one-to one interview with police personnel (OC), during the environmental and social study of the proposed subproject in conformity with the WB's environmental guidelines. However, for better understanding the socio-economic and environmental condition one to one consultation has been conducted in the subproject study area. The consultations were conducted at two different tiers of stakeholders: Bangladesh police (one to one interview) and different organization representative who are concern about the subproject. Feedback, Suggestions, and Recommendations of the Participants FGD The participants' feedback, suggestions, and recommendations listed below: Most of the participants expressed that the 'Community latrine with composting biogas plant' within the police camp area are sufficient, for proper sanitation & cooking. They emphasized for the construction of the community latrines with provision of water supply and washing facilities for ensuring hygiene; Participants showed highly anxious about its operation and maintenance. In this regard, they suggested to confirm who will take responsibilities for operation and maintenance. They wanted climate resilience design of each proposed intervention so that its more durable; Individual level consultation with project interest and influence parties (CiC, Site Management Committee (SMC) / Camp Wash focal team, RRRRC, UNHCR) representative were conducted in consistence with consultation objective during subproject selection stage to have their idea, concern, segregation about the proposed subproject. Consultation outcome with them is consolidated here in below: Responds of CiC <ul style="list-style-type: none">• Always try to coordinate with related authority/group and give updates to CiC;• CiC is ready to support DPHE, if DPHE face any obstacle to implement the scheme;• After confirmation of site for schemes with the assistance of CiC and other related organization, site should be confined to avoid the	



neighboring disturbance

- After site section then try to keep boundary of the scheme areas and hang a signboard as soon as possible including name of executing agency, types of intervention, address of contractor, project duration, funding agency name and so on.

Wash Focal

- Ample temporary bin for waste collection during scheme implementation should arrange and regular disposal also need to be assured;
- Intervention sites not to be allowed in the bank of natural water body except ensuring adequate mitigation;
- Construction wastes that to be generated should be disposed regularly at designated site;

UNHCR:

Intervention sites should not locate in the elephant migration corridor. Hence, elephant migration road map set by the IUCN/UNCHR should follow during site selection.

13. What social and cultural factors affect the ability of stakeholders to participate or benefit from the proposed policy or project?

None.

14. Are project objectives consistent with their needs, interests and capacity?

Yes, the EMCRP project objectives consistent with the respective stakeholders, DRP and host community, needs, interests and capacity in the project areas.

15. What will be the impact of the project or sub-project on the various stakeholders, especially women and vulnerable groups?

Stakeholders are in favor of the projects and believe that overall project impacts will be positive except bit adverse impact.

Positive Impact:

In the study area (police camp), there is no 'Community latrine with composting biogas plant'. After construction of the 'Community latrine with composting biogas plant' in the proposed site of police camp, human waste (feces) will manage properly. Resulting diarrhea and other health problem that are usually in connection with unhygienic sanitation system will mitigate by the well-designed community latrines. One community latrine will be used by 80-85 person. Consequently, Bangladesh Police shall be able to overcome the problems (different pathogenic disease, insecure sanitation, odor, increasing insect, fly etc.) because of poor sanitation system.

Negative impact:

Indeed, construction of these latrines will have no significant negative impact on the community unless latrines remain dirty and smelly and overflowed of human feces for poor maintenance. Without proper maintenance of bio gas plant, there are some possibilities of community health safety hazard



(fire hazard, etc.). There are some adverse impacts during project construction works, but all adverse impacts are very much site & time specific and with proper management plan those adverse impacts are manageable.

16: What social risks might affect project or sub-project success?

None.

C.3. Social Capital Format

The objective is to list various types of social institutes/bodies working in the camp, intended project influence areas to enlist them for the possible inclusion in the management, and monitoring of the projects. List the name of social institutes/ bodies under the given categorization along with the following information. Use separate sheet for each category of social institute/body. The information can be collected through secondary sources such as RRC/UN agencies or different development organizations that are involved with the Rohingya crisis projects, etc.



Type of Social Institutes/bodies	Name of Institution	Contact Person and Address and phone number	Primary areas of Work	Coverage areas in the camp and communities
Government Organizations	RRRC, DPHE, DC LGED, MoDR, DRP CIC	Mr. Shah Rezwana Hayat, RRRC Commissioner, CXB, Email: rccox@yahoo.com Engr. Ritthick Chowdhury, DPHE, Executive Engineer, CXB, Email: chowritthick@gmail.com Md. Mamunur Rashid Email: dccoxsbazar@mopa.gov.bd Md. Maruf Rahman Police Fari-in-Charge, Shahpuri Police Fari	Overall Coordination of GOB dept., Dev partners, NGO, INGIO, UN Agencies, Volunteers, Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management, Ensuring DRP HH shelter, F/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.	DRP Camps, Blocks, synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication.
UN Agencies /INGOs	WSC IOM, UNICEF, WFP, FAO, UNHCR UNFPA	Damian Seal WASH Sector Coordinator UNICEF dseal@unicef.org <u>Please IUCN too.</u> Tanvir Ahmed WASH Information Management Officer, UNICEF taahmed@unicef.org Asif Arafat Sector Coordinator WASH, ACF	Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management, Ensuring DRP HH shelter, F/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.	DRP Camps, Blocks, synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication.
National	Not yet on	the database web link		



EMCRP Environmental and Social Screening Report (DPHE)

Organizations	boarded	https://www.humanitarianresponse.info/en/operations/ bangladesh/document/wash-sector-coxs-bazar-members-contact-list-17-october-2017		
Community based Volunteer Organizations are those, which constitute the members of the community working towards social development.	Not yet involved	N\ A. Prohibited by the GoB.	Ensuring DRP HH shelter, F/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.	



Section D: Environmental and Social Screening Summary

Environmental Screening Summary

Based on the above environmental and social screening, potential impact for implementing the proposed intervention on different parameters of environment and social with consequence mitigation measures and suggestive monitoring plan with mentioning the responsibilities parties of implementation and supervise the subproject project have been summarized in below.

Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
1: Sub-Project Interventions	Air Quality	Under the subproject intervention the overall score is low .	<ul style="list-style-type: none"> Limiting earthworks; watering of dry exposed surfaces and stockpiles of aggregates at least twice daily, as necessary; (spreading of crushed gravel over backfilled surfaces; Work place isolated by fencing active work sites in populated areas. Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Location of stockpiles; Number of complaints from stakeholders; Covering of trucks; Visual observation during construction (dust) 	Regular monitoring during construction
	Soil	Under the sub-project intervention, the overall score is low .	<ul style="list-style-type: none"> Precautions might be taken when rainstorms are likely, when a rainstorm is imminent or forecast, and actions to be taken during or after rainstorms shall be developed by the Contractor. The earthwork sites where exposed land surface is vulnerable to runoff 	<ul style="list-style-type: none"> Construction Contractor monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> No visible degradation to nearby drainages, Canals or water bodies due to soil erosion. Rain storms in construction phase. 	Weekly, especially after rain events



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
			<p>shall be consolidated and/or covered.</p> <ul style="list-style-type: none"> • Channels, earth bunds, netting, tarpaulin and or sand bag barriers shall be used on site to manage surface water runoff and minimize erosion. • The overall slope of the works areas and construction yards shall be kept to a minimum to reduce the erosive potential of surface water flows elsewhere. • More details provided in ESMP 			



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	Hydrology (surface and groundwater)	Under the sub-project intervention, the overall score is low .	<ul style="list-style-type: none"> All precautions to store chemicals/oil/fuel properly so that no chance of spill. Proper disposal of excess bleaching power and care should be taken to follow the appropriate procedure for chlorination. Monitor water quality according to the environmental management plan. Ensure drilling equipment is cleaned well and will be free of contaminants such as grease, and chemicals, prior to drilling; and properly dispose of spoils and wastes at the end of each day's work. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Areas for stockpiles, storage of fuels and lubricants and waste materials; No visible degradation to nearby drainages, khals or water bodies due to construction activities. For surface water quality parameters: pH, DO, BOD, COD, TC, FC For groundwater quality parameters: pH, Chloride, As, Fe, TC, FC Training records 	<p>Water quality test (SW & GW) once in construction period and Operation period.</p> <p>Training records reviewed quarterly</p>
2: Pre-construction Phase	Safe Sanitation, water supply	Under the sub-project intervention, the overall score is low .	<ul style="list-style-type: none"> Provide suitable housing, adequate supplies of potable water, and latrine and bathing facilities within the housing area for the assigned laborer. Provide means for disposing of wastewater from latrines, baths and food preparation areas either through a septic tank and soak away, More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Site-specific H & S Plan; Records of supply of uncontaminated water; Record of Health & Safety orientation trainings; Condition of sanitation facilities for workers 	<p>Visual inspection by PMU and supervision consultants on monthly basis</p>



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	Impact on Aquatic Environment by discharging site cleaning wastes	Impact is low during pre-construction stage Low.	<ul style="list-style-type: none"> Generated waste should be properly disposed in accordance with the approved designated disposal site(s). Separate waste collection bins will be used during site cleaning & will be emptied regularly; Contractor will be responsible to control the workers from discharging of site cleaning waste into adjacent water bodies. 	<ul style="list-style-type: none"> Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Frequency of emptying the waste bin Existence of waste bin 	During site cleaning & preparation of construction
	Storage of construction materials can cause pollution or land slips	Under the sub-project intervention the overall score is low.	<ul style="list-style-type: none"> Train the concerned person, team assigned for the construction work regarding proper storage procedures: away from steep slopes, proper bunding to avoid runoff from site. More details provided in ESMP 	<ul style="list-style-type: none"> Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> List of materials and sources of materials; Storage site away from steep slopes and has proper bunding 	Weekly
	Transportation impacts	Under the sub-project intervention the overall score is low.	<ul style="list-style-type: none"> All vehicle movement to be done during the day time Speed needs to be limited to 20kmph Contractor's responsibility to verify the suitability carrying, loading and unloading of materials by trucks or others transport and head load arrangement. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Check the vehicle pool. Record of regular inspection. Record of accidents/incidents 	Monthly monitoring.
3:	Wastes (earth,	Under the sub-	<ul style="list-style-type: none"> Prepare and implement drilling mud 	<ul style="list-style-type: none"> Contractor and 	<ul style="list-style-type: none"> Complaints from 	As work weekly



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
Construction Phase	mud) causing pollution	project intervention, the overall score is medium .	<p>and water runoff management plan approved by PMU.</p> <ul style="list-style-type: none"> Wastes must be placed in the designated bins which must be regularly emptied. All waste must be removed from the site and transported to a disposal site. More details provided in ESMP 	monitored by Environmental Consultant and PMU	<p>community;</p> <ul style="list-style-type: none"> Regular inspection of waste management activity; Waste disposal record. 	progresses
	Stagnant water risk	<p>Water reservoir for tubewell drilling will be required. These can potentially store stagnant water for short period of time during and after rain events.</p> <p>Medium.</p>	<ul style="list-style-type: none"> Water stagnant area should fence with marking tape The top soils in the sub-project are sandy and the water should drain away quickly After construction of tube well, backfilling & compaction of water storage (which is used during drilling) pit is essential Contractor should arrangr proper water pumping facilities (pup, etc.) Proper PPEs are essential during construction work.. 	<ul style="list-style-type: none"> Construction Contractor foreman and monitored by Consultant and PMU 	<ul style="list-style-type: none"> Water stagent beside 'Community latrine with composting biogas plant' area 	Daily during construction
	Storage of materials (Creating dust/air pollution of spillage of	Under the sub-project intervention the overall score is medium .	<ul style="list-style-type: none"> By the site management committee in Camp to identify the storage site and other requirements, which will be approved by PMU and consultants. More details provided in ESMP 	<ul style="list-style-type: none"> Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> List of materials and sources of materials; 	Monthly basis during implementation phase.



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	liquid/ hazardous substance i.e. oil, drilling fluid, chemicals etc., Risk of crime)					
	Impact on Aquatic Environment by discharging solid & liquid wastes from construction site & labor camp into nearby channel	Under the sub-project intervention the overall score is Low .	<ul style="list-style-type: none"> Generated waste and construction debris shall be properly disposed in accordance with the approved designated disposal site(s); Acceptable quality of excavated soil shall be mostly reused for the backfilling, with the surplus portion, if any, disposed in the approved designated disposal site(s). Separate waste collection bins, for organic and inorganic wastes, shall be provided throughout the construction and camp sites, whereby all waste collection bins shall be regularly emptied and cleaned; Contractor will be responsible to control the workers from discharging of construction waste into adjacent water bodies. 	<ul style="list-style-type: none"> Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Frequency of emptying the waste bin Existence of waste bin 	Monthly basis during implementation phase.
	Erosion of land	Erosion/land slide may occur very	<ul style="list-style-type: none"> During construction work (specially for earth excavation) proper slope 	<ul style="list-style-type: none"> Construction Contractor 	<ul style="list-style-type: none"> No visible degradation to nearby drainages or 	Daily during earth



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
		small scale near construction areas of latrines, digester chamber, sock well, PTW and the overall score is Medium.	<p>protection is essential.</p> <ul style="list-style-type: none"> • During backfilling work proper compaction is essential (as per specification) • Avoid earthwork during moonson • Proper PPEs are essential during construction work. 	foreman and monitored by Consultant and PMU	water bodies due to soil erosion at/near sub-project site.	excavation work & work below GL
	Noise pollution	Under the subproject intervention the overall score is Medium.	<ul style="list-style-type: none"> • Consultation with affected people; not to operate noisy equipment during working and operations time (22:00 – 06:00); • Sound suppression for equipment; • Ear protection for workers. • Conduct noise quality monitoring as per ESMP. • Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. • Transportation of the construction materials and noisy construction work have to be carried during the scheduled times, and mainly during the day 	<ul style="list-style-type: none"> • Construction Contractor and monitored by Consultant and PMU 	<ul style="list-style-type: none"> • Number of complaints from stakeholders; Use of silencers in noise-producing equipment and sound barriers; • Noise Level following decibel meter (dB) 	Inspection by PMU and supervision consultants on monthly basis;



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	Air pollution	Under the sub-project intervention the overall score is low .	<ul style="list-style-type: none"> Water spraying from other source for dust control; Construction materials with potential for significant dust generation shall be covered; no smoke emitting equipment; and limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor and monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> Location of stockpiles; Number of complaints from stakeholders; Dust observation 	Regular monitoring during construction
4: Operational Phase	Injuries to operation and maintenance workers	Site staff can be seriously hurt by accidents. Medium.	<ul style="list-style-type: none"> Ensure proper training given to all staff & DRP community Regular maintenance of biogas plant, gas supply line, gas burners are essential Ensure PPE used by all staff 	<ul style="list-style-type: none"> Camp WASH NGO staff DPHE XEN 	<ul style="list-style-type: none"> Accidents register 	During septic tank cleaning work.
	Destruction of soil	The operation period may be possible soil damage problems in the project areas by rainstorms and overall score is low .	<ul style="list-style-type: none"> Safeguards to be taken at any time of year when rainstorms are likely, actions to be taken when a rainstorm is imminent or forecast, and actions to be taken during rain storms shall be developed by the Contractor. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor weekly monitored by Environmental Consultant and PMU 	<ul style="list-style-type: none"> No visible degradation to nearby drainages or water bodies due to soil damage at pipe laying area. 	Site inspection weekly/2-weekly in rain season.
	Odor & waste disposal of sludge from	Under the issue the overall score	<ul style="list-style-type: none"> This bio gas slurry pit should clean regularly. Appropriate awareness programs 	<ul style="list-style-type: none"> Construction Contractor for first 2 years 	<ul style="list-style-type: none"> Complaints from communities 	Site inspection daily/weekly



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	'Community latrine with composting biogas plant'	is Low.	<p>shall be arranged for the community members on health and hygiene issues and the impacts of improper sanitation practices;</p> <ul style="list-style-type: none"> Ventilation systems and facilities shall be kept in good functional in order to minimize untoward odor problems, 	<p>monitored by Environmental Consultant and PMU</p> <ul style="list-style-type: none"> Long-term responsibility to be determined by CIC/DPHE 		basis.
	Stagnant water risk	<p>There are very low possibilities of stagnant water deposition in operation period. It may occur due to leaking of latrines, tub wells and/or water storage tanks.</p> <p>Low.</p>	<ul style="list-style-type: none"> Regular naintenance of septic tank, sock well & tube well is essential If any leakage is found anywhere, it needs to be repaired quickly. 	<ul style="list-style-type: none"> Construction Contractor for first 2 years monitored by Environmental Consultant & PMU Long-term responsibility to be determined by CiC/ DPHE 	<ul style="list-style-type: none"> Water stagent beside 'Community latrine with composting biogas plant' area 	Monthly Site inspections
	Impact on Aquatic Environment	<p>Aquatic environment may pollute by discharging fecal sludge & liquid waste to the</p>	<ul style="list-style-type: none"> Ensure use of vacuum tanker/pump to collect desludged material & dumping to proper dumping site Appropriate awareness programs shall be arranged for the community members on health and hygiene 	<ul style="list-style-type: none"> Construction Contractor for first 2 years monitored by Environmental Consultant and 	<ul style="list-style-type: none"> Survival rate of nearby aquatic animal; Recorded any incident on aquatic animal Recorded complaint if any 	During septic tank cleaning work.



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
		surface water. But impact is site & time specific so overall score is low .	issues and the impacts of improper sanitation practices; <ul style="list-style-type: none"> • Ensure disposal tanks, drums or containers coming to, and from, the site are in a satisfactory condition – check for damage or leaks; 	PMU <ul style="list-style-type: none"> • Long-term responsibility to be determined by C:IC /DPHE 		
	Erosion of land	Erosion/land slide may occur very small scale near leaking latrines, PTW and water tanks and the overall score is Medium .	<ul style="list-style-type: none"> • Preventative maintenance to be undertaken at regular intervals by the Contractor to ensure there are no leaks causing erosion. 	<ul style="list-style-type: none"> • Construction Contractor foreman and monitored by Consultant and PMU 	<ul style="list-style-type: none"> • No visible degradation to nearby drainages or water bodies due to soil erosion at/near sub-project site. 	Monthly Site inspections



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	Noise pollution	Under the subproject intervention the overall score is Low .	<ul style="list-style-type: none"> Limiting speed of maintenance vehicles in access roads and work sites to maximum of 20 kph. Transportation of the fecal sludge & other liquid waste have to be carried during the scheduled times, and mainly during the day 	<ul style="list-style-type: none"> Construction Contractor for first 2 years monitored by Environmental Consultant and PMU Long-term responsibility to be determined by CiC/ DPHE 	<ul style="list-style-type: none"> Noise from maintenance vehicle 	During Maintenance work
	Air pollution	Under the sub-project intervention, the overall score is low .	<ul style="list-style-type: none"> Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph. More details provided in ESMP 	<ul style="list-style-type: none"> Construction Contractor for first 2 years monitored by Environmental Consultant & PMU Long-term responsibility to be determined by CIC/ DPHE 	<ul style="list-style-type: none"> Dust due to vehicular movement 	During Maintenance vehicle movement

* Overall Impact Score: High = Likely to cause long-term E&S impacts; Medium = Likely to cause temporary impacts; Low = Likely to cause little, short-term impacts



Social Screening Summary:

To furnish the details of social screening, the ESMF has been followed focusing on major social impacts and significance of the sub-projects (Equity, labor influx, population coverage, easy access, GBV), impact mitigation measures, referral, monitoring suggestions. No land acquisition is required for this sub-project. Provision of utilizing existing lands is available for 'Community latrine with composting biogas plant' sites within this police fari. The sub-project location was selected with the support of CiC, SMC and local DPHE. Individual consultation was also done with police who will be direct or indirectly related in the sub-project. The assigned consultants and local DPHE, CiC representatives, SMC and WASH focal team have visited the proposed site location and after then prepared the screening report. It has been sorted out the exact situation on sanitation and safe water provision through consultation with them. The foot of hill, natural drain or channel and others environmental obstructions not close to the site.

Construction induced impact issues:

Since the 'Community latrine with composting biogas plant' sub-project interventions are being implemented in an empty place of Government-owned land and there is no land acquisition, so there will be arise any construction induced impacts. During construction, movements of heavy vehicles or construction materials may cause damages to the shelters or assets. If any damages are reported, DPHE will hold consultations with the site management along with contractors and camp focal points to take mitigation measures according to ESMF and RPF.

Labor issues:

Every 'Community latrine with composting biogas plant' establishment scheme will be executed by the contractor who will engage both skilled (2-3 nos.) & unskilled (2-3 nos.) labors. All labors will be engaged from the local/host community/other places of Bangladesh. No foreign labor will be required to implement the sub-project activities. Since the number of external workers will be very few and working for short periods of time (more than 3 months), usually there will have no competition in using resources. Thus, the sub-project will not create any influx of workers. All labors will be accommodated outside the police camp by the contractors. The contractor will make temporary labor shed for both of his male & female (if necessary) labor. Area of the shed will be around (15ftX15ft) for males and (15ftX12ft) for females. All laborers (skilled and unskilled) shall be given appropriate training and capacity development to entail a multitude of codes of conduct pertaining to conflict, GBV and other issues. "Labor's Code of Conduct" is attached in **Appendix-5**.

Linkage with other stakeholders:

The team has provided emphasis to keep better linkage with related stakeholders (*i.e.*, RRRRC, CiC, Camp focal, WASH focal, DRP & Host Community, INGO & Local NGO *etc.*). The team conducts several types of consultation meeting with them group/individually for any social issues.

GBV issues:

The GBV risk for the project is assessed as high. The proposed project activities will involve major civil works through skilled (from the host community) and unskilled (from the DRP community) labor. Although a strict labor code of conduct will be enforced, a key concern is the potential



exposure to sexual exploitation and abuse (SEA), sexual harassment (SHA) and GBV for females in the area. A GRM will be established to deal with related issues. The team will conduct consultation meetings with the Police staff, contractors and labor to address GBV. In this meeting, another topic of discussion will be the 'do's and don'ts' during implementation of the sub-project intervention to mitigate all the cross-cutting issues. The expected impact of the sub-project on the various stakeholders, women and vulnerable groups is expected to be positive and will create a friendly socioeconomic climate to implement the intervention. It has been determined that Camp police communities and their office in charge have no objection to establish the 'Community latrine with composting biogas plant' in the proposed site of Shahpuri Police Fhari. If any odd situations arise, the GRC will attempt to mitigate any issues according to the ESMF GRM guideline. On the other hand, if any private land/land leases issues arise, the team will conduct a consultation meeting with the owner and relevant stakeholders according to the ESMF & resettlement guideline.

UNFPA is being hired as a specialized organization to deal with the GBV activities. This project is a part of the Gender Component of the UNFPA 9th Country Programme and will contribute to achieve the CP outcome 3 "Advanced gender equality, women's and girls' empowerment, and reproductive rights, including for the most vulnerable and marginalized women, adolescents and youth". In the event any issues on GBV arise, they will be well communicated with UNFPA through appropriate channels to resolve the issue following proper processes.

In this project, 16 new WFS will be established and 2 existing WFS will be fully operationalized, providing comprehensive GBV case management services such as lifesaving information, community and outreach initiatives, community-based psycho-social support, community engagement in GBV prevention activities through SASA, community engagement in safety audit, and strengthening of community-based support mechanism for women and girls through women support groups and adolescence support groups. The staff's capacity will be developed to adequately handle GBV case management, coaching, mentoring, supervision, GBVIMS and GBVIMS+ to ensure comprehensive case management services through proper supervision. Capacity development will also focus on inclusion of people with disability into response and prevention work for GBV. Various tools will be developed/adapted to facilitate GBV services, MHPSS services and engaging men and boys into GBV prevention work. Along with the GBV case management services mentioned above, GBV and labor code of conduct awareness programs will be implemented, where all stakeholders including the host and DRP communities, labor engaged for the project, site management, the WB and project clients such as DPHE and LGD can participate. Local NGO Mukti will procure WFS strengthening materials and awareness raising materials. They will also implement the preparedness/ contingency plans for any and upcoming disasters. Finally, strict monitoring and supervision initiatives will be in place to ensure any arising issues are averted and to facilitate smooth project processes.

Consultations and Future Consultations:

Under the EMCRP, the DPHE has initiated elaborate consultations with various stakeholders of this project for the 'Community latrine with composting biogas plant' Scheme site management. These include GIS specialist (initially), hydrogeologist located in the scheme area, E&S consultants, local DPHE authorities, other development partners such as UN as well as the police community. These sessions covered topics such as WB introduced Social and Environmental safeguard issues, GRM, possible social environmental and economic effects, livelihoods options, discussions on minimizing the laborer conflict among local host communities, Infrastructure, WASH, hygiene, GBV, forestation, waste, sludge management. Most importantly,



the benefits of safe drinking water options through installing the mini pipelines were discussed. It was also determined that there is no Elephant corridor and no scope of Elephant/Human conflict in the site area. The police community were made aware and sensitized on E&S safeguard issues, precautions, child safety, avoid resettlement, relocations of local institutions (mosques, school/ learning centers & others, any restrictions for the DRP, and compensation mechanisms in the event of any objection and complaints.

As a result of these consultations, the community very much welcomed and appreciated the DPHE EMCRP initiatives on WASH sector sub projects. As per their opinion, the safe water and improved sanitation (Latrine installation) is one of the priorities needs for them for secured and better livelihoods.

Thus, future consultations during the lifetime of the project are expected to ensure that negative social and environmental impacts are being mitigated with due consideration of community needs and opinions. Consultations will involve determining with the site management team whether proper signage is being used (e.g., for occupational hazard) and whether a properly GRM system is being implemented through an efficient GRC. The GRM will be set up to serve as an integral tool for engaging the various stakeholders during the project activities and its implementation. There will have a complaint book for stakeholders where all sorts of complaint will be registered. The GRM will be institutionalized with qualified personnel having adequate training in deal with relevant complaints. The GRM will be available for a wide array of issues such as malpractice, labor issues and GBV.

Labor and Contractors management during COVID-19:

Recommendations

For projects involving construction/civil works:

Contractors will develop specific procedures or plans so that adequate precautions are in place to prevent or minimize an outbreak of COVID-19, and what should be done if a worker gets sick:

- Assessing the characteristics of the workforce, including those with underlying health issues or who may be otherwise at risk
- Confirming workers are fit for work, to include temperature testing and refusing entry to sick workers
- Considering ways to minimize entry/exit to site or the workplace, and limiting contact between workers and the community/general public
- Training workers on hygiene and other preventative measures, and implementing a communication strategy for regular updates on COVID-19 related issues and the status of affected workers
- Treatment of workers who are or should be self-isolating and/or are displaying symptoms
- Assessing risks to continuity of supplies of medicine, water, fuel, food and PPE, taking into account international, national and local supply chains
- Reduction, storage and disposal of medical waste
- Adjustments to work practices, to reduce the number of workers and increase social distancing



- Expanding health facilities on-site compared to usual levels, developing relationships with local health care facilities and organize for the treatment of sick workers
- Building worker accommodations further apart, or having one worker accommodation in a more isolated area, which may be easily converted to quarantine and treatment facilities, if needed
- Establishing a procedure to follow if a worker becomes sick (following WHO guidelines)
- Implementing a communication strategy with the community, community leaders and local government in relation to COVID-19 issues on the site.
- For supporting health facilities, plans or procedures will be in place to address the following issues:
- Obtaining adequate supplies of medical PPE, including gowns, aprons, curtains; medical masks and respirators (N95 or FFP2); gloves (medical, and heavy duty for cleaners); eye protection (goggles or face screens); hand washing soap and sanitizer; and effective cleaning equipment. Where relevant PPE cannot be obtained, the plan should consider viable alternatives, such as cloth masks, alcohol-based cleansers, hot water for cleaning and extra handwashing facilities, until such time as the supplies are available
- Training medical staff on the latest WHO advice and recommendations on the specifics of COVID-19
- Conducting enhanced cleaning arrangements, including thorough cleaning (using adequate disinfectant) of catering facilities/canteens/food/drink facilities, latrines/latrines/showers, common areas, including door handles, floors and all surfaces that are touched regularly
- Training and providing cleaning staff with adequate PPE when cleaning consultation rooms and facilities used to treat infected patients
- Implementing a communication strategy/plan to support regular communication, accessible updates and clear messaging to health workers, regarding the spread of COVID-19 in nearby locations, the latest facts and statistics, and applicable procedures.

COVID Management Guidelines during implementation

A. Labor, Workers and Working Conditions:

Contractors are responsible to manage the labors, workers and working conditions. PMU with the support of superstition and monitoring firms will ensure implementation.

- Stop any Project Activities that may increase community exposure to COVID risks
- Communicate to communities about protective COVID risks and measures
- Monitor incidence and outbreak of communicable diseases
- Identify hotspots based on health data available
- Screen Security personnel for COVID
- Follow strict protocols in management of project interventions that may increase the COVID risk for human health (for instance in livestock and commercial farming)



- Undertake preventive measures in resettlement settlements
- Practice social distancing in meetings, workshops and consultations

B. Entry/Exit to the work site and checks on commencement of work:

- Entry/exit to the work site will be controlled and documented for both workers and other parties, including support staff and suppliers. Possible measures will include:
- Controlling entry/exit to the site, securing the boundaries of the site, and establishing designating entry/exit points. Entry/exit to the site will be documented.
- Training security staff on the (enhanced) system that has been put in place for securing the site and controlling entry and exit, the behaviors required of them in enforcing such system and any COVID -19 specific considerations.
- Training staff who will be monitoring entry to the site, providing them with the resources they need to document entry of workers, conducting temperature checks and recording details of any worker that is denied entry.
- Confirming that workers are fit for work before they enter the site or start work. Special attention will be paid to workers with underlying health issues or who may be otherwise at risk. Consideration will be given to demobilization of staff with underlying health issues.
- Checking and recording temperatures of workers and other people entering the site or requiring self-reporting prior to or on entering the site.
- Providing daily briefings to workers prior to commencing work, focusing on COVID-19 specific considerations including cough etiquette, hand hygiene and distancing measures, using demonstrations and participatory methods.
- During the daily briefings, reminding workers to self-monitor for possible symptoms (fever, cough) and to report to their supervisor or the COVID-19 focal point if they have symptoms or are feeling unwell.
- Preventing a worker from an affected area or who has been in contact with an infected person from returning to the site for 14 days or (if that is not possible) isolating such worker for 14 days.
- Preventing a sick worker from entering the site, referring them to local health facilities if necessary or requiring them to isolate at home for 14 days.

C. Land Acquisition and Involuntary Resettlement:

Though this sub-project will not require land acquisition and involuntary resettlement but during implementation if any involuntary resettlement issues arise, following steps will be followed:

- Identify vulnerable PAPs and Non-title holders who may have increased vulnerability due to COVID outbreak and (lockdown or loss of livelihood); particularly NTH
- Make accelerated payments for compensation and/or livelihood restoration to project affected persons, especially vulnerable households, non-titled holders to help them cope with lockdown;



- Employ local population on wage labor, make advance payments;
- Manage migrant labor for COVID related risks
- Invest in living conditions in relocation settlements

D. Community Health and Safety:

PMU and contractors are responsible to implement the following

- Stop any Project Activities that may increase community exposure to COVID risks
- Communicate to communities about protective COVID risks and measures
- Monitor incidence and outbreak of communicable diseases
- Identify hotspots based on health data available
- Screen Security personnel for COVID
- Follow strict protocols in management of project interventions that may increase the COVID risk for human health (for instance in livestock and commercial farming)
- Undertake preventive measures in resettlement settlements
- Practice social distancing in meetings, workshops and consultations

E. Stakeholders and Citizen and Grievance Mechanism:

- Disseminate COVID advisories over phones, texts, what's app groups, radio, TV, frontline workers Communication;
- Monitor existing grievance and public information mechanisms for any COVID related grievance, queries etc.;
- Widely disseminate material on those who have recovered from COVID to remove stigma
- Include Doctor or medical staff in the GRM
- Use more video conference facilities and conferences.

Recommendation for further environmental and social assessment and/or site specific environmental and social management plan: Yes/No

*If yes, please specify what assessments/plans would be required. Mention some recommendation on E&S assessment ESMP

Yes. If site specific environmental and social management plan (ESMP) is followed the impacts can be mitigated and monitored. ESMP is attached in **Appendix-1**



Appendix -01: Environmental and Social Management Plan (ESMP) of this sub-project (camp specific)

ESMP for one 'Community latrine with composting biogas plant' at Shahpuri Police Fari, Raja Palong, Ukhiya

Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
Pre-Construction Stage	Assessment of Social Impacts and Risks	<ul style="list-style-type: none"> To meet the requirements for disadvantaged and vulnerable directive: Include COVID positive individuals, households and clusters as vulnerable category in Social Assessment TORs, surveys and consultations (particularly relating to social stigma); Consult with such COVID positive households to Identify specific support mechanisms that projects could support; Add tribal communities in self isolation under vulnerable groups who may need suitable and socially acceptable support; Use alternative and virtual and video means for consultations and interactions. 	Site Inspection	Regular inspection at site	PMU	Social Development & Hygiene Promotion Consultant of PMU, Supervision and Monitoring firms.
Pre-Construction Stage	Loss of land/and other physical assets	<ul style="list-style-type: none"> No land acquisition will be allowed inside the DRP camp. As, there were no any mitigation measures according to this impact. 	Site Inspection	Monthly inspection at site	PMU	Social Development & Hygiene Promotion Consultant of PMU
Pre-Construction Stage	Loss of livelihoods	<ul style="list-style-type: none"> Under this sub-project, there is no scope of negative impact of DRP livelihoods. 	Site Inspection	Regular inspection at site	PMU & Contractor	Social Development & Hygiene Promotion Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
Pre-Construction Stage	Stakeholders Engagement	<ul style="list-style-type: none"> All the project stakeholders will be engaged in consultation process Individual/Separate community level consultation meeting will be held with the potential affected HHs Consultation meeting with Rohingya male and female about the project safeguard documents will be disclosed to the stakeholders DRP camp people will be involved with the GRM, formed GRC Consultation meeting with will be held contractors and labors about safe guard issues. 	Site progress report	Regular inspection at site	PMU& Contractor	Social Development and Hygiene Promotion Consultant of PMU
Pre-Construction Stage	Loss of Access rights	<ul style="list-style-type: none"> Project to ensure thorough analysis of alternatives that access enjoyed by the community remains intact. In case of unavoidable circumstances, alternative access will be provided. 	Site progress report	Regular inspection at site	PMU	Social Development & Hygiene Promotion Consultant of PMU
Pre-Construction Stage	Site Selection & implementing interventions: Human-elephant conflict	<ul style="list-style-type: none"> Selection of sub-project sites will be outside of the elephant route/corridor/influenced area. Before finalized the location of sub-project must be contact with camp wash focal Bangladesh Forest Department (BFD) and Border Guard Bangladesh (BGB) already fixed up the camp area and boundary. Sub-project Interventions will be also included in this area. So no need to take any further consent for those purpose, if any circumstance arisen. 	Site inspection	Regular inspection at site	PMU	Environmental Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
Pre-Construction Stage	Site Preparation; Soil Erosion; Alteration of natural drainage	<ul style="list-style-type: none"> Selected site will be far away from any water bodies or natural water flow path to avoid the flash flood or any kind of surface runoff. For deep tube well sinking a minimum 10 meters distance from latrines' soak well to be maintained. If the different number of thick clay layer is found on the upper part of the borelog, there is no problem even if it is near the latrine. Minimize cut & fill operations, the site clearing and grubbing operations should be limited to specific locations only. Always try to avoid any disruption of socially sensitive areas with regard to human and biodiversity. The existing slope and natural drainage pattern on the site should not be significantly altered. If trees on private lands are damaged during construction operations, compensation shall be paid to the owner as determined by the DoF or appropriate authority. The contractors shall ensure that site preparation activities not lead to disruption of activities for the local residents and biodiversity. 	Site progress report	Quarterly inspection at site	PMU & Contractor	Environmental Consultant of PMU
Construction Activity	Construction Induced Impacts	<ul style="list-style-type: none"> Any construction induced impacts must be mitigated following the guidelines of RPF and ESMF 	Site progress report	Regular inspection at site	Contractors	Environmental Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
Construction Activity	Noise from construction works	<ul style="list-style-type: none"> Construction activity will be finished at daytime with in 4.00 pm. Proper measures will be taken to avoid any disturbances. But some works will be continuing for 24 hours schedule like deep tube well drilling, development & testing. Contractor will confirm proper measures for avoiding any disturbance of residents as well as biodiversity. Personal Protective Equipment (PPE) will be ensured in sub-project site before starting any kind of construction activities. All construction activities which cause noise pollution, should be stopped during prayers.. 	Site progress report	Regular inspection at site	Contractor	Environmental Consultant of PMU
Construction Activity	Dust	<ul style="list-style-type: none"> Construction machinery shall be properly maintained to minimize exhaust emissions of CO₂, particulate matter (SPM, PM_{2.5} and PM₁₀) and Hydrocarbons. Dust generated as a result of clearing, leveling and site grading operations shall be suppressed using water sprinklers. Dust generation due to vehicle movement on haul roads/access roads shall be controlled through regular water sprinkling. 	Site Inspection	Regular inspection at site	Contractor	Environmental Consultant of PMU
Construction Activity	Safety Issues	<ul style="list-style-type: none"> Unauthorized entry to the site area is completely prohibited and the site will be properly fenced with a single entry, for this purpose 	Site progress report	Regular inspection at	Contractor	Environmental Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<ul style="list-style-type: none"> • Properly maintained and control store house, storages instruments as well as hazardous materials on the site • Health and safety training will be arranged for the Rohingya or other communities labours before project intervention started. • Labour will bring their proper IDs and wear when they will entry in the camp area. • Child labours will not allowed for any kind of activities • Site shall be secured by fencing and maintained at entry points. 		site		
Construction Activity	Traffic Management	<ul style="list-style-type: none"> • Contractors to provide traffic management plans to be approved by relevant authorities. • If need adequate alternative arrangements will be made to minimize impact on motorist and pedestrians. • Adequate road signs to be planted on access roads to limit vehicular speeds. • For access roads, speed ramps will be construct by proper design. • Traffic signs will be made both in Bangla and Rohingya language. 	Site inspection	Regular inspection at site	Contractor	Environmental Consultant of PMU
Construction Activity	Conflicts with existing users due to the	<ul style="list-style-type: none"> • A detailed assessment of the available resources and consent of the local representative for withdrawal of water from existing surface water 	Site progress report	Regular inspection at	Contractor	Social Development and Hygiene



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
	scarcity of resource base.	<p>sources shall be taken.</p> <ul style="list-style-type: none"> If ground water is withdrawn, adequate approvals essential from the appropriate department/authorities before setting up bore wells. Local community must be consulted before any construction works started 		site		Consultant of PMU
Construction Activity	Increase in road accidents	<ul style="list-style-type: none"> The movement of heavy machinery and equipment will be restricted to defined routes. Proper signage to be displayed at major junctions. Road diversions and closures to be informed well in advance to the local community. The vehicular movement will be controlled near sensitive locations viz. schools, colleges, hospitals, mosques, learning center & DRP camps identified along designated vehicular transportation routes. Local community will be trained up about traffic management and awareness. 	Site progress report	Monthly inspection at site	Contractor	Environmental Consultant of PMU
Construction Activity	Labor Base Camp: Conflicts with the local residents	<ul style="list-style-type: none"> An alternate arrangement for fuel wood, heating and cooking required to meet fuel requirement of the labor camps . Alternating cooking arrangement for the HHs living in the camp Awareness building about nutrition, disaster risk resilience or mitigation, adoption of clean energy for cooking; and prevention of child abuse, child marriage, GBV, sexual harassment, trafficking of 	Site progress report	Regular inspection at site	Contractor	Social Development and Hygiene Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<p>women and children as well as illegal drug trade.</p> <ul style="list-style-type: none"> • Work force should be prohibited from disturbing the flora, fauna including hunting of animals, wildlife hunting, poaching and tree felling. • Adequate facilities ensuring sanitation for labor camps. • Safe drinking water will be made available at site for labour drinking purpose. • Adequate accommodation arrangements for labour. • Labor code of conduct to be disclosed through consultation and FGD. 				
Construction Activity	Waste Management: Improper management and handling of hazardous and non-hazardous waste during construction.	<ul style="list-style-type: none"> • Preparation of a waste management plan covering the following aspects: • Residual waste from the temporary accommodation facilities for labor. • Working areas are kept clean and tidy at all times. • Construction site is to be checked for spills of substances i.e. chemical, oil, paint, etc. • Separate waste collection bins, for organic and inorganic wastes, shall be provided throughout the construction and camp sites, whereby all waste collection bins shall be regularly emptied and cleaned; • Bins and/ or skips should be emptied regularly and waste/ debris should be disposed off at waste 	Once after construction is over	Contractor	Contractor	Environmental Consultant of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<p>disposal areas and/ or at the site.</p> <ul style="list-style-type: none"> The scrap material generated from the erection of structures and related construction activities will be collected and stored separately in a stack yard and sold to local recyclers. Hazardous waste viz. waste, oil, Mobil etc. will be collected and stored in the paved and bounded area and subsequently sold to authorized recyclers. Waste from civil works will be properly collected. Acceptable quality of excavated soil shall be mostly reused for the backfilling, with the surplus portion, if any, disposed in the approved designated disposal site(s). Hazardous Waste Management Rules should be applied. Contractor will be responsible to control the workers from discharging of construction waste into adjacent water bodies Generated waste and construction debris shall be properly disposed in accordance with the approved designated disposal site(s); 				
Construction Activity	Health & Safety Risks: The potentialfor	<ul style="list-style-type: none"> All construction equipment will be properly inspected timely. The risk assessment will be prepared time to time 	Site progress report	Monthly inspection at site	Contractor	Environmental Consultant; Social Development and Hygiene Consultant



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
	<p>exposure to safety events such as tripping, working at height activities, fire from hot works, smoking, failure in electrical installation, mobile plant and vehicles, and electrical shocks.</p> <p>Exposure to health events during construction activities such as manual handling and musculoskeletal disorders, hand-arm vibration, temporary or permanent hearing loss,</p>	<p>for all types of work activities on site.</p> <ul style="list-style-type: none"> • Proper walkways that are clearly designated as a walkway; all walkways shall be provided with good conditions underfoot; signposted and with adequate lighting. • Proper signpost any slippery areas will be ensured in construction site. • Carry out fire risk assessment for the construction areas, identify sources of fuel and ignition and establish general fire precautions including, means of escape, warning and fighting fire. • A system to alert for workers will be setup on site. This may be temporary or permanent mains operated fire alarm. • Fire extinguishers will be located at identified fire points around the site. The extinguishers will be appropriated to the nature of the potential fire. • This sub project has Proper communicative emergency response plan (ERP) with all parties, the ERP to consider such things as specific foreseeable emergency situations, organizational roles and authorities, responsibilities and expertise, emergency response and evacuation procedure, in addition to training for personnel and drills to test the plan. • Electrical equipment must be safe and properly 				of PMU



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
	heat stress, and dermatitis.	<p>maintained; works shall not be carried out on live systems.</p> <ul style="list-style-type: none"> • Only competent authorized persons shall carry out maintenance on electrical equipment, adequate Personal Protective Equipment (PPE) for electrical works must be provided to all personnel involved in the tasks. • An adequate number of staff and first aiders shall be on site in accordance with Bangladesh Labor Law requirements. • First aid kit with adhesive bandages, antibiotic ointment, antiseptic wipes, aspirin, non-latex gloves, scissors, thermometer, etc. shall be made available by the contractor on site. • Emergency evacuation response shall be prepared by the contractor and relevant staff shall be trained through mock-up drills. • Ensure all equipment is suitable for jobs (safety, size, power, efficiency, ergonomics, cost, user acceptability etc.), provide the lowest vibration tools that are suitable and can do the works. • All safety equipment will be available in sub-project site (safety, size, power, efficiency, ergonomics, cost, user acceptability etc.), the lowest vibration tools will be provided that are suitable and can do the works. 				



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<ul style="list-style-type: none"> Regulated noise exposure assessments and noise level surveys of noisy areas, processes and equipment shall be carried out in order to form the basis for remedial actions when necessary. Contractor will provide Awareness training to all personnel involved during the construction phase in order to highlight the heat related illnesses of working in hot conditions such as heat cramps, heat exhaustion, heat stroke, and dehydration. Adequate quantities of drinking water will be available at different locations within the sub-project area. Provision to maintain proper PPE wherever necessary and to ensure that there are satisfactory washing and changing facilities. Provision to ensure all workers exposed to a risk are aware of the possible dangers and also given thorough training in how to protect themselves and there should be effective supervision to ensure that the correct methods are being used. 				
Operation & Maintenance	Noise disturbances	<ul style="list-style-type: none"> Provision to maintain noise from the operation & maintenance of machinery and equipment by noise dampeners Provision to take necessary lighting, caution for the works and most of the time contractor will avoid the 	Site progress report	monthly inspection at site	Contractor for first 2 years Long-term responsibility to be	Environmental Concern of DPHE Long-term responsibility to be determined by



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<p>night time construction works.</p> <ul style="list-style-type: none"> Contractors will be ensure the device to determine the of noise level in this sub-project area. Regularly third-party will be monitored the noise level in this sub-project area. 			determined by CIC/DPHE	CIC/DPHE
Operation & Maintenance	Improper disposal and leakage of sewage from 'Community latrine with composting biogas plant' may degrade the surrounding environment.	<ul style="list-style-type: none"> Use bin covers and/or tarpaulins during transport of wastes and end products (compost). The soak pit will have to be cleaned in a regular interval (at least in every three months). Ensure use of vacuum tanker/pump to collect desludged material & dumping to proper dumping site Appropriate awareness programs shall be arranged for the community members on health and hygiene issues and the impacts of improper sanitation practices; Ensure disposal tanks, drums or containers coming to, and from, the site are in a satisfactory condition – check for damage or leaks; Ventilation systems and facilities shall be kept in good functional order to minimize untoward odor problems 	Site progress report	Monthly inspection at site	<p>Contractor for first 2 yrs.</p> <p>Long-term responsibility to be determined by CIC/DPHE</p>	<p>Environmental Concern of DPHE</p> <p>Long-term responsibility to be determined by CIC/DPHE</p>
Operation & Maintenance	Generation of solid waste from slurry pit.	<ul style="list-style-type: none"> Regular cleaning of slurry pit will be essential. The capacity of the slurry pit of each Community latrine cum Biogas Plant is about 0.5 cum or 17.60 cft. 	Site progress report	Monthly inspection at site	<p>Contractor for first 2 yrs.</p> <p>Long-term</p>	<p>Environmental Concern of DPHE</p> <p>Long-term</p>



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
		<p>This slurry pit is required for clean weekly. This solid waste can be used as compost or land filling.</p> <ul style="list-style-type: none"> • Ensure proper training to all staff • Ensure PPE used by all staff during cleaning 			responsibility to be determined by CIC/DPHE	responsibility to be determined by CIC/DPHE
Operation & Maintenance	Injuries to operation and maintenance workers	<ul style="list-style-type: none"> • Ensure proper training given to all staff • Ensure PPE used by all staff 	Site progress report	Regular inspection at site	Contractor for first 2 yrs. Long-term responsibility to be determined by CIC/DPHE	Environmental Concern of DPHE Long-term responsibility to be determined by CIC/DPHE
Operation & Maintenance	Injuries to police community during operation of kitchen with bio gas (fire hazards, etc.).	<ul style="list-style-type: none"> • Ensure proper training given to police community who will use the kitchen • Regular maintenance of biogas plant, gas supply line, gas burners are essential • Pressur valve shude provide (to reduce excessive gas pressure) • Safety baricate should provide around the digester & gas pipe connection point 	Site progress report	Regular inspection at site	Contractor for first 2 yrs. Long-term responsibility to be determined by CIC/DPHE	Environmental Concern of DPHE Long-term responsibility to be determined by CIC/DPHE
Operation & Maintenance	Erosion and land degradation due to leakage of latrines	<ul style="list-style-type: none"> • Preventative maintenance to be undertaken at regular intervals by the Contractor to ensure there are no leaks causing erosion. 	Site inspection	Monthly inspection at site	Contractor for first 2 yrs. Long-term responsibility to be	Environmental Concern of DPHE Long-term responsibility to be determined by



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
					determined by CIC/DPHE	CIC/DPHE
Operation & Maintenance	Air pollution can happen due to bad smell of dirty latrines and improper design of vent pipe	<ul style="list-style-type: none"> To avoid bad smell regular cleaning of 'Community latrine with composting biogas plant' will be assured. Engineering designed to be followed for installing vent pipe so that odor cannot spread. Community awareness will be increased at camp area on cleanness of latrines after wash and its benefit to health. 	Site progress report	Monthly inspection at site	Contractor for first 2 yrs. Long-term responsibility to be determined by CIC/DPHE	Environmental Concern of DPHE Long-term responsibility to be determined by CIC/DPHE
Operation & Maintenance	Draw down of deep tube well groundwater due to excessive withdrawals for operation of 'Community latrine with composting biogas plant'	<ul style="list-style-type: none"> Coordination with other development agencies for groundwater extraction rates will be monitoring. Regular third-party will be monitoring of groundwater levels 	Site progress report	Monthly inspection at site	Contractor for first 2 yrs Long-term responsibility to be determined by CIC/DPHE	Environmental Consultant of PMU Long-term responsibility to be determined by CIC/DPHE
Decommissioning	The impacts are similar to those listed in construction	<ul style="list-style-type: none"> Provision to proper measure of mitigation and monitoring to minimize or reduce the environmental and social impacts during decommissioning are anticipated to be similar to those identified for the 	Site progress report	Monthly inspection at site	Long-term responsibility to be determined	Long-term responsibility to be determined by CIC/DPHE



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Parameter to be Monitored	Measurement Frequency	Institutional Responsibilities	Supervision Responsibility
	stage: Pollution from waste materials Health & Safety risks to workers and local community/DRPs	construction phase. <ul style="list-style-type: none"> Third-party monitoring of air quality as well as on receiving land and water bodies, may be undertaken, if the condition of those compartments seems to be significantly worse. 			by CIC/DPHE	

Appendix 2: Photograph of Community & Stakeholders Consultation at Shahpuri Police Fari, Raja Palong, Ukhiya



Figure-02: Photograph of Community Consultation at Shahpuri Police Fari



Figure-03: Photograph of Community Consultation at Shahpuri Police Fari



Appendix 3: List of the Participants

Community Consultation Meeting of Environmental and Social Management Framework for Emergency Multi-Sector Rohingya Crisis Response Project (EMCRP), DPHE, Cox' Bazar.

List of Participants

Camp No.- Block No.- Sub project *Prigoas* Date: *09.12.20* Time-
 Venue: *Police Camp* *WB-5*

Sl. no.	Name	Sex		Designation	Mobile Number	Signature	Remarks
		M	F				
1	<i>Md, Marub Rahman</i>	<input checked="" type="checkbox"/>		<i>OG</i>	<i>01716020851</i>	<i>[Signature]</i>	
2	<i>Md, Didar</i>	<input checked="" type="checkbox"/>		<i>Contractor</i>	<i>01845921923</i>	<i>[Signature]</i>	
3	<i>Md, Harun</i>	<input checked="" type="checkbox"/>		<i>Constable</i>	<i>01729887645</i>	<i>[Signature]</i>	
4	<i>Sayad Ulla</i>	<input checked="" type="checkbox"/>		<i>DRP</i>	<i>-</i>	<i>[Signature]</i>	
5	<i>Nozi Mulla</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
6	<i>Mohi kulla</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
7	<i>Sayadur Rahman</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
8	<i>Md, Jakir</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
9	<i>" Jemal</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
10	<i>" Jaber</i>	<input checked="" type="checkbox"/>		<i>"</i>	<i>-</i>	<i>[Signature]</i>	
11	<i>-</i>			<i>-</i>	<i>-</i>	<i>[Signature]</i>	
12	<i>SM Rahman</i>	<input checked="" type="checkbox"/>		<i>SDS, IWM</i>	<i>01711969885</i>	<i>[Signature]</i>	
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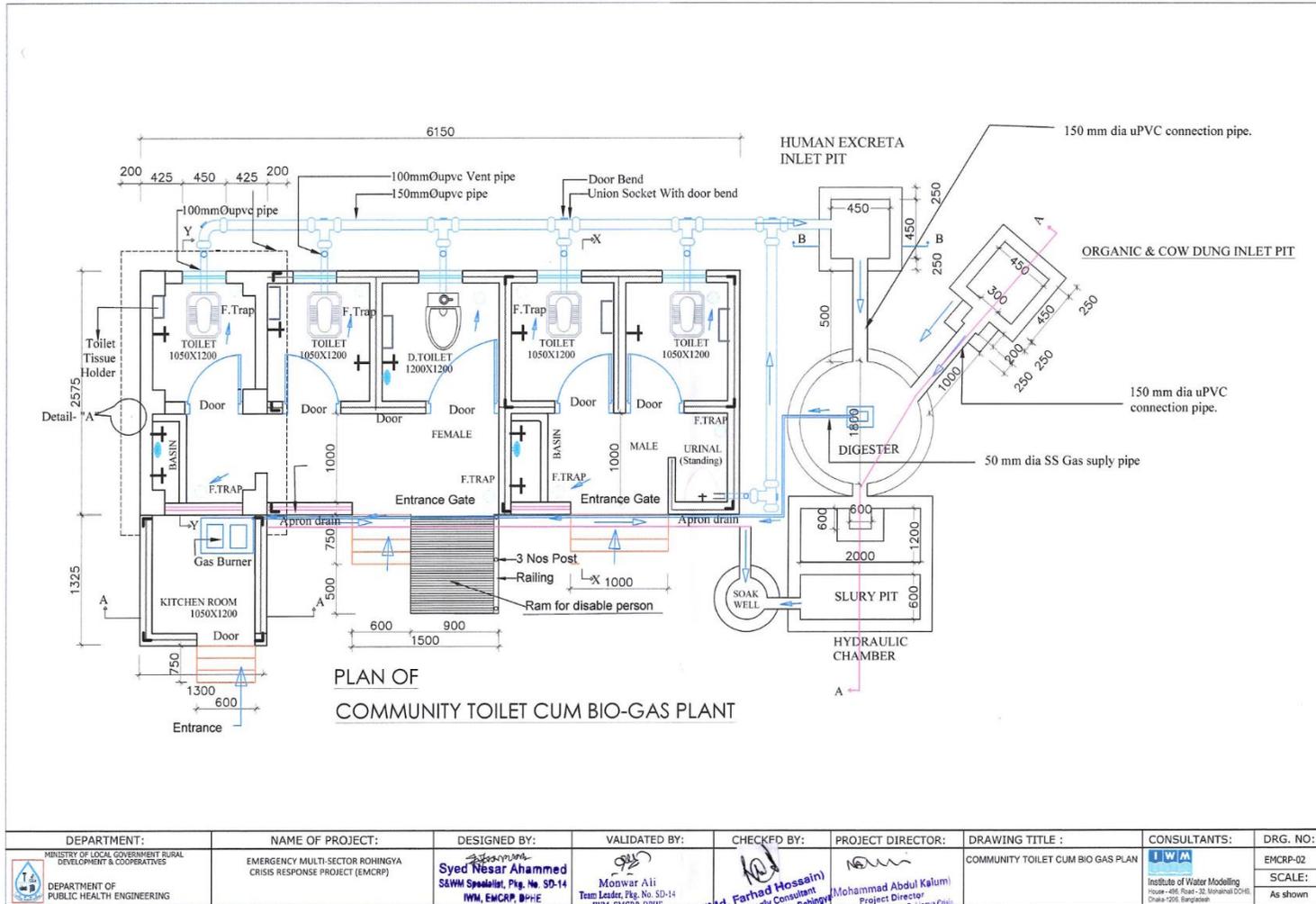
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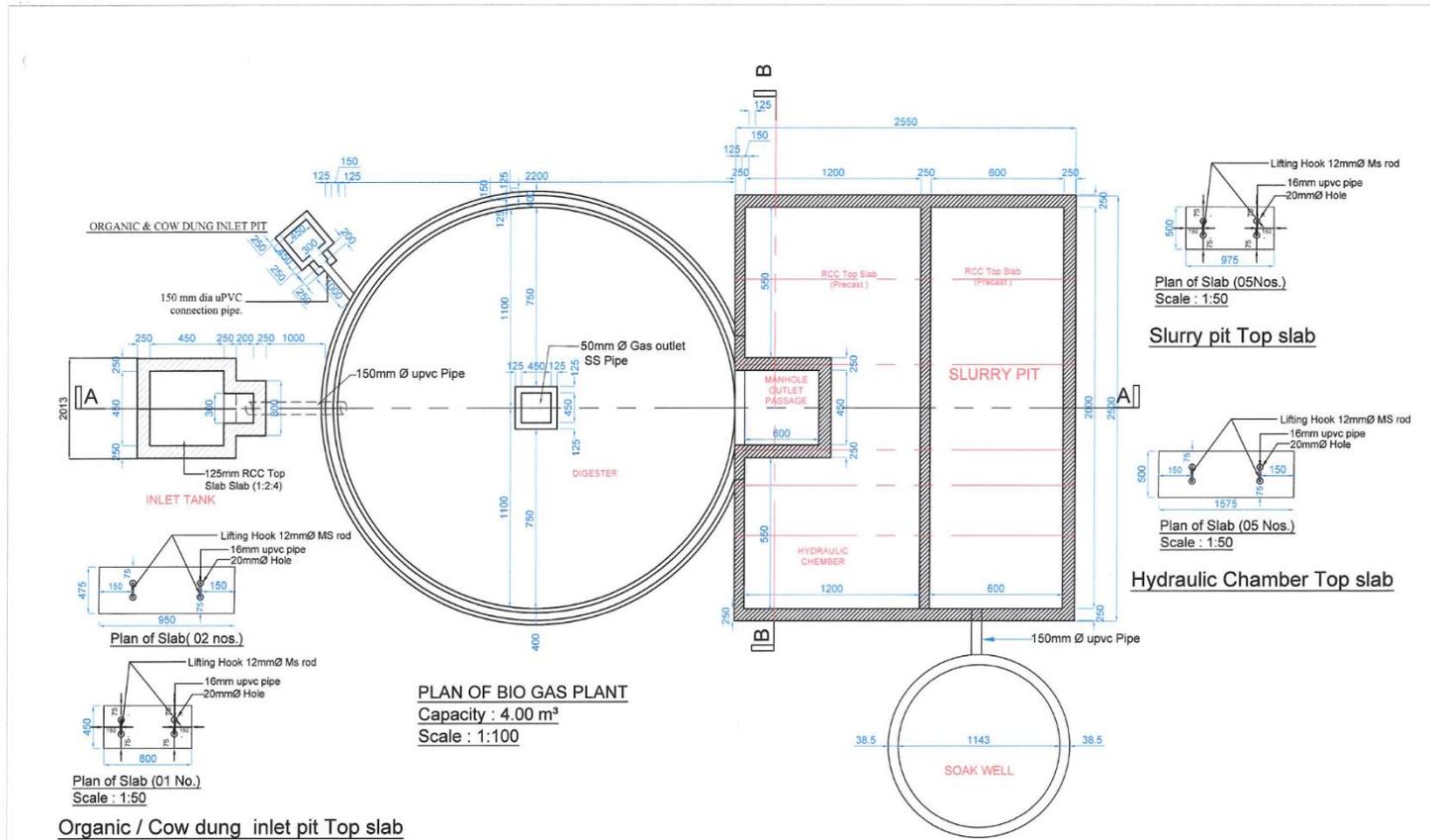
[Signature]

Md. Mostamsirur Rahman
 Social Development Specialist
 Pkg. No. SD-14, IWM, EMCRP, DPHE

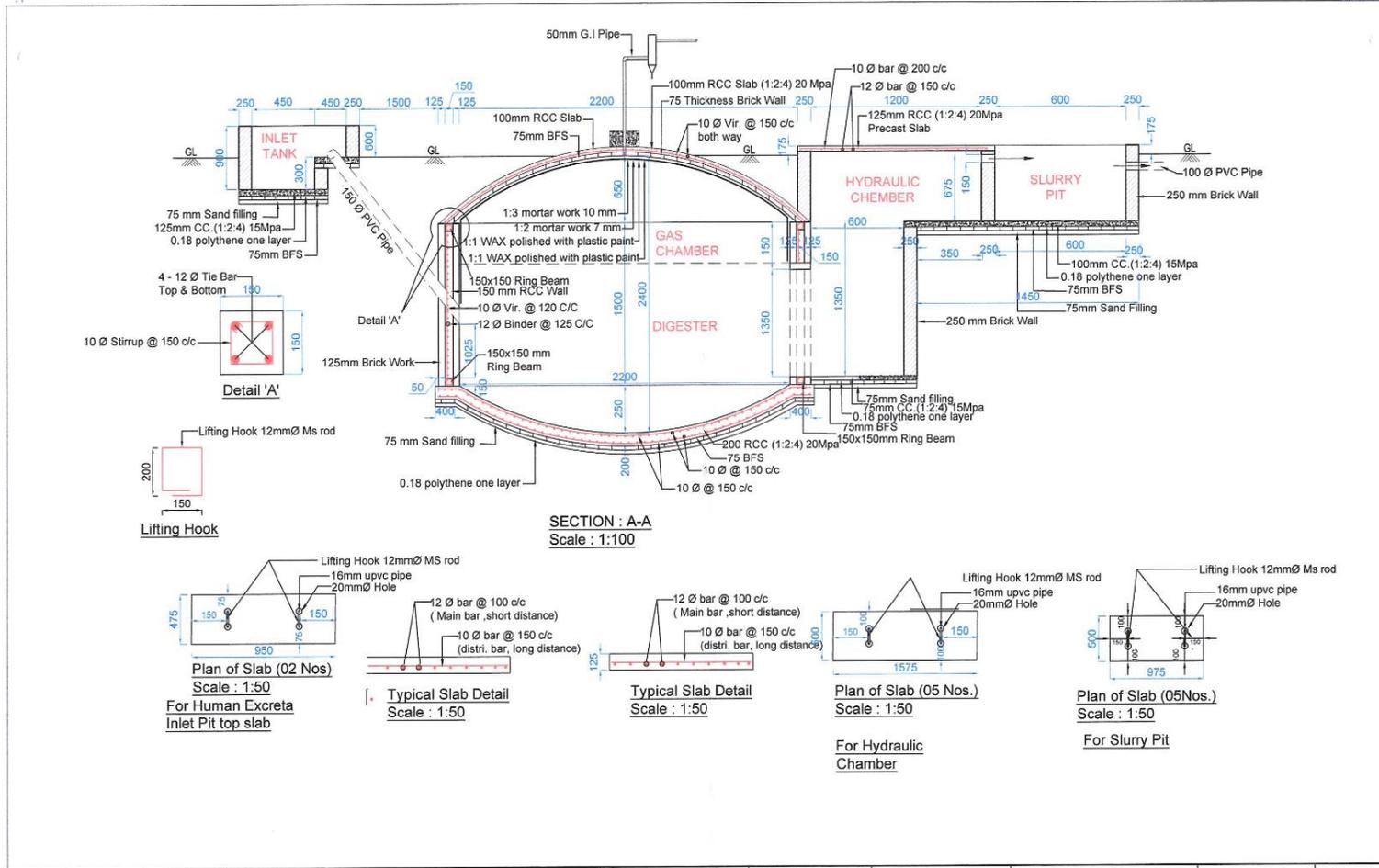


Appendix 4: Detail design of Biogas Plant with community Latrine





DEPARTMENT:	NAME OF PROJECT:	DESIGNED BY:	VALIDATED BY:	CHECKED BY:	PROJECT DIRECTOR:	DRAWING TITLE :	CONSULTANTS:	DRG. NO:
 MINISTRY OF LOCAL GOVERNMENT RURAL DEVELOPMENT & COOPERATIVES DEPARTMENT OF PUBLIC HEALTH ENGINEERING	EMERGENCY MULTI-SECTOR ROHINGYA CRISIS RESPONSE PROJECT (EMCRP)	 Syed Nesar Ahmed S&WM Specialist, Ptg. No. SD-14 IWM, EMCRP, DPHE	 Monwar Ali Team Leader, Ptg. No. SD-12 IWM, EMCRP, DPHE	 Md. Farhad Hossain Water Supply Consultant Emergency Multi-Sector Rohingya Crisis Response Project (EMCRP), DPHE, Dhaka	 Mohammad Abdul Kalum Project Director Emergency Multi-Sector Rohingya Crisis Response Project (EMCRP), DPHE, Dhaka	PLAN OF BIO GAS PLANT	 Institute of Water Modelling House: 466, Road: 32, Mirpur-10, Dhaka-1208, Bangladesh	EMCRP-05 SCALE: As shown



DEPARTMENT:	NAME OF PROJECT:	DESIGNED BY:	VALIDATED BY:	CHECKED BY:	PROJECT DIRECTOR:	DRAWING TITLE :	CONSULTANTS:	DRG. NO:
 MINISTRY OF LOCAL GOVERNMENT RURAL DEVELOPMENT & COOPERATIVES DEPARTMENT OF PUBLIC HEALTH ENGINEERING	EMERGENCY MULTI-SECTOR ROHINGYA CRISIS RESPONSE PROJECT (EMCRP)	 Syed Nesar Ahamed S&WM Specialist, Pkg. No. SD-14 IWM, EMCRP, DPHE	 Monwar Ali Team Leader, Pkg. No. SD-14 IWM, EMCRP, DPHE	 Md. Farhad Hossain Water Supply Consultant Emergency Multi-Sector Rohingya Crisis Response Project, DPHE	 Mohammed Abrul Kabir Project Director Emergency Multi-Sector Rohingya Crisis Response Project (EMCRP), DPHE, Dhaka	Section A-A, RCC Slab Details & Beam Details	 Institute of Water Modelling House: 65, Road-32, Motiatal Dohs, Dhaka-1205, Bangladesh	EMCRP-06 SCALE: As shown



Appendix 05: Labor's Code of Conduct

অঙ্গীকারপত্র

স্থান:

ঠিকাদারী প্রতিষ্ঠান:

আমি এই মর্মে অঙ্গীকার করছি যে, কর্মরত থাকা অবস্থায় নিম্নোক্ত আদেশ, নির্দেশ ও নিষেধ সমূহ সदा সর্বদা মেনে চলবো।

১. সকল রোহিঙ্গা জনগোষ্ঠীর সাথে সর্বদা নম্রতা, ভদ্রতা ও সন্মানের সাথে ব্যবহার বজায় রাখবো।
২. কোন অবস্থাতেই রোহিঙ্গা নারী, শিশুর সাথে কোন প্রকার সম্পর্ক তৈরী করবো না।
৩. রোহিঙ্গা জনগোষ্ঠীর ইচ্ছাকৃত বা অনিচ্ছাকৃত কোন প্রকার সাহায্য সহযোগীতা নিবো না।
৪. কোন অবস্থাতেই রোহিঙ্গা জনগোষ্ঠীদের কোন প্রকার আশ্বাস প্রদান কিংবা অঙ্গীকারবদ্ধ হবো না।
৫. কর্মক্ষেত্রে কিংবা রোহিঙ্গা ক্যাম্প এলাকায় জীব জন্তু, গাছপালা ও পরিবেশের কোন প্রকার অনিষ্ট করবো না।
৬. কর্মক্ষেত্রে সর্বদা নিরাপত্তা পোশাক-আশাক ও উপকরণ পরিধান ও ব্যবহার করবো।
৭. সর্বদা নিজ নিজ পরিচয়পত্র (ID Card) প্রদর্শন ও সংরক্ষণ করবো।
৮. কোন অবস্থাতেই রোহিঙ্গা জনগোষ্ঠী ও স্থানীয় লোকদের সাথে কোন প্রকার অসামাজিক কর্মকান্ড ও কোন প্রকার বিবাদে লিপ্ত হবো না।
৯. যেকোন জরুরী অবস্থায় সিদ্ধান্ত গ্রহণের ক্ষেত্রে সংশ্লিষ্ট কর্মকর্তার শরণাপন্ন হবো।

উপরোক্ত বিষয়সমূহের যদি কোন ব্যতিক্রম ঘটে বা ঘটাই তাহলে এ বিষয়ে প্রশাসন আইনগত যে শাস্তি বা সমাধান গ্রহণ করবে তা মেনে নিতে বাধ্য থাকবো।

স্বাক্ষর ও তারিখ



প্রজেক্ট সাইটে যা যা অবশ্যই রাখতে হবে-

১. শ্রমিক ও কর্মকর্তা তালিকা
২. হাজিরা খাতা
৩. ছুটির রেজিস্টার
৪. দুর্ঘটনার বিবরণী লিপিবদ্ধ করার রেজিস্টার
৫. অভিযোগ লিপিবদ্ধ করার রেজিস্টার
৬. কাজের বিবরণী
৭. জরুরী অবস্থায় যোগাযোগের জন্য কমপক্ষে ২ জন কর্মকর্তার নাম-পদবী সহ মোবাইল নম্বর
৮. বাংলা ও ইংরেজীতে বড় বড় অক্ষরে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
৯. নিকটস্থ হাসপাতাল, পুলিশ স্টেশন এবং ডাক্তারের সাথে যোগাযোগের জন্য মোবাইল/টেলিফোন
১০. নম্বর বাংলা ও ইংরেজীতে বড় বড় অক্ষরে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
১১. কাজের সাইটে পূর্ণাঙ্গ তথ্য ও কাজের পরিধি ব্যানার আকারে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
১২. নিরাপত্তা চিহ্ন, সতর্কতা তথ্য ও নিরাপত্তা বেষ্টনীর ব্যবস্থা করা।
১৩. নিরাপত্তা উপকরণ ও সরঞ্জামাদি এবং প্রাথমিক চিকিৎসার ব্যবস্থা রাখা।
১৪. জরুরী অবস্থায় ব্যবহারের জন্য গাড়ি কিংবা মোটর সাইকেলের ব্যবস্থা রাখা।
১৫. কাজের ঝুঁকিপূর্ণ স্থান দিনে-রাতে সহজে সনাক্ত করা যায় এমন চিহ্ন কিংবা সেফটি লাইটের ব্যবস্থা রাখা।

(বিঃ দ্রঃ রেজিস্টার খাতার উপর প্রত্যেক প্রতিষ্ঠানের নাম ও স্থান উল্লেখ করতে হবে।)

পরিবেশগত সতর্কতাসমূহঃ-

- ১) প্রয়োজন ব্যতীত কোন প্রকার আগুন ধরানো যাবে না।
- ২) কখনোই প্রাণীর অনিষ্ট করা যাবে না।
- ৩) সকল প্রকার দূষণ পরিহার করতে হবে।
- ৪) অনুমতি ব্যতীত কোন প্রকার গাছ কাটা যাবে না।
- ৫) যথাযথ সম্পদের ব্যবহার করতে হবে।
- ৬) নবায়ন যোগ্য উৎস ব্যবহারের সর্বোচ্চ চেষ্টা করতে হবে।
- ৭) কাজের শেষে পূর্বের পরিবেশ ফিরিয়ে দিতে হবে।



EMCRP Environmental and Social Screening Report (DPHE)

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