



**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 Community Latrine including O&M**



**Location: Ukhiya Degree College, Sub-project (Package No.): EMCRP/WD-06  
Emergency Multi-Sector Rohingya Crisis Response Project (GoB-WB)**



**Department of Public Health Engineering (DPHE)**



## Abbreviation and Acronyms

ACF	Action Against Hunger
BBS	Bangladesh Bureau of Statistics
BD	Bangladesh
BoQ	Bill of Quantities
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	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 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
LGED	Local Government Engineering Department
PD	Project Director
PMU	Project Implementation Unit
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

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#### Sub-Project Description Form

**Introduction:** Under the EMCRP, DPHE will construct 70 number of Community Latrines at different DRP camps to improve toilet and sanitation facilities. This screening report is prepared for 01CommunityLatrines at UkhiyaDegreeCollegeis situated adjacent to the DPR camp area, Ukhiya, Cox's Bazar. As a special needs of latrine facilities, DPHE and CIC office decided to establish community latrine at the college premises. Rationally, it has revealed that during the time of shifting at Bhashan Char area the enlisted DRPs are to gather to this college field. So, obviously the DRPs have to wait for a while due to shifting process and obey theCIC, RRRC authority instructions and avail the selected vehicle. So, in the mean time, the respective DRPs, college authority and people have to face problem for using toilet and water. In view of this, the DPHE proposed to provide one community latrine from the ongoing EMCRP at the proposed college premise.The community latrine schemes construction works will be restricted to within the boundary of college.

**Name of Sub-project:**Construction of DRP Camp based Community Latrineincluding Operation and Maintenance Scheme under work package. WD-06, atUkhiya Degree College. This collegeisadjacent to the DPR camp area at Ukhiya, Cox's Bazar.

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

**Estimated total cost per Community Latrine(in Taka):**2,000,000(Tk.)for each Community Latrine

**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:** Rajapalong

**Name of Community/Local Area:**Ukhiya Degree College, Rajapalong, Ukhiya

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

**Sub-project Activities:** In the proposed sub-project (Ukhiya Degree College) areas Community Latrine schemes activities, the following interventions would be taken place:

- Construction of Latrine block with Septic tank, Soak well & Hand washing facilities.
- Sanitary and Water supply works, including 1000L plastic water tank.
- Internal Electrification
- Installation of Production Tubewell (PTW)
- Supply and Installation of Solar pump solution
- Supply sanitary accessories
- Environmental Mitigation Works
- Post Commissioning Operation & Maintenance work

Typical design of Community Latrine is attached within **Appendix-3**.

**Estimated footprint / land area:** Proposed land for constructing the community Latrine is vacant. It's been roughly estimated that about 40 square meter land would be required for each community Latrine. Around 80 to 85peoplewould be able to use per community latrine.



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

The proposed Community Latrines are located at Ukhiya Degree College, Rajapalong, Ukhiya. This land is owned by the college. 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 Academic Building (East), College Boundary (West & North) and playground (South). There is a pucca/ bituminous road is very close to the college.

Noted that, considering a special needs of latrine facilities, DPHE and CIC office decided to establish community latrine at the college premises. Rationally, it has revealed that during the time of shifting at Bhashan Char area the enlisted DRPs are to gather to this college field. So, obviously the DRPs have to wait for a while due to shifting process and obey the CIC, RRRC authority instructions and avail the selected vehicle. So, in the mean time, the respective DRPs, college authority and people have to face problem for using toilet and water. In view of this, the DPHE proposed to provide one community latrine from the ongoing EMCRP at the proposed college premise. The community latrine sub-project was proposed to construct at Rajapalong, Ukhiya 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:

Sl. No.	Location	Latitude	Longitude	Side/ Direction	Surrounding Features
1.	Ukhiya Degree College	21.24111	92.15639	East	Academic Building
				West	College Boundary
				North	College Boundary
				South	Play Ground (Field)

**Overall Comments:**

As a special needs of latrine facilities, DPHE and CIC office decided to establish community latrine at the college premises. Rationally, it has revealed that during the time of shifting at Bhashan Char area the enlisted DRPs are to gather to this college field. So, obviously the DRPs have to wait for a while due to shifting process and obey the CIC Govt. (authority) instructions and avail the selected vehicle. So, in the mean time, the respective DRPs, college authority and people have to face problem for using toilet and water. In view of this, the DPHE proposed to provide one community latrine from the ongoing EMCRP at the proposed college premise.

When the Rohingya gathering will not be there, the student and teacher would be able to use the community latrine. The sub-projects will environmentally sustainable and socially acceptable because expected environmental and social impact to be minimum and very much site specific for implementing the proposed intervention. Under the E&S screening process one consultation meeting was conducted with college authority, and community. The local DPHE, together with IWM Environmental & Social safeguard team, PMU Social & Environmental Consultant discussed with College Teacher/ Governing Body, CiC, Camp WASH area focal, Camp area focal, SAE & Mechanic and relevant stakeholders.

Take into account the suggestion/ opinion made by the Governing body, teacher and students, 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. 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.

#### **Community Latrine site selection process:**

For conducting the subproject screening process, the local DPHE Officials along with IWM Specialists & EMCRP Consultants jointly visited the proposed area. The team primarily selected the 2 sites on the basis of transect view, teachers' opinion, existing structures, improved water supply coverage. Also, the E&S safeguard team considered the initial probable E&S impact, easy access to the Rohingyas including Student and Teachers. So, the team finally proposed location (with GPS) among the other alternative locations (**Figure-01 & Map-01**).

DPHE is implementing agency of the project which the financial assistance of World Bank. After establishing the proposed community latrine scheme, some DRP will be transferred to Vachanchar and students will be benefitted. As a special needs of latrine facilities, DPHE and CIC office decided to establish community latrine at the college premises. Rationally, it has revealed that during the time of shifting at Bhashan Char area the enlisted DRPs are to gather to this college field. So, obviously the DRPs have to wait for a while due to shifting process and obey the CIC Authority instructions and avail the selected vehicle. So, in the mean time, the respective DRPs, college authority and people have to face problem for using toilet and water. In view of this, the DPHE proposed to provide one community latrine from the ongoing EMCRP at the proposed college premise.

#### **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, wood piece, 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 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. However, there are some mosques which bring religious value. In addition to this, within the subproject area include open space. Draft map of elephant migration road set by IUCN



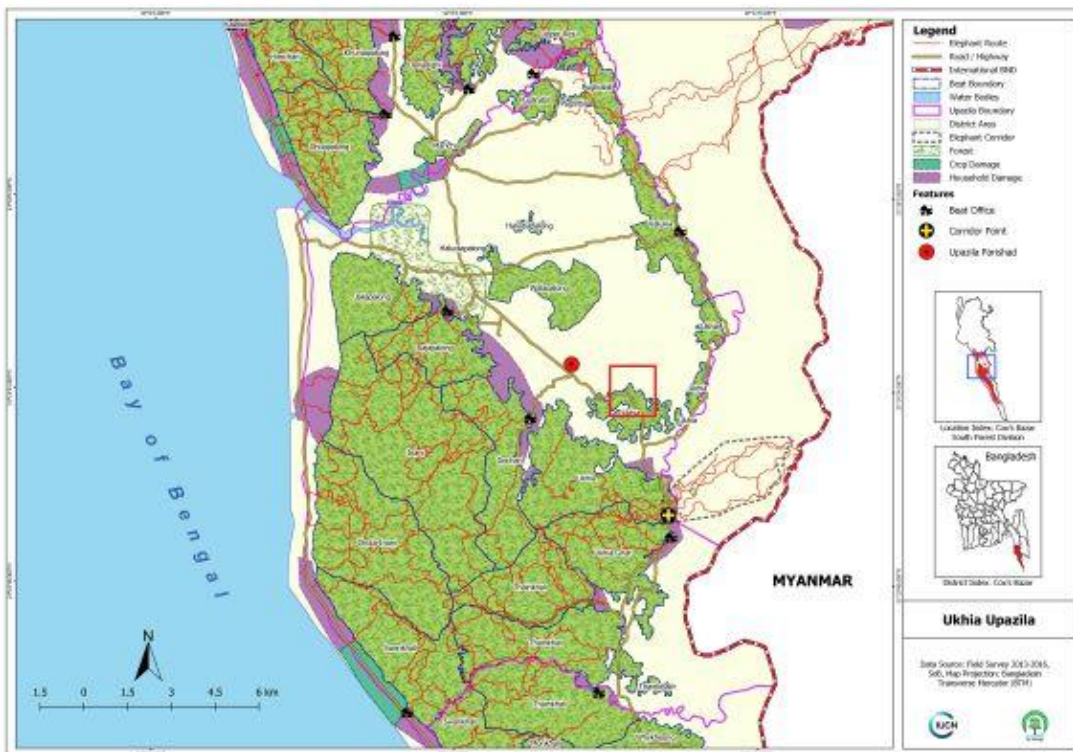
reveals, there is no elephant migration routes within scheme area(**Map-02**).





Figure\_01: Proposed community Latrine's location at Ukhiya Degree College, Ukhiya.

Map-01: Location of proposed sub-project site at Ukhiya Degree College, Ukhiya





**Map-02: Elephant Migration Routes in and around the Ukhiya Upazila area.**





## Environmental and Social Screening Form

### Section A: Sub-project Overview

#### Work Package: WD-06 Construction of Community Latrine

**Description of sub-project/component interventions:**

In the sub-project area, there is no adequate proper sanitation facility and water for washing but electric supply is there. Hence, subproject areas Rohingyas (for a while), teacher and students have been suffering for long time for lacking of proper sanitation. In this context, DPHE has decided to meet up the necessity by constructing the community latrines under package EMCRP/ DPHE/WD-06, with ensuring following accessibility:

- i). Construction of Latrine with Septic Tank Soak well & hand washing facilities
- ii) Internal Electrification, solar systems
- iii) Installation of Deep Tube well
- iv) Supply and Installation of Solar pump
- v) Post Commissioning Operation & Maintenance work (like changing of damaged lock, cleaning of containment chamber, etc.).

**Sub-project Location:**

Community Latrines are located at Ukhiya Degree College at Rajapalong Union under Ukhiya Upazila of Cox's Bazar District. The proposed site is high and plain land (**Figure-1 and Map-1**). Pucca/bituminous road is very close to the site.

**Land ownership:** Land is 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: Ukhiya Degree College at Rajapalong Union, Ukhiya.
- Impacted area: Approx. 40 square meter per Community Latrine
- No structures, trees and livelihood 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 Latrines (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).

## Section B: Environmental Screening

### B.1: Environmental feature of community Latrine 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 terrains are disturbed for the construction of community Latrines and deep tube well. 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.** now there is no existence of Elephant corridor/route.

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

**No.** Now there is no original forest in this area.

**(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). However, increasing construction development program in the area recently responsible for dust pollution.

**Noise:** Noise in the sub-project area is not a major concern based on the discussion.

#### Baseline soil quality:

Soil types are alluvial reddish brown, muddy & sandy soil. The soils developing from the weathered sandstones tend to be sandy to clay loams. Presence of organic matter content in the soil is moderate.

#### Landslide potential:

##### (high/medium/low, with explanation):

**Low.** Potential erosion/land slide may occur when moderately to highly sloping terrains are disturbed for the construction of community Latrine and deep tube well site. The impacts are negative but very small scale, site-specific within a relatively small area and minimized by mitigation measures.



**Baseline surface water and groundwater quality (FE, TDS, fecal coliform, pH):**

**Surface water quality:** No surface water.

**Groundwater quality:** Groundwater is the main source of potable water in the Sub-project area. The shallow depth is about 100 feet and deep tube well depth is 500ft to 750ft. In the sub-project area, groundwater is saline and arsenic free. Shallow tube well 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  $\mu$ s/cm, Fe\_0.50 to 1.5 mg/l, Mn\_0.01 to 0.08 mg/l, Chloride\_10 to 65 mg/l and As \_ Nil to 0.001 mg/l. (Tube well depth: 500 ft. to 750 ft.). Many shallow tube wells have been installed in the camp and surrounding area. This has resulted in excessive withdrawals of water from the shallow aquifer and a drying up of some of the wells.

*\*Data source: Secondary data and field survey.*

**Status of wildlife movement:**None

**State of forestation:**To establish the Ukhiya Degree College, no forest was present in the Ukhiya Degree College area.

**Summary of water balance analysis (For water supply scheme only):**N/A

**B.2: Pre construction Phase**

**Information on Ancillary Facilities (e.g. status of access road or any other facility required for sub-project to be viable):**

Regarding ancillary facilities at the concerned community Latrine scheme area under this sub-project the Ukhiya Degree College connecting pucca/bituminous 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, bricks, cement, rods, solar panel, steel color coated industrial roofing sheet, sanitary materials, iron & wooden frame and bentonite sacs etc.) to the construction site.

**Requirement of accommodation or service amenities (Latrine, water supply, electricity) to support the work force during construction:**

There are scarcity of Latrines and water supply, but electricity supply system is available in the sub-project area. If there are women labors proper lighting facilities should arrange, by using solar light, charger light, etc. Water supply and sanitation will be arranged for the labors also.

**Possible location of labor camps:**

Within the scheme area and very close to the sub-project sites.

**Requirement and type of raw materials (e.g., sand, stone, wood, etc.):**

i) Bricks, ii) Sand iii) Cement iv) uPVC pipe v) Gravel vi) Tiles vii) Sanitary materials viii) Water ix) Iron flat bar x) solar panel xi) Steel Color Coated



Industrial Roofing Sheet etc. are the most common type materials used in construction.
<b>Identification of access road for transportation (Yes/No):</b> <b>Yes.</b> This selected site is very close to the pucca road.
<b>Location identification for raw material storage:</b> Adjacent to the Community Latrine locations and very close to the construction sites. The land is arranged & rented by the contractor, not by the project.
<b>Type and quantity of waste generated (e.g., Solids wastes, liquid wastes, etc.):</b> <b>Solid waste:</b> At pre-construction phase, quantity of generation of waste would be minimum. Because except site clearing work there will have no other source of waste generation significantly. It is predicted that, approximately 350-400kg waste may be produced per community Latrine site.
<b>Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:</b> During site visit, it is observed that, no vegetation clearing work is needed there to implement the sub-project. About 40 sqm land would be required for per site. Contractor will arrange designated stack yard for material and equipment so that momentary interference of community people and traffic movement is not interrupted. In addition, contractor will dispose the generated waste regularly in designated waste dump site.
<b>Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors: (High/Medium/Low with explanation):</b> <b>Low.</b> There is no possibility of stagnant water accumulation in borrows pits reported around or adjacent to the sub-project area.
<b>Disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes): (High/Medium/Low with description):</b> <b>Low.</b> Within 10 ft. there is a natural drain and within 10m, there is low land in west site. But during pre-construction phase impact is negligible.
<b>Destruction or damage of terrestrial or aquatic ecosystems or endangered species directly or by induced development: (High/Medium/Low with description):</b> <b>Low.</b> Under this scheme establishment intervention, the effect of destruction or damage of endangered species is negligible.
<b>Activities that can lead to landslides, slumps, slips and other mass movements in road cuts:</b> In pre-construction phase, stock piling of raw materials will not create land slips, if careful selection of stock pile locations and ensuring large amounts will not be stored in one place.



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

Because of construction materials transportation noise & air pollution may occur. But this impact is very low because during pre-construction stage construction materials transportation is very minimal.

*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 and Deep Tubewell construction site. However, 450 kg of waste may be produced per community Latrine.

**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 Tube well construction site. However, 750 kg of waste may be produced.

**Type and quantity of raw materials used (wood, bricks, cement, water, etc.):**

i) Bricks, ii) Sand iii) Cement iv) uPVC pipe v) Gravel vi) Tiles vii) Sanitary materials incl. 1,000L plastic tank viii) Water ix) Iron flat bar x) solar panel xi) Steel Color Coated Industrial Roofing Sheet etc. The exact quantity of raw materials to be used for each toilet are shown in the BoQ (Bill of Quantities) of the Cont. Pkg. WD-.6 Construction of Community Latrines.

**Approx. area (in square meters) of vegetation and soil in the right-of-way, borrow pits, waste dumps, and equipment yards:**

No vegetation presence in proposed sub-project construction sites. So, vegetation will not be affected by construction work.

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

**Low.** Water reservoir for tubewell drilling will be required. These can potentially store stagnant water for short period of time during and after rain events. The top soils in the sub-project are sandy and the water should drain away quickly.





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

**Low.** Within 10 ft. there is a natural drain and within 10m, there is a low land. The low land water can be contaminated (during monsoon) if generated construction waste is dumped within the area. But this chance is minimal. This impact is very much site specific & with proper management it is possible to mitigate.

**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 intervention, the effect of destruction or damage of endangered species is very low.

**Activities that can lead to landslides, slumps, slips and other mass movements in road cuts:**

Construction of the sub-project components can lead to low scale effects of land slide/slips. The impacts are expected to be negative, short-term and site-specific within a relatively small area and can be minimized by mitigation measures.

**Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains:**  
**(High/Medium/Low with description):**

**Low.** Potential erosion may occur when moderately to highly sloping terrains are disturbed for the development of community latrine and deep tubewell especially site. The impacts are expected to be negative, small scale, site-specific within a relatively small area and minimized by mitigation measures. Adequate safety protection will be taken during construction time.

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

Yes, traffic movement impacts on light as well as effects of noise and air pollution can occur due to traffic movements for construction materials transportation.

**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 schemes, improper use of personal protective equipment (PPE) and lack of safety procedures may cause injuries. However, this will be a localized and temporary activity.

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



<p><b>Low.</b> Low chance of long-term or semi-permanent destruction of soils for community latrine scheme area.</p>
<p><b>Possibility of odor and water, soil quality impacts from SWM and FSM disposal system:</b> <i>(High/Medium/Low with description):</i></p> <p><b>Medium.</b> Sludge from community latrines will be generated. The sludge will be disposed properly in camp waste management facilities. Sludge will be collected by using vacuum truck with 50m suction pipe. It hopes that, it will be possible to collect fecal sludge from community latrine using vacuum truck. In some cases, if manual pit emptying is required then proper pit emptying guidelines will be followed. Labors should use proper PPEs like hand gloves, safety boots, face masks, eye protecting glasses, etc.</p>
<p><b>Possibility of stagnant water bodies in borrow pits, quarries, etc., encouraging for mosquito breeding and other disease vectors:</b> <i>(High/Medium/Low with explanation):</i></p> <p><b>Low.</b> There are very low possibilities of stagnant water deposition in operation period. It may occur due to leaking of Latrines, tubwells and/or water storage tanks.</p>
<p><b>Likely direct and indirect impacts on economic development in the project areas by the sub-project:</b></p> <p>Community Latrine with water supply system will be helpful of the Rohingya, Teacher &amp; Students and improve their health condition.</p>
<p><b>Extent of disturbance or modification of existing drainage channels (rivers, canals) or surface water bodies (wetlands, marshes):</b> <i>(High/Medium/Low with description):</i></p> <p><b>Low.</b> Within 10 ft. there is a natural drain and within 10m, there is a low land. This low land water (during monsoon) can be contaminated if generated waste from septic tank or soak well get contact with road side drain water by runoff of precipitation. It will be possible because of septic tank leakage or improper disposal of generated sewage waste from community Latrine. But this chance is minimal. This impact is very much site specific &amp; with proper management it is possible to mitigate.</p>
<p><b>Extent of destruction or damage of terrestrial or aquatic ecosystem so endangered species directly or by induced development:</b> <i>(High/Medium/Low with description):</i></p> <p><b>Low.</b> Operation and maintenance activities of community latrine schemes will be localized and temporary in nature.</p>
<p><b>Activities leading to landslides, slumps, slips and other mass movements in road cuts:</b> N/A</p>
<p><b>Erosion of lands below the road bed receiving concentrated outflow carried by covered or open drains:</b> N/A <i>(High/Medium/Low with explanation):</i></p>
<p><b>Describe possible traffic movement impacts on (unwanted) light, noise and air pollution:</b></p> <p>Temporary, localized impacts on noise and air pollution from maintenance vehicles movement can occur during septic tank &amp; latrine maintenance</p>



work. 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
<p><b>Will the project potentially involve an influx of workers to the project location, and will the influx be considered significant for the local community?</b></p>	<p>The number of total skilled Labor is 2-3 and unskilled labor 3-5 per community latrine. All the unskilled labor will be engaged from the local community. No foreign labor will be engaged. All the skilled labor will be staying at labor shed outside the college boundary. The size of the labor shed (If there is women labor need to have separate shed and toilet) will be 225 square feet.</p>
<p><b>Is the project located in a rural or remote area?</b></p>	<p>The project area is in Ukhiya Degree Collegedemarcated by the Government and belongs to college authority.</p>
<p><b>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?</b></p>	<p><b>No.</b> It is not expected that the presence of the skilled (local) and unskilled labor may generate any adverse impacts.</p>
<p><b>Consultation with relevant stakeholders (SH)</b></p>	<p>During screening and site identification DPHE has conducted one individual consultation with the stakeholders. The stakeholders include CiCs, WASH Sector, Site Management Committee representatives, Contractor team and College authority.</p>



### C.2 Land acquisition and stakeholder screening

Probable Involuntary Resettlement Effects	Yes	No	Not Known	Remarks
<b>Involuntary Acquisition of Land/ Land Donation/ Land Taking</b>				
1. Will there be any land acquisition?		√		Land acquisition is not needed.
2. Is the project construction site known?	√			Construction sites are within Ukhiya Degree College area
3. Who manages the land?	√			The lands are solely owned by the GoB and currently vacant.
4. Will easement be utilized within an existing Right of Way (ROW)? CRP (Common Resource Property)	√			In the college area provision is available be utilized within an existing Right of Way (RoW) within the DRP Camps, Ukhiya area under EMCRP (DPHE part).
5. Will there be loss of DRP tent, agricultural carps, trees, and other productive or fixed assets due to project intervention?		√		No DRP shelters and other assets will be affected.
6. Will there be loss of businesses or enterprises due to project intervention?		√		No
7. Will there be loss of income sources and means of livelihoods due to project intervention?		√		No
<b>Involuntary restrictions on land use or on access to legally designated parks and protected areas</b>				
8. Will people lose access to natural resources, communal facilities and services?		√		No
<b>Information on Displaced Persons:</b>				
9. Any estimate of the likely number of persons that will be displaced by the Project? [ <input checked="" type="checkbox"/> ] No    [ <input type="checkbox"/> ] Yes If yes, approximately how many?				





<b>10. Are any of them poor, female-heads of households, or vulnerable to poverty risks?</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
<b>11. Are any displaced persons from indigenous or ethnic minority groups?</b> <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes
<b>12. Who are the stakeholders of the project? Please provide a summary of consultation meetings with stakeholders and the affected community.</b> <p>The key stakeholders of this sub-projects are mainly the Rohingya community, Teacher, Student, Labors, People/Communities/Organizations within the project influence area indirectly affected by project activities, relevant government departments/agencies, Environment and Forest Department, Development Partners (WASH Cluster, UNHCR, WFP, IOM) and Local and international NGOs working with local host communities/DRP.</p> <p>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 Ukhiya Degree College area, so it was not possible to conduct group consultation meeting. Only one-to one interview with college teachers, 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: College authority (one to one interview) and different organization representative who are concern about the subproject.</p> <p><b>Feedback, Suggestions, and Recommendations of the Participants FGD</b></p> <p>The participants' feedback, suggestions, and recommendations listed below:</p> <ul style="list-style-type: none"><li>• Most of the participants expressed that the number of community latrine within the Ukhiya Degree College area is not sufficient, for proper sanitation they need more sanitary latrine or community latrine.</li><li>• They emphasized for the construction of the community latrine with provision of water supply and washing facilities for ensuring hygiene;</li><li>• Participants showed highly anxious about its operation and maintenance. In this regard, they suggested confirming who will take responsibilities for operation and maintenance. DPHE response that, responsible contractor will do maintenance work up to contractor's O&amp;M period, after that DPHE will do the maintenance work.</li><li>• They wanted climate resilience design of each proposed intervention so that its more durable;</li></ul>



Individual level consultation with project interest and influence parties (College authority, CiC, Camp Wash focal team, 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 College authority, CiC/Site Management:**

- Always try to coordinate with related authority/group and give updates to CiC. DPHE will always coordinate with all relevant authority & will give update to CiC.
- CiC is ready to support DPHE, if DPHE face any obstacle to implement the Community Latrine 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 be located in the elephant migration corridor. Hence, elephant migration road map set by the IUCN/UNCHR should follow during site selection. DPHE response that, during site selection this point was considered.
- They requested to inform them, if project face any elephant incident during implementation.

**RRRC:**

- For development work of this sub-project anywhere in camp area and close to the camp area, project proponent needs to be taken approval from RRRC with the recommendation of camp-based concern authority along with the cooperation of local DPHE officials. DPHE response that, before starting the construction work DPHE will take clearance from the relevant authority.

**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, needs, interest and capacity in the project areas.

**15. What will be the impact of the project or sub-project on the various stakeholders?**



**Positive Impact:**

In the study area (Ukhiya Degree College), there is no satisfactory number of sanitary latrines. After construction of the community latrine in the proposed site, 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, R 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, unless latrines remain dirty and smelly and overflowed of human feces for poor maintenance. 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 and surrounding area, 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 RRRC/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 college and communities
<b>Government Organizations</b>	RRRC,	<b>Mr. Shah Rezwon Hayat</b> , RRRC Commissioner, CXB, Email <a href="mailto:rrccox@yahoo.com">rrccox@yahoo.com</a>	Overall Coordination of GOB dept. Dev. partners, NGO, INGIO, UN Agencies, Volunteers,	DRP peoples, synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication.
	DPHE,	<b>Mr. Engr. Ritthick Chowdhury</b> , DPHE, Executive Engineer, CXB, Email. <a href="mailto:chowritthick@gmail.com">chowritthick@gmail.com</a>	Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management,	
	DC	<b>Md. Mamunur Rashid</b> <a href="mailto:dccoxsbazar@mopa.gov.bd">dccoxsbazar@mopa.gov.bd</a>	Ensuring DRP HH shelter, F/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.	
<b>UN Agencies /INGOs</b>	Principal	<b>Mr. Ajit Kumar Dash</b> Principal (In-charge) Ukhiya Degree College. <a href="mailto:ukhiya_college@yahoo.com">ukhiya_college@yahoo.com</a>	Management of DRP Crisis in BD. Refugee Relief and Repatriation, Site management,	Synchronizing with Host, E&S aspects, Elephant corridors, conserve NR. Establish proper road communication.
	Chairperson of Governing Body, Ukhiya Degree College	<b>Mr. Nizam Uddin Ahmad</b> Chairperson of Governing Body Ukhiya Degree College and UNO, Ukhiya Upazila.	Ensuring DRP HH shelter/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.	
<b>National Organizations</b>	Not yet on boarded	the database web link <a href="https://www.humanitarianresponse.info/en/operations/">https://www.humanitarianresponse.info/en/operations/</a>		



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Type of Social Institutes/bodies	Name of Institution	Contact Person and Address and phone number	Primary areas of Work	Coverage areas in the college and communities
		<a href="#">bangladesh/document/wash-sector-coxs-bazar-members-contact-list-17-october-2017</a>		
<p><b>Community based Volunteer Organizations</b> are those, which constitute the members of the community working towards social development.</p>	<p>Not yet involved</p>	<p>N\ A. Prohibited by the GoB.</p>	<p>Ensuring DRP HH shelter, F/NFIs, WASH facilities, Education, Health, Livelihoods, Social security, power sources, renewable solar energy.</p>	





## 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 <b>low</b> .	<ul style="list-style-type: none"> <li>Limiting earthworks;</li> <li>Watering of dry exposed surfaces and stockpiles of aggregates at least twice daily, as necessary; (spreading of crushed gravel over backfilled surfaces;</li> <li>Work place isolated by fencing active work sites in populated areas.</li> <li>Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph.</li> <li>More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Location of stockpiles;</li> <li>Number of complaints from stakeholders;</li> <li>Covering of trucks;</li> <li>Records of air quality inspection;</li> </ul>	Regular visual monitoring will be required
	Soil Erosion	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>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</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>No visible degradation to nearby drainages,</li> <li>Canals or water bodies due to soil erosion.</li> <li>Rain storms in</li> </ul>	Weekly, especially after rain events



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
			<p>developed by the Contractor.</p> <ul style="list-style-type: none"> <li>The earthwork sites where exposed land surface is vulnerable to runoff shall be consolidated and/or covered.</li> <li>Channels, earth bunds, netting, tarpaulin and or sand bag barriers shall be used on site to manage surface water runoff and minimize erosion.</li> <li>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.</li> <li>More details provided in ESMP</li> </ul>		construction phase.	
	Hydrology (surface and groundwater)	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>All precautions to store chemicals/oil/fuel properly so that no chance of spill.</li> <li>Proper disposal of excess bleaching power and care should be taken to follow the appropriate procedure for</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Areas for stockpiles, storage of fuels and lubricants and waste materials;</li> <li>No visible degradation to nearby drainages,</li> </ul>	Water quality test (SW & GW) once in construction period and Operation period. Training records reviewed



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
			<p>chlorination.</p> <ul style="list-style-type: none"> <li>• Monitor water quality according to the environmental management plan.</li> <li>• 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.</li> <li>• More details provided in ESMP</li> </ul>		<ul style="list-style-type: none"> <li>• khals or water bodies due to construction activities.</li> <li>• For surface water quality parameters: pH, DO, BOD, COD, TC, FC</li> <li>• For groundwater quality parameters: pH, Chloride, As, Fe, TC, FC</li> <li>• Training records</li> </ul>	quarterly
<b>2: Pre-construction Phase</b>	Safe Sanitation, water supply	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>• Provide suitable housing, adequate supplies of potable water, and Latrine and bathing facilities within the housing area for the assigned laborer.</li> <li>• Provide means for disposing of wastewater from latrines, baths and food preparation areas either through a septic tank and soak away, or holding tank with removal by vacuum truck.</li> <li>• More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>• Site-specific H &amp; S Plan;</li> <li>• Records of supply of uncontaminated water;</li> <li>• Record of Health &amp; Safety orientation trainings;</li> <li>• Condition of sanitation facilities for workers</li> </ul>	Visual 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
	Storage of construction materials can cause pollution or land slips	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>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.</li> <li>More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>List of materials and sources of materials;</li> <li>Storage site away from steep slopes and has proper bunding</li> </ul>	Weekly
	Transportation impacts	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>All vehicle movement (for construction purpose) inside the Ukhiya Degree College to be done during the day time</li> <li>Speed needs to be limited to 20kmph</li> <li>Contractor's responsibility to verify the suitability carrying, loading and unloading of materials by trucks or others transport and head load arrangement.</li> <li>More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Check the vehicle pool.</li> <li>Record of regular inspection.</li> <li>Record of accidents/ incidents</li> </ul>	Monthly monitoring.
<b>3: Construction Phase</b>	Wastes (earth, mud) causing pollution	Under the sub-project intervention, the overall score is <b>medium</b> .	<ul style="list-style-type: none"> <li>Prepare and implement drilling mud and water runoff management plan approved by PMU.</li> <li>Wastes must be placed in the designated bins which must be regularly</li> </ul>	<ul style="list-style-type: none"> <li>Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Regular inspection of waste management activity;</li> <li>Waste disposal record.</li> </ul>	As work weekly progresses



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
			<p>emptied.</p> <ul style="list-style-type: none"> <li>All waste must be removed from the site and transported to a disposal site.</li> <li>More details provided in ESMP</li> </ul>			
	Stagnant water risk	Water reservoir for tubewell drilling will be required. These can potentially store stagnant water for short period of time during and after rain events. <b>Low.</b>	<ul style="list-style-type: none"> <li>Water stagnant area should be fenced with marking tape</li> <li>The top soils in the sub-project are sandy and the water should drain away quickly</li> <li>After construction of tube well, backfilling &amp; compaction of water storage (which is used during drilling) pit is essential</li> <li>Contractor should arrange proper water pumping facilities (pup, etc.)</li> <li>Proper PPEs are essential during construction work.</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor foreman and monitored by Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Water stagnant beside community Latrine area</li> </ul>	Daily during construction
	Storage of materials (Creating dust/ air pollution spillage of liquid/ hazardous substance i.e., oil, drilling fluid,	Under the sub-project intervention, the overall score is <b>medium.</b>	<ul style="list-style-type: none"> <li>By the college management committee to identify the storage site and other requirements, which will be approved by PMU and consultants.</li> </ul>	<ul style="list-style-type: none"> <li>Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>List of materials and sources of materials;</li> </ul>	Monthly basis during implementation phase.



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	chemicals etc., Risk of crime)		<ul style="list-style-type: none"> <li>• More details provided in ESMP</li> </ul>			
	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 <b>Low</b> .	<ul style="list-style-type: none"> <li>• Generated waste and construction debris shall be properly disposed in accordance with the approved designated disposal site(s);</li> <li>• 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).</li> <li>• Separate waste collection bins, for organic and inorganic wastes, shall be provided throughout the construction sites, whereby all waste collection bins shall be regularly emptied and cleaned;</li> <li>• Contractor will be responsible to control the workers from discharging of construction waste into adjacent water bodies.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>• Frequency of emptying the waste bin</li> <li>• Existence of waste bin</li> </ul>	Monthly basis during implementation phase.
	Erosion of land	Erosion/land slide may occur very small scale near	<ul style="list-style-type: none"> <li>• During construction work (specially for earth excavation) proper slope</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Contractor foreman and</li> </ul>	<ul style="list-style-type: none"> <li>• No visible degradation to nearby drainages</li> </ul>	Daily during earth excavation work





Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
		construction areas of Latrines, sock well, PTW and the overall score is <b>Medium.</b>	<p>protection is essential.</p> <ul style="list-style-type: none"> <li>• During backfilling work proper compaction is essential (as per specification)</li> <li>• Avoid earthwork during moonson</li> <li>• Proper PPEs are essential during construction work.</li> </ul>	monitored by Consultant and PMU	or water bodies due to soil erosion at/near sub-project site.	& work below GL
	Noise pollution	Under the subproject intervention the overall score is <b>Low</b>	<ul style="list-style-type: none"> <li>• Consultation with affected people; not to operate noisy equipment during working and operations time (22:00 – 06:00);</li> <li>• Sound suppression for equipment;</li> <li>• Ear protection for workers.</li> <li>• Conduct noise quality monitoring as per ESMP.</li> <li>• Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph.</li> <li>• Transportation of the construction materials and noisy construction work have to be carried during the scheduled times, and mainly during</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Contractor and monitored by Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>• Number of complaints from stakeholders; Use of silencers in noise-producing equipment and sound barriers;</li> <li>• Noise Level following decibel meter (dB)</li> </ul>	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
			the day			
	Air pollution	Under the sub-project intervention, the overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>Water spraying from other source for dust control;</li> <li>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.</li> <li>More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor and monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>Location of stockpiles;</li> <li>Number of complaints from stakeholders;</li> <li>Records of air quality inspection; Air quality test report.</li> </ul>	Regular visual monitoring will be required
<b>4: Operational Phase</b>	Injuries to operation and maintenance workers	Site staff can be seriously hurt by accidents. <b>Low</b>	<ul style="list-style-type: none"> <li>Ensure proper training given to all staff</li> <li>Ensure PPE used by all staff</li> </ul>	<ul style="list-style-type: none"> <li>Camp WASH NGO staff</li> <li>DPHE XEN</li> </ul>	<ul style="list-style-type: none"> <li>Accidents register</li> </ul>	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 <b>low</b> .	<ul style="list-style-type: none"> <li>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.</li> <li>More details provided in ESMP</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor weekly monitored by Environmental Consultant and PMU</li> </ul>	<ul style="list-style-type: none"> <li>No visible degradation to nearby drainages or water bodies due to soil damage at pipe laying area.</li> </ul>	Site inspection weekly/2-weekly in rain season.



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
	Odor & waste disposal of sludge from community latrine	Under the issue the overall score is <b>Medium</b>	<ul style="list-style-type: none"> <li>• Ensure use of vacuum tanker/pump to collect desludged material &amp; dumping to proper dumping site</li> <li>• Appropriate awareness programs shall be arranged for the community members on health and hygiene issues and the impacts of improper sanitation practices;</li> <li>• Ensure disposal tanks, drums or containers coming to, and from, the site are in a satisfactory condition – check for damage or leaks;</li> <li>• Ventilation systems and facilities shall be kept in good functional in order to minimize untoward odor problems,</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Contractor for first 2 years monitored by Environmental Consultant and PMU</li> <li>• Long-term responsibility to be determined by CIC/DPHE</li> </ul>	<ul style="list-style-type: none"> <li>• Complaints from communities</li> </ul>	Site inspection daily/weekly basis.
	Stagnant water risk	<b>Low.</b> There are very low possibilities of stagnant water deposition in operation period. It may occur due to leaking of latrines, tub wells and/or	<ul style="list-style-type: none"> <li>• Regular naintenance of septic tank, sock well &amp; tube well is essential</li> <li>• If any leakage is found anywhere, it needs to be repaired quickly.</li> </ul>	<ul style="list-style-type: none"> <li>• Construction Contractor for first 2 years monitored by Environmental Consultant and PMU</li> <li>• Long-term responsibility to</li> </ul>	<ul style="list-style-type: none"> <li>• Water stagent beside community latrine area</li> </ul>	Monthly Site inspections



Section	Main Environmental and Social Impacts	Impact Significance	Suggested Mitigation Measures	Person/ Institution Responsible	Monitoring Suggestions	
					Indicators	Frequency
		water storage tanks.		be determined by CIC/DPHE		
	Noise pollution	Under the subproject intervention the overall score is <b>Low</b>	<ul style="list-style-type: none"> <li>Limiting speed of maintenance vehicles in access roads and work sites to maximum of 20 kph.</li> <li>Transportation of the fecal sludge &amp; other liquid waste have to be carried during the scheduled times, and mainly during the day</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor for first 2 years monitored by Environmental Consultant and PMU</li> <li>Long-term responsibility to be determined by CIC/DPHE</li> </ul>	Noise from maintenance vehicle	During Maintenance work
	Impact on Aquatic Environment	Aquatic environment may pollute by discharging fecal sludge & liquid waste to the surface water. But impact is site & time specific so overall score is <b>low</b> .	<ul style="list-style-type: none"> <li>Ensure use of vacuum tanker/pump to collect desludged material &amp; transport to nearest Fecal Sludge treatment facility</li> <li>Appropriate awareness programs shall be arranged for the community members on health and hygiene issues and the impacts of improper sanitation practices;</li> <li>Ensure disposal tanks, drums or containers coming to, and from, the site are in a satisfactory condition – check for damage or leaks;</li> </ul>	<ul style="list-style-type: none"> <li>Construction Contractor for first 2 years monitored by Environmental Consultant and PMU</li> <li>Long-term responsibility to be determined by CIC/DPHE</li> </ul>	<ul style="list-style-type: none"> <li>Survival rate of nearby aquatic animal;</li> <li>Recorded any incident on aquatic animal</li> <li>Recorded complaint if any</li> </ul>	During septic tank cleaning work.



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 <b>low</b> .	<ul style="list-style-type: none"> <li>Limiting speed of construction vehicles in access roads and work sites to maximum of 20 kph.</li> <li>More details provided in ESMP</li> </ul>	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"> <li>Dust due to vehicular movement</li> </ul>	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 sites within this Ukhiya Degree College. The sub-project location was selected with the support of RRRRC, CiC, College Authority, SMC and local DPHE. Individual consultation was also done with teachers & students 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 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 sub-project intervention is 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 establishment scheme will be executed by the contractor who will engage both skilled (2-3 nos.) & unskilled (3-5 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 Ukhiya Degree College 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 in **Appendix-4**.

#### Linkage with other stakeholders:

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

#### GBV issues:

The proposed sub-project activities will involve minor civil works through skilled (from the host community) and unskilled (from the DRP community) labor. A strict labor code of conduct will be enforced. A GRM will be established to deal with related issues. The team will conduct consultation meetings with the DRP, contractors and labor to address GBV. 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. GBV issues will be monitored & monitoring progress will be incorporated within monthly progress report.

Beyond of these, under the UNFPA 9th Country Programme “Advanced gender equality, women’s and girls’ empowerment, and reproductive rights, including for the most vulnerable and marginalized women, adolescents and youth” will be achieved as the project is a part of Gender Component of the UNFPA 9th Country Programme. 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.

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, 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.

### **Consultations and Future Consultations:**

Under the EMCRP, the DPHE has initiated elaborate consultations with various stakeholders of this project for the Community Latrine Schemes 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 college authority. 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, WASH, hygiene, GBV, forestation, waste, sludge management. It was also determined that there is no Elephant movement corridor and no scope of Elephant/Human conflict in the site area. The college authorities were made aware and sensitized on E&S safeguard issues, precautions, child safety and compensation mechanisms in the event of any objection and complaints. As a result of these consultations, the college authority very much welcomed and appreciated the local DPHE, PMU EMCRP initiatives on WASH sector sub projects. As per their opinion, 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 impacts are being mitigated with due consideration of community needs and opinions.

### **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:

- DPHE has oriented the contractor and labor on Covid-19 management including OHS (Occupational Health Safety).
- 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 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, 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)

Considering the intervention wise construction activities of proposed site probable impact with consequence mitigation measures have been designed (as an ESMP) in the following table for Community Latrine (1 no.) at Ukhiya Degree College, Rajapalong Union, Ukhiya.

Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Institutional Responsibilities	Supervision Responsibility
<b>Pre-Construction Stage</b>	Assessment of Social Impacts and Risks	<ul style="list-style-type: none"> <li>To meet the requirements for disadvantaged and vulnerable directive:</li> <li>Include COVID positive individuals, households and clusters as vulnerable category in Social Assessment TORs, surveys and consultations (particularly relating to social stigma);</li> <li>Consult with such COVID positive households to Identify specific support mechanisms that projects could support;</li> <li>Add tribal communities in self isolation under vulnerable groups who may need suitable and socially acceptable support;</li> <li>Use alternative and virtual and video means for consultations and interactions.</li> </ul>	PMU	Social Development & Hygiene Promotion Consultant of PMU
<b>Pre-Construction Stage</b>	Loss/source of livelihoods	<ul style="list-style-type: none"> <li>Under this sub-project, there is no scope of negative impact of livelihoods.</li> <li>Ensure engagement of local labor as unskilled worker</li> </ul>	Contractor	Social Development & Hygiene Promotion Consultant of PMU
<b>Pre-Construction Stage</b>	Stakeholders Engagement	<ul style="list-style-type: none"> <li>All the project stakeholders will be engaged in consultation process</li> <li>Consultation meeting with will be held contractors and labors about safe guard issues.</li> </ul>	PMU & Contractor	Social Development & Hygiene Promotion Consultant of PMU
<b>Pre-Construction Stage</b>	Loss of Access rights	<ul style="list-style-type: none"> <li>Prior to start the work, contractor will inform the community people to use alternative roads;</li> </ul>	Contractor	Social Development & Hygiene Promotion



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<ul style="list-style-type: none"> <li>• Construction work will be completed in quick time as much as possible to reduce the hassle of community</li> <li>• Project to ensure thorough analysis of alternatives that access enjoyed by the community remains intact.</li> <li>• In case of unavoidable circumstances, alternative access will be provided.</li> </ul>		Consultant of PMU
<b>Pre-Construction Stage</b>	Improper site selection for proposed intervention can be a cause of HEC at subproject site.	<ul style="list-style-type: none"> <li>• Selection of sub-project sites will be outside of the elephant route/corridor/influenced area;</li> <li>• Before finalized the location of sub-project must be contact with camp wash focal as well as UNHCR or IUCN;</li> <li>• Construction equipment and material storage place should be prohibited on the path of elephant migration;</li> <li>• 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.</li> </ul>	PMU	Environmental Consultant of PMU, IWM,
<b>Pre-Construction Stage</b>	Site Preparation: Soil Erosion; Alteration of natural drainage	<ul style="list-style-type: none"> <li>• Vegetation clearing work not to be done more than required area of proposed intervention;</li> <li>• 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.</li> <li>• Minimize cut &amp; fill operations, the site clearing and grubbing operations should be limited to specific locations only.</li> <li>• The existing slope and natural drainage</li> </ul>	Contractor	Environmental Consultant of PMU, IWM



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<p>pattern on the site should not be significantly altered because construction material/equipment will be stored in selected place with sufficient earthen drainage facilities around to ensure continuous connection with nearby natural water body</p>		
<b>Construction Activity</b>	<p>Noise pollution will occur due to use of diesel-based construction equipment/vehicles movement</p>	<ul style="list-style-type: none"> <li>• Construction activity will be at daytime, not more than 4.00 pm. However, for some work like deep tube well drilling, contractor will be responsible for using noise abating gear such as mufflers for effective sound reduction in powered mechanical equipment and machineries development;</li> <li>• Contractor will confirm proper measures for avoiding any disturbance of residents as well as biodiversity.</li> <li>• Ensure use of the personal protective equipment's (helmet, goggles, gloves, safety boot) during cutting and welding of the reinforcement and during drilling work;</li> <li>• Availability and access to first-aid equipment and medical supplies in case of any accidents.</li> <li>• Contractor will confirm proper measures for avoiding any disturbance of residents as well as biodiversity.</li> <li>• All construction activities which cause noise pollution, should be stopped during prayers.</li> </ul>	Contractor	Environmental Consultant of PMU, IWM
<b>Construction</b>	<p>Air quality will degrade due to dust blowing from</p>	<ul style="list-style-type: none"> <li>• Construction machinery shall be properly maintained to minimize exhaust emissions of</li> </ul>	Contractor	Environmental



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Institutional Responsibilities	Supervision Responsibility
<b>Activity</b>	earthwork, transportation of waste or fine material and emission of construction vehicles.	CO <sub>2</sub> , particulate matter (SPM, PM <sub>2.5</sub> and PM <sub>10</sub> ) and Hydrocarbons. <ul style="list-style-type: none"> <li>• Dust generated as a result of clearing, leveling and site grading operations shall be suppressed using water sprinklers.</li> <li>• Dust generation due to vehicle movement on haul roads/access roads shall be controlled through regular water sprinkling.</li> <li>• Carry the materials especially loose soil and sand with adequate cover.</li> <li>• Ensure use of masks to construction workers if dust content is high.</li> </ul>		Consultant of PMU
<b>Construction Activity</b>	Safety Issues/impact may be decline if construction management not works rightly	<ul style="list-style-type: none"> <li>• Unauthorized entry to the site area is completely prohibited and the site will be properly fenced with a single entry, for this purpose</li> <li>• Properly maintained and control store house, storages instruments as well as hazardous materials on the site</li> <li>• Health and safety training will be arranged for the communities' labors before project intervention started.</li> <li>• Labor will bring their proper IDs and wear when they will entry in the sub-project area.</li> <li>• Child labors will not be allowed for any kind of activities</li> <li>• Site shall be secured by fencing and maintained at entry points</li> </ul>	Contractor	Environmental Consultant of PMU, IWM
<b>Construction Activity</b>	Traffic Management	<ul style="list-style-type: none"> <li>• Contractors to provide traffic management plans to be approved by relevant authorities.</li> <li>• If need adequate alternative arrangements will be made to minimize impact on motorist</li> </ul>	• Contractor	Environmental Consultant of PMU, IWM





Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<p>and pedestrians.</p> <ul style="list-style-type: none"> <li>• Adequate road signs to be planted on access roads to limit vehicular speeds.</li> <li>• For access roads, speed ramps will be construct by proper design.</li> <li>• Traffic signs will be made both in Bangla and Rohingya language.</li> </ul>		
<b>Construction Activity</b>	Conflicts with existing users due to the scarcity of resource base.	<ul style="list-style-type: none"> <li>• A detailed assessment of the available resources and consent of the local representative for withdrawal of water from existing surface water sources shall be taken.</li> <li>• If ground water is withdrawn, adequate approvals essential from the appropriate department/authorities before setting up bore wells.</li> <li>• Local community must be consulted before any construction works started</li> </ul>	• Contractor	Social Development & Hygiene Promotion Consultant of PMU, IWM
<b>Construction Activity</b>	Increase in road accidents	<ul style="list-style-type: none"> <li>• The movement of heavy machinery and equipment will be restricted to defined routes.</li> <li>• Proper signage to be displayed at major junctions.</li> <li>• Road diversions and closures to be informed well in advance to the local community.</li> <li>• The vehicular movement will be controlled near sensitive locations viz. schools, colleges, hospitals, mosques, learning center &amp; DRP camps identified along designated vehicular transportation routes.</li> <li>• Local community will be trained up about traffic management and awareness.</li> </ul>	• Contractor	Environmental Consultant of PMU, IWM and DPHE
<b>Construction Activity</b>	Social conflict may arise between camp workers and	<ul style="list-style-type: none"> <li>• An alternate arrangement for fuel wood, heating and cooking required to meet fuel requirement of the labor camps.</li> </ul>	• Contractor	Social Development & Hygiene Promotion



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
	<p>local residence due to different behavior or custom of outsider worker (if any) as well as consumption of natural resource by the camp worker</p>	<ul style="list-style-type: none"> <li>• Alternating cooking arrangement for the HHs living in the sub-project area should be arranged by the contractor;</li> <li>• Contractor will closely monitor all workers so that workers do not involve with local politics as well as sexual harassment, trafficking of women and children.</li> <li>• Contractor will be arranged an awareness building training for the local workers 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 women and children as well as illegal drug trade.</li> <li>• Work force should be prohibited from disturbing the flora, fauna including hunting of animals, wildlife hunting, poaching and tree felling.</li> </ul>		<p>Consultant of PMU</p>
<p><b>Construction Activity</b></p>	<p><b>Waste Management:</b> Generated wastes (earth, mud) from drill of pump may cause of degrade the quality of nearby water quality (if any) and surrounding environment  -Hazardous waste i.e., waste oil, grease from vehicle maintenance also can decline the nearby water quality and surrounding environment if these are not properly</p>	<ul style="list-style-type: none"> <li>• Wastes must be placed in the designated bins which must be regularly emptied;</li> <li>• All waste must be removed from the site and transported to a disposal site;</li> <li>• Working areas are kept clean and tidy at all times;</li> <li>• Construction site is to be checked for spills of substances i.e., chemical, oil, paint, etc.;</li> <li>• Refueling and maintenance of equipment and vehicles should be done in selected confined area with base of impermeable layer (paved) so that waste could not spill and get contact with nearby water body and soil. Waste oil and mobile will be collected and</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>	<p>Environmental Consultant of PMU, IWM</p>



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Institutional Responsibilities	Supervision Responsibility
	managed	<p>subsequently sold to authorized recyclers.</p> <ul style="list-style-type: none"> <li>• The scrap material generated from the erection of structures and related construction activities including generated mud will be collected and stored separately in a stack yard and regularly disposed in designated waste dump area and residue that is carried value will sold to local recyclers;</li> <li>• Hazardous Waste Management Rules should be maintained by the responsible contractor;</li> <li>• Informal training on handling of hazardous waste shall be done regularly by the ES of PMU and Contractor's HSE.</li> </ul>		
<b>Construction Activity</b>	<p><b>Health &amp; Safety Risks</b> may be taken place for following reason to associates worker</p> <p>-The potential for exposure to safety risking 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 hazardous events during construction activities such as manual handling and musculoskeletal disorders, hand-arm vibration, temporary or permanent hearing loss, heat stress, and dermatitis.</p>	<ul style="list-style-type: none"> <li>• All construction equipment will be properly inspected timely.</li> <li>• The risk assessment will be prepared time to time for all types of work activities on site.</li> <li>• Landslide may occur during disaster time, so adequate safety measures will be taken during construction. During construction work (especially for earth excavation) proper slope protection is essential. During backfilling work proper compaction is essential (as per specification). Earthwork will be avoided during monsoon</li> <li>• Proper walkways that are clearly designated as a walkway; all walkways shall be provided with good conditions underfoot; signposted and with adequate lighting.</li> <li>• Proper signpost any slippery areas will be ensured in construction site.</li> <li>• Carry out fire risk assessment for the construction areas, identify sources of fuel and ignition and establish general fire</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor</li> </ul>	<p>Environmental Consultant and Social Development &amp; Hygiene Promotion Consultant of PMU, IWM and DPHE</p>



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
	Fire safety protection	<p>precautions including, means of escape, warning and fighting fire.</p> <ul style="list-style-type: none"> <li>• A system to alert for workers will be setup on site. This may be temporary or permanent mains operated fire alarm.</li> <li>• Fire extinguishers will be located at identified fire points around the site. The extinguishers will be appropriated to the nature of the potential fire.</li> <li>• 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.</li> <li>• Electrical equipment must be safe and properly maintained; works shall not be carried out on live systems.</li> <li>• 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.</li> <li>• An adequate number of staff and first aiders shall be on site in accordance with Bangladesh Labor Law requirements.</li> <li>• 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</li> </ul>		



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<p>site.</p> <ul style="list-style-type: none"> <li>• Emergency evacuation response shall be prepared by the contractor and relevant staff shall be trained through mock-up drills.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• 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.</li> <li>• Adequate quantities of drinking water will be available at different locations within the sub-project area.</li> <li>• Provision to maintain proper PPE wherever necessary and to ensure that there are satisfactory washing and changing facilities.</li> <li>• Provision to ensure all workers exposed to a risk are aware of the possible dangers and</li> </ul>		



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<p>also given thorough training in how to protect themselves and there should be effective supervision to ensure that the correct methods are being used.</p> <ul style="list-style-type: none"> <li>• Ensure adequate fire safety protection. Fire extinguisher (with proper training to use), water, sand etc., will be reachable in the construction sites.</li> </ul>		
<b>Operation &amp; Maintenance</b>	Noise disturbances to fauna	<ul style="list-style-type: none"> <li>• Provision to maintain noise from the operation &amp; maintenance of machinery and equipment by noise dampeners</li> <li>• Provision to take necessary lighting, caution for the works and most of the time contractor will avoid the night time construction works.</li> <li>• Contractors will be ensuring the device to determine the of noise level in this sub-project area.</li> <li>• Regularly third-party will be monitored the noise level in this sub-project area.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 years</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Consultant of PMU,
<b>Operation &amp; Maintenance</b>	Improper disposal and leakage of sewage from community Latrine may degrade the surrounding environment.	<ul style="list-style-type: none"> <li>• Use bin covers and/or tarpaulins during transport of wastes and end products (compost).</li> <li>• The soak pit will have to be cleaned in a regular interval (at least in every three months).</li> <li>• Ensure use of vacuum tanker/pump to collect de-sludge material &amp; dumping to proper dumping site</li> <li>• Appropriate awareness programs shall be arranged for the community members on health and hygiene issues and the impacts of improper sanitation practices;</li> <li>• Ensure disposal tanks, drums or containers</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 years</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Consultant of PMU,



Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/Indicators	Institutional Responsibilities	Supervision Responsibility
		<p>coming to, and from, the site is in a satisfactory condition – check for damage or leaks;</p> <ul style="list-style-type: none"> <li>• Ventilation systems and facilities shall be kept in good functional order to minimize untoward odor problems</li> </ul>		
<b>Operation &amp; Maintenance</b>	Injuries to operation and maintenance workers	<ul style="list-style-type: none"> <li>• Ensure proper training given to all staff</li> <li>• Ensure PPE used by all staff</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 years</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Concern of DPHE
<b>Operation &amp; Maintenance</b>	Erosion and land degradation due to leakage of Latrines	<ul style="list-style-type: none"> <li>• Preventative maintenance to be undertaken at regular intervals by the Contractor to ensure there are no leaks causing erosion.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 yrs.</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Concern of DPHE
<b>Operation &amp; Maintenance</b>	Air pollution can happen due to bad smell of dirty Latrines and improper design of vent pipe	<ul style="list-style-type: none"> <li>• To avoid bad smell regular cleaning of community Latrines will be assured.</li> <li>• Engineering designed to be followed for installing vent pipe so that odor cannot spread.</li> <li>• Community awareness will be increased at local area on cleanness of Latrines after wash and its benefit to health.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 yrs.</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Concern of DPHE
<b>Operation &amp; Maintenance</b>	Draw down of deep tube well groundwater due to excessive withdrawals for operation of community	<ul style="list-style-type: none"> <li>• Coordination with other development agencies for groundwater extraction rates will be monitoring.</li> <li>• Regular third-party will be monitoring of groundwater levels</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 yrs.</li> <li>• Long-term responsibility to be</li> </ul>	Environmental Concern of DPHE





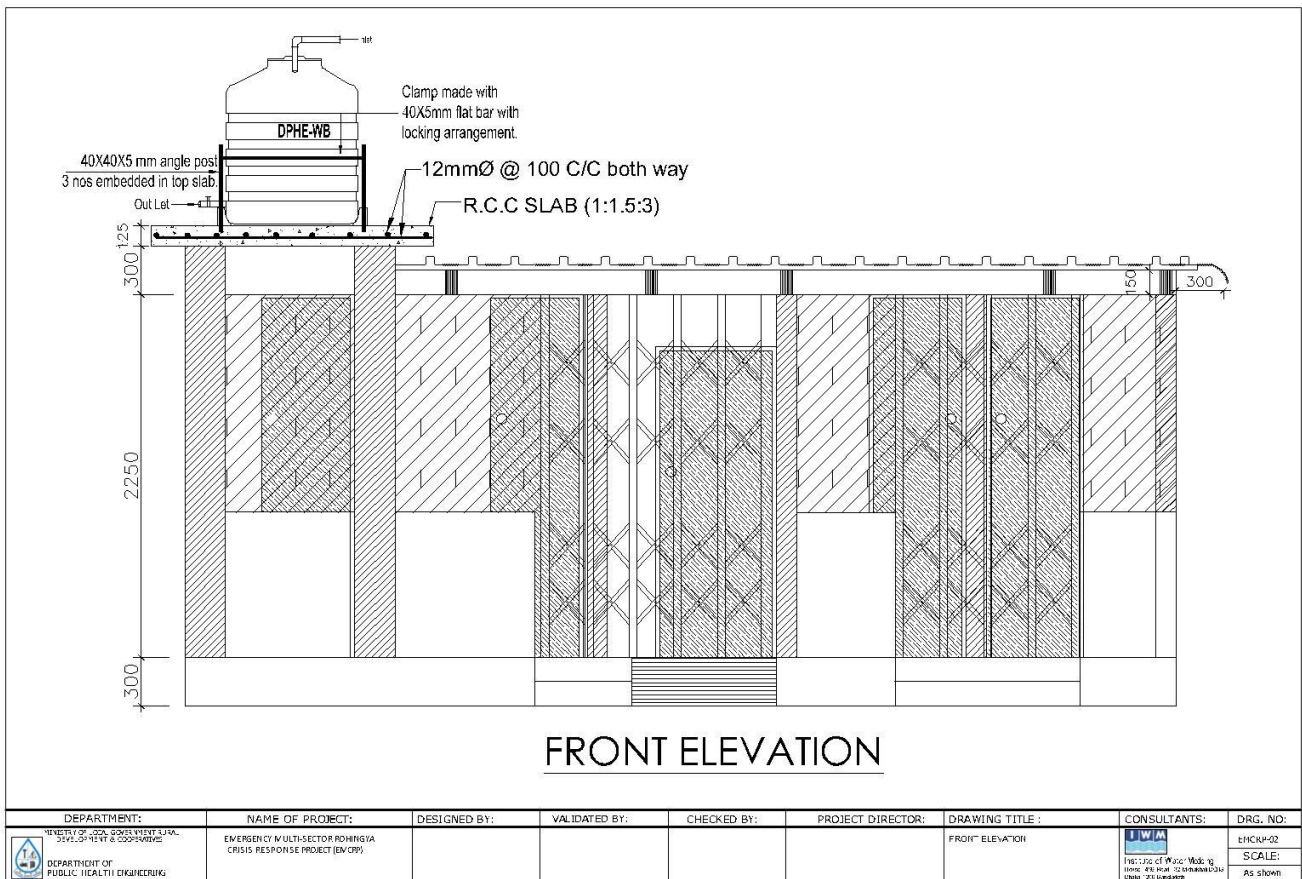
Project Stage	Potential Environmental & Social Impacts/Issues	Proposed Mitigation Measures/indicators	Institutional Responsibilities	Supervision Responsibility
	Latrines		determined by DPHE	
<b>Decommissioning</b>	<p>The impacts are similar to those listed in construction stage:</p> <p>Pollution from waste materials</p> <p>Health &amp; Safety risks to workers and local community/DRPs</p>	<ul style="list-style-type: none"> <li>• 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 construction phase.</li> <li>• 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.</li> </ul>	<ul style="list-style-type: none"> <li>• Contractor for first 2 yrs.</li> <li>• Long-term responsibility to be determined by DPHE</li> </ul>	Environmental Concern of DPHE

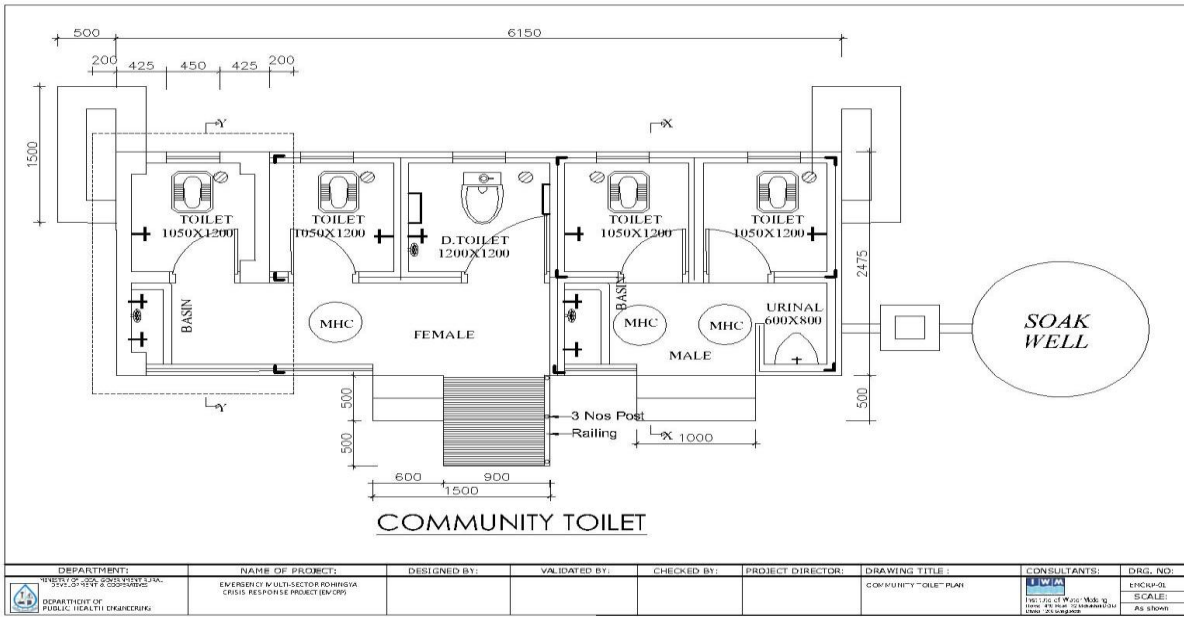
Appendix-2: Site visit with Lecturers in Ukhiya Degree Collage



Figure\_02: Community consultation meeting with college staff

Appendix-3: Typical design of Community Latrine









## Appendix-4: Labor's Code of Conduct

### অঙ্গীকারপত্র

স্থান:

ঠিকাদারীপ্রতিষ্ঠান:

আমি . . . . . এইমর্মে অঙ্গীকার করছি যে, কর্মরত থাকার অবস্থায় নিম্নোক্ত আদেশ, নির্দেশ ও নিষেধসমূহ 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 তৈরি করবো না।
৩. রোহিঙ্গা জনগোষ্ঠীর ইচ্ছাকৃত বা অনিচ্ছাকৃত কোন প্রকার সাহায্য সহযোগীতানি বোনা।
৪. কোন অবস্থাতেই রোহিঙ্গা জনগোষ্ঠীর কোন প্রকার আশ্বাস প্রদান কিংবা অঙ্গীকার বন্ধ হবো না।
৫. কর্মক্ষেত্রে কিংবা রোহিঙ্গা ক্যাম্প এলাকায় জীবজন্তু, গাছপালা ও পরিবেশের কোন প্রকার অনিষ্ট করবো না।
৬. কর্মক্ষেত্রে সর্বদা নিরাপত্তাপোশাক-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 কর্মকাণ্ড ও কোন প্রকার বিবাদে লিপ্ত হবো না।
৯. যেকোন জরুরী অবস্থায় সিদ্ধান্ত গ্রহণের ক্ষেত্রে সংশ্লিষ্ট কর্মকর্তার শরণাপন্ন হবো।

উপরোক্ত বিষয়সমূহের যদি কোন ব্যতিক্রম ঘটবে বা ঘটা হলে এ বিষয়ে প্রশাসন আইনগত যেশান্তি বাসমাধান গ্রহণ করবে তা মেনে নিতে বাধ্য থাকবো।

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স্বাক্ষর ও তারিখ



**প্রজেক্টসাইটে 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 বাংলা ও ইংরেজীতে বড় বড় অক্ষরে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
৮. নিকটস্থ হাসপাতাল, পুলিশ স্টেশন এবং ডাক্তারের সাথে যোগাযোগের জন্য মোবাইল/টেলিফোন নম্বর বাংলা ও ইংরেজীতে বড় বড় অক্ষরে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
৯. কাজের সাইটে পূর্ণাঙ্গ তথ্য ও কাজের পরিধি ব্যানার আকারে দৃশ্যমান স্থানে প্রদর্শনের জন্য স্থাপন।
১০. নিরাপত্তা চিহ্ন, সতর্কতা তথ্য ও নিরাপত্তা বেস্তনী ব্যবস্থাকর।
১১. নিরাপত্তা উপকরণ ও সরঞ্জামাদি এবং প্রাথমিক চিকিৎসার ব্যবস্থাকর।
১২. জরুরী অবস্থায় ব্যবহারের জন্য গাড়িকিং বা মোটর সাইকেলের ব্যবস্থাকর।
১৩. কাজের ঝুঁকি পূর্ণ স্থান দিনে-  
রাত্রে সহজে সনাক্ত করা যায় এমন চিহ্ন কিং বা সেফটি লাইটের ব্যবস্থাকর।

(বিগ্ধ 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) নবায়নযোগ্য উৎস ব্যবহারের সর্বোচ্চ চেষ্টা করতে হবে।
- ৭) কাজের শেষে পূর্বের পরিবেশ ফিরিয়ে দিতে হবে।



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