



**US Agency for International Development (USAID)
Ukraine
Environmental Review Checklist (ERC) and
Environmental Mitigation and Monitoring Plan (EMMP)**

1. Activity and Site Information

Project Name: (as stated in the IEE):	Health Reform Support (HRS)
Mission/Country:	Ukraine
DCN of Original IEE:	2017-UKR-020
DCNs of IEE Amendments	2018-UKR-006 2019-UKR-022 2021-UKR-004 2017-UKR-020-001 2017-UKR-020-002 (Amendment 5 DCN To be assigned by BEU)
Activity/Site/Grantee Name:	Permanent Electrical Power Generator for NHSU
Activity Authorization from IEE:	Objective 4: Enhancing transparency, accountability, and responsiveness of the health care system. Sub Activity: Procurement of technical equipment to provide uninterrupted power supply to the national health system in case of unexpected power cut-offs.
Type of Activity:	Generator Purchases and Generator Installations
Implementing Partner:	Deloitte Consulting LLP
Name and Organization of Preparer:	Clay Madden, Deloitte Consulting LLP
Date Prepared:	

The ERC/EMMP is intended for use by implementing partners to:

- assess activity-specific baseline conditions, including applicable environmental requirements;
- identify potential adverse environmental effects associated with planned activities; and
- develop EMMPs that can effectively avoid or adequately minimize the identified effects.

The IEE requirement to prepare an ERC/EMMP may be fulfilled by substituting a Simplified Environmental Review Form (SERF) for the ERC/EMMP, provided that the proposed activity meets all of the Restrictive Conditions in the SERF.

If implementing partners are in doubt about whether a planned activity requires preparation of an ERC, they should contact their Contracting Officer's Representative (COR)/Agreement Officer's Representative (AOR) for clarification. In turn, the COR/AOR should contact their Mission Environmental Officer (MEO) if they have any questions. In special circumstances and with approval of the BEO it is possible to have one very comprehensive ERC/EMMP for multiple sub-activities if they are similar in scope. *(When preparing the ERC/EMMP, please indicate "not applicable" for items that have no bearing on the activity.)* **The ERC/EMMP must be completed and approved prior to the activity beginning.**

2. Activity Description

2.1. Activity purpose

- *USAID HRS will procure technical equipment and related services to provide uninterrupted power supply during unexpected power outages to the national e-health system, housed in the National Health Service of Ukraine (NHSU) in Kyiv.*
- 2.2. Direct Beneficiaries, e.g., size of community, number of school children, etc.
- *The number of employees physically at NHSU on a daily basis are 264*
 - *All Ukrainian citizens are direct beneficiaries of NHSU, with a population of around 44 million.*
- 2.3. Number of existing employees and annual revenue, if this is a business
- *N/A, NHSU is a government entity.*
- 2.4. Implementation timeframe and schedule
- *Generator and installation services to be completed by November 2024.*
- 2.5. Detailed description of activity
- *USAID funds will be used for the Installation of Generators at NHSU.*
- 2.5.1. Steps that will be taken to accomplish the activity, including mobilization, site preparation, site restoration, and demobilization, if applicable;
- *construction of concrete foundations for two diesel generators,*
 - *laying power and control cables,*
 - *installation of two diesel generators with capacities 250 kWA and 160 kWA,*
 - *installation of operation box 380/220 V,*
 - *installation of a new box for automatic activation of the reserve in the switchboard room instead of the existing one,*
 - *construction of the concrete foundation for the installation of fuel tank,*
 - *installation of fuel tank with a volume of V=5 m3 and pump,*
 - *installation of canopy and fencing over the location for diesel generators,*
 - *installation of the site lighting system,*
 - *installation of a video surveillance system.*
- 2.5.2. Items that will be purchased (This section should fully describe any items, materials, or supplies that will be purchased.)

Item Description	Quantity
Materials and equipment	1
Executions of Works/Installation Services	1
Diesel Generator 275 kVA*	1

- 2.5.3. What entity will be responsible for the maintenance or sustainability of the activity after completion or handover?
- *NHSU will identify a vendor to service the generator and supply diesel fuel. HRS will work with NHSU during installation to identify a vendor to provide maintenance and fuel for the generator.*
- 2.6. Location of activity, e.g. name of village or town, street address, province
- *Stepan Banderi Avenue, 19, Kyiv, Ukraine.*
- 2.7. Detailed description of site
- 2.7.1. Existing setting, e.g., urban, village, agricultural, or undisturbed land

- *Urban*

2.7.2. Size of the facility or hectares of land

- *30m x 30m*

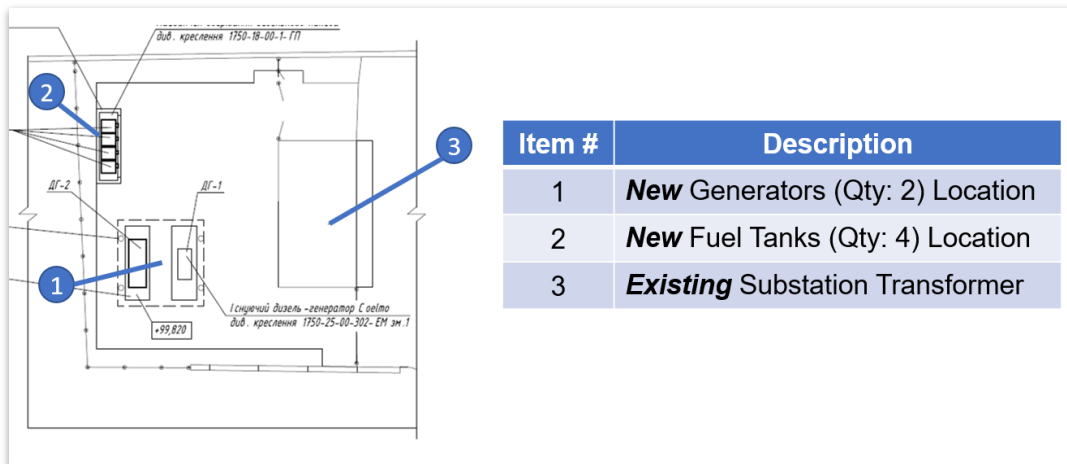
Site map, e.g., provide an image from Google Earth (or similar) of the project site (include latitude and longitude coordinates).

2.8. Photos of site, items to be purchased, engineering construction plans (*when available*)



Latitude & Longitude: 50°29'25.3"N 30°29'26.8"E





3. Activity-Specific Baseline Environmental Conditions

3.1. Population characteristics

- *Kyiv's total population is around 3 million.*

3.2. Geography

- *Kyiv is located on both sides of the Dnieper River, which flows southward through the city. The western part of Kyiv has many hills.*

3.3. Climate

- *In Kyiv, the summers are comfortable and partly cloudy, and the winters are long, freezing, snowy, windy, and mostly cloudy. Over the course of the year, the temperature typically varies from -6.6 °C to 25.5°C and is rarely below -17°C or above 31°C.*

3.4. Natural resources, e.g., nearby forest/protected areas, ground and surface water resources

- *Kyiv is an urban city surrounded by the Dnieper River.*
- *NHSU is 4 miles from the Dnieper River and 2.5 miles from the Yordans'ke (Opechen') Lake, the Kyriliv's'ke Lake, and the Andreevskoye Lake. All these bodies of water could be affected if there was a diesel spill.*
- *NHSU has the following nearby parks or outside environments where people may congregate:*
 - *Kurenivskyi Park, which is about 0.3 miles away from NHSU*
 - *Kyrylivskyi Hai, which is about 1.25 miles away from NHSU*
 - *Syretskyi Park, which is about 2.5 miles away from NHSU*

3.5. Current land use and owner of land

- *Land on which NHSU is located is fully owned by the government of Ukraine*

3.6. Other relevant description of current environmental conditions in proximity to the activity

- *The site is not adjacent to any protected area, national park, nature preserve, or wildlife refuge or other cultural or historic site*

4. Legal, Regulatory, and Permitting Requirements

4.1. Does this activity require an EIA under a national law?

- *Yes, an Environmental Impact Assessment is required . The designer of record for the NHSU generator installation plans, GP Tech, noted that an Environmental Impact*

Assessment is required in accordance with 22 CFR 216. The EIA will be completed prior to construction.

4.2. Applicable National or local permits for this activity, responsible party, and schedule for obtaining them:

Permit Type	Responsible party	Schedule
<i>Zoning</i>	<i>NHSU</i>	<i>TBD</i>
<i>Building/Construction</i>	<i>NHSU</i>	<i>TBD</i>
<i>Source Material Extraction</i>	<i>NHSU</i>	<i>TBD</i>
<i>Waste Disposal</i>	<i>NHSU</i>	<i>TBD</i>
<i>Wastewater</i>	<i>NHSU</i>	<i>TBD</i>
<i>Storm Water Management</i>	<i>NHSU</i>	<i>TBD</i>
<i>Air Quality</i>	<i>NHSU</i>	<i>TBD</i>
<i>Water Use</i>	<i>NHSU</i>	<i>TBD</i>
<i>Wetlands or Water bodies</i>	<i>NHSU</i>	<i>TBD</i>
<i>Threatened or Endangered Species</i>	<i>NHSU</i>	<i>TBD</i>
<i>Other</i>	<i>NHSU</i>	<i>TBD</i>

4.3. Will the activity be required to adhere to formal engineering designs/plans? If yes, attach the designs or plans to this ERC/EMMP.

4.3.1. Have the designs or plans been or will they be developed by a qualified engineer?

- The design plans were completed by Green Powered Technology, an Implementing Partner for USAID. The design plans are attached for reference.*

For Sections 5 through 12, please fill out the blank column with either “Yes,” “No” or “Maybe. Provide a discussion for any of the listed issues that are “Yes” or “Maybe” answers and likely to have a bearing on this activity. Please see the example below:

1.1 Sample question: Does the activity have an environmental impact? <i>[Hitting a return at the end of the question above will automatically format the user input]. Describe the environmental impact here.</i>	Yes
1.1.1 Sample question: Does the activity generate toxic waste? <i>[No response needed if the answer is “No”].</i>	No

5. Land use changes and land impacts

5.1. Will the activity change the land use, e.g., undeveloped, agricultural, residential, commercial, or industrial?	No
5.2. Will the activity require temporary or permanent property land taking?	No
5.3. Will the activity involve site preparation, e.g., clearing and grubbing, grading? <i>Yes, the activity will involve sit preparation because a platform will need to be built to hold the generator</i>	Yes
5.4. Will the activity involve onsite excavation or trenching?	No
5.5. Will the activity involve the use of borrow pits or quarries? If so, describe the siting, operation, and closure plans.	No
5.6. Will the activity interfere with or connect to existing aboveground or below-ground utilities, e.g., electricity, communications, water, sewer, or natural gas?	Yes

<i>Yes, the activity will connect to existing ground utilities because the generator will be connected to the electrical grid of NHSU.</i>		
5.7.	Will the activity involve installation of new aboveground or below-ground utilities, e.g., electricity, communications, water, sewer, or natural gas? <i>New electricity wires will be installed in underground pipes connecting the external generator to NHSUs power. The installation will adhere to the completed and reviewed design. A copy of the design will be provided to the Ukrainian grid operator.</i>	Yes
5.8.	Will the activity result in mineral extraction, e.g., aggregate, stone, or coal?	No
5.9.	Will the activity result in hydrocarbon extraction, e.g., oil, or natural gas?	No
5.10.	Are there known geological hazards, e.g., faults, landslides, or unstable soils which could affect the activity? If yes, how will the project ensure structural integrity?	No

6. Impacts to forestry, biodiversity, protected areas, and endangered species

6.1.	Is the site located adjacent to or near a protected area, national park, nature preserve, or wildlife refuge?	No
6.2.	Is the site located in or near threatened or endangered (T&E) species habitat?	No
6.2.1.	If yes, describe the plan for identifying T&E species during activity implementation. (Non-yes/no question)	
6.2.2.	If yes, describe the formal process for halting work, avoiding impacts, and notifying authorities if T&E species are identified during implementation.	
6.3.	Is the site located in a migratory bird flight or other animal migratory pathway?	No
6.4.	Will the activity involve harvesting of non-timber forest products, e.g., mushrooms, medicinal and aromatic plants (MAPs), herbs, or woody debris?	No
6.5.	Will the activity involve tree removal or logging?	No
6.6.	Will activities result in increased outdoor noise on a continuous or frequent basis at sound levels that disturb wildlife?	No
6.7.	Will activities result in light pollution, which could adversely affect the natural environment?	No

7. Water and water quality impacts

7.1.	List any National, European Union, or other international water discharge regulations or standards applicable to this activity. (Non-yes/no question) • <i>No water regulations that are applicable to this activity</i>	
7.2.	How far is the site located from the nearest river, stream, or lake? (Non-yes/no question) • <i>The site is located about 2.2 kilometers from the Dnieper River.</i>	
7.3.	Is the site located in a floodplain?	No
7.4.	Will the activity increase the risk of flooding at the site or on other property?	No
7.5.	Will the activity disturb wetland, lacustrine, or riparian areas?	No
7.6.	Will the site require excavation within, placing of fill in, or substrate removal (e.g., gravel) from a river, stream, or lake?	No

7.7.	What is the depth to groundwater at the site? (Non-yes/no question) <ul style="list-style-type: none"> <i>The depth of onsite ground water is 4M or 4000 mm.</i> 	
7.8.	Will the activity cause interference with the current drainage systems or conditions?	No
7.9.	Will the activity result in new or increased ground or surface water extraction? If yes, describe the expected volumes and the permit requirements.	No
7.10.	Will the activity discharge domestic or industrial sewage to surface water, groundwater, or a publicly owned treatment facility?	No
7.11.	Will the activity change storm water runoff volume, intensity, or locations? If so, describe how the designs/plans effectively and comprehensively address the management of storm water runoff and its effects.	No
7.12.	Is there potential for discharge of potentially contaminated (including suspended solids) runoff?	No
7.13.	Will the activity result in the runoff of pesticides, fertilizers, or toxic chemicals into surface water or groundwater?	No
7.14.	Will the activity involve the use or onsite storage of liquid fuels? If yes, describe the fuel type(s), quantities, storage conditions, and spill control procedures. <ul style="list-style-type: none"> <i>Yes, the activity will involve the onsite storage of liquid fuels as the generator will consume diesel fuel that is stored at NHSU. The concrete platform that is installed for the generator will also help mitigate spills because the fuel will not contaminate the soil.</i> 	Yes
7.15.	Will the activity result in discharge of effluent containing livestock wastes such as manure or blood?	No

8. Atmospheric and air quality impacts

8.1.	List any National, European Union, or other international air emission regulations or standards applicable to this activity. <ul style="list-style-type: none"> <i>NHSU will ensure all required permits for the generators are acquired in accordance with all National, European Union, and other international air emission regulations.</i> <i>The National regulations and standards applicable to this activity as summarized as follows:</i> <ul style="list-style-type: none"> <i>Order of the Ministry of Environmental Protection of Ukraine dated 17.09.2010 No. 407</i> <i>Order of the Ministry of Environmental Protection of Ukraine No. 309 dated 27.06.2006 DBN A.2.2-1-2021 "Composition and content of environmental impact assessment materials (EIA) in the design and construction of enterprises, buildings and structures".</i> 	Yes
8.2.	Will the activity result in increased emission of air pollutants from a vent or as fugitive releases, e.g., soot, sulfur dioxide, oxides of nitrogen, volatile organic compounds, or methane? <ul style="list-style-type: none"> <i>Yes, the activity will result in increased emission of air pollutants because the diesel generators produce carbon dioxide (CO₂), nitrogen oxide (NO_x), and particulate matter.</i> 	Yes

8.3.	Will the activity involve burning of fossil fuels? <ul style="list-style-type: none"> <i>Yes, the activity will involve the burning of diesel fuel.</i> 	Yes
8.4.	Will the activity involve burning of wood or biomass?	No
8.5.	Will the activity install, operate, maintain, or decommission systems containing ozone depleting substances, e.g., freon or other refrigerants?	No
8.6.	Will the activity generate an increase in carbon emissions? <ul style="list-style-type: none"> <i>Yes, the activity will generate an increase in carbon emissions as the generator will produce carbon dioxide.</i> 	Yes
8.7.	Will the activity increase odor on a continuous or frequent basis? <ul style="list-style-type: none"> <i>Yes, the activity will increase odor on a continuous basis as the generator produces pollution from diesel exhaust.</i> 	Yes
8.8.	Will the activity generate dust on a continuous or frequent basis? <ul style="list-style-type: none"> <i>No, the generator will not generate dust on a continuous basis.</i> 	No
8.9.	Will the activity increase the risk of fire, explosion, or hazardous airborne chemical releases? <ul style="list-style-type: none"> <i>Yes, the activity will increase the risk of fire or explosion as the generator consumes flammable fuel.</i> 	Yes

9. Energy efficiency, pollution prevention, and cleaner production

9.1.	Does the activity use renewable energy sources? If yes, describe the energy sources.	No
9.2.	Does the activity require use of energy efficiency equipment? If yes, describe the energy efficiency requirement.	No
9.3.	Does the activity promote pollution prevention and cleaner production measures? If yes, describe the measures.	No
9.4.	Does the activity promote maximum reliance on green building or green land-use approaches? If yes, describe the approaches.	No

10. Waste management

10.1.	List any National, European Union, or other international solid waste disposal or storage regulations or standards applicable to this activity. (Non-yes/no question) <ul style="list-style-type: none"> <i>Decree of the Cabinet of Ministers of Ukraine of November 8, 2017 No. 820-r "On the approval of the National strategy for waste management in Ukraine until 2030";</i> <i>Order of the CMU "On approval of the National Waste Management Plan until 2030" dated February 20, 2019.</i> 	Yes
10.2.	List any National, European Union, or other international hazardous waste disposal or storage regulations or standards applicable to this activity. (Non-yes/no question) <ul style="list-style-type: none"> <i>Decree of the Cabinet of Ministers of Ukraine of November 8, 2017 No. 820-r "On the approval of the National strategy for waste management in Ukraine until 2030";</i> <i>Order of the CMU "On approval of the National Waste Management Plan until 2030" dated February 20, 2019.</i> 	Yes

<p>10.3. Describe the local capabilities and facilities for solid, hazardous, and recyclable wastes. (Non-yes/no question)</p> <ul style="list-style-type: none"> • <i>The total annual volume of household waste generated in Kyiv is about 1.2 million tons. 400-450 thousand cubic meters of household waste (mixed solid household, separately collected, large-sized waste) is removed monthly from the residential buildings of the city of Kyiv, i.e. the daily volume of waste removal from the residential buildings of the city is about 15.5 thousand cubic meters, or 3,0 thousand tons. The volumes of removed household waste are controlled by the employees of the KP "Kyivcomunservice"</i> • <i>The local capabilities and facilities related to solid waste are as follows:</i> <ul style="list-style-type: none"> ○ <i>Waste is taken to disposal and disposal sites, namely: solid waste landfill No. 5 of Kyivspetstrans PrJSC (Pidigirtsi village, Obukhiv district, Kyiv region); large-sized and construction waste landfill No. 6 of PJSC "Kyivspecstrans" (94-96 Pyrogivskyi Shlach St.), "Energia" incinerator plant of PJSC "Kyivenergo" (44 Kolektorna St., Kyiv); landfills of the Kyiv region (Boryspil, Borodyansky, Brovarsky, Vasylykivsky districts).</i> • <i>The local capabilities and facilities related to hazardous waste are as follows:</i> <ul style="list-style-type: none"> ○ <i>in 2017, 150 containers were purchased for the collection of hazardous waste as part of the household</i> • <i>The local capabilities and facilities related to recyclable waste are as follows:</i> <ul style="list-style-type: none"> ○ <i>Up 10 private enterprises provide relevant services in Kyiv for plastic and glass waste</i> 	
<p>10.4. Will the activity generate nonhazardous solid wastes such as construction debris, packaging material, or nontoxic byproducts? If yes, describe expected types and quantities of solid waste and the plans for reuse, recycling, and disposal.</p>	No
<p>10.5. Will the activity involve the generation and disposal of hazardous waste, such as solvents, acids, caustics, toxics, or other chemicals? If yes, describe the plans for disposal of these hazardous chemicals.</p> <ul style="list-style-type: none"> ○ <i>No, the installation and operation of the diesel generator will not generate hazardous waste.</i> 	No
<p>10.6. Will the activity involve lead paint or lead-painted building components? If yes, describe the plans for disposal of lead paint containers or lead-painted debris.</p>	No
<p>10.7. Will the activity involve the installation, use, or removal of asbestos-containing materials or building materials that may contain asbestos? If yes, describe the plans for disposal of waste asbestos containing materials.</p>	No
<p>10.8. Will the activity involve disposal or retrofitting of equipment containing polychlorinated biphenyls (PCB), e.g., electrical transformers or fluorescent light ballasts? If yes, describe the plans for disposal of PCB materials.</p>	No
<p>10.9. Will the activity generate any other solid or hazardous wastes requiring specific recycling or waste management plans, such as batteries, fluorescent tubes, aerosol cans, or electronic wastes? If yes, describe the plans for disposal of these materials.</p>	No

11. Pesticide Health and Safety Impacts

11.1. Will the activity involve use or onsite storage of pesticides? Pesticide use includes but is not limited to procurement, transportation, storage, mixing, loading, or application.	No
11.1.1. If yes, identify the applicable PERSUAP, including DCN and expiration date.	
11.1.2. If yes, describe the types and quantities of pesticides.	
11.1.3. If yes, describe the pesticide storage conditions.	
11.1.4. If yes, describe the worker training requirements.	
11.1.5. If yes, describe the personal protective equipment (PPE) to be worn workers.	
11.1.6. If yes, describe public safety precautions.	
11.2. Will chemicals be used or stored at the site? If yes, describe the chemicals, quantities, and storage conditions.	No
11.3. Will the activity potentially disturb soil contaminated with toxic or hazardous materials?	No

12. Further Analysis of Recommended Actions (Most activities will have a threshold determinations of negative determination with conditions.)

- 12.1. **Categorical Exclusion:** The activity is not likely to have an effect on the natural or physical environment. No further environmental review is required.* (This is rarely used in the ERC/EMMP.)
- 12.2. **Negative Determination with Conditions:** The activity does not have potentially significant adverse environmental, health, or safety effects, but may contribute to minor impacts that can be eliminated or adequately minimized by appropriate mitigation measures. ERC/EMMPs shall be developed, approved by the Mission Environmental Officer (MEO) and the BEO **prior to beginning the activity**, incorporated into workplans, and then implemented. For activities related to the procurement, use, or training related to pesticides, a PERSUAP will be prepared for BEO approval, PERSUAPS are considered amendments to the IEE and usually Negative Determination with Conditions. See Sections H and I below.*
- 12.3. **Positive Determination:** The activity has potentially significant adverse environmental effects and requires further analysis of alternatives, solicitation of stakeholder input, and incorporation of environmental considerations into activity design. A Scoping Statement (SS) must be prepared and be submitted to the BEO for approval. Following BEO approval of the SS an Environmental Assessment (EA) will be conducted. The activity may not be implemented until the BEO clears the final EA. If the Parent IEE does not have Positive Determination as one of the threshold determinations, the IEE needs to be amended.
- 12.4. **Activity Cancellation:** The activity poses significant and unmitigable adverse environmental effects. Adequate ERC/EMMPs cannot be developed to eliminate these effects and alternatives are not feasible. The project is not recommended for funding.

***Note regarding applicability related to Pesticides (216.2(e):** The exemptions of §216.2(b)(l) and the categorical exclusions of §216.2(c)(2) **such as technical assistance, education, and training** are not applicable to assistance for the procurement or use of pesticides. Pesticide use is broadly defined at USAID and includes assistance with any of the following:

- Procurement, transportation, storage, mixing, loading, and application
- Management
- Fuel needed to transport pesticides
- Technical assistance in pesticide application
- Special payments, donations, free samples, and other forms of subsidies

- Credit provisions to beneficiaries

13. EMMPs and ROCs

- 13.1. Activity-specific environmental mitigation and monitoring plan (EMMP): Using the table provided below, list the processes that comprise the activity, then for each process, identify impacts requiring further consideration. For each impact, describe the mitigation and monitoring measures that will be implemented to avoid or to adequately minimize the impacts. All questions in Sections 5 through 12 with Yes or Maybe answers should be addressed. Upon request, the MEO may be able to provide your project with example EMMPs that are specific to your activity.
- 13.2. Annually (or more frequently if required by the Activity Manager/AOR /COR) and at the closeout of the activity, the IP shall prepare a Record of Compliance (ROC) to be submitted to the Activity Manager/AOR/COR. The ROC shall document how the mitigation and monitoring requirements were met. As appropriate, attachments such as site photos, permits, verification of local inspections, product warranties, etc. should be included in the ROC. The ROC shall be posted to the USAID Environmental Compliance Database (ECD).

Processes	Identified Environmental Impacts	Mitigation Measures	Monitoring Indicators	Monitoring and Reporting Frequency	Responsible Parties	Records Generated
<i>List each process that has impacts (e.g. remove asbestos roof, install toilets, remove and replace flooring). A row should be included for each process.</i>	<i>A single process may have several potential impacts—provide a separate row for each.</i>	<i>For each impact, describe the mitigation measures that will avoid or adequately minimize the impact. (If mitigation measures are well-specified in the IEE, quote directly from IEE.)</i>	<i>Specify indicators to determine if mitigation is (1) in place and (2) successful. For example, visual inspections for seepage around pit latrine; sedimentation at stream crossings, etc.)</i>	<i>For example: “Monitor weekly, and report in quarterly reports. If XXX occurs, immediately inform USAID COR/AOR.”</i>	<i>Separate parties responsible for mitigation from those responsible for reporting, whenever appropriate.</i>	<i>If appropriate, describe types of records generated by the mitigation, monitoring, and reporting process.</i>
<i>Construction of concrete pad and canopy to house generator and fuel tanks</i>	<i>Potential soil erosion during construction of concrete pad Potential contamination of soil or nearby water during concrete construction or installation</i>	<i>Plan vehicle ingress and egress to minimize soil and site disruption Develop temporary and permanent catch-basins to collect runoff or concrete overflow during construction</i>	<i>Recurring site reports will include updates on soil erosion or disruption and contaminant runoff risks.</i>	<i>Monitor weekly, and report in quarterly reports. If significant contamination or erosion occurs, immediately inform USAID COR/AOR.</i>	<i>NHSU is responsible for the monitoring and reporting of all identified environmental impacts noted in this EMMP.</i>	<i>Site condition records will be kept on file by NHSU. These documents will confirm that all mitigation measures were followed in this EMMP.</i>
<i>Installation of new in-ground piping and wires connecting generator to NHSU data center</i>	<i>Potential runoff or soil erosion during trenching for wire install</i>	<i>The trench created for the wires will be no bigger than it needs to be and dug over the shortest possible span, minimizing unnecessary sitework</i>	<i>All monitoring measures will be mitigated through visual inspections and general maintenance conducted by a generator servicer.</i>	<i>Monitor weekly, and report in quarterly reports. If significant erosion or site disruption occurs, immediately inform USAID COR/AOR.</i>	<i>NHSU is responsible for the monitoring and reporting of all identified environmental impacts noted in this EMMP.</i>	<i>Site condition records will be kept on file by NHSU. These documents will confirm that all mitigation measures were followed in this EMMP.</i>
<i>Operation and Maintenance of the diesel generators</i>	<i>The generator will produce carbon emissions because the generator will produce carbon dioxide through the combustion of diesel fuel. The generator will increase odor on a continuous basis as the</i>	<i>The generator will be regularly serviced to ensure the lowest production of carbon dioxide The generator will be regularly serviced to ensure the lowest production of odor</i>	<i>All monitoring measures will be mitigated through visual inspections and general maintenance conducted by a generator servicer.</i>	<i>Generator servicing will occur after 250 hours of operations of generator and any issues will be reported to NHSU.</i>	<i>NHSU is responsible for the monitoring and reporting of all identified environmental impacts noted in this EMMP.</i>	<i>Invoicing and records of repair will be kept on file by NHSU. These documents will confirm that all mitigation measures were followed in this EMMP.</i>

Processes	Identified Environmental Impacts	Mitigation Measures	Monitoring Indicators	Monitoring and Reporting Frequency	Responsible Parties	Records Generated
	<i>generator produces pollution from diesel exhaust.</i>					
<i>Operation and Maintenance of the fuel tanks</i>	<i>Onsite storage of liquid fuel could cause spills.</i>	<i>New liquid fuel tanks will be purchased, and the tanks will be monitored for leaks.</i>	<i>All monitoring measures will be mitigated through visual inspections and general maintenance conducted by a generator servicer.</i>	<i>Fuel tank repair needs will be assessed semiannually and during the servicing cadence of the diesel generators taking place every 250 hours of operation. Any issues will be reported to NHSU.</i>	<i>NHSU is responsible for the monitoring and reporting of all identified environmental impacts noted in this EMMP.</i>	<i>Invoicing and records of repair will be kept on file by NHSU. These documents will confirm that all mitigation measures were followed in this EMMP.</i>
All processes	All	As specified above	Annual EMMR	Annually or as required by Activity Manager/AOR/COR	IP	ROC

Certification of No Adverse or Significant Effects on the Environment

I, the undersigned, certify that activity-specific baseline conditions and applicable environmental requirements have been properly assessed; that environmental impacts and pesticide-related health and safety impacts requiring further consideration have been comprehensively identified; and that adverse impacts will be effectively avoided or sufficiently minimized by proper implementation of the EMMP(s). If new impacts requiring further consideration are identified or new mitigation measures are needed, I will be responsible for notifying the USAID COR/AOR, as soon as practicable. Upon completion of activities, I will submit a **Record of Compliance with Activity-Specific EMMPs** using a format approved by the MEO.

David Elkins

Name

Implementer Project Director/COP

01 February, 2024

Date

Approvals:

Name

USAID COR/AOR

Date

Name

Mission Environmental Officer

Date

Concurrence:

Not required per DCN: 2020-XXX-0nn

Bureau Environmental Officer
Europe and Eurasia Bureau

Date

Distribution:

- Project Files
- IEE Files
- MEO
- BEO
- ECD