OCCUPATIONAL AND ENVIRONMENTAL HEALTH SITE

ASSESSMENT – STAGE I

TEMPLATE

May 2014

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# Introduction: The OEHSA Business Process

This template consists of detailed instructions on assessing OEH hazards at a wide range of locations. It is intended for use by any echelon of Preventative Medicine, and includes as many potential hazards as possible to act as a guide for any assessor. If information that is not known or was not able to be evaluated during the survey please indicate in the template by writing “not known” or “not able to evaluate at this time” with the supporting rationale. Leave no template areas “blank”.

All the potential hazards listed in this template may not exist at every location. Those hazards *not* present should be noted on this form to ensure the document is as complete as possible. The OEHSA may be the initial comprehensive onsite survey performed, or it may be an annual update. Whatever the case, the foundation of the OEHSA is to accurately identify Exposure Pathways (EPs) for real or potential OEH hazards. The summation of EPs creates a Conceptual Site Model (CSM). An example EP can be found at the end of this template to use as a reference, as well as a blank EP form to be printed and/or filled out for as many EPs that are observed. Personnel that can specifically attributed to an EP(s) can be added with personal identifying information (PII) to an Affected Roster in this template, as well as in DOEHRS. After completing the administrative General Survey Information questions regarding the dates, times, and who conducted OEHSA, please continue with Section 1 on page 6 and continue until the end of the template.

In order to make the document as useable as possible, do not place classified information in the main body. The end of the template includes space for classified information that can be separated and sent via SIPR. Having the bulk of the assessment unclassified enhances the ability of Preventive Medicine to communicate with the Service Members at home station, health care providers, Coalition partners, the Veteran’s Administration and other stakeholders concerned with OEH exposures to US forces that do not have clearances.

# General Survey Information:

* The OEHSA should be entered into DOEHRS within 30 days of being conducted. The day and time it was entered in DOEHRS will be automatically be captured, and it is expected to often be slightly different than the date and time it was conducted. Please enter the Survey Start and Ends Dates as accurately as possible to best represent the time PM performed the OEH surveillance.
* Survey Start Date and Tim*e: Self explanatory*
* Survey Completion Date / Time: *If a multiple day assessment, the last day and time of the assessment.*
* Organization Conducting Survey: *Name of the unit conducting the assessment*
* Surveyor’s Unit: *The name of the LEAD surveyor only*
* Lead Surveyor Title: *Title of the LEAD surveyor only*
* Lead Surveyor Phone: *Phone number of the LEAD surveyor only*
* Lead Surveyor Email: *Email of the LEAD surveyor only*

|  |
| --- |
| **General Survey Information**  |
| Survey Start Date and Time: |  | Survey End Date and Time: |  |
| Lead Surveyor Name(s): |  |
| Lead Surveyor Title: |  | Surveyor’s Unit: |  |
| Lead Surveyor Phone: |  | Lead Surveyor Email: |  |

# 1. Administrative Data

* Parent Location Name: *Name of location being assessed, if not known can normally be obtained from the engineers. Ensure it is the official name of the location and not what it is called by locals.*
* Location Aliases: *Other names the base is currently known as or was known as in the past.*
* Geographic location: *Including geo-coordinate (e.g latitude/longitude) of the outside corners of the camp. At a minimum, use the center of the camp. This information may be extracted from the Engineer EBS. (see footnote)*
* Notes: *Notes associated with the geographic location. (the datum associated with the location, map type, map number, GPS used, etc)*
* Units and Detachments/Teams/Elements Present: *Description of the units that are currently or will occupy the locations. Include as much detail as possible and include all Services.* *(see footnote)*
* Camp Fixed Population: *Population of location, if known. Separate by military, civilian, contractors, etc if possible.* *(see footnote)*
* Rotation Schedule: *What is the unit rotation schedule (months, years, etc).* *(see footnote)*
* Number of U.S. Troops, if not U.S. Camp: *(see footnote)*

|  |
| --- |
| *Note: This information may be classified, if the information is classified, enter”Geographic Location Classified” in the Notes field and capture classified data at the end of the template and marked accordingly. It should also be sent to* *usarmy.apg.medcom-phc.mbx.oehs@mail.smil.mil***1. Administrative Data – *Attach the Hard Copy of the OEHSA to this tile in DOEHRS*** |
| Location Name: |  |
| Location Aliases:  |  |
| Geographic location*: Including geo-coordinate (e.g latitude/longitude) of the outside corners of the camp. At a minimum, use the center of the camp. This information may be extracted from the Engineer EBS. Note: Information may be classified.* |
| Coordinate 1: |  | Coordinate 2: |  |
| Coordinate 3: |  | Coordinate 4: |  |
| Notes: |
| Units and Detachments/Teams/Elements Present: *Note: this information may be classified.* |
|  |
| Camp Fixed Population: *Note: this information may be classified.* |  |
| Rotation Schedule: *Note: this information may be classified.* |  |
| Number of U.S. Troops, if not U.S. Camp: *Note: this information may be classified.* |  |

# 2. Survey Background Instructions. This information is presented as standard text in the DOEHRS and should be referenced as needed to explain why PM personnel are conducting an OEHSA.

* Scope of Mission: *This occupational and environmental health site assessment (OEHSA) was performed to identify and document complete or potentially complete exposure pathways that could affect the health of personnel. A site specific sampling and analysis plan (SAP) was developed from information generated during site reconnaissance. Data obtained via the SAP supports health risk assessment. Health risk assessment serves as the basis for recommending evidence based controls designed to reduce health risks.*
* Purpose: *This OEHSA was conducted to evaluate the potential health risks associated with exposures to occupational and environmental contaminants, disease vectors and other environmental conditions experienced by US Forces operating from this location.*
* Methodology: *The OEHSA follows an iterative process of data collection, evaluation and interpretation. This methodology provides a systematic, scientifically defensible process for developing a conceptual site model (CSM) that describe potential or real exposure pathways (EPs). EPs define areas of concern (AOC) by describing environmental and human factors that may lead to contact with environmental health threats. Each EP considers the source of chemical, biological or physical stressors in the environment; movement of those stressors through environmental media; a point and route of human exposure and receptor populations within the AOC. While the CSM serves as the over-arching basis for environmental sampling within all AOC where exposure is likely or suspected, each individual EP represents a need for specific sampling event to be included in the SAP. Revalidation of the initial CSM and identification of new environmental health threats at a site should be performed at least annually or according to service specific guidelines.*

*Screening health risk assessments are performed on chemicals of concern, confirmed by field portable analytical equipment and/or laboratory analysis that exceed Military Exposure Guidelines (MEG). MEGS are published in US Army Institute of Public Health Technical Guide 230, Chemical Exposure Guidelines for Deployed Military Personnel. Screening health risk assessments are completed via operational risk management (ORM) and/or other Service specific processes, using conservative (health protective) exposure assumptions.*

* Onsite Activities

*Data for this OEHSA was compiled from review of historical site information (when available), site reconnaissance, interviews with knowledgeable persons and field screening of chemical, physical or biological stressors with direct reading instruments. A site specific disease vector threat assessment, based on the presence/absence of disease vectors and their habitats, vector biology/behavior, environmental conditions affecting vector populations and potential for disease transmission, was also completed.*

*EPs were developed from the information collected. They describe real and/or potential occupational or environmental health threats and/or real or potential EPs associated with groundwater, surface water, air, soils, sediments, and biota, including disease vectors or infectious agents. All complete and potentially complete EPs identified require further evaluation. The CSM and EPs were used to develop a site specific SAP to facilitate evaluation of potential health risks and assist in prioritizing health risk reduction efforts.*

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**2. Survey Background Instructions *(continued)***

* Limitations of Assessment: *Physical obstructions, limiting conditions (such as weather), mission restrictions, lack of equipment/supplies. Cumulative/synergistic effects from multiple exposures from the same health threats (e.g. lead, benzene, etc) from other pathways and sources are NOT evaluated*.
* General Data Gaps: *Data that was either not obtainable at the time of the survey or that will be received in the future. This includes situations such as when the deployment location is not yet occupied, full build-up has not yet been reached, personnel are not available to be interviewed due to mission requirements or shortfalls, etc. Additionally, if the OEHSA is completed before the site is fully operational, the locations of key facilities or hazards may be unknown, or may move before being occupied, thereby limiting the ability to fully assess the spectrum of potential health hazards.*
* Assumptions / Uncertainties: *Observations and data could be limited due to the inherent challenges of conducting comprehensive public health assessments in an operational environment. Sources of uncertainty will come from limited availability and often from poor quality of information evaluated by the assessor. Sound, professional judgment by the Preventive Medicine professional will often compensate for limited data and few observations resulting in an assessment that’s more qualitative than quantitative.*
* Information Sources / Document Reviewed: *Summaries of environmental sampling and studies, aerial photos, topographic maps, Engineer Environmental Baseline Surveys (EBS basecamp master plans). Intel information may be classified, ensure it is handled appropriately and placed in the classified section at the end of the template.*

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| **2. Survey Background *(continued)*** |
| Limitations of Assessment: *Physical obstructions, limiting conditions (such as weather), mission restrictions, lack of equipment/supplies.* |
|  |
| General Data Gaps: *Data that was either not obtainable at the time of the survey or that will be received in the future.* |
|  |
| Assumptions / Uncertainties: *Observations and data could be limited due to the inherent challenges of conducting comprehensive public health assessments in an operational environment* |
|  |
| Information Sources / Document Reviewed: *Summaries of environmental sampling and studies, aerial photos, topographic maps, Engineer Environmental Baseline Surveys (EBS, basecamp master plan).* |
|  |

# 3. Site Description: *This information may be extracted from the Engineer EBS. Attach site maps and photographs to the survey. Note: Get pictures of the site, a good rule of thumb is at least one picture per section (if applicable).*

* Physical Setting: *(general geography / topography. Urban or rural). (Take photos of setting).*
* Climatic / Weather: (temperature range / predominate wind direction). *Acquire historical (5-years if possible) meteorological data (in an electronic format) from the local weather station. Note the source of the data and obtain a POC for future data.*
* Soil: (types, permeability, drainage ditches, low lying areas (standing water), unusual/out-of-place mounds, disturbed areas, discolored soil, areas unusually devoid of vegetation, etc). *Provide geo-coordinates of areas identified and take photos of areas. (If geo-coordinates are classified please place in the appropriate table at the end of the template)*
* Groundwater: (depth, direction of flow). *What is the depth of the groundwater and in what general direction does it flow.*
* Surface Water: (location, direction of flow).  *What surface water is present on the site; lakes, ponds, rivers. What is the direction of flow for surface drainage? Indicate direction of surface drainage on graphic/site map. (Take photos of surface waters).*
* Wetlands, Flood Zones, Costal Zone, Vegetation present: *Is the location located in a wetlands (swamps, marshes, bogs), flood zones (areas prone to flooding), costal zones. Include the location of wetlands and flood zones on graphic/site map as appropriate. What vegetation is present? (Take photos of identified areas).*

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| **3. Site Description:** *This information may be extracted from the Engineer EBS.* *Attach site maps and photographs to the survey. Note: Get pictures of the site, a good rule of thumb is at least one picture per section (if applicable).* |
| Physical Setting: *(general geography / topography / urban / rural)*.  |
|  |
| Climatic / Weather: *(temperature range / predominate wind direction)* |
|  |
| Soil: (types, permeability, drainage ditches, low lying areas (standing water), unusual/out-of-place mounds, disturbed areas, discolored soil, areas unusually devoid of vegetation, etc) |
|  |
| Groundwater: *(depth, direction of flow)* |
|  |
| Surface Water: *(location, direction of flow)* |
|  |
| Wetlands, Flood Zones, Costal Zone, Vegetation present: |
|  |

**3. Site Description *(continued)***

* Proposed Site Usage: *What is the proposed usage of the site, especially if assessment is being conducted before usage determination or occupation?*
* Current and Past Uses of Property: *What was the past usage of the site; agricultural, industrial, military, etc. For what duration were these uses active?*
* Current and Past Uses of Adjacent Property: *Industrial operations (e.g., power plant, factories, etc.), agricultural uses, type of crops grown, is there knowledge on the use of pesticides (insecticides / herbicides)? For industrial operations, what is the approximate distance from the camp boundary? What can be observed from the camp; smoke, odors, etc*? *(Take photos of identified areas)*
	+ North of Site:
	+ South of Site:
	+ East of Site:
	+ West of Site:

Notes:

*If a previously existing and operational site for another purpose, what were the dates of operation and any significant events that might have occurred there?*

*Descriptions of physical barriers to prevent pollutant transport (e.g., liners, slurry walls, fences, dikes)*

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| **3. Site Description *(continued)***  |
| Proposed Site Usage: *What is the proposed usage of the site, especially if assessment is being conducted before usage determination or occupation?* |
|  |
| Current and Past Uses of Property: *What was the past usage of the site; agricultural, industrial, military, etc. For what duration were these uses active?* |
|  |
| Current and Past Uses of Adjacent Property: *(industrial operations, agricultural uses, type of crops grown) Is there knowledge on the use of pesticides (insecticides / herbicides)?* |
| North of Site: |
| South of Site: |
| East of Site: |
| West of Site: |
| Notes: |

**3. Site Description *(continued)***

* Specific nearby Industrial Facilities. *Are there any nearby industrial facilities? In addition to general description of industrial operation around the location outlined above, this section is available to capture more specific information on the industrial facilities.* *(Take photos of identified facilities)*
	+ Geo-coordinates of facility in MGRS or latitude / longitude in decimal degrees.

*(If geo-coordinates are classified please place in the appropriate table at the end of the template)*

* + Name of industry. – *The name of the industry (ACME Cement Factory, Deep River Power Plant, etc)*
	+ Type of industry. – *List types of industries identified (e.g. power production, petrochemical, agricultural, etc)*
	+ Is industry currently active? *Yes, No*
	+ Description of facility: *What processes are present, what material is used and stored at the facility, operating schedule, environmental impacts of facility. Presence of industrial stacks, stack emission data, control measures if known.*
	+ Proximity to Location: *What is the proximity of the industry to the camp location being assessed (e.g. 1 KM northwest of Camp Snuffy)*

**\*** *(If geo-coordinates are classified please place in the appropriate table at the end of the template)*

|  |
| --- |
| 3. Site Description *(continued)* |
| Nearby Industrial Facilities. *Are there any nearby industrial facilities*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Geo coordinates (MGRS or Lat/Long)\* | Name | Type of Industry | Active? (Y/N) | Description | Proximity to Location (in kilometers) |
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| Do the nearby industrial facilities have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template.  |

# 4a. Site Infrastructure - *Onsite Industrial Operations*

* Onsite Industrial Operations: *Are there any existing onsite industrial operations? Give info on scope of activities, size of facilities, who performs the operations, hazards present. Select the appropriate industrial operation(s) and add other as needed. (Take photos of identified operations) (Examples: vehicle maintenance, aircraft maintenance, etc)*

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| 4a. Site Infrastructure - Onsite Industrial Operations |
|  *Are there any existing onsite industrial operations? Give info on the scope of activities, size of facilities, who performs the operations, and hazards present. (i.e. Vehicle Maintenance, Aircraft Maintenance, etc.)* | Present: [ ]  Absent: [ ]  If Present, list below |
|  |
| Do the onsite industrial operations have the potential to affect workers and/or camp personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**4b. Site Infrastructure *– Description on Structures***

* Description of Structures: *Describe the structures on the camp and what they are used for: housing, maintenance, or office space. (Include Heating/Ventilation Systems and Potential for Radon). (Take photos of identified structures)*
	+ Tents – *Types of tents (manufacture if known)*
	+ Hardened Semi-Permanent – *hard buildings without permanent below surface foundations.*
	+ Hardened Permanent – *hard building with permanent below surface foundations.*

|  |
| --- |
| 4b. Site Infrastructure - Description of Structures |
| *Describe the structures on the camp and what they are used for: housing, maintenance, or office space. (Include Heating/Ventilation Systems and Potential for Radon)*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Tents [ ]  Semi-Permanent [ ]  Permanent [ ]  |
|  |
| Do the conditions of structures have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**4c. Site Infrastructure *- Description of Roads / Hardstand***

* Description of Roads / Hardstand: *Describe the road conditions: paved, gravel, or dirt. Are there problems with dust generated from vehicle traffic? (Take photos of identified areas)*

* + Unpaved
	+ Gravel
	+ Paved

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| 4c. Site Infrastructure - Description of Roads / Hardstand: |
| *Describe the road conditions: paved, gravel, or dirt. Are there problems with dust generated from vehicle traffic?* | Present: [ ]  Absent: [ ]  If Present, list below |
| Unpaved [ ]  Gravel [ ]  Paved [ ]  |
|  |
| Does the dust or noise generated from vehicle traffic have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**4d. Site Infrastructure *- Description of Power Generation***

* Description of Power Generation: *Describe how power is supplied to the camp: individual and/or bulk generators or city power. (Include Potential Electrical Hazards and Sources of PCB's). (Take photos of identified generators)*
	+ Tactical Generators
	+ Commercial Generators
	+ Municipal/Local Grid

|  |
| --- |
| 4d. Site Infrastructure - Description of Power Generation |
| *Describe how power is supplied to the camp: individual and/or bulk generators or city power. (Include Potential Electrical Hazards and Sources of PCBs)* | Present: [ ]  Absent: [ ]  If Present, list below |
| Tactical Generators [ ]  Commercial Generators [ ]  Municipal/Local Grid [ ]  |
|  |
| Does the noise and exhaust from generator farms have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**4e. Site Infrastructure *- Contractor Services***

* Contractor Services: *Obtain copies of contract agreements and attach to this tile in DOEHRS.*
	+ Contractor Name: *Include Contractors, Sub-Contractor Names, or HN Contracts w POC/company info*
	+ Services Provided: *What services are contractors performing at the site?* [Select all that apply per Contractor and add to form]
* Food
* Solid Waste
* Hazardous Waste
* Waste Water
* Water
* Ranges
* Vector Control
* Laundry
* Power
* Medical
* Other
	+ Notes: *Any general notes about the contractor.*

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| 4e. Site Infrastructure - Contractor Services |
| *What services are contractors performing at the site? (Include Contractors, Sub-Contractor Names, or HN Contracts w POC/company info)* | Present: [ ]  Absent: [ ]  If Present, list below |
| Name | Services Provided | Notes |
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#  5a. Hazardous Materials - *Petroleum Distribution Points*

* Petroleum Distribution Points (POL): *Are there any existing or former fuel points? (Take photos of identified POL points)*
	+ Fuel Type: *What fuel is stored(gas, diesel, JP-4 JP-5, JP-08, etc)*
	+ Location Description: *Location of the distribution point (e.g. behind the motor pool, building xx, etc)*
	+ Container Size *Preferred volume of container can be found on label. If volume cannot be determined, physical dimensions of container should be obtained*
	+ Number of containers: *describe the number of containers present. If there are different sized/type containers, describe the number of each size/type.*
	+ Container Type*: metal, plastic, single walled, double walled, etc.*
	+ Container Age: *Approximate age of container; can be found on container label or from installer of container?*
	+ Above / Below Ground: *Is the container or will the container be placed above or below ground?*

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| 5a. Hazardous Materials - Petroleum Distribution Points |
|  *Are there any existing or former fuel points?* | Present: [ ]  Absent: [ ]  If Present, list below |
| Fuel Type | Location Description | Container | Contractor Operated |
| Size | Number | Type | Age | Above or Below grd |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Gas [ ]  Diesel[ ]  JP-4[ ]  JP-8[ ]  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Do petroleum distribution sites have the potential to affect personnel? (Current, Past, Potential) | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**5a. Hazardous Materials - *Petroleum Distribution Points (continued)***

* Notes: *General Notes related to POL distribution in general.*
* Past Releases: *Any information concerning past releases of POL products? Describe the details of those past spills if known: location (MGRS coordinates), date, type of spill, amount spilled (or size of the resulting stain), and any remedial actions taken. If unknown, state “Unknown.” (Take photos of areas associated with past releases)*
* Potential Releases: *Discuss where the potential for releases to occur. This may include: refueling operations, storage facilities, pipelines, fuel transfer points, or other fuel handling operations. (Take photos of areas identified as potential releases)*

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| **5a. Hazardous Materials - Petroleum Distribution Points *(continued)*** |
| Notes: |
|  |
| Past Releases: *Any information concerning past releases of POL products? Describe the details of those past spills if known: location (MGRS coordinates), date, type of spill, amount spilled (or size of the resulting stain), and any remedial actions taken. If unknown, state “Unknown.”*  |
|  |
| Potential Releases: *Discuss where the potential for releases to occur. This may include: refueling operations, storage facilities, pipelines, fuel transfer points, or other fuel handling operations.* |
|  |

**5b. Hazardous Materials - *Hazardous Material Storage / Unidentified Substances***

* Hazardous Material Storage / Unidentified Substances. *Describe hazardous material storage sites and unidentified substance sites (anything other than petroleum products). This may also include past use industries that have contaminated the area prior to US occupation.* *(Take photos of identified containers)*
	+ Material Type: *Description of the material type.*
	+ Location Description: *Location of the container (e.g. behind the motor pool, building XX, DRMO yard, etc)*
	+ Container Size: *Preferred volume of container can be found on label. If volume cannot be determined, physical dimensions of container should be obtained.*
	+ Number of Containers: *describe the number of containers present. If there are different sized/type containers, describe the number of each size/type*
	+ Container Type*: metal, plastic, single walled, double walled, etc*
	+ Container Age /Condition: *Approximate age of container, can be found on container label or from installer of container.*
	+ Above / Below Ground: *Is the container or will the container be placed above or below ground.*
	+ Contractor Operated: *Is the storage site operated by contractors*

|  |
| --- |
| 5b. Hazardous Materials - Hazardous Material Storage / Unidentified Substances |
|  *Describe hazardous material storage sites and unidentified substance sites (anything other than petroleum products). This may also include past use industries that have contaminated the area prior to US occupation.*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Material Type | Location Description | Container | Contractor Operated |
| Size  | Number | Type | Age/Condition | Above / Below Ground |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Abv [ ]  Bel [ ]  | Yes [ ]  No [ ]  |
| Do hazardous material storage / unidentified substance sites have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**5c. Hazardous Materials *-* *Hazardous Material Disposal***

* Hazardous Material Disposal: Include Information, Local Company Information, POC. Who picks it up, method of pickup, frequency of pickup? Where does it go? Location with Coordinates and how long does it remain? How is it stored? (Take photos of identified storage areas and practices)
	+ DRMO
	+ U.S. Contractor
	+ Local Contractor

|  |
| --- |
| 5c. Hazardous Materials *-* Hazardous Material Disposal |
|  *Include information, Local Company information, POC. Who picks it up, method of pickup, frequency of pickup? Where does it go? Location with coordinates and how long does it remain? How it is stored?*  | Present: [ ]  Absent: [ ]  |
| DRMO [ ]  US Contractor [ ]  Local Contractor [ ]  |
|  |

**5d. Hazardous Materials - *Hazardous Materials Migration***

* Describe any hazardous material that have or could leave the location.

|  |
| --- |
| 5d. Hazardous Materials *-* Hazardous Material Migration |
| *Describe any hazardous material that have or could leave the location.* | Present: [ ]  Absent: [ ]  |
|  |

# 6a. Waste Management - *Solid Waste*

* Solid Waste: *General description of solid and hazardous waste disposal practices. Describe whether burn pits, composting, landfills, or incinerators are used. (Take photos of identified areas )*
	+ Type of Waste: *residential, industrial, agricultural, medical, other*
	+ Source of Waste: *Dining facility, housing, office, construction debris, etc.*
	+ Disposal Method: *Incineration, open burning, landfill, compositing, other*
	+ Contractor Operated: *Is that specific waste collection and disposal contractor operated?*
	+ Notes: *Notes related to the specific types of waste.*
* Past Solid Hazardous Waste Releases/Spills: *Any information concerning past releases of solid/hazardous waste? Describe the details of those past spills if known: location (MGRS coordinates), date, type of spill, amount spilled (or size of the stain), and any remedial actions taken. If unknown, state “Unknown.” (Take photos of areas associated with past releases)*

|  |
| --- |
| 6a. Waste Management - Solid Waste |
| *Are residential, industrial, agricultural, medical, or other wastes present?* | Present: [ ]  Absent: [ ]  If Present, list below |
| Type of Waste | Source of Waste | Disposal Method | Contractor Operated |
|  |  |  | Yes [ ]  No [ ]  |
| Notes: |  |
|  |  |  | Yes [ ]  No [ ]  |
| Notes: |  |
|  |  |  |  Yes [ ]  No [ ]  |
| Notes: |  |
| Past Solid Waste Releases/Spills *(Describe the details of those past spills if known: location (coordinates), date, type of spill, amount spilled (or size of the stain), and any remedial actions taken. If unknown, state “Unknown.”)* |
|  |

## 6b. Waste Management *- Landfills*

* Landfills: *(take photos of landfill, equipment present in landfill, operating practices and other items of interest.) If possible, acquire landfill design documents.*
	+ Description: *general size in area, how long in use, materials excluded (e.g. medical waste, batteries, waste POL, tires, etc)*
	+ Location (distance from troops):  *General locations (e.g. northwest corner of camp) and distance from living areas (e.g. 1,000 meters southeast of landfill)*
	+ Geo-coordinates (MGRS):  *Specific location in decimal degrees.*
	+ Material Disposed: *types of material disposed (see “Types of Waste” on previous page)*
	+ Disposal Volume/Day: *In weight or volume, can be obtained from the landfill operator.*
	+ Operator: *Name of operator and contact information.*
	+ Daily Cover (yes/no): *Is daily cover applied?*
* Notes
	+ *Control measures if known (release vents, caps, liners)*
	+ *Type of landfill, landfill design (surface dumping, ravine, trench, mound, etc*

|  |
| --- |
| **6b. Waste Management - Landfills** |
| *Are landfills present?* | Present: [ ]  Absent: [ ]  If Present, list below  |
| Description: size, how long in use, materials excluded | Location (Distance from Troops) | Geo-coordinates  | Material Disposed | Disposal Volume/Day | Operator | Daily Cover (yes/no) |
|  |  |  |  |  |  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Yes [ ]  No [ ]  |
|  |  |  |  |  |  | Yes [ ]  No [ ]  |
| Do landfills have the potential to affect camp personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

## 6c. Waste Management *- Incinerators / Burn Pits*

* Incinerators / Burn Pits: *(Take photos of incinerator and associated chambers, controls and specifications plate). If possible, acquire incinerator manual and operating SOPs*
* Description: *general size in area, how long in use, materials excluded (e.g. medical waste, batteries, waste POL, tires, etc) and unit manufacture of incinerator (Obtained from specifications plate on unit).*
* Location (distance from troops):  *General location (e.g. northwest corner of camp) and distance from living areas (e.g. 1,000 meters southeast of burn pit)*
* Geo-coordinates (MGRS): *Specific location in decimal degrees.*
* Material Disposed: *types of material disposed Residential, Industrial, Agricultural, Medical, Other.*
* Disposal Volume/Day: *Disposal volume per day, in weight or volume, can be obtained from the incinerator / burn pit operator. For incinerators, note unit’s capacity from specifications plate on unit.*
* Operator: *Name of operator and contact information.*
* Supplemental Fuel: *Note supplement fuel (e.g. diesel, propane, waste oil, etc)*

**\*** *(If geo-coordinates are classified please place in the appropriate table at the end of the template)*

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| --- |
| **6c. Waste Management - Incinerators / Burn Pits**  |
| *Are Incinerators / Burn Pits present?* | Present: [ ]  Absent: [ ]  If Present, list below |
| Description: size, how long in use, materials excluded, unit manufacture | Location (Distance from Troops) | Geo-coordinates  | Material Disposed | Disposal Volume/Day | Operator | SupplementalFuel  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| Do the emissions from the Incinerator/Burn Pit have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

6d. Waste Management – *Waste Water*

* Waste Water:
	+ Treatment Facility Name: Unique name of treatment facility
	+ Sources: What is the source of the wastewater (e.g. *general housing, hospital, south part of camp, etc)*
	+ Type / Source of Wastewater: [Add/select all that apply to the form below]
		- *Black water: latrines, urinals, kitchen, other*
		- *Grey water: showers, hand wash stations, laundry; reverse osmosis (RO) concentrate, other*
		- *Industrial wastewater: from wash racks, oil-water separators, other*
	+ Estimated Volume/Day: What is the estimated volume of wastewater treated per day?
	+ Collection Method [Add/select all that apply to the form below]*(Take photos of identified methods)*
		- *Burn-out latrines*
		- *Portable/chemical toilets*
		- *Tank trailer/holding tanks/ponds*
		- *Pipes/pump stations*
		- *Other*
		- *Unknown.*

* + Treatment methods: [Add/select all that apply to the form below] *(Take photos of identified methods)*
		- *Burn-out latrines*
		- *Septic system (solids settling tank / drain field*
		- *Package (portable or modular wastewater treatment facility (WWTF)*
		- *Constructed wastewater treatment facility (WWTF)*
		- *None*
		- *Unknown*
	+ Disposal Method: [Add/select all that apply to the form below]
		- *Subsurface (e.g., septic drain field, dry wells, seepage pits)*
		- *Land applied (ground discharge, infiltration/evaporation ponds/beds/fields, spray irrigation)*
		- *Stream discharge*
		- *Trucked off-site to known/unknown location*
		- *Piped off site to known/unknown location*
		- *Other*
		- *Unknown*
	+ Contractor Operated: *Is the specific collection, disposal and treatment contractor operated?*
	+ General Notes: *Gather available wastewater treatment monitoring data (i.e., flow and physical/chemical data).*

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| --- |
| **6d. Waste Management *– Waste Water*** |
|  *What are the sources/types? How it is collected, treated, discharge/disposed?* | Present: [ ]  Absent: [ ]  If Present, list below |
| Waste Water Treatment Facilities |
| Treatment Facility Name | Source(s) | Type(s) of waste water treated | Estimate volume/day | Collection Method | Treatment (Methods) | Disposal Method | Contractor Operated |
|  |  |  |  |  |  |  | Yes [ ]  No [ ]  |
| Notes: |  |
|  |  |  |  |  |  |  | Yes [ ]  No [ ]  |
| Notes: |  |
|  |  |  |  |  |  |  | Yes [ ]  No [ ]  |
| Notes: |  |
| General Notes: *Gather available wastewater treatment monitoring data (i.e., flow and physical/chemical data)* |
|  |

**6d. Waste Management - *Waste Water (continued)***

* How is storm water managed? *(Take photos of identified areas)*
* *Method: not managed; site grading (adequate/inadequate); open ditches, storm drains and underground pipes; storm water collection (detention/retention ponds or tanks)*
* Is wastewater or storm water reused for beneficial purposes? If yes, explain.
	+ - *Design: obtain storm water system design, if available*
		- *Is treated/untreated wastewater reused?: (no/yes - black/grey water reused)*
		- *If applicable, reuse type: dust control, vehicle washing, crop irrigation, construction uses (explain), toilet flushing, laundry, showers, other (explain)*

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| --- |
| **6d. Waste Management – Waste Water *(continued)*** |
| How is storm water managed? |
|  |
| Is wastewater or storm water reused for beneficial purposes?  | Yes [ ]  No [ ]  If yes, explain. |
|  |
| Does wastewater management have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**7. Entomology [General]**

* Entomological Assessment:
	+ *Is surveillance for the vectors of these diseases being conducted? If yes, describe what is being done and what has been found.*
	+ *Were specimens submitted to another agency for testing and if yes to whom?*
	+ *Are conditions favorable for vectors/pests? If yes, describe.*
	+ *Are soldiers being bitten by vectors/pests? If yes, list and describe what is being done about it.*
	+ *Do soldiers report seeing other pests? If yes, list.*
* Health Assessment: *Are living/work facilities pest proof? If no, describe. Is waste being handled in environmentally sound manner that protects human health and does not provide breeding for pests? If no, describe.*
* Countermeasures / Pest management Control: *Are personal protective countermeasures appropriate to the threats? Describe. Are pest management operations being conducted? If yes, describe. Include who (contractor, Med Det) and what (vector, pest).*
* Pesticide Use: *Attach copies of DD Form 1532-1 (or equivalent).*

| **7. Entomology [General]** |
| --- |
| Entomological Assessment:  |
| Health Assessment: |
| Countermeasures / Pest management Control:  |
| Pesticide Use:  |

**7a. Entomology *– Disease Threats***

* Disease Threats: Are disease threats present, if so list diseases and the risk estimate for each? *These can be obtained for each country from AKO, at* <https://www.us.army.mil/suite/folder/4089741>). Note: this site is currently under construction and will be populated with Entomological and Zoonotic Operational Risk Assessments (EZORAs) on countries of interest. In the meanwhile, please visit the National Center for Medical Intelligence (NCMI) Infectious Disease Risk Assessment (IDRA) at: <https://www.intelink.gov/ncmi/subject/epi.php> for information on vector-borne disease risk threat in the country/region of interest.
	+ Disease Threat: *Examples: Leishmaniasis, sand fly fever, etc. (complete listing in DOEHRS)*
	+ Hazard Severity: *Catastrophic, Critical, Marginal, Negligible,*
	+ Hazard Probability: *Frequent, Likely, Occasionally, Seldom, Unlikely.*
	+ Risk Estimate: *Low, Moderate, High, Extremely High*
	+ Date: *Date of risk assessment, if obtained from USAPHC, list the date of Entomological Operational Risk Assessment.*
	+ Note*: Any notes associated with the disease threat.*

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| --- |
| **7a. Entomology - Disease Threats** |
| *List diseases and the risk estimate for each.* | Present: [ ]  Absent: [ ]  If Present, list below |
| Disease Threat | Hazard Severity | Hazard Probability | Risk Estimate | Date | Notes |
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**7b. Entomology *– Vectors Present***

* Vectors Present: *Are disease vectors present? If yes, list below.*
	+ Vector Present: What vector or pest is present.
	+ Life State: egg, larvae, pupae, adult, etc (depends on the vector )
	+ Notes: General notes about the vector.

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| --- |
| **7b. Entomology – Vectors Present** |
|  *Are disease vectors present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Type of Vector | Vector Present | Life Stage | Notes |
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|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
| Do vectors have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**7c. Entomology *– Pests Present***

* Pests Present: Are pests present? If yes, list below*.*
	+ Pest Present: What pest is present.
	+ Life State: egg, larvae, pupae, adult, etc (depends on the pest)
	+ Notes: General notes about the pest.

|  |
| --- |
| **7c. Entomology – Pests Present** |
|  *Are disease pests present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Type of Pest | Pest Present | Life Stage | Notes |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
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|  |  |  |  |
|  |  |  |  |
| Do pests have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

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# 8a. Physical Hazards Instructions - *Non-Ionizing Radiation Sources*

* Non-Ionizing Radiation Sources: *(Take photos of identified sources)*
	+ Location Description: *Location of the source (e.g. inside building xx, DRMO yard, etc)*
	+ Source: *lasers, ultraviolet sources, bright lights, infrared illuminators, radio frequency radiation, including anti-IED defeat systems/jammers (see descriptions below for more details)*
	+ Source Distance to Personnel*: Distance in meters from identified source to personnel.*
	+ Levels/Amount/Class: *The level and amount of radiation measured and also the class of laser.*
	+ Measurement Distance: *Distance from source to point of measurement*
* General Notes. Notes related to non-ionizing radiation sources in general.
* Radiofrequency Radiation (RFR) Devices / Communication Antennas: RFR devices produce RFR which is transmitted through communication antennas produce radio-frequency (RF) radiation. These systems should be accounted for and inventoried. The RF radiation hazard generated by an RFR system is based on the power of the energy emitted (mW/cm2) and the duration of exposure. Need to gather this information as a minimum.
* Lasers: A variety of laser systems may be present with visible and invisible beams, to include rangefinders, designators, pointers, illuminators, warning systems, and training devices. Each system is classified according to the optical hazards to a person’s eyes, with Class 1 indicating no hazard and Class 4 the most severe hazard. The eyes are generally much more susceptible to injury than the skin. Each system above Class 1 has a nominal ocular hazard distance for unaided and/or optically aided viewing, and possibly a skin hazard distance. In addition, an optical density is specified that is necessary to protect eyes from direct exposure, and may be higher for optically aided viewing. The hazards are limited to the emitted beam, possible reflections, and may include ancillary hazards such as exposure to high voltage.
* Ultraviolet Sources: Ultraviolet sources are sometimes used to examine or locate objects, and can be used for medical treatments, biological research, and air, surface and water disinfection. These sources may be classified as exempt, low risk, or high risk. These lamps may lack a strong visual stimulus, and therefore prolonged exposure may occur without a person realizing that the exposure is hazardous. Exposure to these sources can injure a person's eyes or skin. Guidelines determine a cumulative permissible exposure during an 8 hour day. Hazards are usually limited to the emitted radiation and possible reflections from nearby surfaces. Protective devices generally include skin protection as well as eye protection.
* Bright Lights: Searchlights, tungsten halogen lamps, metal halide lamps, xenon arcs, and light emitting diode visible sources are among the various types of high intensity optical sources that may produce an eye hazard. Exposure should be limited if uncomfortable to view.
* Infrared Illuminators: Infrared illuminators have a hazard similar to bright lights except the visual stimulus is absent. Therefore, prolonged exposure may occur without a person realizing that the exposure is hazardous. Warnings should be heeded on such devices because even if a slight visual indication is present, the lack of brightness may under predict the actual optical hazard.

*USAPHC and USAFSAM evaluate these types of sources and produces a detailed report on each. Warning labels should be located on all hazardous systems and a standing operating procedure should be available for the most hazardous devices. Additional information on specific devices may be obtained by contacting the Deployment Environmental Surveillance Program at the AIPH or USAFSAM.*

|  |
| --- |
| 8a. Physical Hazards – Non-Ionizing Radiation |
| *Are the following sources present? Com Antennas, lasers, ultraviolet, bright lights, infrared illuminators.* | Present: [ ]  Absent: [ ]  If Present, list below |
| Non-Ionizing Radiation Sources  |
| Location / Description  | Source  | Source Distance To Personnel | Levels/Amount/Class | Measurement Distance |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Notes: |
| Do non-ionizing radiation sources have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**8b. Physical Hazards Instructions - *Ionizing Radiation Sources***

* Ionizing Radiation Sources: *Refer to USACHPPM Tech Guide 238 for additional information (*[*http://chppm-www.apgea.army.mil/documents/TG/TECHGUID/TG238.pdf*](http://chppm-www.apgea.army.mil/documents/TG/TECHGUID/TG238.pdf) *). (Take photos of identified sources)* CORRECT LINK?

* + Storage Area: Area of radiation sources *(e.g., building xx, DRMO yard, etc)*
	+ Sources Contained: *Depleted Uranium, Industrial Radiography, Radioluminous Dials or Gages, Lightening Arrestors, Medical Sources*
	+ Isotope: *Cesium-137, Cobalt -60, Radium-226, Tritium, Uranium 238 (DU)*
	+ Activity: *Enter activity amount in curies or becquerel*
	+ Highest Dose Rate Observed: *Dose rates should be measured. (For example using the AN/VDR 2 or AN/PDR-77 using the beta/gamma probe (DT 616) with the beta shield open). No dose rates should be recorded for items containing only tritium (Hydrogen-3).*
* Camp Background Dose Rate: Background dose rate should be measured in an area where there are no radiation sources and no radioactive contamination. Background and highest dose rate should be measured.
* General Notes. *Note any radioactive warning signs or labels observed (refer to USACHPPM Tech Guide 238). Note any radiation sources observed outside radioactive material storage areas. If the highest dose rate observed on the basecamp is outside a radioactive material storage area, record the dose rate in the general notes.*

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| **8b. Physical Hazards – Ionizing Radiation** |
| *Are any ionizing radiation sources present? If known, attach inventory of sources.* | Present: [ ]  Absent: [ ]  If Present, list below |
| Storage Area | Sources Contained | Isotope | Activity | Highest does rate observed |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| 8c. Camp Background Dose Rate: |  |
| Notes: |
| Do ionizing radiation sources have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**8c. Physical Hazards Instructions - *Environmental Noise Sources***

* Environmental Noise Sources: *Are noise sources present? If so, describe sources.* (*Take photos of identified sources)*
	+ Location Description: *Location of the noise source and control (e.g. generator next to building xx, airfield south of camp, air handler servicing building yy, etc)*
	+ Source: *Generator, industrial operations, airfield, etc*
	+ Source Distance to Personnel: *Distance of noise source to personnel in meters*
	+ Noise Level *Ambient noise level obtained from a noise meter*
	+ Measurement Distance: *Distance from source to measurement in meters*
* General Notes: Notes related to noise sources and controls in general

|  |
| --- |
| **8c. Physical Hazards - Environmental Noise** |
|  *Are noise sources present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Environmental Noise Sources |
| Location / Description  | Source  | Source Distance To Personnel | Noise Level | Measurement Distance |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| Notes: |
| Do noise sources have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**9a. Air Quality Instructions - *Ambient (Outside) Air Quality***

* Ambient (Outside) Air Quality. *Describe sources and their locations that impact the ambient air and/or introduce potential hazard. Develop Exposure Pathways Model for sources and populations. (Take photos of identified sources)*
	+ *Survey the landscape and note the presence of any storage tanks (on post and off) and identify the contents (is it a solvent, an industrial chemical at a plant, or a petroleum product, or unknown?)and approximate storage volume.*
	+ *Note all combustion sources or sources that create “exhaust fumes or smoke” (flares, incinerators, generators, burn pits/boxes, welding operations, anywhere vehicles/aircraft idle for significant periods, etc.) and their geo-coordinates.*
	+ *Note well defined sources of dust in the ambient air such as cement plants, mining operations, tank/convoy trails, road/highways, helipads/runways, and agricultural fields/operation.*
	+ *Describe any “other” sources impacting the ambient air by producing visible smoke plumes or odors such as a manufacturing facilities, petrochemical plants, landfill, or military painting and/or solvent use outdoors or indoors, especially refueling points; note any terrain/elevation differences between the camp and air sources. Place special emphasis on identifying sources of caustics including acids and bases that can become airborne and affect the respiratory system.*
	+ *Does the operation of any source change with the weather season or is weather dependent?*

|  |
| --- |
| 9a. Air Quality - Ambient (Outside) Air Quality |
| *Describe sources and their locations that impact the ambient air and/or introduce potential hazards:*  |
|  |
| Do ambient air quality sources have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway and form located at the end of this template. |

**9b. Air Quality Instructions - *Indoor Air Quality***

* Indoor Air Quality (IAQ)

* *Do occupants complain about dust, odor(s), stale air, or have symptoms of eye, throat, and nose irritation?*
* *Are generators placed near building openings? Note: Carbon monoxide and other combustion by products should be controlled to as low as achievable, not the MEG.*
* *Presence of substance appearing to be visible mold? (Take photos of identified mold)*
* *Do they occupy newly built structures?*
* *Does the ventilation system allow fresh, filtered, and conditioned air into the building or shelter?*

|  |
| --- |
| **9b. Air Quality - Indoor Air Quality (IAQ)** |
| *Do occupants complain about dust, odor(s), stale air, or have symptoms of eye, throat, and nose irritation? Are generators placed near building openings? Presence of substance appearing to be visible mold? Do they occupy newly built structures? Does the ventilation system allow fresh, filtered, and conditioned air into the building or shelter?* |
|  |
| Do indoor air quality sources have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**10a. Water Instructions [General]**

* Water Surveillance Program. *Describe the water surveillance program.*
* Conceptually, the Water [Quality] Surveillance program for a Location should consist of an inventory of all the sample points (e.g. water sources, water storage tanks, water treatment points, dining facilities and other sample locations representative of the distribution system). These should ALL be documented throughout DOEHRS in the various modules (water surveys, sampling points, etc). Document the plan to pull samples from those sampling locations monthly, quarterly, annually etc on the SP form(s). The type of testing to be done (onsite, local PM lab, PHC Sample kit) should be based on the PM mission, PM manpower, and capabilities available for the PM AOR. List the PM assets, level and amount of test equipment available, all the field sanitation teams (FSTs) their units and member's names and contact information, and the FST training schedule.
* If a field water system vulnerability assessment (FWSVA) has been completed and it is classified above FOUO, reference it below and any unclassified information that would better provide a comprehensive overview of the Water [Quality] Surveillance program as well.

|  |
| --- |
| 10a. Water *-* Water Surveillance Program |
|  *Describe the water surveillance program.* |
|  |

**10b. Water Instructions - *Natural Water Sources***

* Natural Water Sources: *Are natural water sources present? If so please list*.
	+ Name: *Label as “Base Camp + Unique name” of natural water source. Add the name of the Base Camp when populating this in DOEHRS.* *Water sources should be documented thoroughly. Once added to DOEHRS this can be selected again for water surveys and to associate to water samples.*
	+ Type of Source: *Ground or Surface*
	+ Source*:*
		- *If Ground:* [Select only one and add to form]
			* *Well, Spring*
		- *If Surface:* [Select only one and add to form]
			* *River, Stream, Pond, Rain, Ice, Snow, Sea, Ocean*
	+ Potential Sources of Contamination: *List any sources of potential contamination*
	+ Intended Use(s): *Primary Drinking, Secondary Drinking, Showering, Personal Hygiene, Cooking, Recreation, Medical Treatment, Treatment Source, Other (identify other intended use(s).* [Select all that apply and add to form]
	+ Note*: Any notes associated with the natural water source?*

|  |
| --- |
| **10b. Water - Natural Water Sources** |
| *Are natural water sources present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Natural Water Sources |
| Name  | Type  | Source | Potential Sources of Contamination | Intended Use(s) | Notes |
|  |  |  |  |  |  |
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| Do natural water sources have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**10c. Water Instructions - *Municipal Water Sources***

* Municipal Water Sources.
	+ Name: *Unique name of municipal water source. Label as “Base Camp + Unique name” of municipal water source. Add the name of the Base Camp when populating this in DOEHRS. Once added to DOEHRS this can be selected again for water surveys and to associate to water samples.*
	+ Source of supply*:* *Ground or Surface or Ground and Surface*
	+ Name of source*: Name of the water supply*
	+ Approved: Is the source DOD approved; Yes, No, or Unknown.
	+ Treatment Methods: *What treatment methods are used?*
	+ Intended Uses: *Primary Drinking, Secondary Drinking, Showering, Personal Hygiene, Cooking, Recreational, Medical Treatment, Treatment Source, Other (identify other intended use(s).* [Select all that apply and add to form]
	+ Notes: *Any notes associated with the municipal water source?*

|  |
| --- |
| **10c. Water - Municipal Water Sources**  |
| *Are municipal water sources present?*  | Pr*e*sent: [ ]  Absent: [ ]  If Present, list below |
| Name  | Source of supply | Name of Source | Approved | Treatment Methods | Intended Use(s) | Notes |
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| Do municipal water sources have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**10d. Water Instructions – *Bottled Water Sources***

* Bottled Water Sources
	+ Brand: *Name of the bottled water.*
	+ VETCOM Approved: *Is the source bottled water source VETCOM approved? Yes, No, or Unknown.*
	+ Intended Uses: *Primary Drinking, Secondary Drinking, Showering, Personal Hygiene, Cooking, Recreational, Medical Treatment, Treatment Source, Other (identify other intended use(s).* [Select all that apply]
	+ Notes: *Any notes associate with the bottled water source?*

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| --- |
| **10d. Water *-* Bottled Water Sources** |
| *Are bottled water sources present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Natural Water Sources |
| Brand  | VETCOM Approved | Intended Use(s) | Notes |
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| Do bottled water sources have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

## 10e. Water Instructions - *Water Treatment Systems*

* Water Treatment Systems
* Name: *Unique name of treatment system. Label as “Base Camp + Unique name” of municipal water source. Add the name of the Base Camp when populating this in DOEHRS. Once added to DOEHRS this can be selected again for water surveys and to associate to water samples.*
	+ Operating Organization: *DOD, Contractor, NATO or Other (Specify)* [Select only one]
	+ Treatment System Location: *Fixed or Mobile* [Select only one].
		- *If Mobile: Unique ID of Treatment System/Serial Number*
	+ Water Treatment System Type: *Military or Civilian* [Select only one].
		- *If Military: 3000 GPH, 600 GPH, Army-LWP, Marine Corps-LWPS, Other (specify), TWPS*
		- *If Civilian: High Pressure Membrane/Seawater, Low Pressure Membrane/Seawater, Other (specify)*
* *C*omments: Any additional information
	+ Operation Organization Name/POC: *Self explanatory*.
	+ Natural Water Source(s): *From prior section. Defined natural water sources supplying the treatment facility.*
	+ Municipal Water Source(s): *From prior section. Defined municipal water sources supplying the treatment facility.*
		- *At least one of each of these is required in DOEHRS, but not both.*
	+ Production Capacity/Rate: *volume per time.*
	+ Intended Uses: *Primary Drinking, Secondary Drinking, Showering, Personal Hygiene, Cooking, Recreational, Medical Treatment, Treatment Source, Other (identify other intended use(s).* [Select all that apply]
	+ Water Distribution System: *Describe the water distribution system. How is water transported around the camp: tactical water distribution system (TWDS), water trucks, trailers, existing distribution system, or constructed distribution system? How is water stored? Use additional pages to describe the water distribution system in detail.*

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| **10e. Water - Treatment Sources *(continued)*** |
| *Are water treatment sources present?*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Name | Source water | Operating Organization Type | Fixed or Mobile/ SN(s) | Military/Civilian  | Type | Operating Organization Name/POC | Production Capacity/Rate | Intended Use(s) | Water Distribution System |
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| Do water treatment systems have the potential to affect personnel?  | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**11. General Sanitation Instructions**

* General Facilities: *List and/or* *Describe the name, type, and description/ notes of the General Sanitation Facilities for future inspections. This list may already exist in DOEHRS, but if not the General Sanitation Facilities must be added to DOEHRS. (Take photos of identified facilities).*
	+ Name: *Define an name for the facility (e.g. Gym- North, MWR-101, etc)*
	+ Type*:*[Select only one and add to form]
		- *Barber/Beauty Shop*
		- *Child Development Center(not a choice in DOEHRS)*
		- *EPW Detention Facility*
		- *Field Shower Point*
		- *Gym Fitness Center*
		- *Habitability*
		- *Laundry Dry Cleaning*
		- *Mobile Homes and RV Parks*
		- *Public Facilities*
		- *Recreational Waters*
	+ Description/Notes: *Contractor contact details; how long they’ve been at this location? Who inspects the facility; at what intervals?*

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| **11. General Sanitation**  |
| General Facilities: *List and/or* *Describe the name, type, location, and notes or description of the facilities for future inspections* | Present: [ ]  Absent: [ ]  If Present, list below |
| Name | Facility Type | Description/Notes: |
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| General Notes:*What is the inspection frequency? Are there any concerns?* |

**12. Food Sanitation Instructions**

* Dining Facilities:*List and/or* *Describe the name, type, and description/ notes of the Food Sanitation Facilities for future inspections. This list may already exist in DOEHRS, but if not the Food Sanitation Facilities must be added to DOEHRS. (Take photos of identified facilities).*
	+ Name: *Define a name for the facility (e.g. DFAC North, DFAC-101, etc)*
	+ Facility Type: *Identify all 3 component of each facility inspected: Food Facility Type, Food Service Type, and Operator Type.*
		- Facility Type: *Is the Facility used for Food Service (FOB DFAC), Food Retail (Taco Bell), or Food storage?* [Select all that apply and add to form]
		- Food Service Type: *Is the food served type fixed, mobile, temporary, or seasonal* [Select only one and add to form]
		- Operator type: *AAFES, NEX, MCX, CGX, DeCA, DFAC, MWR/SVS. DLA, Other (specify).* [Select only one and add to form]
	+ Description/Notes: *Contractor details and contact information; population served; meals served. Who inspects the facility and at what intervals? Does review of the facility inspections reports reveal any continuing concerns or food vulnerabilities?*

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| **12. Food Sanitation**  |
| Dining Facilities: *Describe the location and general condition of the facility for future inspections.* | Present: [ ]  Absent: [ ]  If Present, list below |
| Name | Facility Type | Food Service type | Operator Type | Description/Notes:  |
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| General Notes:*What is the inspection frequency? Are there any food vulnerability concerns?* |

# 13. Personnel Contacted Instructions:

* Who did you talk to/interview in each area? (Attach interview notes). Include all POCs, Contractors, Sub-Contractors, and Medical Personnel responsible for ensuring health of personnel using Dining Facilities.
* Name: *Name of the individual contacted.*
* Email: *Email of the individual contacted.*
* Phone: *Phone of the individual contacted, include both DSN and commercial if possible.*
* Title: *Title of the individual contacted.*
* Area: *What area of the OEHSA was the individual contacted? Survey Background, Site Description, Site Infrastructure, Hazardous materials, Waste Management, Entomology, Physical Hazards, Air Quality, Water, General Sanitation, Other-Environmental Concerns, Onsite-Screening Results, Direct-Reading instrumentation and Calibrations*[Select all that apply]
* Did information obtained from interviews corroborate your site observations?

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| --- |
| **13. Personnel Contacted:** *Who did you talk to/interview in each area? (Attach interview notes). Include all POCs, Contractors, Sub-Contractors, Medical Personnel responsible for ensuring health of personnel using the Dining Facilities.* |
| Name | Email | Phone | Title | OEHSA Area |
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| Notes: *What data was obtained by interviewing personnel outlined above?*  |
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**14. Other Environmental Health Concerns Instructions**: *Add anything that does not fit in above sections. Things to discuss (if applicable): areas of stressed vegetation, evidence of mounds or depressions, pits, ponds, lagoons, farm wastes, excessive pesticide used, oil/water separators, unknown substances, ranges / unexploded ordnance, etc* ***.***

* Name: *Define a name for the concern (e.g. Range-North, Stained Soil South, etc)*
* Location / Description: *Where is the area of concern located; building number, camp location, etc? Individuals must be able to identify and find the location for future inspections.*
* Geo coordinates\* *(Lat/Long in decimal degrees)*    Note: if the information is classified, enter "Coordinates Classified" in the “Concern” field.
* Concern: *Describe the concern in as much detail as possible.*

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| --- | --- |
| **14. Other Environmental Health Concerns:** *Anything that does not fit in above sections. Things to discuss (if applicable): areas of stressed vegetation, evidence of mounds or depressions, pits, ponds, lagoons, farm wastes, excessive pesticide used, oil/water separators, unknown substances ranges / unexploded ordnance, etc*  | Present: [ ]  Absent: [ ]  If Present, list below |
| Name | Location | Geo coordinates (MGRS or Lat/Long)\* | Notes |
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| Do the Environmental Health Concerns have the potential to affect personnel? | Yes: [ ]  No: [ ]  If yes, complete the Exposure Pathway form located at the end of this template. |

**15. Conceptual Site Model (CSM) - All Exposure Pathways.** The CSM is a consolidated list of the OEHSAs EPs. *Instructions – There is no action the surveyor needs to take for this section. DOEHRS will automatically populate this tile with all the EPs from the individual sections of the OEHSA. Priority is low, medium and high based upon severity and probability rankings. Use the tables below to aid in assigning Priority (i.e. Risk) to individual EPs. Refer to TG 230 for more in-depth risk assessment information.*

|  |  |
| --- | --- |
| **EPD Hazard Severity Ranking Selection Information** | **EPD Hazard Probability Ranking Selection Information** |
| **Selection** | **Definition** | **Selection** | **Definition** |
| CATASTROPHIC | Loss of ability to accomplish the mission or mission failure. Death or permanent disability. | FREQUENT | Occurs continually during a specific mission or operation. |
| CRITICAL | Significantly degraded mission capability, unit readiness, or personal disability. | LIKELY | Occurs at a high rate, but experienced intermittently |
| MARGINAL | Degraded mission capability or unit readiness. Injury or illness of personnel. | OCCASIONAL | Occurs sporadically (irregularly, sparsely, or sometimes). |
| NEGLIGIBLE | Little or no adverse impact on mission capability. First aid or minor medical treatment. | SELDOM | Occurs rarely within exposed population as isolated incidents. |
| UNLIKELY |  Occurs very rarely, but not impossible. |
|  |
| ***HAZARD SEVERITY RANKING*** | ***HAZARD PROBABILITY RANKING*** |
| *Frequent (A)* | *Likely (B)* | *Occasional (C)* | *Seldom (D)* | *Unlikely (E)* |
| *Catastrophic (I)* | *Extremely High* | *Extremely High* | *High* | *High* | *Moderate* |
| *Critical (II)* | *Extremely High* | *High* | *High* | *Moderate* | *Low* |
| *Marginal (III)* | *High* | *Moderate* | *Moderate* | *Low* | *Low* |
| *Negligible (IV)* | *Moderate* | *Low* | *Low* | *Low* | *Low* |

**16. Onsite Screening Results** *– List of results from onsite sampling.*

* Sample Date: *Date sampling occurred*
* Sample Time: *Time sampling occurred.*
* Geo Coordinates: *Location of sample*. *(If geo-coordinates are classified please place in the appropriate table at the end of the template)*
* Media: *Air, Water , Soil or Other* [Select only one]
* Analyte: *Name of the parameter analyzed.*
* Result: *What is the result of the analysis with units*
* Notes: *Notes related to the analysis and associated results*.

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| --- |
| **16. On-Site Screening Results** *(Add other pages as appropriate)* |
| Sample Date | Sample Time | Geo coordinates (MGRS or Lat/Long)\* | Media | Analyte | Result | Units | Notes |
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# 17. Direct Reading Instrumentation and Associated Calibrations

* Instrument: *Name / ID of instrument used and calibrated*
* Calibration Date: *Date of calibration*
* Notes: *Any notes associated with the instrument or calibration.*

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| **17. Direct reading instrumentation and associated calibrations** *(Add other pages as appropriate)* |
| Instrument | Calibration Date | Notes |
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| 18. Executive Summary Findings. *Detailed environmental conditions of health / mission significance (Add other pages as appropriate)* |
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| 19. Executive Summary Recommendations. *Outline appropriate corrective actions and surveillance plans. Focus on additional data to characterize the risk associated with conceptual site modes. (Add other pages as appropriate).*  |
|  |

# 20. Reviewed and Communicated to Command. Documents the review process and how findings were communicated to the site’s Commander.

* Assessment Reviewed By: *Name of person who reviewed the OEHSA before it was communicated to the Command.*
* Date: *Date assessment was reviewed.*

Communicated to the Command:

* To: *Name of individual(s) in the Command to whom the OEHSA findings were communicated.*
* Position: *The position(s) of those individuals*
* Unit: *Unit name(s) of those individuals.*
* Email Address: *Email address of at least one individual to whom the OEHSA findings were communicated.*
* Phone Number: *Phone number of at least one individual to whom the OEHSA findings were communicated.*
* Date: *Data on which communication took place.*
* By: *Who presented the OEHSA findings to the Command (name, rank and contact info)*
* Via: *How were OEHSA findings communicated (briefing, email, telephonically, etc.)*

Assessment Reviewed by: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Communicated to the Command:

To: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (individual's name(s) and contact information)

Position: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (e.g., Commander, Camp Mayor, Operations Chief, etc.)

Unit: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Email Address: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Phone Number: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

On: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_(date)

By: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (rank/name and contact information)

Via: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (briefing, email, telephonically, etc)

*Note: Once this form is completed, type the data in this form into DOEHRS and attach any hand written copies and/or notes to the attachments section of Tile 1. If any elements of this OEHSA are classified fill out the tables below, then export the form from DOEHRS (once populated with unclassified information) and add in the classified elements. Send the completed classified OEHSA to* *usarmy.apg.medcom-phc.mbx.oehs@mail.smil.mil**. If the OEHSA does not contain classified information it can reside in DOEHRS.*

# 21. Samples Collected for Off-Site Analysis *–Listing of samples collected during the OEHSA that were sent to an off-site laboratory for analysis. (This will be noted in DOEHRS by associating samples with the OEHSA)*

* DOEHRS ID: *Unique ID assigned by DOERHS when sample is entered into DOEHRS (e.g. 00000C93)*.
* Field ID: *Unique ID assigned in the field.(e.g. IRQ\_ADDER\_01W\_17209)*
* Sample Date: *Date sample was taken or started, from the Field Data Sheet.*
* Sample Time: *Time sample was taken or started indicated on the Field Data Sheet.*
* Sample Type: *Type of sample collected (e.g. water, soil, Air-VOC, Air-PM2.5, etc)*
* Notes: *Any notes associate with the sample.*

|  |
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| **21. Associated Samples Collected for Off-Site Analysis** *(Add other pages as appropriate)* |
| DOEHRS ID | Field ID | Sample Date | Sample Time | Sample Type | Notes |
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\*\*\*Make as many copies as needed for each Exposure Pathway(s) and Affected Roster(s)

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| **IF AN EXPOSURE PATHWAY (EP) ALREADY EXISTS IN DOEHRS ENTER THE EP ID # IN THE EXPOSURE NOTES OF THE FDS AND DO NOT SUBMIT THIS FORM.** |
| **Exposure Pathway Form** |
| Name (Unique Name Descriptor) |  |
|  Applicable OEHSA Section | OEHSA Section | OEHSA Sub-section (SELECT ONE)  |
| *Site Description* | Nearby Industrial Facilities\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| *Site Infrastructure* | Onsite Industrial Operations Descriptions of Structures Description of Roads/Hardstand Description of Power Generation |
| *Hazardous Materials* | Petroleum Distribution Points Hazardous Materials Storage/Unidentified Substances |
| *Waste Management* | Solid Waste Landfills Incinerators/Burn Pits Waste Water |
| *Entomology* | Vectors Present Pests Present |
| *Physical Hazards* | Non-Ionizing Radiation Sources Ionizing Radiation Sources Environmental Noise Sources |
| *Air Quality* | Ambient (Outside) Air Quality Indoor Air Quality (IAQ) |
| *Water* |  Natural Water Sources Municipal Water Sources Bottled Water Sources Water Treatment Systems |
| *Other Environmental Health Concerns*  | Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Source |   |
| EnvironmentalMedia (select one) |  ⭘ Air ⭘ Water ⭘ Soil ⭘ Other  |
| Health Threat (Potential Hazard) |   |
| Route of Exposure (multiple routes will require multiple entries in DOEHRS) |  🞎 Ingestion 🞎 Inhalation 🞎 Physical 🞎 Skin Absorption 🞎 Skin Contact 🞎 Other  |
| Description of Affected Population | Fill out roster the Affected Roster for each person affected if known | Number of Affected Personnel:  |
|  |  |
| Existing Controls |   |
| Assessment |   |
| Exposure Duration (Fill out time and select increment) | \_\_\_\_\_\_\_\_ Minute Hour Day Week Month Year Other \_\_\_\_\_\_\_\_ |
| Exposure Frequency (Fill out time and select increment)  | \_\_\_\_\_\_\_\_ *(times per)* Day Week Month Quarter Half-Year Year Other\_\_\_\_\_\_\_\_ |
| Start Date (yyyy/mm/dd) |  |
| Hazard Priority (select one) | LOW | MODERATE | HIGH |  EXTREMELY HIGH |

|  |
| --- |
| **Affected Roster**  |
| Last Name | First Name | DOB (yyyy/mm/dd) | Last 4 digits of SSN (FN#) | Foreign National |
|  |  |  |  |  Yes No |
|  |  |  |  |  Yes No |
|  |  |  |  |  Yes No |
|  |  |  |  |  Yes No |
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|  |  |  |  |  Yes No |

**EXPOSURE PATHWAY FORM INSTRUCTIONS**

*Purpose: These instructions are intended to help complete the Exposure Pathway (EP) hard copy form. The purpose of the EP is to characterize a potential hazard and describe how it could affect personnel. EPs are typically identified, created, and described in Occupational and Environmental Health Site Assessments (OESHAs) but also can be created independently of OEHSAs. EPs are the basis for development of sampling plans to assess the potential hazard. Whenever feasible, EPs should be entered into DOEHRS.*

**Definition of an Exposure Pathway**: The exposure pathway is a description of the course a chemical, physical, or biological agent takes from its point of generation to exposed individuals.

**EXPOSURE PATHWAY: SOURCE ► MEDIA ► ROUTE ► POPULATION**

|  |  |
| --- | --- |
| **Field**  |  **Instructions** |
| Name  | Create a unique name for the exposure pathway (EP) that describes the EP adequately to distinguish it from other EPs. For example: “*Ingestion of unknown contaminants in drinking water from main water point.*” |
| Applicable OEHSA Sub-Section(select only one) | EPs are to be associated with OEHSA Sections and Subsections in DOEHRS. Select the most appropriate OEHSA Section/ Sub-Section, even if an OEHSA has not been completed. If the applicable section is “nearby industrial facilities” or “other” provide a brief description. If you need more space, add the description to the “Assessment” field.  |
| Source\* | Describe the source of the potential hazard. Be as specific as possible. For example: *“nearby brick kiln facilities”, “particulate matter from blowing dust”, “vehicle emissions from convoy staging”, “diesel-fired generators”, “Nestle bottled water”, “ROWPU LC-1346456 treated water.”* |
| Environmental Media\*  | Identify the media (air/water/soil) that will potentially contact personnel. If “Other” describe in the “Assessment” field. |
| Health Threat/ Potential Hazard\* | Describe the potential hazard/ health threat as specifically as possible. For example: “*inhalation of fuel vapors” or “transmission of malaria from mosquito bite” or “ingestion of potential contaminants from drinking water.”*  |
| Route of Exposure\* | Identify the route of exposure for the potential hazard identified. Examples of “Other” routes may include insect bites, injection, etc. |
| Description of Affected Population\* | Describe the population affected by the potential hazard. For example: *“waste management facility security personnel” or “all personnel living in the LSA.”* (For example: security personnel may be located nearer to burn pit emissions for a longer period than the general camp population).  |
| Number of Affected Personnel | The approximate number of personnel affected by the potential hazard. If this information is classified, enter “1”. If the actual population is known by name, complete the “Affected Roster” and attach it to the EP form. If there are no exposed personnel than enter “1” and in the assessment section, state “no personnel exposed.” If the number of personnel is unknown enter “1” and in the assessment section, state “unknown number of personnel exposed.” |
| Existing Controls | Describe the current controls used to manage the potential hazard. For example: *“sound barriers” or “limited access”, “burning during daylight hours only” or “active dust suppression measures in place” or “none”* |
| Assessment | Provide additional details on the potential hazard(s), their sources, the potentially affected population(s), potential health effects/mission impacts due to exposure, sampling/surveillance history, etc. For example: *“Potentially all personnel will be exposed to the water during showering, washing, personal hygiene and laundry. The water is drawn from a local river. This water source has not been tested as of 31 December 2013. Personnel have complained of foul odors when taking showers. This product water needs to be tested.”* |
| Exposure Duration (Fill out time and select increment) | Enter the total length of time per exposure personnel are exposed to the potential hazard. For air and soil exposures this may be a length of time. For example: “*30 minutes*” *or* “*24 hours*”. For water exposures, estimate the typical ingestion rate for each person. For example: *“2 liters of water per day.”* If there exposed personnel with different exposure durations, an EP will need to be filled out for each one. Also, note that the exposure duration listed on an FDS refers to the typical deployment duration. |
| Exposure Frequency (Fill out time and select increment) | Enter the number of times during a time period the exposure occurs. For example:“*1 time/day*” *or* “*4 times/month*” *or* “*1-2 times/week*”. If frequency cannot be described in this manner, select “Other” and describe frequency.  |
| Start Date (yyyy/mm/dd) | Enter estimated/actual date when personnel first had exposure to the potential hazard. If the potential hazard has been present since the location was first occupied (e.g. ambient air), enter the date that the location was first occupied by US troops.  |
| Stop Date (yyyy/mm/dd) | Enter estimated/actual date when exposure to the potential hazard stopped. If exposure to the potential hazard is ongoing, this field should be left blank. (Note this field is available in DOEHRS, but not on the hard copy. If exposure to the potential hazard is no longer occurring, it should not be sampled.) |
| Hazard Priority Level | Select the priority level you believe is associated with this EP. The Hazard Priority Levels are defined as: - *Extremely High* - The potential hazard can nullify accomplishment of the mission or require significant medical surveillance of exposed personnel. *- High* - The potential hazard can degrade the mission or require notable medical surveillance of exposed personnel. - *Moderate* - The potential hazard can result in reduced mission capability or require limited medical surveillance of exposed personnel. - *Low* - The potential hazard is likely to have little or no impact on mission accomplishment or require no specific medical action for exposed personnel. |

\*If this field has more than one entry it will require an additional EP.

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| **IF AN EXPOSURE PATHWAY (EP) ALREADY EXISTS IN DOEHRS ENTER THE EP ID # IN THE EXPOSURE NOTES OF THE FDS** **AND DO NOT SUBMIT THIS FORM.** |
| **Exposure Pathway Form EXAMPLE** |
| Name (Unique Name Descriptor) | **Inhalation of ambient air impacted by emissions from the solid waste incinerator located on FOB Lucky.** |
|  Applicable OEHSA Section | OEHSA Section | OEHSA Sub-section (SELECT ONE)  |
| *Site Description* | Nearby Industrial Facilities\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| *Site Infrastructure* | Onsite Industrial Operations Descriptions of Structures Description of Roads/Hardstand Description of Power Generation |
| *Hazardous Materials* | Petroleum Distribution Points Hazardous Materials Storage/Unidentified Substances |
| *Waste Management* | Solid Waste Landfills Incinerators/Burn Pits Waste Water |
| *Entomology* | Vectors Present Pests Present |
| *Physical Hazards* | Non-Ionizing Radiation Sources Ionizing Radiation Sources Environmental Noise Sources |
| *Air Quality* | Ambient (Outside) Air Quality Indoor Air Quality (IAQ) |
| *Water* |  Natural Water Sources Municipal Water Sources Bottled Water Sources Water Treatment Systems |
| *Other Environmental Health Concerns*  | Other\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ |
| Source | **FOB Lucky solid waste incinerator.** |
| EnvironmentalMedia (select one) |  ⭘ Air ⭘ Water ⭘ Soil ⭘ Other  |
| Health Threat |  **Inhalation of particulate matter and uncharacterized emissions.** |
| Route of Exposure (multiple routes will require multiple entries in DOEHRS) |  🞎 Ingestion 🞎 Inhalation 🞎 Physical 🞎 Skin Absorption 🞎 Skin Contact 🞎 Other  |
| Description of Affected Population | Fill out roster the Affected Roster for each person affected if known | Number of Affected Personnel:  |
| **All personnel on FOB Lucky.** | **3,000** |
| Existing Controls | **There are no existing controls in place other than the incinerator itself (as opposed to open burning).** |
| Assessment |  **The solid waste incinerator is located within the FOB Lucky boundary at the north side of the camp, less than 100 meters from the housing areas and DFAC. The incinerator is operational once a day for 8 hours, five days a week. The incinerator produces visible smoke from the combustion of solid wastes. The contents of the incinerator are unknown but may include solid wastes, garbage, tires, paints, or solvents. POL products, plastics, and batteries are removed prior to incineration and recycled. Wind carries the smoke from the incinerator towards the FOB while it is operational.**  |
| Exposure Duration (Fill out time and select increment) | \_\_\_**8**\_\_\_\_\_ Minute Hour Day Week Month Year Other \_\_\_\_\_\_\_\_ |
| Exposure Frequency (Fill out time and select increment)  | \_\_\_\_**5**\_\_\_\_ *(times per)* Day Week Month Quarter Half-Year Year Other\_\_\_\_\_\_\_\_ |
| Start Date (yyyy/mm/dd) | **2013/10/16** |
| **Hazard Priority**  | **LOW** | **MODERATE** | **HIGH** |  **EXTREMELY HIGH** |

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*Data captured at the end of the template is Classified and should be sent via SIPRNET to usarmy.apg.medcom-phc.mbx.oehs@mail.smil.mil*

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| **Classified Data**: Add classification markings look at report requirements |
| Location Name: |  |
| Geographic location*: Including geo-coordinate (e.g latitude/longitude) of the outside corners of the camp. At a minimum, use the center of the camp. This information may be extracted from the Engineer EBS. Note: this information may be classified.* |
| Coordinate 1: |  | Coordinate 2: |  |
| Coordinate 3: |  | Coordinate 4: |  |
| Notes: |
| Units and Detachments/Teams/Elements Present: *Note: this information may be classified.* |
|  |
| Camp Fixed Population: *Note: this information may be classified.* |  |
| Rotation Schedule: *Note: this information may be classified.* |  |
| Number of U.S. Troops, if not U.S. Camp: *Note: this information may be classified.* |  |
| *Classified data should be sent via SIPRNET to usarmy.apg.medcom-phc.mbx.oehs@mail.smil.mil* |

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| General Classified Notes |
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| Sample Summary and Associated Geo-coordinates (Classify appropriately) |
| Sample ID  | Latitude (Decimal Degrees or MGRS) | Longitude(Decimal Degrees or MGRS) |
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