Stormwater/Groundwater Pollution Prevention Plan (SWGPPP)

For:

Department of the Army
Environmental Management Division (AMIM-KNP-E)
Directorate of Public Works
125 6th Avenue, Suite 325
Fort Knox, Kentucky 40121-5719
502-624-3629
Agency Interest ID 1642
KPDES Permit KY0002917

SWGPPP Contact(s):

Environmental Management Division
Directorate of Public Works
Stormwater Program Manager
125 6th Avenue, Suite 325
Fort Knox, Kentucky 40121-5719
502-624-3629

SWGPPP Preparation Date:

12 / May / 2021

12 / May / 2022-Update

12 / July / 2022-Amendment

12/ May / 2023-Update

Contents

Section 1. Facility Description and Contact Information

1.1 Facility Information:

Facility Information

Name of Facility: Department of the Army, U.S. Army Garrison Command-Fort Knox
Street: 125 6th Avenue, Suite 325
City: Fort Knox State: KY ZIP Code: 40121-5719
County: Hardin, Bullitt and Meade
Permit Number: KY0002917

Latitude/Longitude

Latitude:	Longitude:
37.893624º N	-85.951262 º W

Estimated area of industrial activity at site exposed to stormwater: 109,029 acres

Discharge Information

Does this facility discharge stormwater into surface waters? X Yes ☐ No

Does this facility discharge stormwater into a municipal storm water conveyance system? ☐ Yes X No

SIC Code(s): 9711-Federally owned military training base.

1.2. Contact Information/Responsible Parties:

Facility Operator:

Name: Department of the Army, Environmental Management Division (EMD) (AMIM-KNP-E)
Directorate of Public Works
Address: 125 6th Avenue, Suite 325
City, State, Zip Code: Fort Knox, Kentucky 40121-5719
Telephone Number:502-624-3629
Email address: army.knox.emd@mail.mil

Facility Owner:

Name: Department of the Army, Environmental Management Division (EMD) (AMIM-KNP-E)
Directorate of Public Works
Address: 124 6th Avenue, Suite 325
City, State, Zip Code: Fort Knox, Kentucky, 40121-5719
Telephone Number: 502-624-3629
Email address: army.knox.emd@mail.mil

SWGPPP Contact:

Name: Stormwater Program Manager
Telephone number: 502-624-3629
Email address: army.knox.emd@mail.mil

This combined stormwater and groundwater pollution prevention plan has been developed in fulfillment of the Kentucky Pollutant Discharge Elimination System (KPDES) KY0002917 permit Section 3 and 401 KAR 5:037 Groundwater protection plans.

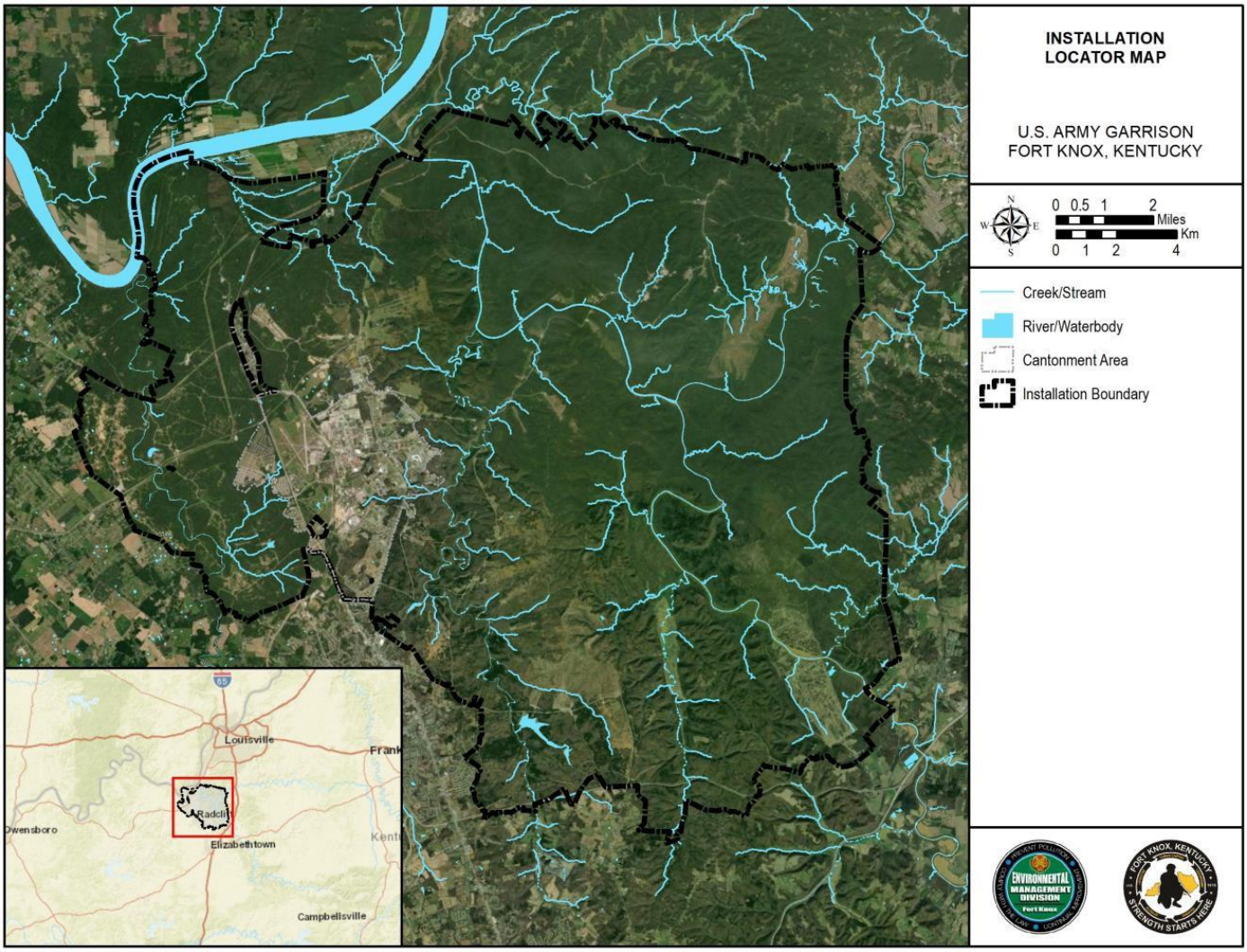
Certification of a groundwater protection plan is required by 401 KAR 5:037 Section 2(3)(g).

I, Daniel S. Musel, certify that I have reviewed the plan, and to the best of my knowledge, this combined plan also complies with the requirements of 401 KAR 5:037. I have read the terms of the plan and will implement its provisions.

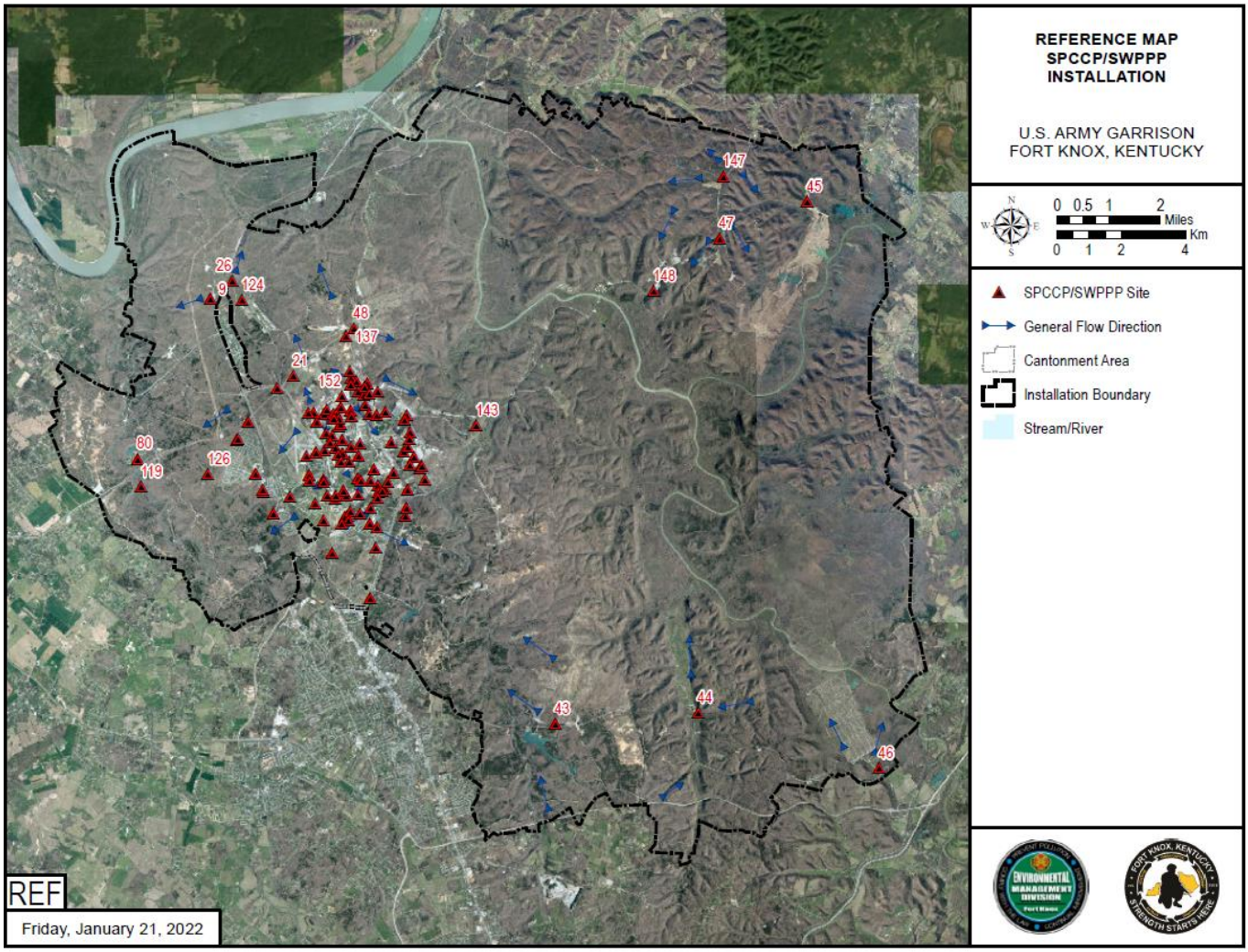
Signature: Daniel S Musel Digitally signed by MUSEL.DANIEL.STEPHEN.1231335320 Date: 2021.06.23 12:31:53 -04'00'

Date: 23 June 2021

1.3. General Location Map:



1.4. Site Map:



Detailed Watershed maps are located in Appendix A.

Fort Knox is comprised of 17 sub-watersheds, listed below, that drain to 4 river systems (Ohio River, Salt River, Mill Creek and Otter Creek). The cantonment area where the majority of the activities which could impact stormwater occur, contains 6741 acres (6% of the total acreage of the post) and is drained by 4 watersheds: Lower Mill Creek, Lower Otter Creek, Middle Otter Creek, and Tioga Creek. The remaining 102,289 acres containing training, range and impact areas are drained by an additional 13 sub-watersheds (Big Run, Brier Creek, Bullitt Lick Creek, Cedar Creek, Cedar Point Branch, Clear Creek, Crooked Creek, Knob Creek, Rolling Fork, Long Lick Creek, Salt River, Upper Mill Creek, and Woodland Creek.

1. **Big Run-Ohio River Watershed-**The Big Run sub-watershed is located in the northwest part of the post and flows directly into the Ohio River. Only 3 acres are located on Fort Knox with no activities in this watershed at this time. This sub-watershed comprises approximately 0.003% of the entire reservation.

2. Brier Creek-Salt River Watershed-The Brier Creek sub-watershed is located in the norther part of the post. It flows in a westerly direction into Pond Creek and then to the Salt River. The watershed on post is 20 acres and contains a training areas. This sub-watershed comprises approximately 0.02%% of the entire reservation.

3. Bullitt Lick-Salt River Watershed-The Bullitt Lick Creek sub-watershed is located in the northeastern part of the post. It flows in a southerly direction to the Salt River. The watershed on post is 108 acres and contains training areas. This sub-watershed comprises approximately 0.10% of the entire reservation.

4. Cedar Creek-Rolling Fork Watershed-The Cedar Creek sub-watershed is located in the southeastern part of the post. It flows in a northerly direction to the Rolling Fork. The watershed on post is 21,353 acres and contains range, training and impact areas. This sub-watershed comprises approximately 19.59%% of the entire reservation.

5. Cedar Point Branch-Salt River Watershed-The Cedar Point Branch sub-watershed is located in the northern part of the post. It flows in a westerly direction to the Salt River. The watershed on post is 9,542 acres and contains range, training and impact areas. This sub-watershed comprises approximately 8.75% of the entire reservation.

6. Clear Creek-Rolling Fork Watershed-The Clear Creek sub-watershed is located in the southeast part of the post. It flows in an easterly direction to the Rolling Fork. The watershed on post is 114 acres and contains training and range areas. This sub-watershed comprises approximately 0.11% of the entire reservation.

7. Crooked Creek-Rolling Fork Watershed-The Crooked Creek sub-watershed is located in the eastern part of the post. It flows in an easterly direction to the Rolling Fork. The watershed on post is 6,103 acres and contains range and impact areas. This sub-watershed comprises approximately 5.6% of the entire reservation.

8. Knob Creek-Salt River Watershed-The Knob Creek sub-watershed is located in the northern part of the post. It flows in a westerly direction to Pond Creek then to the Salt River. The watershed on post is 2,685 acres and contains training and range areas. This sub-watershed comprises approximately 2.46% of the entire reservation.

9. Lebanon Junction-Rolling Fork-Rolling Fork Watershed-The Lebanon Junction-Rolling Fork sub-watershed is located in the southeastern part of the post. It is part of the Rolling Fork which flows in a northwesterly direction to the Salt River. The watershed on post is 2,513 acres and contains range, training and impact areas. This sub-watershed comprises approximately 2.31% of the entire reservation.

10. Long Lick Creek-Salt River Watershed-The Long Lick Creek sub-watershed is located in the eastern part of the post. It flows in a northwesterly direction to the Salt

River. The watershed on post is 560 acres and contains training and range areas. This sub-watershed comprises approximately 0.51% of the entire reservation.

11. Lower Mill Creek-Salt River Watershed-The Lower Mill Creek sub-watershed is located in the central part of the post. It flows in a northerly direction to the Salt River. The watershed on post is 17,693 acres and contains cantonment, range, training and impact areas. The cantonment area in this watershed is 3,677 acres which comprises 55% of the cantonment. This sub-watershed comprises approximately 16.23%% of the entire reservation.

12. Lower Otter Creek-Ohio River Watershed-The Lower Otter Creek sub-watershed is located in the western part of the post. It flows in a northerly direction to the Ohio River. The watershed on post is 10,029 acres and contains cantonment and training areas. The cantonment area in this watershed is 85 acres which comprises 1% of the cantonment. This sub-watershed comprises approximately 9.20% of the entire reservation.

13. Middle Otter Creek-Ohio River Watershed-The Middle Otter Creek sub-watershed is located in the southwestern part of the post. It flows in a northerly direction to the Lower Otter Creek and then to the Ohio River. The watershed on post is 5,693 acres and contains cantonment, range and training areas. The cantonment area in this watershed is 2,828 acres which comprises 42% of the cantonment. This sub-watershed comprises approximately 5.22% of the entire reservation.

14. Rogers Hollow-Salt River Watershed-The Rogers Hollow sub-watershed is located in the eastern part of the post. It flows in a westerly direction to the Salt River. The watershed on post is 9,406 acres and contains range, training and impact areas. This sub-watershed comprises approximately 8.63% of the entire reservation.

15. Tioga Creek-Ohio River Watershed-The Tioga Creek sub-watershed is located in the northern part of the post. It flows is a northwesterly direction to the Ohio River. The watershed on post is 8,095 acres and contains cantonment, range, training and impact areas, and gas field Underground Injection Control (UIC) well and produced water storage tanks. The cantonment area in this watershed is 150 acres which comprises 2% of the cantonment. This sub-watershed comprises approximately 7.42% of the entire reservation.

16. Upper Mill Creek-Salt River Watershed-The Upper Mill Creek sub-watershed is located in the southern part of the post. It flows in a northerly direction to the Lower Mill Creek and then to the Salt River. The watershed on post is 5,497 acres and contains range, training and impact areas. This sub-watershed comprises approximately 5.45% of the entire reservation.

17. Woodland Creek-Salt River Watershed-The Woodland Creek sub-watershed is located in the northeastern part of the post. It flows in a southeasterly direction to the Salt River. The watershed on post is 9,165 acres and contains range, training and

impact areas. This sub-watershed comprises approximately 8.41% of the entire reservation.

1.5. Stormwater Pollution Prevention Team:

Staff Names and/or Title	Individual Responsibilities
Chief, Environmental Management Division, EMD	• Coordinates final preparation, review, and approval of the SWGPPP and ensures compliance. • Coordinates with state and federal regulators regarding SWGPPP modification, meeting permit requirements, and resolving compliance issues.
Chief, Compliance Branch, EMD.	• Delegates responsibility for implementing SWGPPP to appropriate personnel. • Reviews and approves modifications to the SWGPPP. • Coordinates funding requests for equipment and training to support BMPs and implement SWGPPP. • Coordinates with state and federal regulators regarding SWGPPP modification, meeting permit requirements, and resolving compliance issues.
Program Manager, Stormwater Program	• Coordinates with all facilities to ensure that storm water and groundwater issues are properly managed. • Tracks all construction activities to ensure compliance with the Fort Knox KPDES permit. • Ensures appropriate personnel are aware of SWGPPP requirements and implement BMPs. • Performs or delegates inspections as listed in the SWGPPP and documents findings. • Oversees SWGPPP implementation by providing training, technical, and funding support/guidance to facility managers. • Coordinates with state and federal regulators regarding SWGPPP modification, meeting permit requirements, and resolving compliance issues. • Ensures that all facilities are in compliance with Kentucky storm water permit requirements and have fully implemented the SWGPPP.
Program Manager, KPDES, Water	• Performs routine inspections as listed in the SWGPPP and documents findings.

Quality Programs	• Interprets test data and determines necessary modifications to the SWGPPP. • Ensures appropriate personnel are aware of SWGPPP requirements and implement BMPs. • Conducts sampling at stormwater outfall locations, and makes sure DMRs are completed and submitted on time. • Oversees SWGPPP implementation by providing training, technical, and funding support/guidance to facility managers. • Ensures that all facilities are in compliance with Kentucky stormwater permit requirements and have fully implemented the SWGPP.

Section 2. Facility Assessment

2.1. Facility Description:

Industrial Activity: Fort Knox uniquely boasts the sole responsibility for all Soldier career management, from swearing in to departing service. Its senior-most units include U.S. Army Cadet Command, V Corps, U.S. Army Human Resources Command, U.S. Army Recruiting Command, 1st Theater Sustainment Command, First U.S. Army Division East, 84th Training Command, 100th Division, and U.S. Army Reserve Aviation Command.

The electrical system at Fort Knox has been privatized and is owned, operated, and maintained by the Nolin Rural Electric Cooperative Corporation (or simply Nolin). Nolin has implemented an inspection, testing, and maintenance program for regulated bulk storage containers (BSCs) under their control (including electrical transformers). Nolin follows Fort Knox's spill response procedures, is responsible for any spills or discharges originating from their equipment, and closely coordinates spill prevention and response activities with EMD.

There are two Contractor Owned Contractor Operated (COCO) fuel points on Fort Knox operated by Louis Berger Services, Inc.: 9th Calvary Regiment non-tactical retail terminal and the Frazier Road tactical bulk retail terminal. Louis Berger Services, Inc. maintains an SPCC Plan for these locations and is responsible for any spills or discharges originating from their equipment. Louis Berger Services, Inc. closely coordinates spill prevention and response activities with EMD.

There are five BSCs that serve emergency generators associated with telecommunications equipment. This equipment is owned by several different

telecommunications companies who have established spill reporting policies posted on the exterior of their properties. EMD does not have access to this equipment and can only report observed discharges.

Fort Knox stores the following types of petroleum products in BSCs, underground storage tanks (USTs), and containers 55 gallons or greater in capacity:

- Gasoline
- Diesel fuel
- F-24 / Jet-A
- Various grades of engine oil, greases, hydraulic oils, and used oils
- Used cooking oil
- Mineral oil

Petroleum products are stored in BSCs, drums, and mobile containers located throughout the installation; mainly diesel for emergency generators, diesel and gasoline for Government vehicle fueling, and used oils from vehicle maintenance activities. In addition, there are two USTs at the Army and Air Force Exchange System (AAFES) Wilson Road station.

There are numerous diesel-powered emergency generators located on Fort Knox. These are used to supply electricity during electrical emergencies. Diesel fuel for these generators is stored in either an exterior BSC near the generator or a BSC beneath the generator unit. Part of Fort Knox's contingency electrical operations include six large Energy Security facilities, or small power plants designed to compartmentalize and provide emergency power to specific locations at Fort Knox. The Energy Security facilities are comprised of large BSCs that supply smaller day tanks which provide fuel to the generators.

Potable water and wastewater at Fort Knox are privatized and are operated and managed by Hardin County Water District No. 1. There is one wastewater treatment plant and two drinking water plants (Central and Muldraugh); however, the Central drinking water plant is currently not in operation. Fort Knox maintains separate stormwater and sanitary sewer systems. Discharges into the sanitary system would eventually reach the Wastewater Treatment Plant.

Spills which directly enter stormwater grates drain into the underground system and are likely to be released into drainage conveyances that flow towards an installation outfall. Spills that flow into surface drainage ditches can most likely be contained before flowing off Fort Knox or entering the underground system. Stormwater is conveyed through grassy drainage ditches, catchment basins, culverts, oil-water separators (OWSs), and underground concrete pipes.

Fort Knox is divided into 18 training areas for assignment to military units for field training. Descriptions of these training areas which are considered priority areas and management practices can be found in the U.S. Army Garrison, Fort Knox, Kentucky Integrated Natural Resources Management Plan, June 2018.

Groundwater Protection Plan: The goal of the Kentucky Groundwater Protection Plan (GPP) is to prevent groundwater contamination. The administrative regulation, 401 KAR 5:037 establishes the requirement for persons conducting certain activities to prepare and to implement groundwater protection plans to ensure the protection for all current and future uses of groundwater and to prevent groundwater pollution.

The main criterion in determining if a facility is subject to groundwater protection requirements is defined in KAR 5:037 Section 1(1). Fort Knox meets the requirement to prepare and implement a SWGPP/BMP because they conduct the following activities listed in 5:037 Section 1(1) of the Kentucky Groundwater Regulations:

(a) Storing or related handling of bulk quantities of pesticides or fertilizers for commercial purposes;
(b) Storing or related handling of bulk quantities of pesticides or fertilizers for the purpose of distribution to a retail sales outlet;
(c) Applying of pesticides or fertilizers for commercial purposes;
(d) Applying of fertilizers or pesticides for public right-of-way maintenance or institutional lawn care;
(e) Land treatment or land disposal of a pollutant;
(f) Storing, treating, disposing, or related handling of hazardous waste, solid waste, or special waste in landfills, incinerators, surface impoundments, tanks, drums or other containers, or in piles;
(g) Commercial or industrial storing or related handling in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling, or other pollutants held in tanks, drums or other containers, or in piles;
(h) Transmission in pipelines of raw materials, intermediate substances or products, finished products, or other pollutants;
(i) Installation or operation of on-site sewage disposal systems;
(j) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location;
(k) Application or related handling of road oils, dust suppressants or deicing materials;
(l) Mining and associated activities;
(m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes;
(n) Collection or disposal of pollutants in an industrial or commercial facility through the use of floor drains not connected to on-site sewage disposal systems, closed-loop collection or recovery systems, or a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System;
(o) Impoundment or containment of pollutants in surface impoundments, lagoons, pits, or ditches; or

(p) Commercial or industrial transfer, including loading and unloading, in bulk quantities of raw materials, intermediate substances or products, finished products, substances held for recycling, or other pollutants.

Following the requirements of the Groundwater Protection Plan 401 KAR 5:037 and the Kentucky Pollutant Discharge Elimination System (KPDES) KY0002917 for the development of a Best Management Practices Plan which prevents or minimizes the potential for the release of "BMP pollutants" from ancillary activities through site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage this combined Stormwater Protection Plan, Groundwater Protection Plan (SWGPPP) has been developed.

Regular Business Hours: Regular business hours for DPW-EMD is 0700 to 1600, except during lunch breaks, 5 days per week (closed on Saturdays and Sundays).

General Layout: Fort Knox is on 109,029-acres about 35 miles southwest of Louisville, Kentucky. Fort Knox stretches into Bullitt, Meade, and Hardin Counties with the cantonment area located primarily in Hardin County. The towns of West Point, Radcliff, Vine Grove, and Lebanon Junction are in the immediate vicinity of the installation. The City of Muldraugh is within the installation boundaries and the City of Elizabethtown is 15 miles south of Fort Knox. The installation is located in central Kentucky which straddles the Mississippian (or Pennyroyal) Plateau and Blue Grass Regions. The Mississippian Plateau is characterized by karst topography, including rolling hills, caves, and natural springs. The Blue Grass Region is similar in characterization.

2.2. Industrial Activity, Materials Inventory, and Associated Pollutants:

Detailed individual site descriptions including activity, exposed materials and associated pollutants are located in Appendix B. Sites where the pollutants are POLs only are referenced in the SWPP for information. Descriptions and BMPs for these sites are included in the Fort Knox SPCCP and therefore not in this SWGPPP.

2.3. Spills and Leaks;

- **Past spills and leaks:** A description of significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a stormwater conveyance. *Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), 42 USC §9602.*

Description of areas of potential spills and leaks are included in the individual site plans in Appendix B.

15 April 2021. No significant spills as described above have been documented in the past 3 years.

Section 3. Best Management Practices (BMPs)

3.1 Operational Source Control BMP:

3.1.1 Good Housekeeping:

Generally Applicable BMPs:

Good Housekeeping practices are designed to maintain a clean and orderly work environment in an effort to prevent or reduce pollution of stormwater and groundwater. Good Housekeeping refers to the cleaning, maintenance, and storage practices conducted at the facility. Many of the potential sources of stormwater and groundwater pollution can be mitigated or eliminated through simple common sense housekeeping practices.

Dust Control at Disturbed Land Areas and Unpaved Roadways and Parking Lots:

- Sprinkle or wet down soil or dust with water as long as it does not result in a wastewater discharge.
- Use only local and/or state government approved dust suppressant chemicals.
- Avoid excessive and repeated applications of dust suppressant chemicals. Time the application of dust suppressants to avoid or minimize their wash-off by rainfall or human activity such as irrigation.
- Apply stormwater containment to prevent the conveyance of stormwater TSS into storm drains or receiving waters.
- The use of motor oil for dust control is prohibited. Care should be taken when using lignin derivatives and other high BOD chemicals in excavations or areas easily accessible to surface water or ground water.
- Consult with the Regional Office in your area on discharge permit requirements if the dust suppression process results in a wastewater discharge to the ground, ground water, storm drain, or surface water.

Dust Control at Manufacturing Areas:

- Clean, as needed, powder material handling equipment and vehicles that can be sources of stormwater pollutants, to remove accumulated dust and residue.

- Regularly sweep dust accumulation areas that can contaminate stormwater. Sweeping should be conducted using vacuum filter equipment to minimize dust generation and to ensure optimal dust removal.

Fueling At Dedicated Stations:

See Section 9. Procedures for Fuel Transfers in the Fort Knox Spill Prevention, Control and Countermeasure Plan (SPCCP). Appendix C.

Illicit Connections to Storm Drainage Areas:

- Eliminate unpermitted wastewater discharges to storm drains, ground water, or surface water; or
- Convey unpermitted discharges to a sanitary sewer if allowed by the local sewer authority.

Landscaping and Lawn/Vegetation Management:

Landscaping:
- Install engineered soil/landscape systems to improve the infiltration and regulation of stormwater in landscaped areas.
- Do not dispose of collected vegetation into waterways or storm drainage systems.

Pesticides/Herbicides:
- The Natural Resources Branch, Environmental Management Division developed an Integrated Natural Resources Management Plan dated June 2018. This plan tracks pesticide and herbicide application throughout the installation, including authorized users, quantities, and chemical list.

Loading and Unloading Areas for Liquid or Solid Material:

All Loading/Unloading Areas:
- A significant amount of debris can accumulate at outside, uncovered loading/unloading areas. Sweep these surfaces frequently to remove material that could otherwise be washed off by stormwater. Sweep outside areas that are covered for a period of time by containers, logs, or other material after the areas are cleared.
- Place drip pans, or other appropriate temporary containment device, at locations where leaks or spills may occur such as hose connections, hose reels and filler nozzles. Drip pans shall always be used when making and breaking connections. Check loading/unloading equipment such as valves, pumps, flanges, and connections regularly for leaks and repair as needed.

Tanker Truck and Rail Transfer Areas to Above/Below-ground Storage Tanks:
- **See Section 9. Procedures for Fuel Transfers in the Fort Knox SPCCP. Appendix C.**

- Retain and maintain an appropriate oil spill cleanup kit on-site for rapid cleanup of material spills. (See BMP Spills of Oil and Hazardous Substances).
- An employee trained in spill containment and cleanup should be present during loading/unloading.

Transfer from Tanks and Containers:

- Refer to BMPs Storage of Liquids in Permanent Above-Ground Tanks, and Storage of Liquid, Food Waste, or Dangerous Waste Containers, for requirements on the transfer from tanks and containers, respectively.

Maintenance and Repair of Vehicles and Equipment:

- Inspect for leaks all incoming vehicles, parts, and equipment stored temporarily outside. Oily parts and equipment stored outside should be covered to minimize runoff.
- Use drip pans or containers under parts or vehicles that drip or that are likely to drip liquids, such as during dismantling of liquid containing parts or removal or transfer of liquids.
- Remove batteries and liquids from vehicles and equipment in designated areas designed to prevent stormwater contamination. Store cracked batteries in a covered non-leaking secondary containment system.
- Empty oil and fuel filters before disposal. Provide for proper disposal of used oil and off-spec fuel.
- Do not pour/convey wash water, liquid waste, or other pollutant into storm drains or to surface water. Check with the local sanitary sewer authority for approval to convey to a sanitary sewer.
- Do not connect maintenance and repair shop floor drains to storm drains or to surface water.
- Spill material should be available in all areas performing maintenance and repairs of vehicles and equipment.

Mobile Fueling of Vehicles and Heavy Equipment:

See Section 9: Procedures for Fuel Transfers in the Fort Knox Spill Prevention, Control, and Countermeasure Plan (SPCCP). Appendix C.

Painting/Finishing/ Coating of Vehicles/Boats/ Buildings/ Equipment:

- Train employees in the careful application of paints, finishes, and coatings to reduce misuse and over spray. Use ground or drop cloths underneath outdoor painting, scraping, sandblasting work, and properly clean and temporarily store collected debris daily.
- Do not conduct spraying, blasting, or sanding activities over open water or where wind may blow paint into water.

- Wipe up spills with rags and other absorbent materials immediately. Do not hose down the area to a storm drain or receiving water or conveyance ditch to receiving water.
- Use a storm drain cover, filter fabric, or similarly effective runoff control device if dust, grit, washwater, or other pollutants may escape the work area and enter a catch basin. The containment device(s) must be in place at the beginning of the workday. Collect contaminated runoff and solids and properly dispose of such material before removing the containment device(s) at the end of the workday.
- Use a ground cloth, pail, drum, drip pan, tarpaulin, or other protective device for activities such as paint mixing and tool cleaning outside or where spills can contaminate stormwater.
- Properly dispose of all associated material (including but not limited to washwater and thinners) per manufactures recommendations or requirements within Safety Data Sheets (SDS) and prevent all uncontrolled releases to the air, ground or water.
- Store toxic materials under cover (tarp, etc.) during precipitation events and when not in use to prevent contact with stormwater.

Parking and Storage of Vehicles and Equipment:

- Do not hose down a parking or storage area to a storm drain or to a receiving water. Sweep parking lots, storage areas, and driveways, regularly to collect dirt, waste, and debris.

Railhead Areas:

- Implement all required BMPs depending on the pollutant generating activities/sources at railhead areas.

Recyclers and Scrap Yards:

- Parts are stored on an uncovered impervious concrete pad with inward sloping (with appropriate outside grading to prevent run-on), or dike, or other physical barrier for containment. Use appropriate cover, roof or tarp, for storage of all oily part.

Soil Erosion and Sediment Control at Industrial Sites:

- Cover Practice Options:
  - Vegetative cover such as grass, trees, shrubs, on erodible soil areas; or,
  - Covering with mats such as clear plastic, jute, synthetic fiber; and/or,
  - Preservation of natural vegetation including grass, trees, shrubs, and vines,
- Structural Practice Options:
  - Vegetated swale, dike, silt fence, check dam, gravel filter berm, sedimentation basin, and proper grading.

Spills of Oil and Hazardous Substances:

See Section 4: Predicted Spills as Result of Equipment Failure in the Fort Knox Spill Prevention, Control and Countermeasures Plan (SPCCP). Appendix D.

Storage of Liquid, Food Waste, or Hazardous Waste Containers:

- Place tight-fitting lids on all containers.
- Place drip pans beneath all mounted container taps and at all potential drip and spill locations during filling and unloading of containers.
- Inspect container storage areas for corrosion, structural failure, spills, leaks, overfills, and failure of piping systems. Check containers for leaks/spills. Replace containers, and replace and tighten bungs in drums as needed.
- Activities accumulating Hazardous Wastes will be managed under the Fort Knox Hazardous Waste Program.
- Drums stored in an area where unauthorized persons may gain access must be secured in a manner that prevents accidental spillage, pilferage, or any unauthorized use.
- If the material is a Hazardous Waste, site personnel must comply with the Fort Knox Hazardous Waste Program requirements and the Uniform Fire Code.
- Accumulated fluids from solid waste/recycle dumpsters and waste hauling vehicles must be discharge, rinsed at the wastewater treatment plant (WWTP). Prior coordination with the local sewer plant must be made. Keep dumpster lids closed and make sure drain plugs are installed.

Storage of Liquids in Permanent Above-ground Tanks:

- Inspect the tank containment areas to identify problem components such as fittings, pipe connections, and valves, for leaks/spills, cracks, corrosion, etc.
- Place adequately sized drip pans beneath all mounted taps and drip/spill locations during filling/ unloading of tanks. Valved drain tubing may be needed in mounted drip pans.
- Sweep and clean the tank storage area regularly, if paved.
- Replace or repair tanks that are leaking, corroded, or otherwise deteriorating.
- All installations shall comply with the Uniform Fire Code and the National Electric Code.
- Clear vegetation from fencing so tanks are not obstructed from view.

Storage or Transfer (Outside) of Solid Raw Materials, By-Products, or Finished Products:

- Do not hose down the contained stockpile area to a storm drain, a conveyance to a storm drain, or receiving water.

Deicing and Anti-Icing Operations - Airports and Streets:

BMPs for Aircraft:

- There is no deicing of aircraft at Godman Airfield.

BMPs for Airport Runways/Taxiways:

- Godman Airfield currently utilizes a 50% Potassium Acetate solution for deicing of runways/taxiways at the airfield.

BMPs for Streets/Highways:

- Select deicers that cause the least adverse environmental impact. Apply only as needed using minimum quantities.
- Where feasible and practicable use roadway deicers, such as calcium magnesium acetate, potassium acetate, or similar materials, that cause less adverse environmental impact than urea, and sodium chloride.
- Store and transfer de-icing materials on an impervious containment pad in accordance with BMP Outside Storage or Transfer of Solid Raw Materials, By-Products, or Finished Products in this volume.
- Sweep/clean up accumulated de/anti-icing materials and grit from roads as soon as possible after the road surface clears.
- Beet juice brine is used as a pretreatment while salt is commonly used for deicing of roadways on Fort Knox. Salt piles or piles that are predominantly composed of other materials that contain some salt must be covered or enclosed and otherwise isolated from coming into contact with stormwater.

Washing and Steam Cleaning Vehicles/Equipment/Building Structures:

- Conduct vehicle/equipment washing in one of the following locations:
  - At a commercial washing facility in which the washing occurs in an enclosure and drains to the sanitary sewer, or
  - In a building constructed specifically for washing of vehicles and equipment, which drains to a sanitary sewer.
  - Conduct outside washing operations in a designated wash area:
  - Military vehicles are to be washed at the Wilson Wash Rack.
  - Aircraft located at Godman Airfield are to be washed at the designated wash pads. During washing activities the valve is to be turn to the position to direct the wash water to the oil water separator which goes to the sanitary sewer. When there is no washing activity the valve is to be turned to the position to direct uncontaminated stormwater to the drainage way. The local sanitary sewer authority has approved the use of detergents on aviation helicopters as long as the wash water is dispensed to the sanitary sewer.
  - Soaps or detergents are not to be used during all other washing activities. A power washer may be used but with water only.

3.1.2 Preventive Maintenance:

A Preventive Maintenance program involves the inspection and maintenance of stormwater and groundwater management devices such as oil-water separators, secondary containment structures, and inspection of facility operations to detect faulty and/or leaking equipment. Equipment should be checked for signs of deterioration.

- Oil-water separators, and associated grit chambers will be cleaned and inspected for proper operation by base maintenance contractor, and repaired as needed.
- Inspect all equipment and vehicles for leaking fluids such as oil, antifreeze, etc. Take leaking equipment and vehicles out of service or prevent leaks from spilling on the ground until repaired.
- Immediately clean up spills and leaks (e.g., using absorbents, vacuuming, etc.) to prevent the discharge of pollutants.

Maintenance of Public and Private Utility Corridors and Facilities:

- When water or sediments are removed from electric transformer vaults, determine whether contaminants might be present before disposing of the water and sediments. This includes inspecting for the presence of oil or sheen, and determining from records or testing if the transformers contain PCBs. If records or tests indicate that the sediment or water are contaminated above applicable levels, manage these media in accordance with applicable federal and state regulations, including the federal PCB rules (40 CFR 761). Water removed from the vaults can be discharged in accordance with the federal 40 CFR 761.79 or via the sanitary sewer if the requirements, including applicable permits, for such a discharge are met.
- Within utility corridors, consider preparing maintenance procedures and an implementation schedule that provides for a vegetative, gravel, or equivalent cover that minimizes bare or thinly vegetated ground surfaces within the corridor, to prevent the erosion of soil.
- Provide maintenance practices to prevent stormwater from accumulating and draining across and/or onto roadways. Stormwater should be conveyed through roadside ditches and culverts. The road should be crowned, out sloped, water barred, or otherwise left in a condition not conducive to erosion. Appropriately maintaining grassy roadside ditches that discharge to surface waters is an effective way of removing some pollutants associated with sediments carried by stormwater.
- Maintain ditches and culverts at an appropriate frequency to ensure that plugging and flooding across the roadbed, with resulting overflow erosion, does not occur.

Maintenance of Roadside Ditches:

- Inspect roadside ditches, as needed, to identify sediment accumulations and localized erosion.

- Ditches and drainage ways are maintained by base maintenance contractor.
- Vegetation in ditches often prevents erosion and removes pollutants from runoff waters. Remove vegetation only when flow is blocked or excess sediments have accumulated. Conduct ditch maintenance (seeding, fertilizer application, harvesting) in late spring and/or early fall, where possible. This allows vegetative cover to be re-established by the next wet season thereby minimizing erosion of the ditch as well as making the ditch effective as a biofilter.
- In the area between the edge of the pavement and the bottom of the ditch, commonly known as the “bare earth zone,” use grass vegetation, wherever possible. Vegetation should be established from the edge of the pavement if possible, or at least from the top of the slope of the ditch. Channel liner or riprap may be used in lieu of vegetation as required for permanent stabilization.
- Diversion ditches on top of cut slopes that are constructed to prevent slope erosion by intercepting surface drainage must be maintained to retain their diversion shape and capability.
- Ditch cleanings are not to be left on the roadway surfaces. Sweep dirt and debris remaining on the pavement at the completion of ditch cleaning operations.
- Roadside ditch cleanings, not contaminated by spills or other releases and not associated with a stormwater treatment system such as a bioswale, may be screened to remove litter and separated into soil and vegetative matter (leaves, grass, needles, branches, etc.). The soil fraction may be handled as ‘clean soils’ and the vegetative matter can be composted or disposed of in a municipal waste landfill.
- Roadside ditch cleanings contaminated by spills or other releases known or suspected to contain waste must be handled by following applicable waste regulations. Examine culverts on a regular basis for scour or sedimentation at the inlet and outlet, and repair as necessary. Give priority to those culverts conveying perennial and/or salmon-bearing streams and culverts near streams in areas of high sediment load, such as those near subdivisions during construction.

Maintenance of Stormwater Drainage and Treatment Systems:

- Inspect and clean treatment BMPs, conveyance systems, and catch basins as needed, and determine whether improvements in O & M are needed.
- Promptly repair any deterioration threatening the structural integrity of the facilities. These include replacement of clean-out gates, catch basin lids, and rock in emergency spillways.
- Ensure that storm sewer capacities are not exceeded and that heavy sediment discharges to the sewer system are prevented.
- Regularly remove debris and sludge from BMPs used for peak-rate control, treatment, etc. and discharge to a sanitary sewer if approved by the sewer authority, or truck to a local or state government approved disposal site.
- Clean catch basins when the depth of deposits reaches 60 percent of the sump depth as measured from the bottom of basin to the invert of the lowest pipe into or out of the basin. However, in no case should there be less than six inches clearance from the debris surface to the invert of the lowest pipe. Some catch basins (for

example, WSDOT Type 1L basins) may have as little as 12 inches sediment storage below the invert. These catch basins will need more frequent inspection and cleaning to prevent scouring. Where these catch basins are part of a stormwater collection and treatment system, the system owner/operator may choose to concentrate maintenance efforts on downstream control devices as part of a systems approach.
- Clean woody debris in a catch basin as frequently as needed to ensure proper operation of the catch basin.

3.1.3 Spill Prevention and Emergency Cleanup:

Spill Prevention:

- Store all chemical liquids, fluids, and petroleum products on a stable surface and away from storm drains if stored outside. Petroleum products in containers 55 gallons or greater are also managed according to the Fort Knox Spill Prevention Control and Countermeasures Plan (SPCCP).
- Prevent storm water runoff and precipitation from accumulating in containment/storage areas with a roof, tarp, or equivalent structure.
- Spill material shall be available at all fueling stations, fuel transfer stations, and mobile fueling units.
- Do not lock shut-off fueling nozzles in the open position by bypassing any automatic or manual shutoff mechanism. Do not “top off” tanks being refueled.
- Do block, plug, or cover storm drains that receive runoff from areas where fueling occurs, during fueling.
- Use drip pans or equivalent containment measures during all petroleum transfer operations, other than routine vehicle or equipment refueling.
- Locate materials, equipment, and activities so that leaks are contained.
- Confine the storage of leaking or leak-prone vehicles and equipment awaiting maintenance to protected areas or store indoors when feasible.
- Use drip pans/pads and absorbents under or around leaking vehicles and equipment. Properly dispose of waste per the Fort Knox Environmental Officer Handbook and the Memorandum of Instruction (MOI) available from the Hazardous Waste Classification Unit.
- EMD maintains a spill log that includes the following information for chemical and petroleum spills: date, time, amount, location, and reason for spill; date/time clean-up completed, notifications made, and staff involved.

Emergency Cleanup:

Fort Knox maintains spill contingency plan and response procedures labels that are attached to BSCs and POL storage/accumulation areas (Appendix D). These labels identify necessary steps to be taken for Incidental Spills (i.e., small amounts of POL), Significant Spills (i.e., measurable quantities with the potential to impact the

environment), and Major Spills (i.e., large quantities with a definite impact to the environment).

All discharges of POL must be immediately reported to EMD at (502) 624-3629 and the Fort Knox Fire Department at 911. Discharges of POL on range/training areas must be immediately reported to Range Control at (502) 624-2125. Fort Knox Fire Department is the primary spill responder for the installation.

For discharges into the environment (or into secondary containment), the following must be immediately reported, once observed, to the Kentucky Department of Environmental Protection (KDEP) Emergency Response Branch (ERB). (DPW-EMD will be the responsible party for notifying KDEP of all reportable spills):

- 25 gallons or more of petroleum or petroleum product in a 24-hour period.
- 75 gallons or more of diesel fuel in a 24-hour period.
- Any amount that creates a visible sheen on surface waters.

Procedures for spills are documented in the Fort Knox SPCCP under Section 4 Predicted Spills as Result of Equipment Failure, 4.1 Discharge Notification and Response Procedures (Appendix D) and in the Fort Knox Environmental Handbook.

3.1.4 Employee Training:

Staff who are designated as Environmental Officers (EO) receive an initial three-day course and an annual one-day refresher course covering various environmental topics. SWGPPP training is included as a module within the three-day EO course and one-day refresher course. EOs perform spill training for personnel within their unit or organization. Contractors who are responsible for operation, maintenance, delivery, or oversight of POL equipment will be provided spill training by their employer. SWGPPP training topics include:

- Purpose and Overview of SWGPPP.
- Discussion of applicable pollution control laws, rules, and regulations.
- Operation and maintenance of equipment to prevent discharges of oil.
- Review of chemical and physical properties of materials.
- Review of potential spill areas and drainage routes.
- Review of emergency response procedures.
- Review of locations and use of spill cleanup equipment.

EMD maintains records of initial training (via three-day EO courses) and annual one-day refreshers. EOs maintain records of training for their staff.

3.1.5 Inspections, Reporting, and Recordkeeping:

EMD will conduct quarterly industrial stormwater inspections.

The Facility manager or EO or trained and qualified personnel designated by them, should conduct visual inspections of their facility to examine the areas and equipment or concern. Qualified personnel are those who possess the knowledge and skills to assess conditions and activities that could impact stormwater quality at the facility, and who can also evaluate the effectiveness of control measures. The EO may appoint other personnel to perform these tasks, but all appointed personnel shall be on orders with a copy furnished to EMD.

Each Facility Manager or EO is responsible for ensuring inspections for chemical storage and 55 gallon drums are conducted and documented using EMD worksheet 5058, located in the EMD Environmental Handbook, and maintain records for these inspections onsite.

POL bulk storage containers will be inspected according to the provisions contained in Table 6-1 of the Fort Knox SPCCP.

For stormwater inspections, EMD will use the most current version of the Fort Knox stormwater inspection worksheet (Appendix F).

The inspection reports will note when the inspection was conducted, who conducted the inspection, areas inspected and any deficiencies found at the time of the inspection. Photos will be taken of deficiencies. Each report will be electronically signed by the inspector.

Records of inspections will be retained for a minimum of 6 years per 401 KAR 5:037 Section 3(1)(c).

3.1.6 Inappropriate (Non-permitted) Discharges:

Kentucky groundwater protection plan regulations, 401 KAR 5:037 Section 2(5)(c) state floor drains or catch basins shall be evaluated to determine if they discharge to an on-site sewage disposal system, to a closed-loop collection or recovery system, or to a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System. All known floor drains at Fort Knox have been evaluated and discharge to an appropriate location as required. If drains are discovered that do not discharge to one of the aforementioned systems, the Facility Manager or EO will notify the Installation Stormwater/Groundwater Program Manager EMD who will arrange to terminate the

discharge or connect it to an on-site sewage disposal system, a closed loop-collection or recovery system, or a waste treatment system permitted under a KPDES permit.

No cleaning solvents, POL products, waste vehicle fluids or other pollutants shall be poured or washed into any storm drain or onto the ground. The storm drains at Fort Knox all flow into nearby creeks and streams and this type of pollution will drastically affect the quality of that stream and potentially contaminate groundwater sources.

During each site inspection, look for signs of inappropriate discharges, especially during dry weather when stormwater isn't discharging from the site. Each site inspection will include:

- Observations made at each stormwater sampling location and area where stormwater associated with industrial activity is discharged off-site, whether to waters of the Commonwealth, or to a storm sewer system that drains to waters of the Commonwealth.
- Observations for the presence of floating materials, visible oil sheen, discoloration, turbidity, odor, etc. in the stormwater discharge.
- Observations for the presence of inappropriate discharges such as domestic wastewater, noncontact cooling water, or process wastewater (including leachate).

3.2. Structural Source Control BMPs:

Generally Applicable Structural Source Control BMPs:

- Use grading, berming, or curbing to prevent runoff of contaminated flows. Divert run-on away from manufacturing, processing, and material storage areas.
- Perform all cleaning operations indoors, under cover, or in bermed areas that prevent stormwater runoff and run-on and that also capture any overspray.
- Ensure that all washwater drains to a collection system that directs the washwater to further treatment or storage and not to the stormwater drainage system.

3.3. Treatment BMPs:

Generally Applicable Treatment BMPs:

- Employ oil/water separators, booms, skimmers or other methods to eliminate or minimize oil and grease contamination of stormwater discharges.
- Many "off the shelf" oil removal BMPs are available (Absorptive booms, skimmers, pads, etc.)
- A list of oil/water separators is included in (Appendix G).

Treatment BMPs for Parking and Storage of Vehicles and Equipment at a high-use site:

- An oil removal system such as an appropriate oil and water separator, catch basin filter, or equivalent BMP, approved, if required, by the local jurisdiction, is applicable for parking lots meeting the threshold vehicle traffic intensity level of a high-use site. A high-use site is:
- Subject to an expected average daily vehicle traffic (ADT) count equal to or greater than 100 vehicles per 1,000 square feet of gross building area: or
- Is subject to storage of a fleet of 25 or more diesel vehicles that are over 10 tons gross weight (trucks, buses, trains, heavy equipment, etc.).

Treatment BMPs for Recyclers and Scrap Yards:

Stormwater runoff from the scrap metal pad is directed to a concrete catch basin to allow solids from the pile to settle prior to discharge.

Treatment BMPs for Storage of Liquids in Permanent Above-ground Tanks:

- If the tank containment area is uncovered, equip the outlet from the spill-containment sump with a shutoff valve, which is normally closed and may be opened, manually or automatically, only to convey contaminated stormwater to approved treatment or disposal, or to convey uncontaminated stormwater to a storm drain. Evidence of contamination can include the presence of visible sheen, color, or turbidity in the runoff, or existing or historical operational problems at the facility. Simple pH measurements with litmus or pH paper can be used for areas subject to acid or alkaline contamination.

3.4. Erosion and Sediment Control BMPs:

The SWPPP must describe the erosion and sediment control BMPs necessary to prevent off-site sedimentation and violations of water quality standards. The Permittee shall implement and maintain:

- Sediment control BMPs such as detention or retention ponds or traps, vegetated filter strips, bioswales, or other permanent sediment control BMPs to minimize sediment loads in stormwater discharges.
- Filtration BMPs to remove solids from catch basins, sumps or other stormwater collection and conveyance system components (filter socks, modular canisters, sand filtration, centrifugal separators, etc.).
- *Definition:*
  Erosion and Sediment Control BMPs means BMPs that are intended to prevent erosion and sedimentation, such as preserving natural vegetation, seeding, mulching and matting, plastic covering, filter fences, and sediment traps and ponds.

- Most areas within the cantonment area at Fort Knox have very little problem with sediment accumulation as the area surrounding the facilities is paved. The non-paved areas that do exist consist mainly of flat or gently sloping grassy areas that trap sediment and allow infiltration of stormwater.
- Stormwater discharges from construction activities can significantly impact water quality. As stormwater flows over a construction site, it can pick up pollutants such as sediment, debris, and chemicals. In most states, a stormwater construction permit is required for discharges from construction activities that disturb one or more acres, and discharges from smaller sites that are part of a larger common plan of development or sale. Construction stormwater permits include effluent limits for erosion and sediment control, pollution prevention, and site stabilization.

The Kentucky General Construction Permit (No KYR100000, AI No 35050, Section 1.2), includes an exclusion for construction activities that " are conducted at or on properties that have obtained an individual KPDES permit for the discharge of other wastewaters which requires the development and implementation of a Best Management Practices (BMP) plan. " Fort Knox has elected to manage all construction projects on the installation under the Fort Knox Industrial Stormwater Permit issued to Fort Knox by the Kentucky Division of Water (KDOW).

EMD has developed a Notice of Construction (NOC) and BMP Template to be used by installation, tenants and contractors to satisfy the requirements of the KPDES Permit and must be completed for all ground disturbing activities of 1 acre or larger (Appendix E). The NOC and BMP template are available from EMD. The BMP template will include the following:

- a detailed project site map showing drainage and discharge locations,
- The locations of control measures,
- Descriptions of appropriate erosion prevention and sediment control measures,
- Other site management practices necessary to prevent the discharge of sediment and other pollutants,
- Maintenance procedures,
- Inspection procedures and Frequency,
- Identification of non-stormwater discharges.

Control measures and site management practices are required to be properly selected based on site-specific conditions, and installed and maintained to effectively minimize discharges for storm events up to and including a 2-year, 24-hour event.

Projects of less than an acre only require the NOC document be submitted prior to project commencing but units and contractors are still responsible for implementing BMP’s to control stormwater discharges.

Fort Knox EMD will conduct inspections to ensure construction sites/projects are in compliance with the site BMP plans.

Section 4. Sampling Plan:

1. Discharge Locations and Sampling Points:

Fort Knox has been issued a minor KPDES Permit KY0002917 for an existing, federally owned military training base (SIC Code 9711) for stormwater and groundwater discharges. The outfalls are listed below. Specifics concerning parameters, limitations, sample frequency and sample type or described in the permit and listed in Appendix H.

Discharge ID	Common description	Latitude	Longitude	Discharge Type	Comments
003	Upstream point without influence of stormwater runoff from facility	37.88306	85.91417	Instream	Mill Creek
004	Downstream point with influence of stormwater runoff from facility	37.91566	85.90028	Instream	Mill Creek
005	Upstream point without influence of stormwater runoff from facility	37.86306	86.00442	Instream	Otter Creek
006	Downstream point with influence of stormwater from facility	37.89528	86.02469	Instream	Otter Creek
007	Stormwater from closed residential landfill	37.92419	85.97062	External	Sinkhole
008	Stormwater from closed residential landfill	37.92779	85.96873	External	Sinkhole
009	Stormwater from closed residential landfill	37.92401	85.96671	External	Sinkhole
010	Stormwater from closed residential landfill	37.92504	85.96556	External	Sinkhole
011	Stormwater from closed residential landfill	37.92213	85.96859	External	Sinkhole

012	Stormwater runoff from active CDD landfill	37.92555	85.96138	External	Otter Creek
013	Stormwater runoff from active CDD landfill	37.92706	85.96068	External	Otter Creek
017	Groundwater from classified area	37.94861	85.86139	External	Salt River
019	Groundwater from the water well field	37.99639	85.98932	External	Ohio River

2. Staff Responsible for Sampling:

Samples will be collected by EMD personnel. Sampling locations and frequency must be in accordance with KPDES KY0002917. All samples collected must be representative of storm water associated with industrial activities. All permit limitations and monitoring requirements must be performed by a laboratory certified through the Kentucky Division of Water Laboratory Certification Program (KWLCP).

3. Sample Collection and Handling:

Qualified Field Technician(s) responsible for sample collection and handling will be trained in the operation, maintenance, and calibration of field instruments. Grab samples will be collected at KPDES sampling locations and required field analysis performed. During transport, samples should be kept on ice. Coordinate with contract laboratory for sample exchange.
Chain of Custody (COC) must accompany all samples. COC is provided by contracted lab and must follow their protocol. Critical information required is Sampler Signature, Date & Time, Sample ID, Sample Description, Required Analyses, Field pH/Temp and Relinquished By/Received By.

4. Submitting Sample Results:

Central Data Exchange (CDX), www.cdx.epa.gov, is the Environmental Protection Agency (EPA) electronic reporting site where permittee's upload monthly, quarterly and annual discharge monitoring results. CDX is the federal system that integrates data collected from states. Kentucky utilizes the Network Discharge Monitoring Report Support Portal (NetDMR) reporting database which is assimilated within CDX.

The completed DMR for each monitoring period must be entered into CDX and NetDMR no later than midnight on the 28th day of the month following the monitoring period for which monitoring results were obtained.

Current User Roles for Fort Knox KY #0002917

Signatory:	*Chief, Environmental Management Division*
Permit Administrator:	*Chief, Environmental Management Division*
Edit/View:	*Environmental Protection Specialist*