# COMBINED SPILL RESPONSE PLAN

| | |
|---|---|
| **Stormwater Best Management Practices Plan** | **BMP** |
| **Storm Water Pollution Prevention (identical to BMP)** | **SWPP** |
| **Groundwater Pollution Prevention Plan** | **GPP** |
| **Spill Prevention Control and Countermeasures Plan** | **SPCC** |

## Eastern Kentucky University

**Facilities Services**

**Environmental Resources and Energy Management**

# COMBINED SPILL RESPONSE PLAN

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## Eastern Kentucky University

**Facilities Services**

**Environmental Resources and Energy Management**

**Last Updated: March 4, 2011**

**This document contains the required contents for the following EKU procedures:**

| | |
|---|---|
| **BMP** | **Stormwater Best Management Practices Plan** |
| **SWPP** | **Storm Water Pollution Prevention (identical to BMP)** |
| **GPP** | **Groundwater Pollution Prevention Plan** |
| **SPCC** | **Spill Prevention Control and Countermeasures Plan** |

**Applicable sections for each plan are listed in Appendix 25.**

**Questions should be directed to the Assistant Director of Environmental Resources and Energy Management:**

**Bill Rhodes**
**bill.rhodes@eku.edu**
**office 859 622-4104**
**cell 859 893-2100**

# COMBINED SPILL RESPONSE PLAN: QUICK REFERENCE

## EMERGENCY CHEMICAL RELEASE AND MATERIAL SPILL ACTIONS:

- **Spill Emergency** (Section 5.2)
- **Medical Emergency** (Section 5.3)
- **Fire Emergency** (Section 5.4)

| MATERIAL SPILLED | REFER TO | CALL EKU POLICE 911 or 622-2821 | CONTAIN SPILL | CLEAN UP SPILL |
|---|---|---|---|---|
| Any Spill | **Section 1.1** | All Staff<br>All Students<br>All Visitors | Spill Response Team | Spill Response Team |
| Oil/ Petroleum | **Section 1.5** | All Staff<br>All Students<br>All Visitors | Spill Response Team | Spill Response Team or Contractor |
| Chemical/ Material | **Section 1.6** | All Staff<br>All Students<br>All Visitors | Spill Response Team | Spill Response Team or Contractor |

***Spill Response Actions - Refer To:***

- **IMMEDIATE Spill Decision Tree** **(Section 1.1)**
- CERCLA OR ECPRA Spill Reporting Decision Tree (Section 1.2)
- Emergency Phone No's. - Government Agencies (Section 1.3)
- Emergency Phone No's. - EKU (Section 1.4)
- Action Plans for Spilled Material
  - Oil/Petroleum (Section 1.5)
  - Chemical or Material Spill (Section 1.6)
- Regulatory Agency Notification Chart (Section 1.7)
  - Emergency Release Notification Chart
  - Clean Water Act (SPCC)
  - CERCLA
  - EPCRA
  - RCRA - TSCA
- Emergency Release Responsibility Assignments (Section 1.8)
- Plan Definitions and Acronyms (Section 1.9)

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**Page No.**

## APPENDICES

## 1.0 SPILL RESPONSE ACTIONS AND POLICY

Eastern Kentucky University (EKU) has prepared this Spill Response Plan (SRP) to provide guidance to all STAFF, STUDENTS, VISITORS, AND CONTRACTORS in the event of a discharge of any chemical, petroleum, or raw material. This SRP has been prepared to address the plan requirements identified in the following regulations.

Oil Pollution Act - Spill Response Control and Countermeasures Plan (SPCC)

Kentucky Water Regulations - Groundwater Protection Plan (GPP)

Clean Water Act - Stormwater Best Management Practices Plan (BMP)

Spill Response Policy is as follows:

**ONLY STAFF or INDIVIDUALS WITH DOCUMENTED PROPER TRAINING WILL RESPOND TO MATERIAL SPILLS**

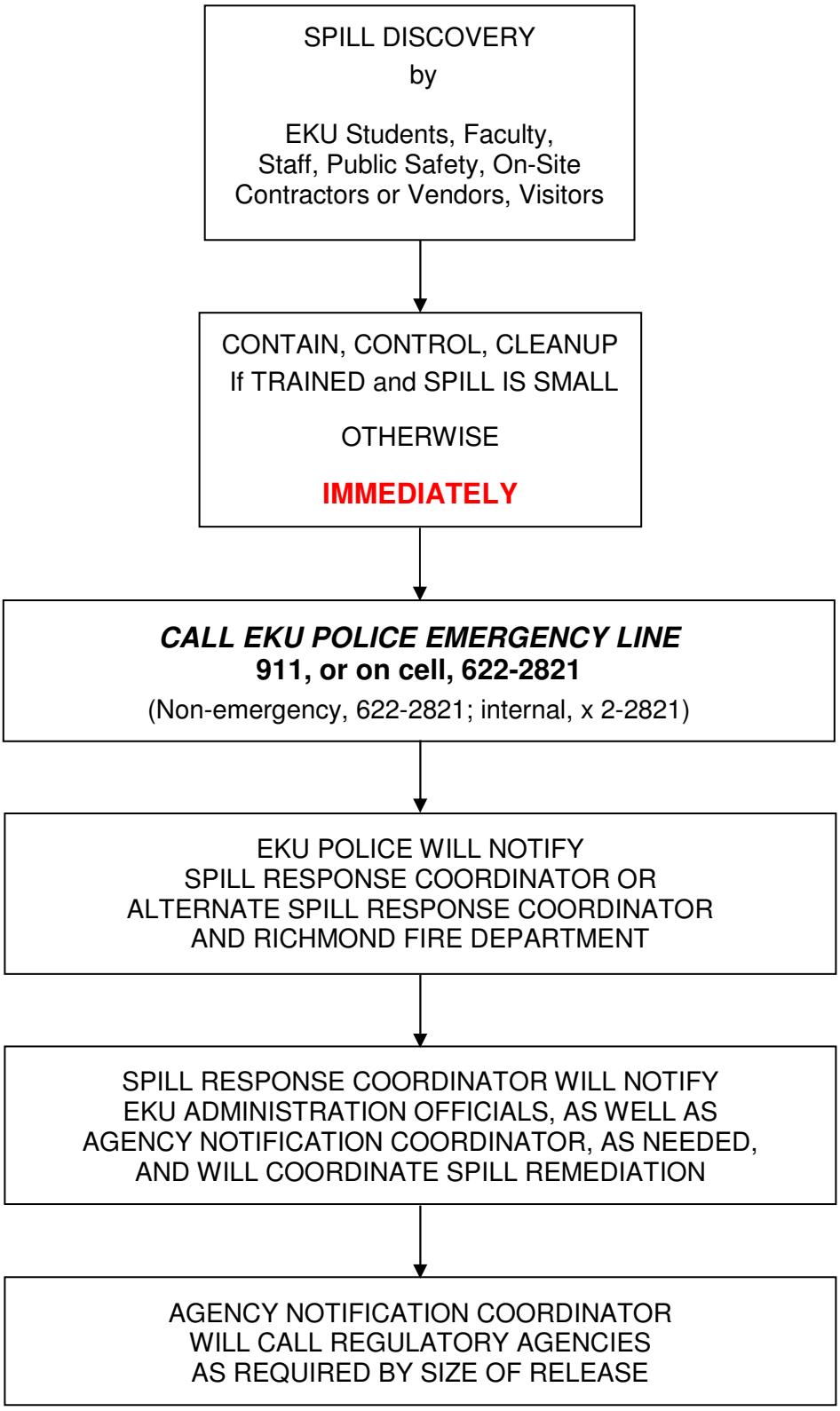
EKU has communicated or will communicate the elements of this plan and document that communication to all employees, students, and contractors:

1) Whose job function and activity could contribute to contamination of groundwater or stormwater if they fail to properly follow procedures,
2) Who are required to respond to material spills or releases,
3) Who have been designated by EKU as responsible for emergency response actions which could result in incident command over a chemical, material, or petroleum spill or release incident.

All staff, students, and contractors are trained to notify EKU POLICE at 911 or 622-2821 in the event of a spill or release. Only trained staff or individuals will implement spill control and cleanup actions.

Emergency response actions to a spill of material at EKU are summarized in Section 1.1 of this plan and described in more detail in the body of this combined plan. **Immediate spill response actions** are detailed in **Sections 1.3, 1.5 and 1.6.**

## *1.1 Spill Decision Tree*



## *1.2 CERCLA or EPCRA Reporting Decision Tree*

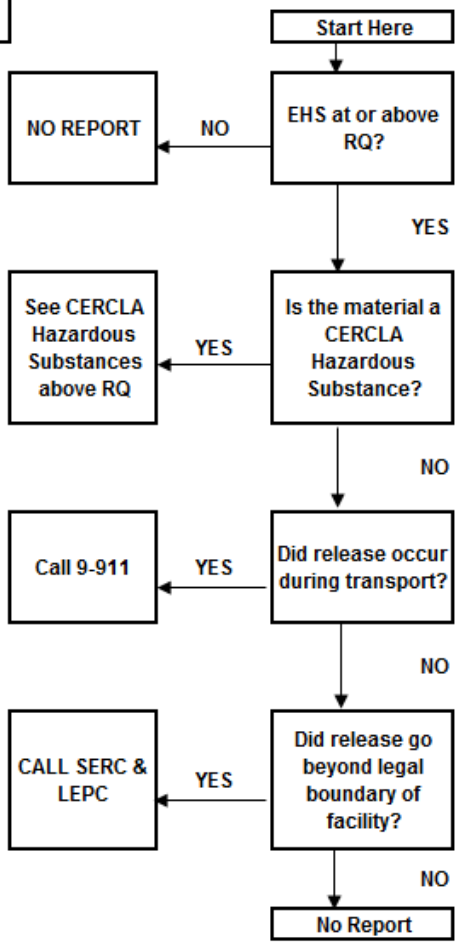
**SPILL NOTIFICATION DECISION TREE - CERCLA or EPCRA RELEASES**

| | |
|---|---|
| 1 | WHAT SPILLED - EPCRA EHS, CERCLA HS, or CWA HS MATERIAL or |
| 2 | WHICH PROGRAM IS CHEMICAL UNDER? |

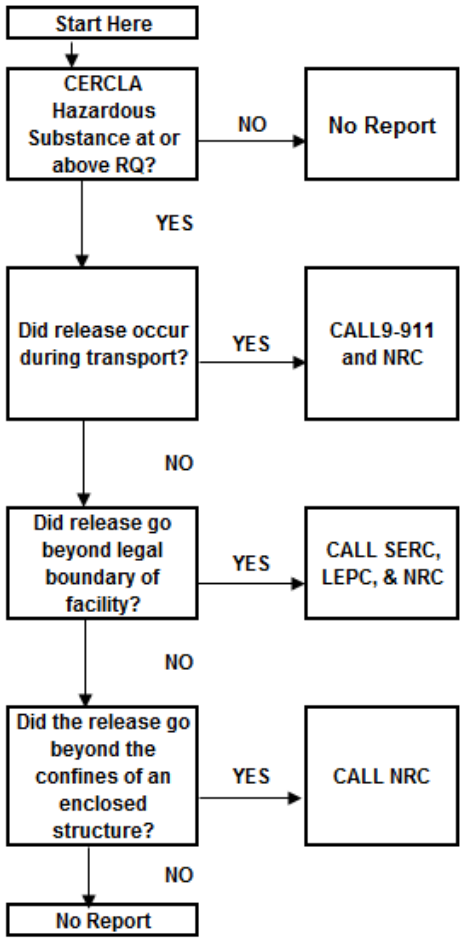
| | | | |
|---|---|---|---|
| 3 | Appendix 16 - EPCRA EHS 40 CFR 355.50 | Appendix 15 - CERCLA HS 40 CFR 302.4 | Appendix 17 -CWA HS 40 CFR 117.3 |

**4**

### EPCRA MATERIAL




### CERCLA OR CWA MATERIAL




**Emergency Phone Numbers**

| | | |
|---|---|---|
| LEPC | LEPC Phone No. | 911 |
| NRC | National Response Center Phone No. | 1-800-424-8802 |
| KYERT | Kentucky Emergency Response Team | 1-800-928-2380 |

**PETROLEUM RELEASE TO ENVIRONMENT - REPORTING**

| | |
|---|---|
| 25 Gallons of Petroleum in 24-hours<br>75 Gallons of Diesel Fuel<br>Sheen on Waters of the US (off property) | IMMEDIATE PHONE CALL TO KYERT and NRC |

### *1.3 Emergency Phone Numbers - Agencies [40 CFR 112.7(3)(vi)]*

| Emergency Phone Numbers - Agencies | |
|---|---|
| Richmond - Fire | 911 land line; cell call 859 622-2821 |
| Richmond - Police | 911 land line; cell call 859 622-2821 |
| Richmond - Medical | 911 land line; cell call 859 622-2821 |
| Kentucky Environmental Emergency Response Hotline | (502) 564-2380 or (800) 928-2380 |
| National Response Center (NRC) | (800) 424-8802 |
| Richmond Utilities (Gas, Water, Sewer) | (859) 623-2323 |
| Kentucky Division of Water | (502) 564-3410 |
| Kentucky Division for Air Quality | (502) 573-3382 |
| Kentucky Division of Waste Management | (502) 384-4734 |
| Spill Response Contractor:<br>PECCO, Inc. | (859) 887-5508 |

### *1.4 Emergency Phone Numbers - EKU [40 CFR 112.7(3)(vi)]*

| Emergency Phone Numbers - EKU | |
|---|---|
| **EKU Police Department (Spill Response Dispatch)** | 911<br>(859) 622-2821 (cell) |
| **Spill Response Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Spill Response Coordinator:**<br>Mike Kasitz - Director, Emergency Preparedness | (859) 622-2275 (work)<br>(859) 582-3529 (cell) |
| **Agency Notification Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Notification Coordinator:**<br>Rich Middleton - Director, Facilities Services | (859) 622-2966<br>(859) 200-2767 |

## *1.5 Action Plan - Oil/Petroleum Spill [40 CFR 112.7(5)]*

| **PETROLEUM SPILL ACTION PLAN<br>Oil, Diesel or Gasoline** | | | |
|---|---|---|---|
| Spill Classification: | Small<br>< 5 gallons | Medium<br>5 to 55 gallons | Large<br>Over 55 gallons |
| **Personnel** | **Action** | | |
| EKU Police | Assess spill based on phone call from release site<br>**Call Spill Response Coordinator**<br>**Call Spill Response Team**<br>Conduct ON SCENE Operations as required by SPILL INCIDENT | | |
| Students/Faculty/Staff | **IF NOT TRAINED, EVACUATE AREA - CALL EKU POLICE** | | |
| Visitors/Contractors/Vendors | **IF NOT TRAINED, EVACUATE AREA - CALL EKU POLICE** | | |
| **SPILL TRAINED**<br>Facilities Services Personnel and other trained Staff, Faculty and Contractors or Vendors | Contain, Control, Cleanup, Notify EKU Project Manager | Contain & Control | Contain and Control |
| Spill Response Coordinator/ Alternate Spill Response Coordinator | Implement Incident Command and Control, Safely Assess Scene<br>Contact Local (Regional) Haz Mat Team<br>Implement Remediation thru Waste Disposal Actions<br>Coordinate Agency Notifications (as needed)<br>Contact Spill Contractor based on SCOPE OF SPILL INCIDENT | | |
| Spill Response Team | Based on SPILL INCIDENT ASSESSMENT - Using Proper PPE, Contain, Control, Cleanup, and perform Waste Material Storage / Disposal<br>Support Response Contractor as needed | | |
| Spill Contractor | AS NEEDED - Contain, control, cleanup, label waste containers, store waste containers, prepare waste / haz waste manifests, transport waste, dispose of waste consistent with RCRA regulations, return paperwork to Spill Response Coordinator | | |

| | |
|---|---|
| **Spill Response and Agency Notification Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Spill Response Coordinator:**<br>Mike Kasitz - Director, Emergency Preparedness | (859) 622-2275 (work)<br>(859) 582-3529 (cell) |
| **External Contacts:**<br>• National Response Center (NRC)<br>• KY Emergency Response Commission<br>• KY Department for Environmental Protection - Division of Water | <br>(800) 424-8820<br>(800) 564-7815<br>(800) 564-2380 |
| **Spill Response Contractor:**<br>PECCO, Inc. | (859) 887-5508 |

## *1.6 Action Plan - Chemical /Material Release [29 CFR 1910.138]*

| CHEMICAL OR MATERIAL SPILL ACTION PLAN | | | |
|---|---|---|---|
| Spill Location: | Chemistry Department | | Other |
| Spill Classification: | Small<br>< 0.5 liters | Large<br>0.5 liters and up | Any |
| **Personnel** | **Action** | | |
| EKU Police | Assess spill based on phone call from release site<br>**Call Spill Response Coordinator**<br>**Call Spill Response Team**<br>Conduct ON SCENE Operations as required by SPILL INCIDENT | | |
| Students/Faculty/Staff | **IF NOT TRAINED, EVACUATE AREA - CALL EKU POLICE** | | |
| Visitors/Contractors/Vendors | **IF NOT TRAINED, EVACUATE AREA - CALL EKU POLICE** | | |
| **SPILL TRAINED**<br>Students | Contain, Control, Cleanup and Dispose -<br>Follow LAB WASTE DISPOSAL PROCEDURE | | **EVACUATE AREA -<br>CALL EKU POLICE** |
| **SPILL TRAINED**<br>Facilities Services Personnel and other trained Staff, Faculty, and Students | Contain, Control, Cleanup and Dispose -<br>Follow LAB WASTE DISPOSAL PROCEDURE | | Contain and Control |
| **SPILL TRAINED**<br>Contractors or Vendors | Contain, Control, Cleanup, Notify EKU Project Manager | Contain & Control | Contain and Control |
| Spill Response Coordinator/ Alternate Spill Response Coordinator | Implement Incident Command and Control, Safely Assess Scene<br>Contact Local (Regional) Haz Mat Team<br>Implement Remediation thru Waste Disposal Actions<br>Coordinate Agency Notifications (as needed)<br>Contact Spill Contractor based on SCOPE OF SPILL INCIDENT | | |
| Spill Response Team | Based on SPILL INCIDENT ASSESSMENT - Using Proper PPE, Contain, Control, Cleanup, and perform Waste Material Storage / Disposal<br>Support Response Contractor as needed | | |
| Spill Contractor | AS NEEDED - Contain, control, cleanup, label waste containers, store waste containers, prepare waste / haz waste manifests, transport waste, dispose of waste consistent with RCRA regulations, return paperwork to Spill Response Coordinator | | |

| | |
|---|---|
| **Spill Response and Agency Notification Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Spill Response Coordinator:**<br>Mike Kasitz - Director, Emergency Preparedness | (859) 622-2275 (work)<br>(859) 893-2100 (cell) |
| **External Contacts:**<br>• National Response Center (NRC)<br>• KY Emergency Response Commission<br>• KY Department for Environmental Protection - Division of Water | <br>(800) 424-8820<br>(800) 564-7815<br>(800) 564-2380 |
| **Spill Response Contractor:**<br>PECCO, Inc. | (859) 887-5508 |

### *1.7 Agency Notification Chart [40 CFR 112.7(4)]*

The Spill Response Coordinator and the EKU Police can use the following chart to determine if the release is a REPORTABLE QUANTITY (RQ) and subsequently reportable to an agency (see Agency Notification Phone Numbers in Section 1.3 of this Plan).

- CERCLA Hazardous Substance RQ are listed in Appendix 15
- EPCRA Extremely Hazardous Substance RQ are listed in Appendix 16
- CWA Hazardous Substance RQs are listed in Appendix 17

| **Type of Material** | **Spill Activity** | Quantity (qty.)<br>See Note 2. | Employees aware of spill should immediately notify: | | Agency Notification Coordinator should take the following actions |
|---|---|---|---|---|---|
| | | | **Spill Response Coordinator (page 5)** | **Richmond Utilities (page 4)** | |
| Fuel (e.g. gasoline, diesel), Used Oil | Entered floor or street drains | Any qty. | X | X | See Note 1 |
| | Entered drainage ditch, river or stream | Any qty. | X | X | See Note 1 |
| | Entered soil | Any qty. | X | | See Note 1 |
| | 100% contained on pavement or within the secondary containment system | ≥ 50 gallons | X | | See Note 1 |
| | | < 50 gallons | X | | No action |
| Hazardous Substances | Entered floor or street drains | ≥ reportable qty. found in 40 CFR 302.4 | X | X | See Note 1 |
| | Entered drainage ditch, river or stream | ≥ reportable qty. found in 40 CFR 302.4 | X | X | See Note 1 |
| | Entered soil | ≥ reportable qty. found in 40 CFR 302.4 | X | | See Note 1 |
| | Contained or non-contained spill | ≥ reportable qty. found in 40 CFR 302.4 | X | | See Note 1 |
| | Contained or non-contained spill | < reportable qty. found in 40 CFR 302.4 | X | | No action |
| Extremely Hazardous Substances 40 CFR 355.50 | Entered floor or street drains | ≥ reportable qty. found in 40 CFR 302.4 or 40 CFR 355 Appendices 15 & 16 | X | X | See Note 1 |

| | | | | | |
|---|---|---|---|---|---|
| | Entered drainage ditch, river, or stream | ≥ reportable qty. found in 40 CFR 302.4 or 40 CFR 355 Appendices 15 & 16 | X | X | See Note 1 |
| | Entered or Contaminated soil | ≥ reportable qty. found in 40 CFR 302.4 or 40 CFR 355 Appendices 15 & 16 | X | | See Note 1 |
| | Contained or non-contained spill | ≥ reportable qty. found in 40 CFR 302.4 or 40 CFR 355 Appendices 15 & 16 | X | | See Note 1 |
| | Contained or non-contained spill | < reportable qty. found in 40 CFR 302.4 or 40 CFR 355 Appendices 15 & 16 | X | | No action |

## X Take the action specified in the column

Note 1 - Spill Response Coordinator/Incident Commander will immediately notify the following:

- National Response Center (NRC) 1800-424-8802
- KY Dept. of Natural Resource's Emergency Response Hotline 800-928-2380
- Local Emergency Planning Commission (LEPC) 911

Note 2 - See "List of Lists" - US EPA chemical specific reporting requirements. Current US EPA List of Lists is included Appendix 18

### *1.8 Emergency Release Responsibility Assignments [40 CFR 112.7(4)]*

The following chart describes the typical response actions to a release of regulated materials at this facility. Staff responsibilities for emergency actions are described below by job description or job title:

| Emergency Action | Primary Person(s) Authorized to Implement Action - Job Description | Employee Name or Title |
|---|---|---|
| 1. **NOTIFY EKU Police** of a fire, medical emergency, spill, release, or material discharge | All Staff | All Employees |
| 2. **CONTAIN** Using - Spill Pads, Apply Absorbent, Spill Booms, Plug Storm Sewer Line, Drain Covers | Small Spill - Trained Staff<br>Other Spill - Spill Response Team | Trained Employees Only |
| 3. **EVACUATE** if needed | Spill Response Coordinator, Alternate Spill Response Coordinator | EKU Police, Director EH&S, Assistant Director Facilities Services |
| 4. Call 911 - fire, police, ambulance | All Staff<br>EKU Police | All Employees<br>EKU Police |
| 5. Incident Command - Assess Spill | Initial - EKU Police<br>Final - Spill Response Coordinator or Alternate | Director EH&S, Assistant Director Facilities Services |
| 6. **CONTROL** Spill Using - plugs, dikes, dams, and stop flow | Spill Response Coordinator or Alternate, Trained Staff on Spill ResponseTeam | Director EH&S, Assistant Director Facilities Services, Safety Trained Employees Only |
| 7. **Notify** University Administration and Legal Department<br>**Notify EKU** Public Relations Officer | Spill Response Coordinator, Alternate Spill Response Coordinator | Director EH&S, Assistant Director Facilities Services |
| 8. **NOTIFY** Local Agencies - LEPC, Fire, Police<br>Notify State Agencies - SERC, Ky. Emergency Response Hotline, Div Water, Div Waste, Div Air<br>Notify Federal Agencies - NRC | Spill Response Coordinator or University Administrator | Director EH&S, Assistant Director Facilities Services |
| **9. CLEANUP SPILL** | Spill Response Coordinator Directs Spill Response Contractor | Spill Response Contractor |
| **10. DISPOSE OF SPILL** | Spill Response Coordinator Directs Spill Response Contractor | Spill Response Contractor |

## *1.9 PLAN DEFINITIONS AND ACRONYMS*

| ACRONYM | DESCRIPTION or DEFINITION as used in this Plan |
|---|---|
| ACM | Asbestos-Containing Material |
| ANSI | American National Standards Institute |
| API | American Petroleum Institute |
| ASHRAE | American Society of Heating, Refrigeration and Air Conditioning Engineers |
| ASTM | American Society for Testing and Materials |
| ATSDR | Agency for Toxic Substances and Disease Registry |
| BMP | Best Management Practice |
| BOD | Biological Oxygen Demand |
| BTU | British Thermal Units |
| CAAA | Clean Air Act Amendments |
| CAS | Chemical Abstract Service |
| CERCLA | Comprehensive Environmental Response Compensation Liability Act of 1980 (amended in 1984 and later) |
| CFR | Code of Federal Regulations |
| CHEMTREC | Chemical Transportation Emergency Center |
| COD | Chemical Oxygen Demand |
| CWA | Clean Water Act |
| DMR | Discharge Monitoring Reports |
| DO | Dissolved Oxygen |
| DOT | Department of Transportation |
| EMS | Environmental Management System (also see ISO14000) |
| EPA | Environmental Protection Agency |
| EPCRA | Emergency Planning and Community Right-to-Know Act |
| FIFRA | Federal Insecticide, Fungicide and Rodenticide Act |
| FR | Federal Register |
| GPP | Groundwater Protection Plan |
| HAP | Hazardous Air Pollutant |
| HAZCOM | 29 CFR 1910.1200 OSHA Hazardous Communication Standard requiring employers to communicate MSDS/material to employees |
| HAZWOPER | 29 CFR 1910.120 - the OSHA / EPA requirement to have all employees trained if they will be handling, managing or shipping hazardous wastes |
| HCFC | Hydrofluorochlorocarbon |
| HM | Hazardous Material |
| HWM | Hazardous Waste Management |
| ID | (as in ID number) - Hazardous Waste Identification Number assigned to RCRA generators, transporters, and TSDFs |
| KDAQ | Kentucky Division for Air Quality |
| KDOW | Kentucky Division of Water |
| KDWM | Kentucky Division of Waste Management |
| KPDES | Kentucky Pollutant Discharge Elimination System |
| LEPC | Local Emergency Planning Committee |
| LQG | Large Quantity Generator of hazardous wastes - this term has a specific definition under RCRA! |
| LWHUW | Large Quantity Handlers of Universal Waste (haz wastes) |
| LUST | Leaking Underground Storage Tanks |
| MCL | Maximum Concentration Limit or Level |
| MSDS | Material Safety Data Sheet (under OSHA) |
| MSW | Municipal Solid Waste (trash, nonhazardous waste, etc.) |

| | |
|---|---|
| NAAQS | National Ambient Air Quality Standards |
| NESHAP | National Emissions Standard for Hazardous Air Pollutants |
| NFPA | National Fire Protection Association |
| NIH | National Institute for Health |
| NIOSH | National Institute of Occupational Safety and Health |
| NPDES | National Pollution Discharge Elimination System |
| NRC | National Response Center |
| OSHA | Occupational Safety and Health Administration (29 CFR) |
| PCB | Polychlorinated biphenyl - A toxic cooling oil used in the past in transformers and capacitors |
| PEL | Permissible Exposure Limit |
| POTW | Publicly Owned Treatment Works |
| PPB | Parts Per Billion |
| PPE | Personal Protective Equipment (such as gloves, respirators, etc.) |
| PPM | Parts Per Million |
| RCRA | Resource Conservation and Recovery Act of 1976 - resulted in hazardous waste regulations - 40 CFR Parts 260 to 280 |
| RQ | Reportable Quantity |
| RUST | RCRA Underground Storage Tanks |
| SARA | Superfund Amendments and Reauthorization Act |
| SDWA | Safe Drinking Water Act of 1974 |
| SERC | State Emergency Response Commission |
| SPCC | Spill Prevention Control and Countermeasures |
| SQG | Small Quantity Generator of hazardous wastes (has a specific definition!) |
| SQHUW | Small Quantity Handlers of Universal Waste (haz waste) |
| TPQ | Threshold Planning Quantity (CERCLA community right-to-know) |
| TSCA | Toxic Substances Control Act of 1976 - regulates asbestos, PCBs, new chemicals being developed for sale and other chemicals |
| TSS | Total Suspended Solids |
| TWA | Time Weighted Average |
| UST | Underground Storage |
| VA | Vulnerability Assessment |
| VOC | Volatile Organic Compounds |

## 2.0 FACILITY INFORMATION

### *2.1 Name and Address*

Owner

EKU Facilities Services
Gentry Building / CPO 6A-1
521 Lancaster Avenue
Richmond, Kentucky 40475-3102

Facility

Same as above

### *2.2 Location - Latitude and Longitude*

The facility is shown on the Topo Map (See Appendix 1 Figure 1) and is located at the following latitude and longitude: 37° 44' 07.88" N / 84° 17' 26.44" W
(Note this data is for the location of Outfall 001 from the Coal Pad)

### *2.3 Type of Facility*

The facility is a University.

#### *2.3.1 SIC*

The facility is classified under the Standard Industry Code Classification as 8221 - Colleges, Universities, and Professional Schools

#### *2.3.2 NAICS*

The facility is classified under the North American Industry Classification System as 611310 - Colleges, Universities, and Professional Schools.

### *2.4 Location of Facility - County*

The facility is located on 892 acres in the city of Richmond, Kentucky; Madison County. See Section 2.2 for Latitude Longitude.

### *2.5 Facility Drainage*

The University Campus has multiple outfalls for stormwater discharge. Ultimately stormwater discharge from EKU enters Taylor Fork Creek and eventually enters the Kentucky River. EKU has vegetation in all areas of campus not covered by buildings,

road surface, parking lots, or material storage pads. Surface flow from the southern portion of campus, including the coal storage pile, will flow to Taylor Fork Creek located to the south of the US 60 bypass. Surface flow from the northern portion of campus will flow via storm sewers to the west and intercept an unnamed tributary of Taylor Fork Creek.

Release of materials from the Gentry Building (facilities operation area) location would flow to the south via storm drains and ditches to an unnamed tributary of Taylor Fork Creek. This tributary follows the southern boundary of EKU property to the south of US 60 Bypass (see Appendix 1, Figures 1 & 3).

### *2.6 Person Responsible for Implementing GPP, BMP, SPCC*

The President of EKU has the overall responsibility for administering and implementing the facility's oil spill prevention program, stormwater protection plan, and groundwater protection plan. The following person has been delegated the authority to implement the GPP, BMP, and SPCC plans:

Mr. Rich Middleton, Director EKU Facilities Service
Gentry Building / CPO 6A-1
521 Lancaster Avenue
Richmond, Kentucky 40475-3102
Phone: (859) 622-2966

### *2.7 Designated Person Responsible [40 CFR 112.7(f)(2)]*

The President has delegated the operational responsibility of maintaining these plans and implementing specific actions to conform with the regulations that require these plans to the Director of Facilities Services and the Director of Environmental Health & Safety. This delegation is in writing and forms the basis for the University's compliance with the following applicable Federal and State Laws and regulations:

1. Oil Pollution Act - 40 CFR 112 - SPCC Plan
2. Clean Water Act - 401 KAR Chapter 65 - Stormwater Permit and BMP Plan
3. Kentucky GPP Regulation - 401 KAR Chapter 5:037 - GPP Plan

For purposes of this combined plan, the operational responsibility for Spill Response Coordinator and Environmental Coordinator has been assigned to the Director of EH&S. His role will be to implement the operational plan elements, direct the site emergency response to spills or releases of materials, oversee remediation and recovery actions resulting from spills and releases of regulated substances subject to these three regulatory areas and provide response notifications to agencies as required, both verbal and written. For purposes of this plan, the responsibility for plan administration has been assigned to the Assistant Director of Facilities Services. His role will be to keep the plan document current and certified, provide any required sampling and analysis, insure periodic inspections and maintain required inspection records.

### *2.8 Person Developing GPP, BMP, SPCC*

Name: Fred Rial, PE Tetra Tech, Inc. under authority of
Bill Rhodes, Assistant Director EKU Facility Services
Tetra Tech Project No. 200-11693-07001

Address: 800 Corporate Drive, Suite 100
Lexington, KY 40503
859-223-8000

### *2.9 Facility Security [40 CFR 112.7(g)]*

The campus is open to the public via public and University owned roads. Entry into individual buildings is controlled by one or more of the following: building security staff, building receptionists with secure lobby access, key card access, key pad access, locked gates with key access, locked fences, and fence(s) around the property buildings and areas. During normal business hours, all commercial vehicles delivering campus goods will go to the L.O. Martin Building for delivery of campus support materials, chemicals, and goods. Deliveries to the science department, boiler operation, cafeteria operation, and administration building will occur at the receiving docks of those respective buildings. The campus coal pile lot is open to the public and security maintains patrols to inspect that area daily.

## *2.10 Hydrogeologic Setting*

### Geology and Hydrology

Eastern Kentucky University (EKU) is located in Richmond, Kentucky on 892 acres of land. According to the Natural Resources Conservation Service's website, soils underlying the campus area all consist of silty loams and are of the Caleast, Faywood, Lowell, Newark, and Shelbyville Series. Loamy material is typically a permeable soil composed of clay, silt, sand, and organic matter.

The campus is split into two different bedrock settings due to the Tate Creek Fault system located just north of Crabbe Street on campus. The Tate Creek Fault is a northwest-southeast trending fault that extends from the Blue Grass Army Depot property in Madison County in to Fayette County. Because the north side of the fault is the downthrown side of the fault, a portion of EKU's campus is underlain by the Drakes Formation, as well as the upper and lower parts of the Ashlock Formation. The Drake Formation consists of dolomite, shale, and limestone, whereas the upper and lower Ashlock Formations consist primarily of limestone and dolomite. These three bedrock types are all part of the Upper Ordovician Richmond Formation. The area south of the fault is underlain by only the upper and lower parts of the Ashlock Formation.

Although limestone weathering can typically lead to karstic features such as sinkholes and caves, this is not a mature karst area. Upon review of the geologic map of the area, there does not appear to be any such features on the subject area. However, there are minor sinkhole depressions located to the east and south of the subject site.

The geologic map shows a spring that originates just south of the Eastern By-Pass and west of Kit Carson Drive (coordinates 37º 43' 54", 84º 17' 52"). According to the Kentucky Geological Survey's website, another spring (KGS spring #3570, coordinates 37º 43' 05", 84º 17' 35") is located on the southern portion of the subject property. It is unknown if these springs are connected to a karst feature off-site without conducting a thorough dye trace study.

In the event that a spill does occur on the subject property, there does not appear to be any sinkholes that could be impacted, which could lead to subsurface conduits causing extensive off-site contaminant migration. However, potential subsurface pathways could be fractures associated with the fault along the northern portion of the campus. If a spill occurs within the fault zone and the overburden is thin, contaminants may enter a fracture and travel along the fracture for an unknown distance, possibly off-site. A fracture associated with the fault may also connect with a conduit leading to a spring, a surface water feature, such as a pond or creek, or even deeper to impact the groundwater. Therefore, it is recommended that storage and handling of materials not be conducted along the fault zone.

## 3.0 REGULATORY REQUIREMENTS

This Combined Regulatory Plan combines the administrative requirements, spill response actions, plan elements, training requirements, and reporting requirements of the following:

1. SPCC Plan - Code of Federal Regulation, Chapter 40, Section 112 (40 CFR 112)
2. BMP Plan - KPDES Stormwater Permit Condition 2 (401 KAR 5:065)
3. GPP Plan - Kentucky Groundwater Protection Plan Regulation (401 KAR 5:037)

Applicable regulations and administrative compliance requirements are discussed in this section of the plan. Copies of the current regulations are presented for reference in Appendices 20, 21, and 22.

### *3.1 Applicable Regulations [40 CFR 112.1]*

#### *3.1.1 Spill Prevention Control and Countermeasures Plan (SPCC)*

40 CFR 110, promulgated in November 1976, prohibits the discharge of oil into or upon navigable waters of the U. S. or adjoining shorelines or into or upon the waters of the contiguous zone in such quantities that it has been determined may be harmful to the public health or welfare of the U.S. The Oil Pollution Act identifies in 40 CFR 112 the specific requirements, procedures, methods, and/or equipment that facilities must implement in a spill prevention control and countermeasures plan to prevent the discharge of harmful quantities of oil into or upon waters of the U. S.

This facility stores over 1,320 gallons of petroleum in bulk containers and is therefore subject to the federal regulations that require EKU to prepare and implement a written Spill Prevention Control and Countermeasures (SPCC) Plan.

#### *3.1.2 Kentucky Groundwater Protection Plan (GPP)*

Kentucky Administrative Regulation (KAR), 401 KAR 5:037, define those activities that require a facility to prepare and implement a groundwater protection plan (GPP). The

following chart summarizes activities that are applicable or not applicable at EKU. The specific activities that apply are identified in the following chart with the term "Applies" in the first column. Those activities that do not apply at EKU are noted with "NA."

| KENTUCKY GROUNDWATER PROTECTION PLAN REQUIREMENTS | |
|---|---|
| **Applies or NA** | **Per 401 KAR 5:037 Section 2) - Facilities conducting any of the following activities shall prepare and implement a groundwater protection plan:** |
| NA | (a) Storing or related handling of bulk quantities of pesticides or fertilizers for commercial purposes; |
| NA | (b) Storing or related handling of bulk quantities of pesticides or fertilizers for the purpose of distribution to a retail sales outlet; |
| NA | (c) Applying of pesticides or fertilizers for commercial purposes; |
| Applies | (d) Applying of fertilizers or pesticides for public right-of-way maintenance or institutional lawn care; |
| NA | (e) Land treatment or land disposal of a pollutant; |
| Applies | (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; |
| Applies | (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; |
| NA | (h) Transmission in pipelines of raw materials, intermediate substances or products, finished products, or other pollutants; |
| NA | (i) Installation or operation of on-site sewage disposal systems; |
| Applies | (j) Storing or related handling of road oils, dust suppressants, or deicing agents at a central location; |
| Applies | (k) Application or related handling of road oils, dust suppressants or deicing materials; |
| NA | (l) Mining and associated activities; |
| NA | (m) Installation, construction, operation, or abandonment of wells, bore holes, or core holes; |
| NA | (n) Collection or disposal of pollutants in an industrial or commercial facility through the use of floor drains which are 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; |
| NA | (o) Impoundment or containment of pollutants in surface impoundments, lagoons, pits, or ditches; or |
| NA | (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. |

The Kentucky groundwater protection plan regulations identify several exclusions that result in a facility not being required to prepare a GPP for those listed activities. The following chart identifies exemptions to the GPP plan requirements as they relate to EKU activities. Those exclusions to preparing a GPP are noted with the term "Applies."

| KENTUCKY GROUNDWATER PROTECTION PLAN EXCLUSIONS | |
|---|---|
| **Applies or NA** | **Per 401 KAR 5:037 Section 3) - Exclusions from preparing and implementing a groundwater protection plan:** |
| NA | (3) General exclusion. Any person who conducts an activity identified in subsection (2) of this section shall not be required to prepare or to implement a groundwater protection plan for that activity if that person can demonstrate by substantial evidence based on the factors set forth in this subsection, the activity has no reasonable potential of altering the physical, thermal, chemical, biological, or radioactive properties of the groundwater in a manner, condition, or quantity that will be detrimental to the public health or welfare, to animal or aquatic life, to the use of groundwater as present or future sources of public water supply or to the use of groundwater for recreational, commercial, industrial, agricultural, or other legitimate purposes. The demonstration shall at a minimum consider the following factors: (a) Hydrogeologic sensitivity at or near the location of the activity; (b) Quantity of the pollutants, including the cumulative potential to pollute from small discharges, spills, or releases which individually would not have the potential to pollute; (c) Physical, chemical, and biological characteristics of the pollutants such as solubility, mobility, toxicity, concentration, and persistence; (d) Use of the pollutants at the locations of the activities; and (e) Present and potential uses of the groundwater. |
| **GPP SPECIFIC EXCLUSIONS** | |
| Applies | (a) Normal use or consumption of products sized and packaged for personal use by individuals; |
| NA | (b) Retail marketing of products sized and packaged for personal use or consumption by individuals; |
| Applies | (c) Activities conducted entirely inside enclosed buildings if: 1. The building has a floor sufficient to prevent the release of pollutants to groundwater; and 2. There are no floor drains, or all floor drains within the building are connected to an on-site sewage disposal system, closed-loop collection or recovery system or a waste treatment system permitted under the Kentucky Pollutant Discharge Elimination System; |
| NA | (d) Storing, related handling, or transmission in pipelines of pollutants that are gases at standard temperature and pressure; |
| Applies | (e) Storing municipal solid waste in a container located on property where the municipal solid waste is generated and which is used solely for the purpose of collection and temporary storage of that municipal solid waste prior to off-site disposal; |
| Applies | (f) Installing and operating sewer lines or water lines approved by the cabinet; |
| NA | (g) Storing water in ponds, lakes or reservoirs; |
| NA | (h) Impounding stormwater, silt, or sediment in surface impoundments; |
| NA | (i) Application of chloride-based deicing materials used on roads or parking lots; |
| Applies | (j) Emergency response activities conducted in accordance with local, state, and federal law; |

The specific activities at this facility that require a GPP are: storing or handling of chemicals, materials, solid waste in tanks, drums, and other containers or in piles; application of fertilizer, herbicides, pesticides; and application of deicing materials. Bulk is defined in the Kentucky GPP regulation as 55-gallon drums or 100-pound dry weight packages.

EKU conducts specific activities that involve the storage, treatment, or transport of bulk materials at the EKU facility. Specific details of container volume, contents, location and containment / control structures are shown in Appendix 3.2 - Bulk Material Container and Containment Details. Specific activities conducted at EKU are shown in Appendix 1, Figure 4 - Wet Transformer Locations and Figure 5 - AST and UST Locations. The activities subject to GPP plan development include the following:

- Storage of lubricating oil, motor oil, and antifreeze in 55-gallon containers
- Storage of coal in a bulk pile (10,000 tons)
- Storage of diesel and gasoline
- Storage of used lubricating oil and motor oil in 55-gallon containers
- Storage of chemicals for lawn application
- Storage of chemicals for boiler water treatment
- Storage of deicer for use on roads and parking lots
- Disposal of solid waste on site

A current copy of the Kentucky GPP guidance memo and regulations are included in Appendix 22 for reference.

### *3.1.3 Kentucky Stormwater Permit*

The Kentucky Division of Water has identified facilities and operations with industrial activity that require stormwater discharge permits. In Kentucky this type of permit is regulated by specific water regulations found in 401 KAR Chapters 4 and 5. The stormwater permit is identified as the Kentucky Pollutant Discharge Elimination System or KPDES. Storm water discharge associated with industrial activity means the discharge from any conveyance which is used for collecting storm water and which is directly related to manufacturing, processing, or raw material storage areas at an industrial plant, industrial operation, or construction activity. Construction activity that disturbs more than 1 acre of land requires a KPDES permit prior to construction. The following chart identifies the types of stormwater permits that apply to facilities in Kentucky. Activities conducted at this facility that require a KPDES permit are identified in the chart with the term “Applies.”

| KENTUCKY BEST MANAGEMENT PRACTICES PLAN REQUIREMENTS BASED ON WATER DISCHARAGE REGULATIONS (See 401 KAR Chapter 4 & 5) | |
|---|---|
| **Applies or NA** | **KNDOP - Kentucky No Discharge Operational Permit** |
| NA | KNDOP ND - For facilities that do not have a point source discharge but use other means of disposal such as land application, subsurface injection, closed circuit, etc. |
| NA | KNDOP ND - IFR - For individual family residences with "no discharge" treatment systems |
| | |
| NA | KPDES SC - For services, wholesale and retail trade, and all other establishments that have sanitary and/or non-process discharges |
| NA | KPDES - CAFO - General permit for concentrated animal feeding operations (poultry, swine, beef and dairy) |
| NA | KPDES CM - General permit coverage for coal mining |
| NA | KPDES WTP - General permit coverage for wastewater discharges associated with drinking water plant activities |
| NA | KPDES GW - General permit coverage for discharges associated with remediation activities involving gasoline and/or diesel fuel |
| NA | KPDES HWY - General permit coverage for wastewater discharges associated with highway maintenance and equipment facilities |
| NA | KPDES IFR - General permit coverage for wastewater discharges associated with individual family residences |
| NA | KPDES MM - General permit coverage for mineral mining |
| | |
| NA | KPDES - Categorical Industry or Process - See 40 CFR 400 to 471 |
| | |
| | **Storm Water General Permit Coverages** |
| NA | KPDES SMS4 - General permit for municipal separate storm sewer systems |
| Applies | KPDES SW - General permit coverage for storm water discharges associated with industrial activity |
| Applies | KPDES SW - General permit coverage for storm water discharges associated with construction activities exceeding 1 acre of disturbed land |

### *3.1.4 Stormwater Best Management Practices Plan (BMP)*

Facilities that are required to have a KPDES permit, are also, as a permit condition, required to prepare a Stormwater Best Management Practices Plan (BMP).

EKU has a KPDES stormwater permit for the coal bin where the coal is kept in bulk storage prior to use in the campus boiler operation. Coal is delivered by truck, stored in

the coal bin, and transported by truck from the coal bin to the boiler operation. The coal bin is located outside with no rain cover and has the potential to impact stormwater.

The Kentucky Division of Water issued Eastern Kentucky University, a Kentucky Pollutant Discharge Elimination System (KPDES) permit (permit number KYR 3000002), for stormwater point source discharge. This KPDES stormwater permit expired on September 30, 2007 and per "page 4 Paragraph 7. Permit Duration" in the permit; it will be automatically renewed by the Division of Water. No NOI or other notification is required by EKU for renewal of this general permit. A copy of the KPDES permit is included in Appendix 8.

KPDES permits require completion of a Best Management Practices Plan (BMP) for stormwater discharge within 6 months of receipt of the KPDES Permit unless the KPDES permit is for construction. The BMP for construction projects must be completed prior to the start of construction.

This plan fulfills the requirement to develop and implement a BMP Plan. The objective of a BMP is to minimize exposure of stormwater to hazardous and toxic materials as a way to prevent the release of these materials to waters of the commonwealth.

### *3.2 Plan Amendment, Review, and Submittal Requirements*

The SPCC portion of this plan needs to be reviewed, approved, and certified (See Section 14) by an authorized representative of the administration every **five** years. Technical changes to the facility may require Plan recertification by a professional engineer. An authorized administrative representative is a person who has been delegated, in writing, the authority to sign and certify this type of document.

The GPP and BMP portion of this plan requires a review of the Plan every **three** years or more frequently depending on the ability of the plan to protect the environment in the event of a release of material.

This Plan shall be reviewed and amended as indicated in this section. Reasons for Plan amendment or review include the following:

- Five year plan review and update (SPCC),
- Three year plan review and update (GPP, BMP),
- Change in facility design, construction, and operation,
- Maintenance, modification, or installation of existing or new containers,
- Increase in regulated pollutant storage capacity,
- Change in maintenance practices that materially affect the facility's potential for the discharge of pollutants,
- Spill of at least 42 gallons of petroleum in any 12-month period,
- Discharge of 1,000 gallons of petroleum in one spill during any 12-month period,
- Failure of the Plan to prevent a discharge from impact on the environment,
- Plan deficiencies identified by the Regional Administrator,
- Plan deficiencies identified from a regulatory agency inspection, or
- Changes to the regulations governing the plan requirements.

### *3.2.1 Prepare, Implement, and Review [40 CFR 112.3]*

EKU is required by the KPDES permit (Clean Water Act) to prepare and implement a BMP plan. The Kentucky water regulations require EKU to prepare and implement a GPP plan. The plan is available for review by the EPA Regional Administrator, Division of Water staff, or the public during normal business hours and must be reviewed periodically by EKU staff and, as appropriate, updated.

### *3.2.2 Amendment of SPCC Plan by Regional Administrator [40 CFR 112.4]*

If, within a twelve-month period, EKU discharges more than 1,000 gallons or more than 42 gallons in each of two discharges, EKU must submit information regarding this spill to the EPA Regional Administrator (RA) within 60 days. Based on a review by the RA, EKU may be required to prepare and submit the SPCC plan or revise and submit the current SPCC plan. The RA is located at the US EPA Regional office in Atlanta, Georgia.

### *3.2.3 Amendment of SPCC Plan by Owner/Operator [40 CFR 112.5]*

If this Plan is found to be deficient according to applicable regulations, pursuant to a state site inspection, or Plan review, the Spill Response Coordinator shall revise and resubmit this Plan to the Kentucky Environmental and Public Protection Cabinet (Cabinet) within 30 days for further review. The Cabinet will make a final determination regarding the ability of this Plan to prevent and/or contain the discharge of pollutants from EKU. The Spill Response Coordinator or Alternate Spill Response Coordinator shall implement the amendment of this Plan as soon as possible, but not later than six months after the amendment becomes part of this Plan.

If this plan fails to protect the environment when implemented to respond to a spill or emergency, the Spill Response Coordinator or the Alternate Spill Response Coordinator will initiate an immediate review of the plan elements that contributed to that failure. The changes to the plan must be certified by Eastern Kentucky University, administration and certified by a registered professional engineer if the change is technical and not administrative.

## *3.3 Review Location for GPP, BMP, SPCC*

This plan document is a combined plan prepared in conformance with the US EPA Integrated Contingency Plan guidance for preparing emergency response and spill response plans. The Groundwater Protection Plan, the Stormwater Best Management Practices Plan, and the Spill Prevention Control and Countermeasures Plan are kept
In the office of the Assistant Director of Facilities Services; Environmental Resources and Energy Management (Gentry Building).

## *3.4 Record Maintenance [40 CFR 112.7]*

The master files for the Plan are kept on a shared drive maintained by EKU Information Technology at N:Administrative\Facilities\Regulatory Compliance\Combined Spill Response Plan.

The Plan shall be available for review for a period of six years to comply with the BMP and GPP regulatory records retention requirements.

Additionally, all records evidencing compliance, including inspection records, secondary containment stormwater discharge, stormwater monitoring and testing, and tank integrity test reports shall be made a part of this Plan and shall be maintained for a period of three years. A record summarizing the results of the inspections, a certification that EKU is in compliance with this Plan, and a record identifying any incidents of noncompliance shall be maintained for a period of six years.

## *3.5 Plan Procedures*

This plan identifies procedures that will be used by EKU and staff to respond to the following:

- Emergency Response to Spills
- Emergency Response Equipment Use
- Spill Response Notifications
- Employee Training for Spill Response
- Routine Area Inspections

## *3.6 Emergency Response and Plan Responsibilities*

### *3.6.1 Plan Coordinator*

The Spill Response Coordinator is responsible for implementation of the elements identified in this plan. At EKU, the role of operational response for events identified in this plan is in the office of the Environmental Health Safety. The Director of EH&S serves as the Spill Response Coordinator. The Director of Emergency Preparedness serves as the Alternate Spill Response Coordinator. Contact phone numbers for those staff are presented in Section 1.0 and Appendix 2. Administrative coordination is performed by the Assistant Director of Environmental Resources and Energy Management under the office of Facilities Services.

### *3.6.2 Best Management Plan Committee and Responsibilities*

The function of the BMP Committee is to develop and update EKU's BMP and other applicable plan elements and to assist EKU Administration in the implementation of the BMP plan and general combined regulatory plan, maintenance, and revision. The following persons constitute the BMP Committee for EKU:

*Spill Response Coordinator*

Responsibilities:

- Establish, train and equip spill response operations
- Coordination of plant incident response and cleanup
- Environmental assessments associated with spill, release, reporting, and agency notifications (as required)
- Mandatory and awareness training and documentation
- Annual comprehensive site compliance evaluation

*Alternate Spill Response Coordinator:*

Responsibilities:

- Back-up first response
- Overall plan coordination and updating
- Monitoring, inspections and record keeping
- Periodic sampling, analysis and reporting as required by KPDES
- Review and managerial control of technical projects and programs

*Spill Team*

Responsibilities:

- Spill response
- Review incidents and recommend changes to plan
- Assist in performing inspections and reporting deficiencies
- Identification of potential spill sources
- Review of process or facility changes that may affect existing plan

## 4.0 REGULATED ACTIVITIES AND MATERIALS - SPCC, BMP, GPP

The locations and description of tank contents for regulated activities with the potential to contribute pollutants to groundwater and/or stormwater are shown in Appendix 1, Figure 4 - Wet Transformer Locations and Figure 5 - AST and UST Locations. The following observed activities at EKU require one or more plans to be prepared and implemented:

- Storing petroleum in bulk containers (55-gallon or greater) [SPCC, BMP, GPP]
- Transferring petroleum to bulk containers [SPCC, BMP, GPP]
- Unloading bulk liquid and dry materials [SPCC, BMP, GPP]
- Transfer of bulk liquid and dry materials from delivery trucks to inside and outside storage locations [SPCC, BMP, GPP]
- Transferring coal from point of storage to boiler house [SPCC, BMP, GPP]
- Storing waste materials in containers [BMP, GPP]

### *4.1 Storage of Regulated Materials SPCC [40 CFR 112.7(a)] GPP (401 KAR 5:037 & 5:065)*

Storage of petroleum or bulk materials is regulated and requires one or more of the following: BMP, SPCC, and GPP. Improper storage activity can potentially contribute pollutants to groundwater or stormwater and the plan procedures provide a framework to prevent this environmental impact. The drainage pathways for a spill that would impact stormwater are shown in Appendix 1, Figure 2 and are related to pollutants that could be released from the coal pile through Outfall 001.

Regulated activities requiring the SPCC Plan include:

- Over 1,320 gallons of petroleum storage in bulk containers. Bulk containers are defined as 55-gallons or larger. Actual total petroleum inventory is over 16,000 gallons.
- Storage of petroleum in operational bulk containers. Operational containers include transformers, elevator hydraulic units, trash compactor hydraulic units.
- Storage of fat and grease from cafeteria operations in bulk containers.

Fifty-five gallon drums of fresh motor oil and antifreeze are stored in the maintenance building on concrete floors. Fresh hydraulic oil and transmission fluid are stored in 5 gallon buckets in the maintenance building on concrete floors. Fifty-five gallon drums of used motor oil and used hydraulic oil are stored outside the maintenance building on a concrete floor. Universal Environmental Services, LLC collects any used oil. Oil filters are drained into the 55 gallon drums and the filters disposed of in the local landfill.

Regulated activities requiring the GPP Plan include (Appendix 1, Figures 4 & 5):

- Storage of bulk liquid materials. Bulk is defined as 55-gallons or larger and includes water treatment chemicals, antifreeze, boiler treatment chemicals.
- Storage of bulk dry materials in excess of 100-pound dry weight or in piles. Bulk dry materials include the coal pile (stored for use in the boiler operation) and coal combustion products (fly ash from baghouse and bottom ash).
- Storage of used equipment outside.

An inventory of current petroleum and other materials stored and used at EKU with potential to contribute pollutants to stormwater or groundwater is presented in Appendix 3.2.

### *4.2 Transfer of Petroleum Products (GPP, SPCC)*

Transfer of petroleum products is a regulated activity under the SPCC and GPP regulations and requires the preparation and implementation of both the SPCC and GPP to address this requirement.

There is no transfer of petroleum products into or from the numerous transformers located at this site. There are transfer activities associated with all petroleum containing aboveground storage tanks (AST) and underground storage tanks (UST). These petroleum storage tanks are associated with emergency equipment [generator(s) and fire pump(s)] and as a fuel supply for vehicles and equipment used by the university to support maintenance and facility/grounds activities. These are identified in Appendix 1, Figures 4 & 5 by building location, container volume, and container contents.

ASTs and USTs are filled by commercial tanker trucks.

### *4.3 Solid Waste Storage and Disposal (GPP)*

Solid waste storage and disposal activities are regulated under various state and federal regulations. EKU is required to prepare a GPP to address the structural and administrative activities related to solid waste storage and disposal.

It is illegal to dispose of any solid waste without a permit. Permits to dispose of solid waste on property are included in Appendix 9 where applicable. Storage of solid waste must be conducted in a manner to be protective of the environment. The GPP plan elements address the structural and administrative practices by EKU to prevent groundwater contamination from solid waste storage practices.

Solid waste is generated by campus activities including boiler operations (coal combustion waste), cafeteria operations, building maintenance, grounds maintenance, road maintenance, utility maintenance, HVAC maintenance, university academic activities, administrative office operations, science and chemistry department activities, coal fired boiler operations, and fleet / vehicle maintenance.

Solid wastes are stored and disposed of in accordance with local, state, and federal regulations. Waste streams on campus have been identified and there is no mixing of hazardous waste (RCRA waste) and regular or special waste. Solid waste is generated from the construction, remodeling, repair, and demolition of structures and roads. Solid waste may also consist of vegetation resulting from landscape activities, land clearing and grubbing, utility line maintenance, and seasonal and storm related cleanup.

Waste is primarily disposed of in a local licensed landfill. Waste equipment and materials are stored for recycle or reuse in covered areas to prevent impact on stormwater.

### *4.4 Storage of Special Waste (GPP)*

Special waste is defined by the Kentucky Division of Waste Management as follows: coal boiler fly ash (dust collector waste), coal boiler bottom ash, batteries, mercury containing switches and equipment, light bulbs (fluorescent), tires, used oil, and electronic equipment (CRT, TV, computers, keyboards, electronic storage devices).

These special wastes are stored either inside on solid concrete floors, in totally enclosed tanks or containers, or in locations to prevent impact on the environment from stormwater. EKU also manages each of these waste streams in a manner to prevent impact on the environment due to transfer and disposal. Recycling contractors are used to remove and recycle selected special wastes generated by EKU operations.

### *4.5 Onsite Water or Wastewater Treatment Operations (BMP, GPP)*

EKU does not have any on-site waste water treatment operations.

EKU does not have any on-site potable water treatment operations.

Potable water is purchased for campus use through Richmond Utilities. EKU does have boiler feed water treatment inside the boiler house. Concentrated boiler treatment chemicals are stored inside on a continuous concrete floor. Diluted boiler feedwater (with chemical addition) is stored in bulk containers inside the boiler house on continuous concrete floors.

EKU does not have any wastewater treatment for municipal sewage generated by campus operations. Each building on EKU's campus is connected to the municipal sewer department maintained by EKU Facilities Services (building side) and Richmond Utilities (street side). EKU does not use any septic systems on campus.

### *4.6 Applying Fertilizers of Pesticides for Institutional Lawn Care (GPP)*

EKU does store and use fertilizers and pesticides for institutional lawn care. These are stored by the building and grounds staff and applied to the university property on a

scheduled basis. Storage and use follow the manufacturer's recommendations. These materials are stored on solid surfaces away from drains. These materials are used by staff who have been trained in the proper use of these materials. The materials are placed into the dispensing equipment over hard surfaces and any spill materials are cleaned up promptly to prevent impact to the stormwater or groundwater.

## 5.0 SPILL RESPONSE PROCEDURES AND NOTIFICATION [40 CFR 112.7(A)]

EKU has prepared an emergency response plan for various emergencies including material spills and releases, fire, medical emergencies, weather emergencies, bomb threats, and hostile actions. The current plan is included in Appendix 2. This section of the plan has been prepared to provide an overview of the detailed planning steps identified in the documents prepared by EKU's staff and included in Appendix 2.

### *5.1 Emergency Spill Response - Responsibility Decision Tree*

The following chart describes the typical response actions to a release of regulated materials at EKU. The staff who are authorized and responsible for the emergency actions are described below by job description or job title:

| Emergency Action | Primary Person(s) Authorized to Implement Action - Job Description | Employee Name or Title |
|---|---|---|
| 1. Internal notification to staff or emergency team of a fire, medical emergency, spill, release, or material discharge | All Employees, Students, Visitors, Contractors, Vendors | See list to left |
| 2. Implement Containment - Spill Pads, Apply Absorbent, Spill Booms, Close Retention Pond Valve, Plug Storm Sewer Line, Drain Covers | Small Spill - All Trained Employees<br><br>Other - Spill Response Team | Trained Employees Only |
| 3. Implement Evacuation | EKU Police, Spill Response Coordinator | EKU Police |
| 4. Call 911 - fire, police, ambulance | All Employees | All Employees |
| 5. Incident Command - Assess Spill | Initial - EKU Police<br>Final - Spill Response Coordinator | Director EH&S |
| 6. Implement Spill Control - plug drains, plug Leaks, build dike, stop flow | Spill Response Coordinator and Spill Response Team | Director EH&S and Spill Response Team |

| Emergency Action | Primary Person(s) Authorized to Implement Action - Job Description | Employee Name or Title |
|---|---|---|
| 7. Notify Local Agencies - LEPC, Fire, Police<br><br>Notify State Agencies - SERC, Ky. NREPC Emergency, Div Water, Div Waste, Div Air<br><br>Notify Federal Agencies - NRC | Spill Response Coordinator | Director EH&S |
| 8. Implement Contractor Response Actions | Spill Response Coordinator | Director EH&S |
| 9. Implement Cleanup Actions / Response | Spill Response Coordinator and Spill Response Team | Director EH&S |
| 10. Implement - Post Incident Decontamination Include - Operating Equipment and Response Equipment | Spill Response Coordinator and Spill Response Team | Director EH&S and Spill Team Members |
| 11. Implement Spill/Waste Containerization and Labeling | Spill Response Coordinator and Spill Response Team | Director EH&S |
| 12. Implement Waste Disposal | Spill Response Coordinator | Director EH&S |
| 13. Complete Waste Manifests | Spill Response Coordinator | Director EH&S |
| 14. Prepare Incident Report and Submit to local, state, or federal agency | Agency Notification Coordinator University Administrator | Director EH&S Director Facilities Services |
| 15. Review/Revise Emergency Spill Plan as needed | Spill Response Coordinator | Director EH&S |
| 16. Develop and Implement Employee Emergency and Spill Training program | Spill Response Coordinator | Director EH&S |
| 17. Conduct and Document Employee Emergency and Spill Response Training | Spill Response Coordinator | Director EH&S |

### *5.2 Emergency Response - Evacuation Due to Spill*

In the event the spill or leak requires an evacuation of a location; staff, students, visitors, contractors, vendors, will be alerted by EKU Police or the Spill Response Coordinator - that they should leave the building immediately. Each person on campus has received formal, documented training with respect to his or her duties and responsibilities depending upon the type of emergency.

The evacuation steps include the following actions:

- Shut off equipment in the immediate area of the spill or leak if time permits
- Leave the building by the closest exit that is not involved in the spill or emergency incident
- Go quickly to the evacuation assembly point for this location
- Assembly area supervisor will take a headcount of employees
- Wait until the "All Clear Signal" is given by the EKU official in charge of evacuation or the local "Incident Commander"

### *5.3 Emergency Response - Injury*

**DO NOT ENTER THE SPILL AREA IF YOU DO NOT HAVE REQUIRED PPE**

In the event that there is an injury as a result of or incidental to a spill or leak, EKU has staff with first aid training to respond. All staff, students, vendors, contractors, and visitors should take the following actions, prior to the arrival of medical help:

a. Immediately call EKU Police, spill response coordinator, or spill team by radio, phone, or through available EKU staff.
b. Determine if you have the knowledge to know if the area is safe to enter where the injured person is located.
c. If trained, immediately administer appropriate care techniques until the medical help unit arrives

### *5.4 Emergency Response - Fire*

**DO NOT ENTER THE SPILL AREA IF YOU DO NOT HAVE REQUIRED PPE**

If a fire occurs as a result of or incidental to a spill of material, immediately use a fire extinguisher on small fires (if you have received proper training); otherwise, take the following actions:

a. Call EKU Police (911)
b. Pull the closest fire alarm.
c. If possible, remove source of fuel, shut off equipment, and evacuate the area.
d. Follow the instructions of EKU Spill Response Coordinator or Local Fire Department Personnel.

### *5.5 Immediate Response -Non-Hazardous Small Spill of less than 55 gallons - 40 CFR 117.7(d)*

**NOTIFY EKU POLICE IMMEDIATELY BY PHONE**

1. Extinguish any open flames or smoking material, or cease any operation such as welding, cutting, or brazing that could ignite the spilled material.
2. The person discovering the spill should take the necessary steps to reduce or eliminate any further spillage then implement spill cleanup procedures.
3. Curb the spill with spill control materials such as spill blankets, spill pigs, absorbent clay, or other available materials. Prevent the spill from migrating.
4. When the spill is curbed, soak up oil or spilled material via sorbent pads and wring out liquid in a clean, unused spill cleanup drum. Be sure that appropriate labels are placed on drums, and that the drum contents are properly identified.
5. The Spill Response Coordinator will contact the off-site contractor to assist in the cleanup and removal of spilled materials.
6. If the spilled material has left the property and has impacted a stream, review the spill notification action plan decision tree in Section 1 of this plan to determine if a RQ spill has occurred. If it is determined that a reportable quantity (RQ) spill has occurred, immediately notify the following:

| | |
|---|---|
| National Response Center | 1 800 424-8802 |
| Kentucky Emergency Response Commission | 502 564-2380 |
| Richmond Fire Department | 859 623-1164 |

Spill Response Coordinator will use the Spill Notification Form in Section 5.9 for reporting spills to these agencies.

7. Contaminated soils areas should be promptly removed by a soil remediation firm to prevent contamination of groundwater.
8. Accumulated oil or oil contaminated materials within containment areas caused by oil leaks or spills shall be completely removed within 72 hours of the leak or spill.

### *5.6 Immediate Response Non-hazardous Large Spill greater than 55 gallons*

**NOTIFY EKU POLICE IMMEDIATELY BY PHONE**

1. Extinguish any open flames or smoking material, or cease any operation such as welding, cutting, or brazing that could ignite the spilled material.
2. If the person discovering the spill is trained in the spill response procedures, take the necessary steps to reduce or eliminate any further spillage then contact Spill Response Coordinator or office.
3. If the person discovering the spill is not trained in spill response actions, immediately notify the area supervisor.
4. Curb the spill with spill control materials such as spill blankets, spill pigs, absorbent clay, or other available materials. Prevent the spill from migrating to floor drains or storm drains.
5. A large spill will be cleaned up by an off-site spill cleanup contractor. The Spill Response Coordinator will contact the off-site contractor to mobilize the cleanup and removal of spilled materials.
6. If the spilled material has left the property and has impacted a stream, review the spill notification action plan decision tree in Section 1 of this plan to determine if a RQ spill has occurred. If it is determined that a RQ spill has occurred, immediately notify the following:

| | |
|---|---|
| National Response Center | 1 800 424-8802 |
| Kentucky Emergency Response Commission | 502 564-2380 |
| Richmond Fire Department | 859 623-1164 |

NOTE: Use the Spill Notification Form in Section 5.9 for reporting spills that leave the property to these agencies.

7. Accumulated oil or oil contaminated materials within containment areas caused by oil leaks or spills shall be completely removed within 72 hours of the leak or spill.

   NOTE: Use the Spill Notification Form in Section 5.9 for reporting spills to these agencies.

8. Contaminated soils areas should be promptly removed by a soil remediation firm to prevent contamination of ground water.

### *5.7 Notification in Event of Spills [40 CFR 11.27(a)(4)]*

1. In the event of spills of any substance

**NOTIFY EKU POLICE IMMEDIATELY BY PHONE**

2. EKU POLICE will assess the scene by phone and contact the Spill Response Coordinator.
3. The Spill Response Coordinator will implement the appropriate spill cleanup and proper notification.
4. If the Spill Response Coordinator is not available, EKU Police will contact the Alternate Spill Response Coordinator.
5. External regulatory agencies will only be notified if the spill is reportable. The determination of a reportable quantity (RQ) spill may be made using the US EPA Region 4 spill chart listed in Section 1.6 of this Plan. The following agencies may be contacted:

| | |
|---|---|
| Richmond Fire Department: | **911** |
| Kentucky Department of Natural Resources and Environmental Protection: | **(502) 564-2380** |
| U.S. Coast Guard National Response Center: | **(800) 424-8802** |

### *5.8 Notification Contact List - See Appendix 2*

| Emergency Phone Numbers | |
|---|---|
| Richmond - Fire | 911 land line; cell call 859 622-2821 |
| Richmond - Police | 911 land line; cell call 859 622-2821 |
| Richmond - Medical | 911 land line; cell call 859 622-2821 |
| Kentucky Environmental Emergency Response Hotline | (502) 564-2380 or (800) 928-2380 |
| National Response Center (NRC) | (800) 424-8802 |
| Richmond Utilities (Gas, Water, Sewer) | (859) 623-2323 |
| Kentucky Division of Water | (502) 564-3410 |
| Kentucky Division for Air Quality | (502) 573-3382 |
| Kentucky Division of Waste Management | (502) 384-4734 |
| Spill Response Contractor:<br>PECCO, Inc. | (859) 887-5508 |

| Spill Respondents | |
|---|---|
| **EKU Police Department (Spill Response Dispatch)** | 911<br>(859) 622-2821 (cell) |
| **Spill Response Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Spill Response Coordinator:**<br>Mike Kasitz - Director, Emergency Preparedness | (859) 622-2275 (work)<br>(859) 582-3529 (cell) |
| **Agency Notification Coordinator:**<br>Bryan Makinen - Director, EH&S | (859) 622-2421 (work)<br>(859) 893-6503 (cell) |
| **Alternate Notification Coordinator:**<br>Rich Middleton - Director, Facilities Services | (859) 622-2966<br>(859) 200-2767 |

## *5.9 Spill Notification Form*

A discharge of a harmful quantity of oil to navigable waters includes discharges of oil that violate water quality standards, cause a fire or sheen upon the water surface or discolor the water surface or adjoining shoreline, or cause a sludge or emulsion to be deposited beneath the water surface or upon adjacent shoreline. A hazardous waste spill requires reporting using this form.

| | | |
|---|---|---|
| Name of caller: | Date of call: | Time of call: |
| Facility Name: EKU , Richmond, Kentucky 40475<br>Building: _____ | | Facility phone number<br>(859) _____ (building) |
| Spill date: | Spill time: | |
| Type of material spilled: | | |
| Estimated total quantity spilled: | | |
| Estimated total quantity spilled into navigable waters: | | |
| Source of the spill: | | |
| Description of receiving water affected: Taylor Fork Creek | Location of discharge from property: | |
| Cause of spill: | | |
| Any damage or personal injury caused by spill: | | |
| Actions taken by facility to stop, remove or mitigate the effects of the spill | | |
| Whether evacuation is needed | | |
| Names of individuals and agencies contacted including the following: | | |
| National Response Center<br>(800) 424-8802 | Name of person contacted: | Log Number of Call (if any) |
| Kentucky Emergency Response Commission<br>(502) 564-2380 | Name of person contacted: | Log Number of Call (if any) |
| Richmond Local Emergency Response 911 | Name of person contacted: | Log Number of Call (if any) |
| Other: | | |

| | | |
|---|---|---|
| Post spill response follow-up actions (name and date) | Written report: | |
| | Restock response materials | |
| Corrective actions: | Waste/spill material removal: | |
| | SPCC plan review: | |
| | Other: | |

## 6.0 EMERGENCY RESPONSE PROGRAM [40 CFR 112.7(A)]

### *6.1 EKU Response Organization*

The EKU Emergency Response Organization is a group of employees trained in response to spills of materials. These employees will respond to emergency incidents at EKU. These people receive annual training and conduct exercises to maintain proficiency in the use of emergency equipment and application of same in emergency situations. The following describes the responsibilities for employees (by job title) who will receive training in various phases of spill response identified in Section 7 of this Plan:

| | |
|---|---|
| Internal Spill Notification | All EKU Employees, Students, Contractors, Vendors |
| Incident Commander | Spill Response Coordinator |
| Spill Cleanup Responsibility | |
| Non-hazardous Material | |
| Inside | Employee, Area Staff, Spill Team |
| Outside | Spill Response Coordinator, Off-Site Spill Contractor (based on size) |
| Incident Reporting | |
| ANY SPILL | Spill Response Coordinator |
| Incident Notification Report | (see Appendix 12) |
| Call Medical or Fire Emergency | All Employees |
| Call Richmond EMS, Richmond Fire Department | All Employees |

### *6.2 Response Equipment (SPCC, BMP, GPP)*

EKU has the following emergency equipment and communication systems on hand to respond to a spill incident:

- Strategically located eyewash (permanent and portable) and showers
- Fire blankets

- Dry sweep and oil dry
- Oil Absorbent Pads, Booms, and Ropes (snakes)
- Chemical Spill Kits (Chemistry Department)
- Wet Dry Vacuum
- Empty 55 Gallon Drums (Spill Cleanup)
- Brooms, mops, shovels
- Internal phone systems
- Two-way radio systems
- Air monitor (LEL, Oxygen, H2S, CO)
- pH paper
- First aid cabinets and blood borne pathogen spill kits

EKU verifies equipment listed above in the monthly inspection forms - See Appendix 5.

### *6.3 Personal Protective Equipment*

EKU has stockpiled personal protective equipment that may be needed by the Spill Response Team during a spill or release response. The Spill Response Team members have been trained in the use of this equipment and are responsible for monthly inspections of the personal protective equipment stockpiles to insure that this equipment is available. The monthly checklist for personal protective equipment is included in each of the appropriate monthly inspections in Appendix 5. The following equipment is available for routine operations and for emergency response: rubber gloves, rubber boots, rubber aprons, chemical resistant clothing, tyvex suits, face shields, goggles, hearing protection, dust masks, dust respirators, organic vapor respirators, acid gas respirators, self contained breathing apparatus, cold weather outerwear garments.

### *6.4 Visual Inspections [40 CFR 112.7(e)] SPCC, GPP, BMP*

EKU has developed this Plan to organize the program for response to spills of petroleum related products and solid waste. The employees with responsibilities for

spill response receive training regarding the spill response actions described in Sections 5 and 6 of this Plan. Details of training to prepare these employees for their spill response actions are presented in Section 7 of this Plan.

EKU has also developed and implemented periodic inspections of storage areas, storage tanks, dikes, and other facility areas where petroleum is stored or used.

### *6.4.1 Visual Inspection - Bulk Storage Containers*

EKU has developed a periodic inspection procedure to evaluate the status of bulk containers, valves, pipes, fittings, secondary containment dikes, and other equipment used in storage, transfer, or use of paint or petroleum materials. The inspection checklists must be retained for a period of at least three years. The bulk containers included in the visual inspection include the following:

- Indoor drum storage
- Outside drum storage
- Outside AST
- Culverts, ditches, sediment ponds, buffer zone, lateral field
- impoundments

This procedure for periodic inspections and the inspection forms are included in Appendix 5.

### *6.4.2 Visual Inspection and Test Records*

The Spill Response Coordinator or his designee is responsible for maintaining the documentation of inspections of the bulk petroleum tanks, bulk chemical storage areas, all outside secondary containment, and operating equipment that contains fluids that if spilled could result in an environmental impact. Any deficiencies noted on any inspection checklist must be corrected with the written documentation attached to the inspection checklist.

## 7.0 TRAINING - SPCC, GPP, AND BMP PLAN [40 CFR 112.79(F)]

**NO STAFF MAY ENTER THE HOT ZONE WITHOUT PROPER TRAINING**

The HOT ZONE is defined as a SEVERE HEALTH OR LIFE risk area in or adjacent to a spill or release which, without PPE or training; staff, students, or other personnel would become victims as a result of entering that area.

SEVERE HEALTH OR LIFE risk areas include but are not limited to the following:

- Permit Required Confined space (see OSHA 29 CFR 1910.119)
- Atmospheric conditions that could result in death (oxygen below 19.5%, toxic fumes, asphyxiants, dust, air contaminants)
- Combustible air conditions above the lower explosive limits
- Physical site conditions that are hazardous (power line, electrical issue, unstable structure)
- Release of chemicals or materials in an enclosed lab, room, or building and the ventilation system has failed in the lab, room, or building

### *7.1 Training Operations Spill Response Team*

Proper training for staff with responsibilities for spill response, including containment, control, cleanup, and disposal are required by OSHA. This includes at a minimum the following:

- Training on the SPCC, BMP, and GPP combined plan
- Spill Notification and First Response - Internal Spill
- Training on EKU's emergency plan prepared for 29 CFR 1910.38
- HAZCOM training for the chemicals and materials in the areas where they will respond (per 29 CFR 1910.1200)
- HAZWOPER training per 29 CFR 1910.120
- Proper personal protective equipment (PPE) use (based on MSDS)
- Medical Response - CPR First Aid
- Fire extinguisher training

Note if the operations spill response team or the department response team (including students) are required by the SPECIFIC BUILDING OR CHEMICAL RESPONSE PROCEDURE to use respirators then each person with that responsibility must follow the OSHA standard with respect to respiratory personal protective equipment. It is not the intent of this plan to provide that training. It is the intent of this plan to provide the framework that describes safe practices to be used when response involves more than the use of the following PPE: gloves, boots, face shield, goggles, and apron.

Recommended training for facility staff by job title or job description is identified in Appendix 10.

## *7.2 Training for SPCC/BMP/GPP Awareness for affected Employees*

All affected employees receive annual documented awareness training in EKU's emergency plans which covers the following:

SPCC, BMP, GPP Plan - content, awareness, employee responsibilities
HAZCOM training for chemicals or materials in their work area
Awareness of EKU's Emergency Plan (see Appendix 2)

Documentation of this awareness training will conform to EKU's training policy, not included in this plan.

### *7.2.1 Employee Training - GPP*

Training focuses on groundwater protection and includes educating the employees, contractors, and vendors regarding the importance of groundwater protection. Specific training practices are discussed in detail in this combined plan. The training includes all aspects of the GPP and includes, but is not limited to the following topics:

- Review of the GPP
- Importance of groundwater protection
- Activities that have the potential to pollute groundwater
- Review of storage, use, and disposal of pesticides and fertilizers

- (BMPs) - practices that protect groundwater from pollution
- Inspection schedule
- Spill response
- Review of BMP and SPCC plans - as they relate to groundwater

Annual documented training is provided to all staff whose activities could impact groundwater.

### *7.2.2 Employee Training - BMP*

BMP training focuses on prevention actions related to stormwater protection and includes educating employees regarding the importance of preventing impact on stormwater. Specific training practices are discussed in detail in this combined plan. The training includes all aspects of the BMP (related to the Coal Pile Runoff KPDES Permit Requirements) and includes, but is not limited to the following topics:

- Review of the BMP (Coal Pile)
- Importance of stormwater protection
- Activities that have the potential to pollute stormwater
- (BMPs) - practices that protect stormwater from pollution
- Inspection schedule
- Spill response
- Review of GPP and SPCC plans - as they relate to stormwater

Annual documented training is provided to all staff whose activities could impact stormwater.

### *7.2.3 Employee Training - SPCC*

SPCC training focuses on prevention actions related to managing, transferring, storing, and spill response related to petroleum products in inventory at EKU. The training includes educating employees, contractors, and vendors regarding the importance of preventing impact on groundwater and stormwater from activities involving petroleum products at EKU. Specific training practices are discussed in detail in this combined

plan. The training includes all aspects of the SPCC, GPP, and BMPand includes, but is not limited to the following topics:

- Review of the SPCC
- Importance of groundwater and stormwater protection
- Activities that have the potential to pollute groundwater and stormwater
- Inspection schedule
- Spill response
- Review of SPCC, BMP, and GPP plan

Annual documented training is provided to all staff whose activities involve petroleum products.

## 8.0 SPILL POTENTIAL

Total petroleum in storage at this location exceeds 19,400 gallons in over 100 containers ranging in size from 55 gallons to 2,000 gallons. The release of this material due to a natural catastrophe (earthquake) would result in the materials entering both the groundwater and flowing by surface water toward and into the Kentucky River. Due to the fact that most of the structures containing petroleum are transformers, the likelihood that all of these containers would impact stormwater or groundwater at the same time is remote.

Spill potential for the coal stored in the coal pile is remote.

### *8.1 Spill Potential Categories*

This section of the Plan identifies the administrative, structural, and operational programs implemented to prevent discharge of regulated substances to the environment. Failure of one or more of these programs could result in a discharge that could impact the environment.

Uncontrolled elements that may require activation of the Plan to prevent discharge include natural events like floods, hurricanes, tornados, and earthquakes; third party acts of vandalism; and impact by offsite activities and operations.

Administrative elements include: procedures, training, labeling, monitoring, inspecting, checking, implementing corrective actions, and availability of contractor spill response resources.

Structural elements include: security, container specification, tank piping, tank supports, overfill protection, secondary containment, containment valves, containment pumps, dike material, leak detecting alarms, berms, retention basins, or unloading containment areas.

Operational preparedness includes: labels, spill kits, spill response equipment, fire response equipment, overfill alarms, leak detector alarms and systems, and fire alarms.

### *8.2 Discharge Potential - Uncontrolled - Natural/Weather*

The probability of a petroleum or bulk contained material discharge due to a natural or weather related event is relatively low in the Richmond area.

Historic meteorological data suggests that the EKU facility in Madison County, Kentucky, will not be affected by hurricanes and should not be affected by tornados. The likelihood that a tornado would impact this facility is low based on the USGS NOAA severe weather maps for tornado activity in Kentucky (see Appendix 4).

The risk for a petroleum discharge due to a flood is low. This is based on review of the Richmond floodplain map from FEMA. EKU is not included in any flood-prone area in Richmond, Kentucky.

The risk for a petroleum discharge due to an earthquake is low due to the fact that EKU is located in a peak acceleration rating of 4 (mild disturbance) relative to a peak acceleration rating of 40. This peak acceleration (%g) with a 10% probability of exceedance in 50 years is shown in the USGS August 2002 Map of the Eastern half of the United States (see Appendix 4).

The risk for discharge of petroleum from an uncontrolled third party (vandal) is low based on the fact that a significant portion of the petroleum stored at this location is in transformers and not in bulk containers available to the public (i.e. inside buildings).

### *8.3 Discharge Potential - Administrative*

The potential for discharge related to failure of an administrative activity is low. EKU conducts periodic inspections, implements corrective actions, provides employee training, and annually reviews all procedures related to elements of this plan.

EKU conducts and documents periodic review or inspections of the following: bulk storage tanks, security equipment, spill kits, spill response equipment, secondary containment dikes, fire extinguishers, administrative procedures related to emergency response, and emergency plans (GPP, SPCC, BMP).

In addition to the inspection of equipment and containment, EKU conducts annual training for spill team personnel and makes all employees aware through periodic and new employee awareness training of the requirements to promptly report and take action for spills.

### *8.4 Discharge Potential - Structural [40 CFR 11.27(b)] SPCC GPP*

Potential pollutants can enter the groundwater through cracks in the concrete floor in the maintenance facility or through leaks or spills from transformer casings, tanks storing bulk fluids, and USTs. Structural controls include diversion berms, diversion ditches, and concrete pads and solid concrete floors to prevent a petroleum or material release from impacting groundwater.

Included in Appendix 1 are facility diagrams showing flow direction of a release or spill of bulk material. These include the facility location shown on the topographic location map (Figure 1), location of tanks shown on the activity map (Figure 4) and the discharge direction shown on the stormwater discharge direction map (Figure 2). The groundwater discussion is included with the hydrogeology discussion is in Section 2.10 of this plan.

### *8.5 Discharge Potential - Operational [40 CFR 112.7(b)] SPCC GPP*

EKU has developed and implemented operational procedures for numerous activities that involve storage, transfer, use, and disposal of chemicals, materials, hazardous substances, and bulk substances (bulk as defined by GPP and SPCC regulations). The operational procedures include but are not limited to the following:

- installation of equipment, controls (cathodic protection, overfill alarms), monitors (fire, heat, smoke, unauthorized entry), and secondary containment (spill pallets, individual over pack containers, double wall tanks),
- developing and implementing procedures to prevent impact on groundwater and stormwater including: good housekeeping, fuel dispensing, fuel transfer, vehicle washing, discharge of materials or wastes to the environment, storing waste and hazardous waste, disposing of wastes and hazardous waste, emergency response procedures.
- developing and implementing GPP, SPCC, and BMP plans, and procedures for periodic and annual inspections of all areas where activities, practices, and storage of materials subject to SPCC, GPP, and BMP occur.

Failure of any of these operational programs and procedures could result in impact to the groundwater or stormwater. Prompt corrective actions by alert and trained staff are part of EKU's proactive approach to preventing operational failures that would result in impact to the environment.

## 9.0 POLLUTION PREVENTION MEASURES AND CONTROLS GPP, BMP, SPCC

### *9.1 Preventive Structural Controls (BMP, SPCC, GPP)*

Structural controls are used to control or direct stormwater runoff. The following structural controls are in place at the coal pile pad to control stormwater discharges:

- Coal is stored on the concrete coal pile storage pad and drainage structure constructed 1976 (see Appendix 1 - Figure 6)
- Drainage systems direct any runoff water from the coal storage pad through particulate and oil water separator catch basins (quantity 2) (see Appendix 1 - Figure 8 “Coal Pile Sediment and Oil Separators”)
- Bulk materials are stored on solid surfaces
- Diversion ditches will be kept sufficiently clear to allow surface water flow to gravity feed to sedimentation ponds
- Vegetative cover in the buffer zone is placed and maintained where needed to prevent erosion
- Sediment control structures are used when construction projects require a KPDES for construction and associated building activity
- USTs are registered and EKU has a leak detection system installed and operational.

UST tank suction side is of the European design that permits fluids to return to the tank rather than retain petroleum in the supply side (for example - fluid held above a tank check valve).

The USTs on property are registered with the Kentucky Underground Storage Tank Branch of the Division of Waste Management and are regulated by 401 KAR Chapter 42 (and federal regulations listed at 40 CFR Part 280). All UST systems must meet uniform performance standards for corrosion protection and spill and overfill protection. In addition, owners must install and maintain an approved method of release detection. Proper installation and maintenance of UST systems along with these pollution prevention measures help protect against releases of petroleum products into the

environment, especially groundwater. A summary of the Kentucky UST regulations is found in Appendix 21.

### *9.2 Preventive Practices - Application of Pesticides/Fertilizers*

Pesticides and fertilizers are used for lawn care on EKU property. This includes the storage of pesticides and fertilizers and the application of same to facility grounds. The following practices are followed to be in compliance with local, state, and federal law and also to comply with the requirements of the GPP portion of this plan:

- These products are applied according to manufacturer's recommendations.
- EKU will only use commercial fertilizers that contain a detailed fertilizer analysis which has been properly registered with the University of Kentucky, Regulatory Services, Division of Fertilizer Inspection.
- EKU will only use slow release fertilizer to prevent the leaching of potential fertilizer application to surface water or groundwater.
- Staff who apply pesticides are certified applicators (Note - a certified applicator is a person who has received training, passed a test, and received an annual certificate from the state of Kentucky.).
- Staff who applies pesticides who are not certified will work directly under the supervision of a certified applicator.
- Staff will apply pesticides and fertilizers using proper applicator equipment and confirm that the application is following the proper manufacturer settings for spray nozzles, bottom feed hopper settings, and proper calibrations of applicator pressure for the type of material being applied.
- Staff will insure that pesticides and fertilizers are applied in a minimum amount adjacent to storm drains.
- Cleaning of spray or applicator equipment is permitted if the location is greater than 100 feet from a creek, stream, or drainage ditch.
- No pesticide or fertilizer may be sprayed on water surfaces, ponds, or lakes.
- No pesticide or fertilizer may be disposed of by burying the excess material on site.

- Applications of pesticides must be recorded and documented in EKU service files.
- EKU attempts to limit the volume of pesticide application through spot treatment and using less pesticide when infestations are light.

### *9.3 Preventive Practices - Pesticide Fertilizer Storage*

Good storage practices for pesticides and fertilizers are inexpensive way of preventing pollution. The following storage practices are used at KEU to reduce stormwater pollution and prevent groundwater impact:

- All pesticides and fertilizers are stored in their original labeled containers until used in a labeled applicator.
- Pesticides and fertilizers are stored under roof on an impervious surface.
- Pesticide and fertilizer containers are triple rinsed when emptied with the rinse water collected and recycled through the applicator system (i.e. there is no discharge of pesticide or fertilizer contaminated water to the storm sewer or the sanitary sewer).
- Empty pesticide and fertilizer containers will be disposed of in a landfill permitted by the State of Kentucky Division of Waste Management.
- MSDS sheets are maintained in the immediate area where pesticides and fertilizers are stored.
- Emergency equipment for a spill release response is immediately available at the L.O. Martin Building.
- Pesticide and fertilizer inventories will be taken periodically to insure that product does not become obsolete through lack of use and to confirm that there have been no leaks, spills, or damages to containers.

### *9.4 Preventive Practices - Good Housekeeping*

Good housekeeping practices are inexpensive way of preventing pollution. The following good housekeeping practices are used at EKU to reduce stormwater pollution:

- No equipment is stored outside unless it is free of contaminants or covered.
- No drums of bulk materials are stored outside.
- Routine inspections are performed to determine bulk container status.
- Visual inspections are conducted to observe any history of leaks or conditions that could lead to the potential discharge of pollutants.
- Containers are stored away from direct traffic routes to prevent accidental spills.
- Containers are stored (stacked) according to manufacturer's instructions to avoid damaging the containers from improper weight distribution.
- Drains and catch basis are kept clear and free of debris.
- Drums are stored to prevent direct contact with the ground surface, and possible corrosion due to contact with moisture.

### *9.5 Preventive Practices - Maintenance Activities*

Preventive maintenance of fixed and mobile equipment exposed to stormwater can prevent or reduce the contamination of stormwater and impact on groundwater. EKU does maintain equipment and vehicles used at this site. The following preventive maintenance activities will be used to prevent or reduce stormwater and groundwater pollution:

- Equipment, forklifts, trucks, and trailers are regularly inspected and maintained to prevent leaks or fluids.
- Rock and gravel are placed in required areas to reduce erosion due to high stormwater velocity.
- Preventive maintenance programs, on all vehicles, are performed inside to minimize stormwater contamination.
- Waste materials are stored in closed top containers to prevent impact by stormwater.
- Bulk containers of oil and antifreeze are placed in secondary containment.
- Leaking fluids are collected in containers and transferred into proper waste drums with secondary containment.

- Caution signs are placed next to dumpsters and trash containers warning staff and contractors not to place liquids in these containers.
- Maintenance staff will be reminded of good maintenance practices through the use of signs and other visual aids placed by waste containers, wash sinks, and floor drains.

Special waste is collected by EKU and maintained in a manner to prevent impact on the environment. Collection sites have been designated for special waste and are listed in the following table:

| SPECIAL WASTE and UNIVERSAL WASTE LOCATIONS | | | |
|---|---|---|---|
| **Waste Description** | **Building / Location** | **Container Type** | **Max. Quantity** |
| Used Oil | Black Building<br>Carter Building | Drum<br>Tank | 100 Gal<br>55 Gal |
| Coal Ash | Middleton Coal Bin | Concrete Silo | unknown |
| Coal Bottom Ash | Middleton Coal Bin | Concrete Silo | unknown |
| Batteries | Grounds Shed | Pallet Pan | 25 |
| Used Tires | Grounds Shed | Stack | 50 |
| Spent Lamps | L.O. Martin Custodial | Box | Designated Area |
| Recycle CFC | L.O. Martin HVAC | Recovery Tank | 300# |
| Waste Electronics | Trailer behind L.O. Martin | Tractor Trailer | Load |
| Ballasts | Gentry Dock | Pallet Box | Load |
| Waste Pesticides | Gentry Building<br>Carter Building | Chemical Shed<br>Designated Area | Moved to<br>Moore Science<br>at collection date |

### *9.6 Preventive Practices - Periodic Visual Inspections*

Preventive maintenance involves regular visual inspections and periodic testing of facility emergency equipment and operating systems. These inspections reveal conditions that if uncorrected, could result in a release of a pollutant to surface water or groundwater. The following practices are followed to identify the status of tanks, equipment, and storage locations:

- Develop and periodically update the site visual inspection checklists (updates based on new equipment, new storage locations, or modifications to buildings, roads, or site operations).
- Conduct periodic inspections or testing of equipment (See Appendix 5) and correct any noted deficiencies immediately.
- Maintain records of inspections, findings, and actions taken to eliminate the pollutant source.
- Conduct annual "COMPREHENSIVE SITE EVALUATION" as required by the BMP for the coal pile using the form included in Appendix 6.

### *9.7 Preventive Practices - Petroleum Loading/Unloading [40 CFR 112.7(h)] SPCC, BMP, GPP*

Fuel loading into bulk tanks from tankers (fuel supply contractor) and fuel unloading by EKU staff into fleet vehicles and yard equipment is conducted on solid surfaces. In the event of a catastrophic leak, EKU can use the collective capacity of the adjacent storm sewer system and paved parking area to contain the release if necessary.

The storm sewer and adjacent retention areas will contain the fuel / oil until a vacuum truck can be mobilized to remove the fuel. The phone number for the vacuum service will be posted at the fuel storage tank. Absorbent pads will be used to collect any freestanding oil outside the containment area.

Preventive practice - disconnect Warning System: State law requires that the operator filling the storage tank from a tanker truck must be in control of a shut-off valve during the transfer process. This replaces the need for an automatic disconnect warning system.

The tank truck attendant is on duty by the truck at all times during unloading and will immediately shutoff fuel to the bulk tank to prevent accidental release during the fuel transfer process. All tanks with the exception of the USTs are fitted with overfill

prevention measures that include an overfill alarm and a visual level indicator. All product transfers are constantly monitored.

Preventive practice - tank truck examination: The tank truck driver is responsible for examination of drains and outlets on vehicle prior to loading used motor oil, unloading petroleum products (including grease/fat at the cafeteria, diesel fuel, and gasoline), and prior to departure of the tank truck from the premises. An EKU staff person or representative must be present during transfer of petroleum product.

### *9.8 Preventive Practices - Brittle Fracture [40 CFR 112.7(i)] SPCC*

EKU currently does not have any field-constructed bulk petroleum storage tanks and therefore has not conducted an evaluation of tanks for risk of discharge related to failure due to brittle fracture as specified in 40 CFR 112.7(i).

If EKU does install a field-constructed aboveground container and that container undergoes a repair, alteration, reconstruction, or a change in service that might affect the risk of a discharge or failure due to brittle fracture or other catastrophe, or has discharged oil or failed due to brittle fracture failure or other catastrophe; then EKU will evaluate that bulk container for risk of discharge or failure due to brittle fracture or other catastrophe, and as necessary, take appropriate action. This action will be documented and retained in EKU Facilities Services files.

### *9.9 Preventive Practices - Petroleum Transfer Operations [40 CFR 112.8(d)] SPCC, BMP, GPP*

EKU stores diesel fuel for fleet vehicles and yard equipment in the following bulk tanks:

1. A double wall 1000 gallon above ground storage tank (AST) in the gravel lot behind the bypass fire station
2. A double wall 1000 gallon AST along the east wall of the Black Building

EKU stores gasoline in two 600 gallon AST's adjacent the Black Building for yard equipment.

EKU stores diesel fuel in AST's and UST's for use in generators and fire pumps. Details of these tanks are in Appendix 3.2.

EKU stores fats and greases from the cafeteria operation in 200 gallon steel tanks on the back dock of the cafeteria building.

There are transfer pipes and hoses used to deliver petroleum from these bulk tanks to mobile vehicles owned by EKU. With the exception of the cafeteria fats and grease, the petroleum (diesel fuel and gasoline fuel for vehicles) is transferred from bulk mobile tankers to the tanks upon filling and from these tanks by flexible hoses with pressure stop fuel dispensers.

The transfer pumps and fuel dispensers are locked when not in use.

Protective practices for buried tanks

1. All USTs are registered with the Division of Waste Management UST Branch
2. EKU has developed a UST program consistent with the elements identified in the new UST regulations (referenced in Appendix 21)
3. UST piping has cathodic protection on all pipes with the exception of two fiberglass tanks with double wall plastic underground piping (UST's 1032076 and1030076).
4. USTs are monitored following the UST program for leaks
5. Transfers from mobile bulk tankers into the USTs are supervised by EKU staff who are present at UST filling.

Protective practices for above ground tanks

1. All above ground petroleum containers (larger than 55-gallons) are either double wall steel tanks or are placed in secondary containment with sufficient volume to retain a rupture or spill of the contents of the largest tank in the containment area.
2. Tanks are place on solid surfaces away from drains or storm drains.

3. Tanks are periodically examined (see 10 tank integrity testing) and corrective action is taken as necessary.
4. Tank supports for aboveground piping are examined and corrective action is taken as necessary.
5. Tanks and piping are adequately protected with bumper guards at the fuel dispensing location or otherwise located in areas not normally accessible to vehicular traffic.
6. Filling areas have sufficient lighting at night for detection of spills and to prevent accidents (vehicular collision).
7. EKU will use spill booms for spill protection during transfer operations.

### *9.10 Preventive Programs - Employee Training [40 CFR 112.7(f)] SPCC, BMP, GPP*

Employees involved in activities that could impact stormwater pollution or contribute to groundwater contamination are given awareness training with regards to the goals and objectives of the BMP, SPCC, and GPP annually. Training attendance is documented. Documentation is kept in EKU Facilities Services files.

## 10.0 CONTAINER INTEGRITY TESTING [40 CFR 112.7(C)(6)]

### *10.1 Container Integrity Testing Regulations*

This section of the Plan addresses the integrity testing required by the SPCC regulations (40 CFR 112) for bulk containers storing petroleum product. This section does not describe any regulatory requirement to conduct integrity testing for containers or tanks that do not store petroleum and are therefore not subject to the specific SPCC regulations. For purposes of this section, the term bulk container will be used to describe any storage tank or container storing petroleum product and equal to or larger than 55-gallons. For clarification, the use of the term "bulk container" and the term "tank" will be used interchangeably in this section and have the same meaning as defined in the Federal SPCC regulations.

EKU is subject to the SPCC regulations as previously discussed in this plan. As required by 40 CFR 112.8(c)(6), EKU must prepare and implement a periodic integrity testing procedure for bulk petroleum storage containers and testing of tanks that do not have secondary containment. The regulations require that the following tasks be implemented in the current SPCC Plan (Plan):

- Aboveground containers must be tested for integrity on a regular schedule and when material repairs are done.
- Testing frequency and type take into account container size and design.
- Combine visual inspection with another testing technique such as hydrostatic testing, radio-graphic testing, ultrasonic testing, acoustic emissions testing, or other system of non-destructive shell testing.
- Keep comparison records of inspections and tests and include tank supports and foundations in these inspections.
- Frequently inspect the outside of the container for signs of deterioration, leaks, or accumulation of oil inside diked areas.
- Maintain records of inspections and tests pursuant to EKU's environmental recordkeeping program.

### *10.2 Bulk Container Integrity Testing Program [40 CFR 112.8]*

EKU has developed the following bulk container inspection and testing program, using the Steel Tank Institute (STI) "Standard for the Inspection of Aboveground Storage Tanks," SP001 Issued July 2006, 4th Edition as a guide. The STI SP001 standard identifies inspection and testing protocols based on the type of containment, size of tank, and location of the tanks. The STI SP001 standard describes monthly and annual visual inspections, checklists to record these inspections, and periodic Certified External Inspection. The certified external inspection per STI SP001 must be conducted by an inspector who is certified to conduct this type of inspection, based on the certification criteria identified in STI SP001 Section 4, "AST Inspector Qualifications."

An EPA assessment of the STI SP001 is included in the testing program procedure included in Appendix 7 of this plan.

### *10.3 Bulk Containers That Require Integrity Testing*

Bulk containers that are classified as a Category 2 or 3 configuration (see STI SP001 standard) must have periodic integrity testing; include external and internal inspections, and have leak testing according to the inspection schedule listed in Table 5.5 of the STI SP001 4th Edition, issued July 2006.

EKU has recorded each bulk petroleum container larger than 55-gallon in Appendix 3.2, including tank type, size, material, date installed, construction, containment and integrity testing schedule as required. Portable containers or operational containers were not included since they are considered transient or temporary.

### *10.4 Bulk Containers That Do Not Require Integrity Testing*

The engineering review of the bulk petroleum containers indicates that EKU stores petroleum in portable tanks, operational containers, and Category 1 bulk tanks only.

Therefore, EKU is subject only to periodic inspections as discussed in this section. If in the future, EKU installs a bulk tank classified as a Category 2 or 3 (as described in the

STI SP001 standards) then EKU must fill out the "STI SP001 AST Record" in Appendix 7 to include the inspection schedule for that tank based on its configuration and risk as specified in the STI SP001 standard.

The tank test and inspection program discussed in this section of the Plan is based on guidance in the July 2006 STI SP001 standard. The STI SP001 standard describes tank configurations in Categories ranging from 1 to 3 based on the following conditions:

- Category 1 - Above ground storage tanks (AST) with spill control and continuous release determination methods (CRDM)
- Category 2 - AST with spill control and without CRDM
- Category 3 - AST without spill control and without CRDM

The STI SP001 standard identifies the following tank configurations as Category 1 tanks:

- Elevated AST with spill control and CRDM
- Vertical AST with release prevention barrier (under tank) and spill control
- Double wall AST with CRDM
- AST with secondary containment and CRDM

The STI SP001 standard also identifies the following designations for tank inspections:

- P - periodic visual inspections,
- E(20) - formal external inspections by a certified inspector with a 20 year interval between inspections starting with the date the tank was fabricated (not date installed)
- I - formal internal inspections by a certified inspector, and
- L - leak testing by qualified individual.

The tank inspection schedule recommended by STI SP001 is based on the Category describe above and the size of the container. The STI SP001 standards inspection guide for "Shop-fabricated ASTs" under 30,000 gallons capacity is as follows:

| STI SP001 - AST Inspection Schedule - Category 1 Tanks Only | | | |
|---|---|---|---|
| **Size (Gallons)** | **Periodic Inspection Forms in Appendix 5** | **External Inspection Certified Inspector** | **Leak Test or Internal Inspection** |
| Portable ( >55 Gal ) | Monthly SPCC AST Inspection Form | Not Required | Not Required |
| 55 to 5,000 gal | Monthly SPCC AST Inspection Form and Annual SPCC AST Inspection Form | Not Required | Not Required |
| 5,001 to 30,000 gal | | External - Every 20 yr | Not Required |
| 30,001 to 50,000 gal | | External - Every 20 yr | Not Required |

In addition to the guidance from the STI SP001 standards, the SPCC regulations state that operating equipment containers that store petroleum and are at least 55 gallons in size do not require integrity testing. Transformers at EKU fall into the operational container category as defined in 40 CFR112. Therefore, transformers with capacity equal to or greater than 55 gallons are exempt from integrity testing but must be included in the periodic inspection and checking program.

## 11.0 STORMWATER PERMIT PROGRAM REQUIREMENTS

The Kentucky Division of Water regulates stormwater discharge from facilities using the Kentucky Pollutant Discharge Elimination System governed by regulations found at 401 KAR Chapters 4 and 5. Facilities with the potential to impact stormwater due to their activities are required to obtain a KPDES permit and implement Best Management Practices to prevent environmental impact due to industrial activities. The Division of Water has determined that Colleges and Universities generally fall into the Phase Two stormwater permit requirements which, according to KDOW staff will not be implemented until 2008. Selected activities at colleges and universities do fall under the Phase One stormwater permit requirements. EKU's storage of coal for use in the boiler operation is an industrial activity that requires EKU to obtain the KPDES permit , comply with the permit monitoring requirements, and implement actions based on the BMP prepared as part of the KPDES permit requirement.

### *11.1 Monitoring Parameter Requirements*

Eastern Kentucky University has a KPDES stormwater permit No. KYR3000002 for discharges from the Coal Pile located immediately south of the L.O. Martin Building. A current copy of this permit is located in Appendix 8.

The KPDES stormwater permit monitoring will be required at Outfall 001 which has been identified in Figure 2.

OUTFALL 001

**Frequency**: Twice per year

**Sample Type**: Grab

**Sample Parameters**: Flow (as million gallons per day)
Oil and Grease (mg/l)
Total Suspended Solids (TSS; must be </= 50 mg/l)
Following Total Recoverable Metals (mg/l)
Chlorides, Arsenic, Copper Iron, Manganese, Nickel, Selenium, Zinc Sulfate

Hardness (mg/l as $CaCO_3$)
pH (6.0 to 9.0 Standard Units)

**Visual Observation**: There shall be no discharge of floating solids or visible foam in other than trace amounts, and the discharge shall not produce a visible sheen.

**Sample Parameters**: Monitoring results must be recorded on the Kentucky Discharge Monitoring Report (DMR) form and retained by EKU for 6 years following the collection date of the stormwater sample. The DMR is not required to be submitted to the Kentucky Division of Water.

### *11.2 Stormwater Monitoring Procedure*

EKU will collect two stormwater samples within the calendar year. The samples will be taken as grab samples during a valid EPA rain event.

### *11.3 Valid EPA Rain Event Criteria*

Three criteria that must be met for a valid EPA rain event:

1. Storm event exceeds 0.1 inch of rain,
2. Storm event is at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event, and
3. Strom event is less than the 10-year, 24-hour storm event for the Richmond area.

The stormwater sample must be collected using appropriate sample containers and recorded on a proper "Chain of Custody." The containers and COC can be obtained from a number of analytical labs.

**Note:** pH must be observed and recorded immediately upon taking the water sample; due to the fact that pH of the discharge water will begin to change.

## 12.0 PLAN IMPLEMENTATION REQUIREMENTS

With the signatures to this plan, this plan is in force. The actions listed in the following chart are needed to fully implement the current plan:

| Action Item | Target Completion Date |
|---|---|
| Provide secondary spill protection for stored transformers | June 30, 2011 |
| Install secondary protection curb for new wet transformer in basement of McGregor Hall | June 30, 2011 |
| Install bollards to protect new double-wall diesel fuel tanks at the Black Building and behind the fire station | April 30, 2011 |
| Implement pipe plug for the Black Building floor drains as secondary containment when not washing down floors or paint equipment | April 30, 2011 |
| Provide storm sewer cover kit at Black Building | April 30, 2011 |
| Provide capture and disposal of clean-up water at parking lot paint clean-up behind the fire station | March 31, 2011 |
| Complete Spill Team training | June 30, 2011 |

## 13.0 SPCC/BMP/GPP PLAN REVISIONS

| Plan | Revision Date | Next Revision Date |
|---|---|---|
| SPCC | March 2011 | March 2016 |
| BMP | March 2011 | March 2014 |
| GPP | March 2011 | March 2014 |

## 14.0 PLAN CERTIFICATIONS [40 CFR 112.3]

EKU is required to have administrative certification of plans prepared for certain activities conducted at EKU and subject to federal and state regulations. The following chart describes those regulatory plans that are required by this facility based on one or more of the following regulatory compliance elements:

1. Bulk materials in storage or use (oil in excess of 1,320 gallons, bulk storage of materials - e.g. coal pile, bulk storage of water treatment chemicals, bulk storage of solvents),
2. Activities that could impact stormwater (transfer of coal to boiler house, application of pesticides and herbicides),
3. Activities that could impact groundwater (transfer of petroleum to USTs, bulk storage of materials),
4. Services provided by this facility, or
5. Products or wastes produced at this facility.

| Certifications Required in the EKU Plan | | |
|---|---|---|
| **Plan Required** | **Certification Required** | **Regulation** |
| SPCC - Spill Prevention Control and Countermeasures Plan | **REQUIRED** - More than 1,320 gallons of petroleum in storage | 40 CFR 112 |
| BMP - Stormwater Best Management Practices Plan | **REQUIRED** - KPDES Permit Condition (Coal Pile) | 401 KAR 5:065 |
| GPP - Kentucky Groundwater Protection Plan | **REQUIRED** - Bulk Materials Stored and Handled (55-gal) Pesticides/Herbicides applied | 401 KAR 5:037 |

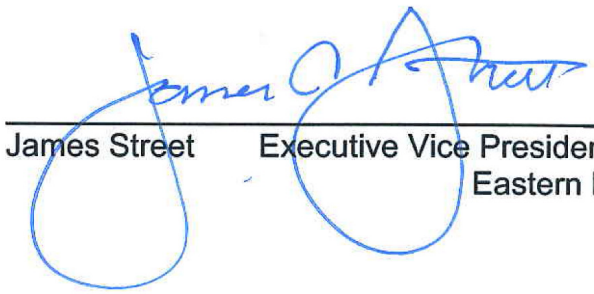
### *14.1 ADMINISTRATIVE CERTIFICATION*

This plan requires Facilities Services administration and the reviewing engineer to certify that the plan has been prepared according to the provisions of the applicable regulations and that the actions as described in the plan will be implemented and carried out by administration or operations management of this facility. The certifications included in this section must be signed by University Administration or their designated representative and the certifying engineer to meet the requirements of these regulations.

### *14.2 REQUIRED - Administrative Approval -SPCC [40 CFR 112.3]*

EKU is subject to the provisions of the SPCC regulations due to storing more than 1,320 gallons of petroleum, therefore the following certification must be completed by administration or operations management.

I, James Street, delegate the authority to implement the provisions of this plan to Rich Middleton and his assignees. This delegation is in writing as evidenced by my signature below.



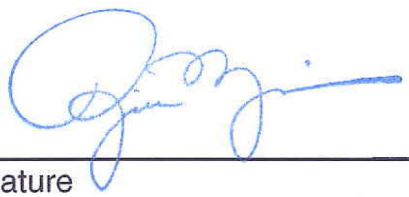
James Street Executive Vice President for Administration
Eastern Kentucky University

21 MAR 2011
Date

### *14.2.1 Assignment of SPCC Plan Responsibility*

I, Rich Middleton, certify under penalty of law that I have personally examined and am familiar with the information submitted in this document. I further certify that all attachments were prepared under my direct supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information; the information submitted is to the best of my knowledge and belief; true, accurate, and complete. I am aware that there are significant penalties for submitted false information, including the possibility of fine and imprisonment for knowing violations.

This SPCC plan is a carefully thought-out plan, prepared in accordance with good engineering practices and has the full approval of University Administration. This plan conforms to the requirements for a SPCC plan found in 40 Code of Federal Regulations 112, Oil Pollution Prevention. We will commit the necessary resources to implement and maintain the provisions of this plan.



Assignee Signature

3-22-11

Date

Rich Middleton, Director of EKU Facilities Service

Name and Title

### *14.3 REQUIRED - Engineers Certification - SPCC [40 CFR 112.3(d)]*

With my signature below, I certify the following:

1. I have personally examined the EKU facility in Madison County, KY.;
2. I am familiar with the current SPCC regulation, 40 CFR 112;
3. This Plan was prepared in accordance with good engineering practices, including consideration of applicable industry standards;
4. The Plan conforms to the requirements of 40 CFR 112, SPCC Plans;
5. Procedures for required bulk container inspections and integrity testing have been established;
6. This Plan is adequate for the facility assuming that the administration implements the plan elements;
7. This Plan conforms to the requirements to prepare a best management practices plan (BMP);
8. This Plan conforms to the Kentucky GPP requirements of 401 KAR 5:037; and
9. I have reviewed the facility response to 40 CFR 112 Appendix 2 "Applicability of the Substantial Harm Criteria" and the facility's responses are true, accurate, and complete.

This certification in no way relieves EKU of the duty to prepare and fully implement the elements contained in this Plan document.


3-4-2011

J. Frederick Rial, PE — Date
Kentucky Professional Engineer #19060

Plan Review and Amendment Statement (Must be completed within five years of current plan approval for SPCC portion and every three years for BMP, GPP portion)

I have completed a review and evaluation of the **SPCC Plan** for EKU on _____ (date), and ( will or will not ) amend the Plan as a result.

_____ _____
Assignee Signature Date

I have completed a review and evaluation of the **BMP and GPP** portion of this Plan for EKU on _____ (date), and ( will or will not ) amend the Plan as a result.

_____ _____
Assignee Signature Date

## *14.4 REQUIRED - Administrative Certification - SPCC - Harm Criteria*

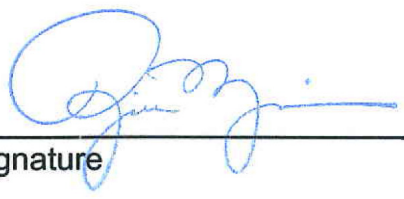
EKU is subject to the SPCC regulations. The following must be completed. Appendix B to 40 CFR Part 112 is used to determine whether EKU "could reasonably be expected to cause substantial harm to the environment by discharging into or on navigable waters or adjoining shorelines." A facility that has the potential to cause substantial harm to the environment in the event of a discharge must prepare and submit a facility-specific response plan to EPA. The checklist for applicability follows:

Certification of the Applicability of the Substantial Harm Criteria

Facility: Eastern Kentucky University
Richmond, Kentucky

1. Does EKU transfer oil over water to or from vessels and does EKU have a total oil storage capacity greater than or equal to 42,000 gallons?
   Yes ___ No _X__
2. Does EKU have a total oil storage capacity greater than or equal to 1 million gallons and does EKU lack secondary containment that is sufficiently large to contain the capacity of the largest aboveground oil storage tank plus sufficient freeboard to allow for precipitation within any aboveground oil storage tank area?
   Yes ___ No _X__
3. Does EKU have a total oil storage capacity greater than or equal to 1 million gallons and is EKU located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix [40 CFR 112] or a comparable formula) such that a discharge from EKU could cause injury to fish and wildlife and sensitive environments?
   Yes ___ No _X__
4. Does EKU have a total oil storage capacity greater than or equal to 1 million gallons and is EKU located at a distance (as calculated using the appropriate formula in Attachment C-III to this appendix [40 CFR 112] or a comparable formula) such that a discharge from EKU would shut down a public drinking water intake? For the purposes of 40 CFR part 112, public drinking water intakes are analogous to public water systems as described at 40 CFR part 143.2(c).
   Yes ___ No _X__
5. Does EKU have a total oil storage capacity greater than or equal to 1 million gallons and has EKU experienced a reportable oil spill in an amount greater than or equal to 10,000 gallons within the last 5 years?
   Yes ___ No _X__

I, Rich Middleton, certify under penalty of law that I have personally examined and am familiar with the information submitted in this document, and that based o n my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete. I further certify I have reviewed the checklist document identified as "Certification of the Applicability of the Substantial Harm Criteria" and have determined that this facility is not subject to the preparation and submittal of a facility response plan requirements found in 40 CFR 112.20 (a), (f)(1)i, and (f)(1)ii.



Assignee Signature

3-22-11

Date

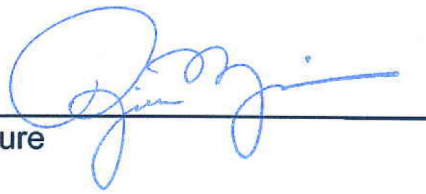
Rich Middleton, Director of EKU Facilities Service

Name and Title

### *14.5 REQUIRED - Administrative Certification - GPP [401 KAR 5:037]*

The following certification is to be signed by the responsible university official:

I, Rich Middleton, certify that this Groundwater Protection Plan complies with the requirements of 401 KAR 5:037, and that I have reviewed the terms of this plan and will implement its provisions. I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.



Assignee Signature

3-22-11

Date

Rich Middleton, Director of EKU Facilities Service

Name and Title

### *14.6 REQUIRED - Administrative Certification - BMP [401 KAR 5:065]*

The following certification is to be signed by the responsible university official:

I, Rich Middleton, certify that these Best Management Practices have been prepared in accordance with the KPDES Permit issued to EKU and to EPA guidance for BMP's and that I have reviewed the terms of these practices and will implement their provisions. I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete.

Assignee Signature — Date: 3-22-11

Rich Middleton, Director of EKU Facilities Service

Name and Title

The following certification is to be signed by the Tetra Tech, Inc., engineer:

I certify that this document and all attachments were prepared under my direction and supervision for Eastern Kentucky University in Richmond, Kentucky. This document has been prepared in accordance with the KPDES Permit issued to EKU. The information contained is based on in formation collected during my site visit.

Signature: — Date: 3-4-2011

J. Frederick Rial, P.E.

Tetra Tech, Inc.