

**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN**

**PREPARED FOR:**

**ARKANSAS STATE UNIVERSITY  
JONESBORO, ARKANSAS**

**ORIGINAL DATE OF PLAN: APRIL 2005**

**DATE OF LAST PLAN AMENDMENT/P.E. CERTIFICATION:  
MAY 24, 2005**

**DATE OF FINAL PLAN: MAY 24, 2005**

**PREPARED BY:**

**HESS ENVIRONMENTAL SERVICES, INC.  
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**CERTIFICATION STATEMENT**

I hereby certify that I have examined the facility, and being familiar with the provisions of 40 CFR Part 112, attest the this SPCC Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, that procedures for required inspections and testing have been established, and that this plan is adequate for this facility.

Engineer: David Michael St. John

Signature: \_\_\_\_\_

Registration Number:

**SEAL**

State: Arkansas

Date May 24, 2005

**SPILL PREVENTION CONTROL AND COUNTERMEASURE PLAN**

**COMPLIANCE REVIEW PAGE**

In accordance with 40 CFR §112.5(b), a review and evaluation of this Spill Prevention Control and Countermeasure Plan (SPCC) is conducted at least once every five years. As a result of this review and evaluation, Arkansas State University will amend the SPCC Plan within six months of the review to include more effective prevention and control technology if: (1) such technology will significantly reduce the likelihood of a spill event from the facility, and (2) if such technology has been proven at the time of review. Any amendment to the SPCC Plan shall be certified by a Professional Engineer within six months after a change in the facility design, construction, operation, or maintenance occurs which materially affects the facility’s potential for the discharge of oil into or upon the navigable waters of the United States or adjoining shorelines.

<u>Review Dates</u>	<u>Signature</u>	<u>Section</u>
_____	_____	_____
_____	_____	_____
_____	_____	_____

**MANAGEMENT APPROVAL**

Arkansas State University is committed to the prevention of discharges of oil to navigable waterways and the environment, and maintains the highest standards for spill prevention control and countermeasures through regular review, updating and implementation of this Spill Prevention Control and Countermeasure Plan for the Arkansas State University campus located in Jonesboro, Arkansas.

**Authorized Facility Representative:** \_\_\_\_\_

**Signature:** \_\_\_\_\_

**Title:** \_\_\_\_\_

**Date:** \_\_\_\_\_

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# **ARKANSAS STATE UNIVERSITY SPILL PREVENTION, CONTROL, AND COUNTERMEASURE PLAN**

## **1.0 OIL POLLUTION PREVENTION REGULATIONS**

Arkansas State University (ASU), located in Jonesboro, Arkansas has prepared this Spill Prevention, Control, and Countermeasure (SPCC) Plan in accordance with the requirements of Title 40, code of Federal Regulations, Part 112 (40 CFR 112). A copy of this regulation is included as Appendix A. 40 CFR 112 requires that facilities subject to the rule prepare and implement a plan to prevent any discharge of oil into or upon navigable waters of the United States or adjoining shorelines. ASU meets the following three criteria outlined in the regulation to be subject to the SPCC rule.

Criteria:

- Is a non-transportation related facility
- Has an aggregate aboveground storage capacity greater than 1,320 gallons or a completely buried storage capacity greater than 42,000 gallons; and
- Has the reasonable expectation of a discharge into or upon navigable waters of the United States or adjoining shorelines.

### **1.1 Compliance with Applicable Requirements of the Regulation**

This SPCC Plan is written in conformance with the requirements of 40 CFR 112 and in the sequence specified in 40 CFR Part 112.7. Where exceptions to the procedures, structures, or countermeasures specified in the regulation are made, a full discussion of the existing equivalent environmental protection in place or proposed corrective actions is included in the appropriate section of this plan. Where compliance with the requirements of the regulations is lacking, ASU has committed to develop and enforce procedures and install containment by the August 18, 2006 compliance deadline (as established in the final rule published August 11, 2004). The Engineering Certification of this plan as written, is based on conditions present during early 2005 while this plan was being written, and ASU's assertion that deficient requirements, as outlined in this SPCC, will be remedied prior to the compliance deadline.

### **1.2 Reporting and Emergency Contacts**

The Director of Environmental Health and Safety is responsible for the administration of this SPCC plan. Emergency reporting procedures, contacts, and phone numbers are listed in Section 10.0 of this document.

### 1.3 Site Layout and Physical Facilities

The ASU-Jonesboro campus is one of seven ASU campuses within the Arkansas State University regional system. The university is located to the northeast of the City of Jonesboro in northeast Arkansas. Property included within the boundaries of the ASU-Jonesboro campus includes:

1. Main Campus, comprising the academic, administrative, and service departments, dormitories;
2. Athletic Fields, stadium complex, undeveloped areas, and the Convocation Center which includes a variety of athletic fields, parking lots, and a large pond;
3. Farm Facilities, which include: Equine Center, pasture lands, swine and cattle research facilities, crop production research area, and an irrigation test area.

Oil storage activities on the campus areas include five (5) emergency generators with diesel fuel tanks, three (3) small aboveground fuel tanks (two diesel and one unleaded) for machinery and vehicle fueling, one unleaded and one diesel fuel underground storage tanks at the motor pool, an underground used oil storage tank at the motor pool, hydraulic oil in the elevator systems, and cooking oils in the food service areas.

A map of the campus with fuel tank storage locations and a regional topographical map are included in Appendix B.

## 2.0 OIL STORAGE, CAPACITY, AND PREDICTED FLOWS

### 2.1 Oil/Fuel Storage

Table I and Table II below contain details about each fuel/oil tank including location, contents, capacity, containment, and the receiving point or stream.

**Table 1: Above Ground Oil/Fuel Storage:**

Location	Contents	Capacity (gal)	Containment	Receiving Point	Direction of Flow
Convocation Center (Generator)	Diesel	1000	Yes	Storm Drain	East then south
Ed Com (Generator)	Diesel	45	No	Storm Drain	South then East
Farm	Diesel	500	No	Pasture	East
Farm	Unleaded Gasoline	500	Yes	Pasture	East
KASU Tower (offsite)	Diesel	600	No		NA
Kays Hall (Generator)	Diesel	450	Yes	Storm Drain	South then East
Library (Generator)	Diesel	200	Yes	Storm Drain	South then East
Biosciences Center (Generator)	Diesel	1000	Yes	Storm Drain	South then East

**Table 2: In Ground Oil/Fuel Storage:**

<b>Location</b>	<b>Contents</b>	<b>Capacity (gal)</b>	<b>Containment</b>	<b>Receiving Point</b>
Facilities (Motor Pool)	Diesel	4000	NA	East then South
Facilities (Motor Pool)	Unleaded Gasoline	10,000	NA	East then South
Facilities	Used Oil	400	NA	East then South
Convocation Center	Diesel	1000	NA	East then South

## **2.2 Drainage**

Drainage on the northern part of the ASU main campus flows to the east through storm drains to drainage ditches along Highway 49 then south to Turtle Creek Ditch. In the southern part of the main campus, drainage flows toward the south to a drainage ditch that runs toward the east along the railroad tracks then south to Turtle Creek Ditch.

The farm facilities located on the east side of Highway 49 drain to the east to the drainage ditch along the highway, to one of several drainage ponds located on the farm property, or to drainage ditches along the east side of the farm facility then south to Turtle Creek Ditch. In the event of a rupture or other major release, fuel from the farm facility tanks would likely drain into grassy pastureland and eventually to one of the drainage ponds constructed to hold swine or bovine wastes.

Hydraulic oils in the elevator systems are self-contained within the elevator shafts and would not likely be exposed to storm water or otherwise released to the environment. Cooking oils are also stored and transported inside and do not pose a risk to the environment.

## **3.0 DISCHARGE AND DRAINAGE CONTROLS**

### **3.1 Containment**

The generators located at the Convocation Center, Kays Hall, the Library, and the Biosciences Center are constructed with internal secondary containment for the fuel tanks. The generators at the KASU tower and the Ed Com buildings presently do not have containment, but authorization has been received to provide containment for these units prior to the August 18, 2006 compliance date.

Hydraulic oil contained in the elevator systems in various campus buildings is self-contained within the concrete elevator shaft. Cooking oils are stored inside in the food services area and pose little threat to the environment. Used oil from the motor pool area is transferred to a 400 underground storage tank through a conduit from the garage area to the tank. Used oil is not transported outdoors.

The 500-gallon diesel tank of the Farm property currently sits on a small concrete pad and has no secondary containment. Authorization has been issued to provide containment for this unit by the August 2006 deadline. The 500-gallon unleaded fuel tank on the Farm property has a



secondary containment consisting of a steel box underlying the tank. A manual drain valve that can be locked will be installed on this containment by the compliance deadline to allow for removal of rainwater after inspection.

## **3.2 Drainage Control Procedures**

### **3.2.1 Farm Tanks**

The containment structures for the 500-gallon diesel (once constructed) and 500-gallon unleaded fuel tanks on the farm property will be fitted with manual drainage valves, which will remain, locked in the closed position when not in use.

If liquid is observed in the containment structures during routing inspections (see Section 5.0) or by casual observation, the following discharge procedures will be followed:

- If no visible oil sheen can be observed, storm water can be drained from the containment area.
- If a visible oil sheen is present, the oil will be removed from the surface by use of absorbents prior to discharge of the water, or the water will be drained onto absorbent pigs so that oil is not discharged to the environment.
- In the event a large amount of fuel is present in the containment, the contents of the containment structure will be pumped into a drum for disposal by a licensed TSD facility.
- If fuel is found in the containment structure in a significant quantity, the reason for the release, the integrity of the tank, and fueling procedures will be evaluated and appropriate actions initiated.

Inspections and resulting remedial actions will be documented and maintained in Appendix C of this SPCC. A blank inspection checklist is included in Appendix D.

### **3.2.2 Generator Tanks**

The emergency generators are serviced monthly and test operated to ensure that they are in good working order. Procedures for inspection of the containment structures and areas surrounding the generators for evidence of releases of fuel will be added to the maintenance routine. When draining of the generator fuel tanks is required (approximately once every 5-7 years) the Director of Environmental Health and Safety will outline protocols to prevent release of fuels to the ground and provide a spill kit to have on hand in the event of a release. The SPCC Plan will be updated at that time to include these protocols.

### **3.2.3 Underground Storage Tanks**

The underground storage tanks (USTs) are regulated under separate regulations and drainage procedures, should draining of these tanks be necessary will be developed according appropriate UST requirements. These tanks are permitted by the Arkansas Department of Environmental Quality and leak detection and monitoring are in place. The tanks are

equipped with overfill alarms as well as internal monitoring for fuel level, water level etc. Spill prevention protocols are discussed in Section 8.2 of this SPCC Plan.

#### **4.0 SPILL CONTINGENCY PLAN**

In the event of a release of fuel or oil to the environment, emergency response will be coordinated by the Director of Environmental Health and Safety (DEHS) and the Safety Supervisor. Spill response equipment will be provided near farm tanks and near the KASU tower tank for use in the event of a release at these locations. Spill response equipment as described in Section 8.0, will be available as needed during maintenance of the generator tanks when directed by the DEHS.

Spill response training will be incorporated into university employee safety training for employees who need to be able to recognize and respond to a release of fuel. Specific training elements will vary from basic notification procedures, to spill containment and response activities depending on the employee job responsibilities.

In the event of a large release of fuel or oil to the environment, ASU maintains a contract with an outside contractor for response and clean up activities. The DEHS will promptly notify emergency and regulatory officials and will coordinate response and clean up activities with these agencies.

#### **5.0 INSPECTIONS, TANK TESTING AND RECORD KEEPING**

ASU will provide inspection of all fuel/oil storage tanks and containment areas at regular intervals. A master inspection checklist is included in Appendix D of this SPCC and completed inspection forms will be filed in Appendix C of this document.

##### **5.1 Generator Tanks**

Inspection of the generator fuel tanks and containment areas will be conducted as part of the routine monthly maintenance activities. Completed inspection checklists will be submitted to the Director of Environmental Health and Safety and kept on file in Appendix C of this SPCC.

These tanks are drained and inspected periodically (approximately every 5-7 years) as part of routine maintenance procedures.

##### **5.2 Above Ground Fuel Tanks**

Inspection of above ground fuel tank containment areas on the farm and at the KASU Tower will be scheduled on a regular basis, at no less than once per month, with additional inspections scheduled after intense rainfall events. Inspections will include an observation of the condition of the tanks, valves, hoses and other equipment, and the presence of any water or fuel within the containment structure. If water or fuel is observed in a containment

structure, the procedures outlined in Section 3.2 will be followed. Completed inspection checklists will be filed in Appendix C of this SPCC.

If maintenance of the tanks, hoses, valves, or containment structures is needed, the Director of Environmental Health and Safety will be notified.

### **5.3 Underground Storage Tanks**

The underground storage tanks (USTs) located at the facilities management motor pool area are permitted and regulated by the Arkansas Department of Environmental Quality. Integrity testing is conducted as required by the UST permit for each tank. Leak detection and monitoring are part of standard operations and maintenance procedures. Records pertaining to the USTs are kept in the Facilities Management offices.

## **6.0 PERSONNEL TRAINING**

Spill recognition, notification, and response procedures will be incorporated into ASU's employee training programs for employees who may, in the course of their responsibilities, be required to recognize, report, or respond to a spill or release of fuel or oil. Employees will receive this training a minimum of once per year. Notification procedures and phone numbers are outlined in the ASU Emergency Procedures Handbook.

Employees at the Motor Pool facility have annual training in spill response and the use of spill response equipment. Employees who handle or transport fuels/oil or are responsible for maintenance or inspection of fuel tanks or associated equipments will be trained in spill response. Other campus employees will be provided with training on notification procedures in the event a release is discovered. The basic protocol for release/spill notification will be to notify Campus police, who in turn will notify the Director of Environmental Health and Safety or the Safety Supervisor, who will in turn initiate appropriate response activities as documented in the SPCC Plan.

## **7.0 SECURITY**

Campus Police patrol the entire ASU facility grounds regularly providing a security presence. The aboveground fuel tanks at the farm and KASU Tower are equipped with padlocked valves to prevent unauthorized discharge. The KASU Tower tank is enclosed in a locked fenced area. Fencing is not present around the farm tanks, however the electrical disconnect for the pumps on the farm tanks is secured in a locked enclosure inside the adjacent building.

The motor pool area and underground fuel storage tanks is open 24 hours a day, lighted, and patrolled regularly by campus police. There is a breaker cutoff panel on the fuel island that can shut down the pumps in the event of an emergency. Pumps are locked with padlocks to prevent tampering and are only activated by a special issue key card.

## **8.0 DISCHARGE PREVENTION MEASURES**

### **8.1 Supplies**

The following supplies must be on hand at the fueling facility during petroleum product transfer from tanker truck to storage tank:

1. A drip bucket or pan
2. A spill kit that includes absorbent material, salvage drum, plastic sheeting, and spill containment socks.
3. A shovel.
4. A yard brush.
5. Dispensing hoses must be fitted with breakaway couplings, which would allow a safe break of the hose from the dispenser in the event of the vehicle driving away with the nozzle still in the fuel tank.

### **8.2 Fuel Delivery Procedures**

Procedures for fuel delivery and fueling of vehicles are being developed and will be submitted to each fuel delivery contractor as well as posted at each delivery and fueling site. The fueling requirements described in this section are considered standard procedure.

The following procedures should be standard procedure for tank truck drivers during refilling of the fuel tanks on the ASU campus.

1. Tank truck drivers shall measure the fuel level in the tank prior to re-filling.
2. A drip pan or buck shall be placed under all connections prior to filling.
3. Tank truck drivers shall remain with the vehicle while fueling the tanks and observe the progress of the fueling process to prevent overfilling.
4. The fuel lines must be drained and drain valves closed before the lines are disconnected.
5. The drip pan/bucket must be stored under roof or upside down when not in use. If the drip bucket/pan is stored upside down, it must be free of fuel/oil before storage.
6. The driver must inspect the vehicle before departure to be sure fuel lines have been disconnected and drain and vent valves (if applicable) are closed.
7. Drivers must report any leakage or spillage, including quantity, to the SPCC Coordinator.

## **9.0 EVALUATION OF RISK OF FAILURE OR FRACTURE**

Routine inspections of above ground fuel tanks will include observations of the outside conditions of the tanks, hoses and valves. Any concerns noted will be reported to the Director of Environmental Health and Safety for evaluation.

## **10.0 IMMEDIATE REPORTING PROCEDURES/EMERGENCY RESPONSE CONTACTS**

In the event of an accident or chemical spill at the facility, the manager with direct responsibility for the day-to-day operation of the affected are of campus will contact the individuals listed below as soon as practical after the incident has occurred. Contact preference is in the order listed. If spill discharge to surface waters is imminent, the regulatory emergency agencies should be notified of the potential immediately as described below.

### **10.1 Internal Reporting**

In the event of a spill of less than 10 gallons on dry land or in on-site surface water drainage **that is contained and recovered**, no outside reporting to regulatory authorities are required; however, the following internal contacts shall be made:

**SPCC Coordinator:** Starr Fenner, Director of Environmental Health and Safety  
Office: 870-972-3217  
Cell Phone: 870-897-1574

Or

**Safety Supervisor:** DA Davis, Safety Supervisor  
Office: 870-972-4705  
Cell: 870-897-7250

### **10.2 Reporting to Outside Agencies**

After the SPCC Coordinator (or designee) has been notified, he/she will report to the outside agencies listed in 10.2.1 as necessary.

#### **10.2.1 Releases/Spills to Land, Air, Navigable, Surface or Ground Water**

If a spill threatens to reach or enters a waterway, and the spill cannot be contained and recovered by facility personnel, then the following contacts shall be made immediately:

Local Fire Department  
911

Arkansas Emergency Management Agency  
1-800-322-4012

Arkansas Department of Environmental Quality, Water Division  
501-682-0654

Environmental Protection Agency Region 6 – Oil Spill Program  
1-800-424-9346

First Response  
1-800-914-9111

### **10.2.2 Reporting Procedures**

The following information will be communicated in reporting to outside agencies:

- Name, title, telephone number, and address of person reporting release
- Name, address, and telephone number of facility/spill location:

Arkansas State University  
2105 Aggie Road,  
P. O. Box 10  
State University, AR 72467  
Phone: (870) 972-3030  
Fax: (870) 972-3465

- Time, type, and amount of materials involved
- Extent of injuries/illness, if known
- Possible hazards to human health and environment
- Any body of water involved
- The cause of the accident/spill
- The action taken or proposed by the facility/personnel

### **10.2.3 Other Emergency Contacts**

Poison Control Center  
1-800-442-6305

Hess Environmental Services Inc.  
901-377-9139

**APPENDIX A**

**40 CFR 112.7 – SPCC Regulations**

**APPENDIX B**

**Map of Arkansas State University Campus  
and Locations of Fuel/Oil Storage Tanks**

**Topographic Map**



**Insert Map of ASU Campus with location of tanks**

**Insert Topo Map here**

## **APPENDIX C**

### **Inspection Reports**

## **APPENDIX D**

### **Blank Checklists and Report Forms**

**Arkansas State University  
SPCC Plan  
Above Ground Fuel Tank Inspection Report**

**Date:** \_\_\_\_\_ **Inspector:** \_\_\_\_\_

**Location/Tank:** \_\_\_\_\_

**Capacity:** \_\_\_\_\_ **Fuel Level:** \_\_\_\_\_

**1. Hoses and Piping**

<b>Hoses and Piping in good condition?</b>	<b>YES</b>	<b>NO</b>
<b>Any leaks?</b>	<b>YES</b>	<b>NO</b>

**Notes/Observations:**

**2. Corrosion Control**

Note general appearance of paint on shell and structural members:

Is rusting or pitting occurring on any of the above? **YES** **NO**  
If yes, explain where and if repairs are needed immediately.

Are gauges working (if applicable)?

<b>3. Any evidence of spills or leaks?</b>	<b>YES</b>	<b>NO</b>
<b>Explain:</b>		

**4. Containment**

Is containment in good condition?	YES	NO
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Are valves in place?	YES	NO
----------------------	-----	----

Are locks in place?	YES	NO
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Is liquid present in containment?	YES	NO
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If yes, describe:

**Describe procedures followed for draining:**

## INCIDENT REPORT FORM

1. TIME RELEASE DISCOVERED \_\_\_\_\_ DATE: \_\_\_\_\_
2. TIME RELEASE STOPPED \_\_\_\_\_ DATE: \_\_\_\_\_
3. APPROXIMATE LOCATION AND TYPE OF ACCIDENT (E.G., FIRE EXPLOSION, SPILL)  

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4. MATERIAL SPILLED  

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APPROXIMATE AMOUNT  

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5. EXTENT OF INJURIES (IF ANY)  

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6. WHAT DAMAGE TO PEOPLE OR THE ENVIRONMENT IS LIKELY?  

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7. ESTIMATED AMOUNT OF MATERIAL RECOVERED  

---
8. WHAT WAS DONE WITH RECOVERED MATERIAL?  

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9. ACTION TAKEN TO CONTROL THE PROBLEM AND PREVENT FURTHER PROBLEMS  

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10. NOTIFICATIONS TO EXTERNAL AGENCIES? YES: \_\_\_\_\_ NO: \_\_\_\_\_
11. TIME NOTIFICATIONS MADE:  
AGENCY: \_\_\_\_\_ TIME: \_\_\_\_\_  
AGENCY: \_\_\_\_\_ TIME: \_\_\_\_\_  
AGENCY: \_\_\_\_\_ TIME: \_\_\_\_\_  
AGENCY: \_\_\_\_\_ TIME: \_\_\_\_\_  
SIGNATURE (MANAGER): \_\_\_\_\_  
DATE: \_\_\_\_\_