

ENVIRONMENTAL HANDBOOK FOR MANAGEMENT OF HIGHWAYS AND TRANSPORTATION FACILITIES

Developed by:
Kentucky Transportation Cabinet
and the
Kentucky Transportation Center in 2005

Updated November 2008

Facilities Preservation Environmental Compliance

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Time Frame

Snow & Ice Event Inspection (See Enviro. Hdbk. Appendix 7)Lot Superintendents are responsible for this Each event

 ▶ Work in Streams 401/404 USACE permits (See Enviro. Hdbk. Appendix 7 and 15)
 by Responsible Engineer Each project

- ▶ Facility Discharge Samples and Data Forms 1 per quarter (See Enviro. Hdbk. Appendix 3)
 Lot Superintendents are responsible for sampling
- ▶ Facility DMR Forms Submitted
 (See Enviro. Hdbk. Appendix 2, Part III)
 Environmental Coordinator prepares,
 DMR signed by CDE or his delegated person

1 per quarter

▶ Facility Inspections (8 pgs)(See Enviro. Hdbk. Appendix 7)by Lot Superintendent

1 per quarter

▶ Annual Facility Inspection (15 pgs)
 (See Enviro. Hdbk. Appendix 7)
 by Responsible Engineer

accomplish in 1st quarter

▷ GWPP Training (Seasonal)(See Enviro. Hdbk. Appendix 8)Lot Superintendents are responsible for this

Quarterly

Activity/Requirement

Time Frame

- Stormwater BMP Plan training Annually (See Enviro. Hdbk. Append. 2, Tool Kit) DEA provides to District personnel
- Stormwater BMP Plan should be modified based on effectiveness and significant changes. Facility Storm Water Discharge NOI/NOT - +/- discharges or lots (See Enviro. Hdbk. Append. 2, Tool Kit) by Responsible Engineer
- ➢ Oil Pollution Control SPCC modified (See Enviro. Hdbk. Appendix 6, 112.5)
- SPCC Plan training after implementation (See Enviro. Hdbk. Appendix 6, 112.7(f))
- ▷ SPCC Plan Review and Evaluation Every 5 years
- Groundwater Protection Plans are to be recertified
 (See Enviro. Hdbk. Appendix 4) by Responsible Engineer
- Each facility should have on hand:

 - ▶ Facility Stormwater BMP Plan
 - → 3 Years of Records for KPDES permit

 - ▶ Last Groundwater Protection plan
 - ▶ 6 years of inspection records
 - ▶ 6 years of training records

 - > DOW inspection reports
 - ▶ SPCC Plan and documentation (see SPCC training by DEA)
 - ➤ Facilities Pride Continuous, good housekeeping

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Key Contacts

Transportation Cabinet employees are to use the supervisory chain to request assistance with environmental problems. In the districts, the **Environmental Coordinator** is a resource to provide guidance. Matters that cannot be resolved within the district are to be referred to the Division of Environmental Analysis.

Kentucky Environmental Response Team

Call the Kentucky Environmental Response Team when there is a release or threatened release of a hazardous substance, pollutant or contaminant, petroleum or petroleum product. **This is a regulatory requirement.**

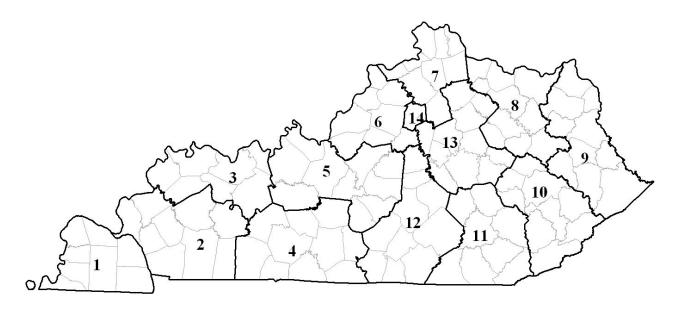
Kentucky Environmental Response Team (24-hours)......1-800-928-2380 or 502-564-2380

National Response Center

The National Response Center (NRC) is the federal government's national communications center, which is staffed 24 hours a day by U.S. Coast Guard officers and marine science technicians. The NRC receives all reports of releases involving hazardous substances and oil that trigger the federal notification requirements under several laws. Reports to the NRC activate the National Contingency Plan and the federal government's response capabilities. It is the responsibility of the NRC staff to notify the pre-designated on-scene coordinator (OSC) assigned to the area of the incident and to collect available information on the size and nature of the release, the facility or vessel involved, and the party(ies) responsible for the release. The NRC maintains reports of all releases and spills in a national database called the Emergency Response Notification System.

National Response Center......1-800-424-8802

Division of Emergency Management Offices



Area	Contact	Telephone
Director	Malcolm Franklin	502-607-1682
Area 1	Bob Carrico	502-607-1601
Area 2	Jere McCuiston	502-607-1602
Area 3	Rick Cox	502-607-1603
Area 4	Tony Keithley	502-607-1604
Area 5	Gene Logue	502-607-1605
Area 6	John Bastin	502-607-1666
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Area 8	Larry Dixon	502-607-1608
Area 9	Mrcia Salyer	502-607-1609
Area 10	Roy Benge	502-607-1654
Area 11	Jerry Rains	502-607-1655
Area 12	Don Franklin	502-607-1656
Area 13	Dan Hayden	502-607-1657
Area 14	Steve Oglesby	502-607-1658

Division of Water

The Division of Water is responsible for matters that impact water quality, flood plain management, ground water protection and drinking water programs.

Address: Kentucky Division of Water

200 Fair Oaks Lane, 4th Floor

Frankfort, KY 40601

Kentucky Division of Water (main)......502-564-3410

The branches and central office contacts for matters affecting highway maintenance are:

Director Sandy Gruzesky **Assistant Director** Peter Goodmann

Kentucky Pollutant Discharge Elimination System Jory Becker

(permits for discharges to surface or ground water)

Watershed Management Branch

Ground Water Protection Plans Pat Keefe Wellhead Protection Ernie Elliston

Water Quality Branch John Brumley

(monitoring, water quality certifications)

401 Water quality certifications Alan Grant

(work in and near streams)

Surface Water Permits Branch Ron Dutta

(flood plain permits)

Division of Water Regional Offices					
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Louisville, KY 40222-5084	625 Hospital Drive
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Morehead Regional Office	Paducah Regional Office
Danny Fraley, Supervisor	Gaye Brewer, Supervisor
525 Hecks Plaza Drive	130 Eagles Nest Drive
Morehead, KY 40351	Paducah, KY 42003-0823
Telephone: 606-784-6634	Telephone: 270-898-8468
FAX: 606-784-4544	FAX: 270-898-8640
Email: Daniel.Fraley@ky.gov	Email: Gaye.Brewer@ky.gov



Division of Waste Management

The Division of Waste Management administers the programs that regulate all wastes. This includes solid wastes, hazardous wastes, sludges and the Division works with local government to assure that waste collection and disposal is being managed.

Division of Waste Management (main)......502-564-6716

The branches and central office contacts for matters affecting highway maintenance are:

Director Anthony Hatton

Solid Waste Ron Gruzesky

(solid waste disposal and facility permitting)

Hazardous Waste April Webb

(hazardous waste generators and TSD facility permitting)

Resource Conservation and Local Assistance Chris Fitzpatrick

(recycling programs and assistance to local government)

Illegal Dumping Hotline (24-hour, toll free)......888-NO-DUMPS

Division of Waste Management Field Offices
Jon Maybriar, Manager

Jon Maybriar, Manager					
Phone: (502) 564-6716, FAX: (502) 564-4049					
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Bowling Green Regional Office	Columbia Regional Office				
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1508 Western Avenue	2751 Campbellsville Road				
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Email: todd.johnston@ky.gov	Email: john.rogers@ky.gov				
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8020 Veterans Memorial Drive, Suite 110	643 Teton Trail				
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FAX: 606-783-8659	FAX: 270-898-8640
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Division for Air Quality

Robbin Edwards, Complaints Coordinator E-Mail: Robbin.Edwards@ky.gov

Environmental Emergency, (24-Hour).....(502) 564-2380 or (800) 928-2380

Division for Air Quality Field Offices Kevin Flowers, Manager				
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Owensboro, KY 42303-2191	Paducah, KY 42003-9435			
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FAX: 270-687-7204	FAX: 270-898-8640			
E-Mail: Mac.Cann@ky.gov	Email: Betsy.Ryan@ky.gov			

The air quality program for Jefferson County is administered by: Jefferson County Air Pollution Control District 850 Barret Ave.

Louisville, KY 40204-1745 Telephone: (502) 574-6000 Fax: (502) 574-5306



Division of Enforcement

The Division of Enforcement brings together activities previously performed by enforcement branches of Waste Management, Water and Air Quality. A primary goal of the Division of Enforcement is to resolve enforcement cases in a professional, consistent and timely manner.

Director

Case Resolution Section East Case Resolution Section West Special Programs Section Compliance and Operations Branch

Phone (502) 564 - 2150

Jeff Cummins

Diana Carrier Jeffrey Schuhmann Justin Schul Mark Cleland

MAINTENANCE WORK THAT DISTURBS SOIL



Do

- ✓ <u>All</u> projects are to use Best Management Practices to prevent erosion and to control sediment.
- ✓ BMP plans are to be used for contract work and for projects that are long term or are complex.
- ✓ Projects let to contract are to have a BMP plan.
- ✓ A qualified inspector should be used to inspect work. The KEPSC program provides instruction and qualification for this inspection.
- ✓ Use the DEA Environmental Viewer to determine if the work can impact an environmentally sensitive area. If yes, then follow-up with the District environmental coordinator or DEA.
- ✓ Ask contractors to identify their KEPSC qualified inspector. Section 213 of the standard specification requires the contractor to have a KEPSC qualified inspector.
- ✓ Contract work is subject to compliance with Sections 212 and 213 of the standard specifications.
- ✓ Stabilize disturbed areas within two weeks of finishing the work.
- ✓ Remove all temporary BMPs after work is complete.
- ✓ Use TC 63-61 A for inspections for contract inspections.
- ✓ Use KEPSC forms for non-contract inspections.
- ✓ Let the grass mature!

Don't

- ➤ Initiate work before conducting a pre-disturbance inspection and installing BMPs as needed.
- **★** Kill the Grass!

If...Then

- ► If work is near a water body, follow the work in or near water bodies FACT SHEETS.
- ► If there is material to be burned, follow FACTSHEET ---

Relevant Environmental Programs O Air Quality

• 401/404/WOC

KPDES

O Facilities Pride

• GWPP

O Pesticides

• SPCC

Waste Mgt



Earth Disturbing work associated with highway maintenance.

Materials & Waste Management

▲ Materials and wastes are to be managed in ways that do not cause storm water pollution.

Factsheet Checklist

- ☐ Pre-disturbance inspections are to identify BMPs needed
- ☐ BMPs are installed where needed before earth disturbance
- ☐ Inspect weekly.
- ☐ Correct BMPs within 5 days of inspection
- ☐ Update BMP plans within 5 days of inspection.

Tips & Tricks

- The absence of a BMP plan subjects the compliance questions to the water quality standards regulation 401 KAR 10:031. This regulation is quite subjective and difficult to argue out of. It is better to have a BMP plan based on good engineering practice as the basis of compliance.
- **?** Follow the Divisions of Design and Construction information pertaining to Erosion Prevention and Sediment Control when preparing BMP plans and employing BMPs.
- The KPDES permit perspective is that this work is covered by the KYTC SWQMP under MCM 6 for the MS4 program under the KYR20 permit. Permit coverage being established through KYTC co-permit relationship to the Phase II MS4 communities. This FACT SHEET applies statewide, not just within the community MS4 jurisdictions.

Training: 1 per Year Season: Spring

KYTC FOG Reference:

INFORMATION SOURCES

KPDES Permit KYG50 or KYR10

Kentucky 2008 - Standard Specifications for Road and Bridge Construction

www.kepsc.org

Page

BE PART OF THE SOLUTION: ALTERNATIVES TO OPEN BURNING

Reduce

- Look for items with less packaging.
- Buy items in packaging that can be reused or recycled.

Reuse

- Donate old clothes, shoes, books, appliances, electronics, furniture and toys to charity.
- Carry a coffee mug with you instead of disposable cups.
- Bring your own cloth bag to the store or reuse plastic bags.

Recycle

Many counties in Kentucky have a community recycling center. You can bring one or more of the following:

Newspaper
Plastics #1 and #2
Cardboard
Aluminum
Steel

Glass

Compost

- Leaves and grass clippings can be turned into food for your garden or houseplants.
- Instead of burning old pallets, tie four pallets together to make a simple compost bin.

Landfill

 Items that cannot be reused or recycled should be taken to the landfill.

Contact the Division for Air Quality, Division of Waste Management or your local solid waste coordinator for more information.

Division for Air Quality 1-888-BURN-LAW

Air Quality REGIONAL OFFICES

Paducah	Owensboro	London	Hazard	Frankfort	Florence	Bowling Green	Ashland
(270) 898-8468	(270) 687-7304	(606) 878-0157	(606) 435-6022	(502) 564-3358	(859) 525-4923	(270) 746-7475	(606) 929-5285

OTHER CONTACTS

Dept. of Fish & Wildlife	Illegal Dumping (DWM)	Division of Waste Management (502) 564-6716	Department of Agriculture	Kentucky Fire Commission	Fire Marshal's Office	Division of Forestry	Louisville Metro APCD
(502)	(888)	(502)	(502)	(800)	(502)	(800)	(502)
(502) 564-3400	(888) 663-8677	564-6716	502) 564-4696	(800) 782-6823	502) 564-3626	(800) 866-0555	(502) 574-6000



Division for Air Quality 803 Schenkel Lane Frankfort, KY 40601

Phone: 502-573-3382 Fax: 502-573-3787 E-mail: burnlaw@ky.gov

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KENTUCKYUNBRIDLEDSPIRIT.COM

OPEN BURNING

LEARN BEFORE YOU BURN



THIS OPEN BURN IS ILLEGAL AND SUBJECT TO A FINE UP TO \$25,000.

DIVISION FOR AIR QUALITY

www.air.ky.gov



ILLEGAL OPEN BURNING

Agriculture

Muck Piles (horse manure/hay) Animal Bedding

Construction

Buildings (houses, barns and garages) Construction Debris Asbestos Materials Renovation Debris **Demolition Debris** Shingles

Household Garbage

Animal or Vegetable Plastic Cans Glass

Wood Materials

Painted, Stained, or Pressure-Treated Wood Wood Chips and Shavings Fence Posts Wood Mulch Sawdust Pallets

Miscellaneous

Industrial, Business, School, Church, and Farm Waste Chemical Containers Insulated Wire Coated Wire Motor Oil Used Oil Rubber Tires

flame in the environment. Open burning is any open

LEARN BEFORE YOU BURN

Some open burning is legal, with restrictions. But many materials are illegal to burn. The Division for Air Quality can impose fines of up to \$25,000 per day per violation of the law. It pays to learn before you burn!

OPEN BURNING FACTS

cause easthma emphysema eheart attacks ebirth defects •nervous system damage •other health problems. Children and the elderly are especially sensi-Air pollution from open burning tive to the air pollution from open burning.

WHY IS IT BETTER TO SEND **YOUR TRASH TO** A LANDFILL?

emperature fires. Burning trash at low temperatures produces a lot of smoke and releases many toxic Backyard burn barrels and woodstoves produce low pollutants like dioxin/furans. EPA has shown that open burning of garbage is the argest source of dioxins in the nation. Dioxin/furans have been linked to cancer in humans. Dioxin/furans from open burning end up in our water and soil. They enter our food supply and accumulate in animal tissue.

LEGAL OPEN BURNING

Agriculture

Animal Carcasses (disease control) Tobacco Curing Plant Beds

Land Management

Natural Growth from Land Clearing Tree Limbs Felled by Storms Natural Land Management Leaves (check local laws)

Construction Sites

Warming Fires (clean lumber only)

Miscellaneous

Household Paper Products Only Ceremonial Bonfires Fire Training Camp Fires Cooking

RESTRICTIONS

- When a fire emergency is declared, ALL open burning is prohibited.
- During fire hazard season, burning within 150 feet of any woodland area is allowed only between 6 p.m. and 6 a.m.
- From May-September, open burning is restricted in counties that have been designated nonattainment for ozone and particulate matter
- Do not burn within 50 feet of any structure.
- Do not burn near landfills.
- Do not burn near streams or sinkholes.
- Do not burn near utility lines.

Kentucky Transportation Cabinet

Department of Highways Division of Construction

Erosion Control Inspection Report

for KPDES Permits in the Contractor's Name
Scope of Inspection - Section 213

			•				
Project #:				Date:			
C.I.D. #:			•	Contractor Rep	resentative:		
Road Name:				Inspector:			
Prime Contractor:			•	Inspector Qual	fications:		
Type of Inspection:				Resident Engin	eer:		
Rainfall Since Last Inspection:				Actions Requir	ed from Last Inspection hav	ve	
Inspection Results							
Areas To Be Disturbed	1		It:	DMD'- 4- 1-			
Stations	Imminent Cons	truction Activity	Location of Pla	BMP's to be ced		Rema	arks
Disturbed Areas							
Stations	Construction Activity	Date of Last Activity	Location of Ex be Cor		Location of Additional B Necessary	MP's	Location of Areas Where Stabilization is Required
	Tieurney	Heavily	50 Co.		Ticessary		Suomenton to require

	m	Location of Ex	sisting BMP's to	Location of Additional BMF	o's -
Stations	Type of Stabilization		rrected	Necessary	Remarks
		Ī			
		+			
		+			
louse - Keeping	Locations			Remarks	
Vehicle Exit Points					
Concrete Wash-Out					
Chemical Containment					
Chemical Contaminent					
			•		
dditional Comments					
nspection Summary					
Note: This report only details action elated to this project. This inspection f any responsibility for compliance v	n is for the purpose of verifying	g conformance of	the contract with	the Standard Specifications a	
		_	WW.	1 (2)	
VVTC Damasantation	Datas				
YTC Representative:	Date:		K i i C Resid	dent Engineer:	Date:
YTC Representative:	Date:		K i i C Resid	ient Engineer:	Date.
YTC Representative: OTE: In accordance with the requal to the contractual provision to the port are not corrected in a mann spension of all operations and the	quirements of the KYTC Stan for liquidated damages will b ner acceptable to the Departn	oe imposed on th nent of Hightway	ons for Road an e Contractor if 's within 5 days	d Bridge Construction 2004 the deficiencies identified in of receipt of this report. Fa	s, Subsection 213.03.02, a pena this Erosion Control Inspect ilure to correct may result in

Table 2. Notification Requirements for USACE and KDOW

Activity	USACE Permit #	Notification to USACE is required if the following conditions occur:	Application for a KDOW WQC is required if the following conditions occur:
Drift Removal	3(ii)	 Notification is required if the "One Step" method of drift removal cannot be used. 	 When the project does not qualify under the USACE nationwide permit.
Beaver Dam Removal	None	■ Notification is not required for this activity	 Notification is not required for this activity
Sediment	3 (ii)	• Work area extends further than 200 feet in any direction from the structure.	More than 200 feet of stream length will be affected
Removal from Structures	19	 More than 25 cubic yards of material are removed. 	• When the project does not qualify under the USACE nationwide permit.
Embankment Repair and/or Protection	13	 Length of bank stabilization activity is more than 500 feet On average, more than one (1) cubic yard per foot of fill is placed below the ordinary high water mark. 	■ Length of bank stabilization activity affects more than 500 feet of stream or using asphalt, creek rock, or rip rap.
	3 (ii)	 Work area extends more than 200 feet in any direction from the structure. 	 More than 200 feet of stream length will be affected
Scour/ Erosion Repair to Bridge Elements	18	 More than 25 cubic yards of material is placed below or removed from below the ordinary high water mark More than 1/10 acre of special aquatic site (i.e., wetlands, vegetated shallows, riffle/pool complex), is affected. 	• When the project does not qualify under the USACE nationwide permit or is more than 300 feet.
Bridge and Culvert Replacement	3 (i)	 Notification is not required for this activity unless one or more of the General Conditions is not met. 	More than 300 feet of stream length will be affected
Temporary Construction, Access and De- watering	33	 A Notification is required for each project A Restoration Plan is required for each project 	■ If the project is more than 300 feet.
Minor Discharges	More than 25 cubic yards of material is placed below or removed from below the ordinary high water mark		■ If the project is greater than 300 feet.
Minor Dredging	19	 More than 25 cubic yards of material are removed. 	 When the project does not qualify under the USACE nationwide permit.

- No work can be preformed in special use waters without pre-approval unless the situation is an emergency. Chief District Engineers can approve work for an emergency. Use the DEA Environmental Viewer to determine if special use waters are present. The District environmental coordinator will obtain approval. The Division of Environmental Analysis will assist the district when needed.
- Environmental viewer --- http://kytcgis.ky.gov/enviro/viewer.htm

General Conditions

Notification to the regulatory agencies **is required** if one or more of the following conditions cannot be met during the project.

Soil Erosion and Sediment Controls. Effective sediment and erosion controls shall be employed on all projects. Use appropriate Best Management Practices (BMPs) from the "Kentucky Best Management Practices for Construction" manual, developed by the Division of Conservation and Division of Water, Natural Resources and Environmental Protection.

Scheduling. All work within the stream channel should be performed during no-flow or low flow conditions. As necessary, emergency work may be performed within the confines of the stream channel from April 15 through June 15. "Emergency work" should be determined by the Transportation Engineering Branch Manager for Operations or the County Judge Executive, as applicable.

Sediment Disposal. Material removed from the channel or banks will not be stockpiled within the confines of the stream channel. All spoil material will be loaded onto trucks and hauled away to upland sites, not to any wetland areas, for later use, storage, or disposal. Trucks must be covered to control dust. Material removed from bridge openings shall be limited to restoration of the original cross-section. Disturbance to the existing stream bank vegetation shall be minimized. Where practicable, existing access roads into the stream channel shall be utilized to enter and exit the work area.

Equipment. Equipment, type or operation, shall conform to the "one step method", as described in **Section 2.4.3**. Bulldozers shall not be used to perform any work within the confines of the stream channel.

Materials Placement. Materials used in maintenance work shall be selected and placed so that they will not be washed downstream during normal or high water flows.

Special Use Waters. The work shall not occur in Special Use Waters designated as follows or in wetlands adjacent to those waters: National Wild and Scenic River, critical habitat for federally listed threatened and endangered species, state natural heritage sites, Outstanding National Resource Water. An Individual Water Quality Certificate is required for activities in Outstanding State Resource Waters, Exceptional Waters and Cold Water Aquatic Habitat. Some Special Use Waters are listed in **Appendix 16.** This is a dynamic list. The current reference is found by accessing http://nrepcapps.ky.gov/special_waters/specialwaters.htm. Other locations of concern, such as state natural heritage sites, must be identified on a case-by-case basis.

Threatened and Endangered Species and Shellfish. No activity shall jeopardize a threatened or endangered species listed under the Federal Endangered Species Act or amendments, or endanger the critical habitat of such species, or occur in areas of concentrated shellfish production. KyTC activities should be coordinated through the District Environmental Coordinator. Local agencies should contact the Nature Preserve Commission.

4 - 2.3.1 IN STREAM INTRO V5 (4) Last Revision: 11/14/08

5.1. KYTC SPILL RESPONSES



Do

- ✓ Treat spills of products or wastes that are flammable, toxic, reactive or corrosive as hazardous spills.
- ✓ Refer to the Material Safety Data Sheet (MSDS) for spill response procedures and personal protective equipment needs.
- ✓ Isolate the area.
- ✓ Safely *stop the release* if possible and protect streams, sewers and other waterways.
- ✓ Report all releases that are larger than a routine spill to DEA; call 911 or local emergency responders when warranted.
- ✓ If the spill exceeds reportable quantities on the "List of Lists" (40 CFR 302) or enters a Water of the Commonwealth, call the Environmental Response Team (800) 928-2380 or (502) 564-2380 and call the National Response Center.
- ✓ *Clean up* the spilled material.
- ✓ *KyTC personnel* Coordinate any cleanup involving removal of soil with DEA.
- ✓ **Local government** should use an environmental consultant to oversee clean up of spills involving removal of soil.
- ✓ Manage the waste- store absorbent in drums and conduct a waste determination if a hazardous spill is known or suspected.
- ✓ Use appropriate absorbent pads or socks for cleanup oil only for oil or universal for non-oil.
- Review emergency response actions after an incident to highlight appropriate responses and needed improvements.
- ✓ Fill out the spill form and make reports

Don't

- **★** Don't risk injury to yourself or co-workers.
- ➤ Don't panic, respond calmly and quickly.
- **✗** Don't stop the release if it is hazardous to do so.

Materials & Waste Management

- ▲ Store contaminated materials so they do not further contaminate the environment.
- ▲ Dispose in accordance with the waste determination.

Relevant Environmental Programs O Air Quality

• GWPP

O 401/404/WQC ● KPDES O PesticidesSPCC

O Facilities Pride

Waste Mgt



The spill kit contains protective equipment and absorbent materials for emergency use. Locate spill kits near where materials are stored and used.

Factsheet Checklist

- ☐ Check product and waste storage areas for leaks, spills and housekeeping *WEEKLY*.
- ☐ Check hazardous waste storage areas for leaks, spills and housekeeping *WEEKLY*.
- ☐ Check spill kits *QUARTERLY* and promptly restock after use.
- ☐ Check spill response and cleanup procedures *ANNUALLY*.
- ☐ Check for the presence of copies of MSDS sheets for all products handled at the facility *ANNUALLY*.

Tips & Tricks

- 2 Reportable quantities are 25 gallons or more of a petroleum product within a 24-hour period and 75 gallons or more of diesel fuel in a 24-hour period or any amount that creates a visible sheen released to a stream or lake.
- **!** EPA's "List of Lists" document, which identifies reportable chemicals, can be downloaded from: http://yosemite.epa.gov/oswer/lol.nsf/homepage
- **!** Wring oil absorbent pads into a bucket to collect spilled material for reuse or disposal.

If...Then

➤ If the materials that are cleaned up can be reused, place them in a suitable container and label them.

Training: 1 per Year

Season: Winter

Review All MSDS sheets as part of this training

KYTC FOG Reference M140

INFORMATION SOURCES

40 CFR 302

- Kentucky Transportation Cabinet. *Environmental Awareness: A Road Master Training Course*. Undated. (Unit 3 p 7, 8)
- Kentucky Transportation Cabinet. *Spill Prevention Control and Countermeasures Plan Template*. February, 2003. Frankfort, Kentucky.
- Kentucky Transportation Cabinet. *Stormwater Best Management Practices Plan for District 5 Poplar Level Lost 392.* Undated. (p 6-7)
- United States Environmental Protection Agency. List of Lists: Consolidated List of Chemicals Subject to the Emergency Planning and Community Right-To-Know Act (EPCRA) and Section 112(r) of the Clean Air Act. October, 2001. Office of Solid Waste and Emergency Response. Washington, D.C. EPA 550-B-01-003.

NOTES

5.1 KYTC SPILL RESPONSE V2 Last Revision: 11/21/08

5.2 ILLICIT DISCHARGES



The stormwater program (MS4) requires that sources of stormwater pollution be reported and corrected. This fact sheet guides KYTC personnel in the matter of illicit discharges.

Do

- ✓ Cooperate with communities that we are partnered with to facilitate removal of pollution sources.
- ✓ Report any observation of an activity you see that may be a source of stormwater pollution on state highway right of way to the District MS4 coordinator.
- ✓ Understand this fact sheet applies to our highways that are inside of a MS4 community program jurisdiction.
- ✓ Use the KYTC Spill or Pollution Report form to document the observations.

Don't

✗ Ignore important observations of pollution.

If...Then

- ► Pollution is found that is the result of our (KYTC) activities, we must correct it.
- ► The pollution is from a source that is off right of way, the MS4 community is to be notified.
- ► KYTC will take appropriate action to correct or eliminate illicit sources of stormwater pollution that originate on state highway right of way.
- ► KYTC cooperate with the local MS4 program to assist when they correct or eliminate illicit sources of stormwater pollution that originate off of state highway right of way and cause a discharge of pollutants to the state highway separate storm sewer system.



Example of a storm drain protective measure.

Materials & Waste Management

▲ Materials and wastes are to be managed in ways that do not cause undue storm water pollution.

Factsheet Checklist

 \square Be observant when you are doing your work.

Tips & Tricks

? The District MS4 coordinator will know the local government contact for MS4 related issues.

Training: 1 per Year **Season**: Spring

Relevant Environmental Programs O Air Quality O 401/404/WQC

GWPPO Pesticides

• KPDES

O SPCC

O Facilities Pride O Waste Mgt

KYTC FOG Reference:

INFORMATION SOURCES

http://transportation.ky.gov/EnvAnalysis/

MS4 Communities by District

Mayfield Murray Paducah 2 Henderson Hopkinsville Madisonville Oak Grove Owensboro 3 Bowling Green Glasgow 4 Bardstown Campbellsville Elizabethtown Hardin county Muldraugh Radcliff Vine Grove West Point	Bullitt County Frankfort Mt. Washington Oldham County Shelbyville Shepherdsville Florence Sanitation District # 1 of Northern Kentucky Danville Georgetown Jessamine County Nicholasville Richmond Winchester Somerset Ashland Greenup county Raceland Middlesboro
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Illicit Discharge Detection and Elimination Last Revision: November 21, 2008

5.4 - KYTC SPILL OR POLLUTION DOCUMENTATION AND REPORTING

LOCATION	FACILITY NAME AND NUMBER or	HIGHWAY ROU	JTE AND MP	DATE	TIME		AM			
	NEAREST CITY			COUNTY						
	DISTRICT			TELEPHONE NUMBER AT FACILITY						
Fire was involved	DATE AND TME OF INCIDENT									
	TYPE OF MATERIAL DISCHARGED,IF A PESTICIDE, LIST THE TANK MIX									
	ESTIMATED QUANTITY OF DISCHARGED MATERIAL									
	SOURCE OF DISCHARGE									
	EXTENT OF THE SPILL: CHECK ALL THAT APPLY IT OCCURRED ONLY ON PAVEMENT OR CONCRETE (AN IMPERVEOUS SURFACE) IT OCCURRED ON OR IMPACTED SOIL OR GRAVEL, IT IMPACTED A STREAM OR LAKE IT DISCHARGED INTO A CITY SEWER IT IT IS BEYOND KYTC PROPERTY IT IMPACTED A STORM SEWER OR DRAINAGE DITCH IT THERE WAS A FIRE AS PART OF THIS SPILL Make a sketch of the site and approximate limits of the spill on the back of this form. CAUSE OF THE DISCHARGE									
	ANY DAMAGE OR INJURY									
	ACTIONS USED TO STOP OR REM		GATE EFFECTS OF THE DISC	HARGE						
	EVACUATION NECESSARY (EXPL.	AIN)								
	☐ SUPERVISOR NOTIFIED	DATE	☐ DIST. BRANCH MG NOTIFIED		□ C		DATE			
	□ ENVIRON. COORDINATOR NOTIFIED	TIME DATE TIME	NAME OF INDIVIDUAL	TIME TAKING REPORT		DAT	ED TIME ATE IME			
Local Fire Dept. Notified	NAME OF FIRE DEPT.	TIME	NAME OF INDIVIDUAL	TAKING REPORT	Rep		Date	Time		
GOVT. AGENCIES NOTIFIED (when applicable)	NATIONAL RESPONSE CENTER (1-800-424-8802)	NAME OF INDIVIDUAL	NAME OF INDIVIDUAL TAKING REPORT			Date	Time			
	STATE ERT (1-800-928-2380)		NAME OF INDIVIDUAL	NAME OF INDIVIDUAL TAKING REPORT Re			Date	Time		
	☐ City ☐ County ☐ Sewer Author	ITY	NAME OF INDIVIDUAL	NAME OF INDIVIDUAL TAKING REPORT Rept # Date Tim						
			<u> </u>		•	•				
Incident										
Description, Action Taken,										
General Comments										
Prepared by			TITLE	DATE		PHON	E			
	1									

Note: Follow the guidance from the material(s) MSD Sheet for appropriate action, personal protection and handling of spill materials. Copy this report to: KYTC Division of Environmental Analysis

Revised: 11/21/2008

PESTICIDES REPORTABLE QUANTITIES

Common Name	Active Ingredient	Reportable Quantity	Reportable Product Amount
2,4-D Formula 40	Di-methylamine + Tri-isopropanolamin	e 100 pounds	27.25 gallons
2,4-D IVM DRY	Di-methylamine Salt	100 pounds	103 pounds
Arsenal	Imazapyr	None	
Basil Oil Premix	Triclopyr Ester, Imazapyr		Call DEA!
Dormant Stem Premix	2, 4-D Ester; 2-4 DP Ester; Dicamba; 7	Γ 100 pounds	163 gallons
Endurance	Prodiamine	None	
Envoy	clethodim	100 pounds	37 gallons
Escort	Metsulfuron	None	
Fusilade II	Fluazifop	100 pounds	305 gallons
Fusion	Fluazifop and Fenoxaprop	100 pounds	1,300 pounds
Gallery	Isoxaben	None	
Garlon 3A	Triclopyr(amine)	5,000 pounds	
Garlon 4 Ultra	Triclopyr(ester)	None	
Krenite-S	Fosamine Salt	None	
Milestone	Aminopyralid	None	None
MSMA	Methanearsonate	1 pound	4.5 pounds
Outrider	Sulfosulfuron	None	
Overdrive	salts of Diflufenzopyr and Dicamba	1,000 pounds	2,000 pounds
Payload	Flumioxazin	None	
Pendulum (WDG)	Pendimethalin	None	
Plateau	Pyidinecarboxylic	None	
Poast	Sethoxydim	100 pounds	76,000 pounds
Roundup Pro	Glyphosate Salt	None	
Roundup Pro Dry	Glyphosate Salt	None	
Sahara	Imazapyr and Diuron	100 pounds	161 pounds
SFM 75	Sulfometuron	None	
Stronghold	Ammonium Salt of Imazethapyr, Imaza	a None	
Telar DF	Chlorsulfuron	None	
Transline	Clopyralid	None	

Sunday, December 07, 2008 Page 1 of 1

BE PART OF THE SOLUTION: ALTERNATIVES TO OPEN BURNING

Reduce

- Look for items with less packaging.
- Buy items in packaging that can be reused or recycled.

Reuse

- Donate old clothes, shoes, books, appliances, electronics, furniture and toys to charity.
- Carry a coffee mug with you instead of disposable cups.
- Bring your own cloth bag to the store or reuse plastic bags.

Recycle

Many counties in Kentucky have a community recycling center. You can bring one or more of the following:

Newspaper
Plastics #1 and #2
Cardboard
Aluminum
Steel

Glass

Compost

- Leaves and grass clippings can be turned into food for your garden or houseplants.
- Instead of burning old pallets, tie four pallets together to make a simple compost bin.

Landfill

 Items that cannot be reused or recycled should be taken to the landfill.

Contact the Division for Air Quality, Division of Waste Management or your local solid waste coordinator for more information.

Division for Air Quality 1-888-BURN-LAW

Air Quality REGIONAL OFFICES

Paducah	Owensboro	London	Hazard	Frankfort	Florence	Bowling Green	Ashland
(270) 898-8468	(270) 687-7304	(606) 878-0157	(606) 435-6022	(502) 564-3358	(859) 525-4923	(270) 746-7475	(606) 929-5285

OTHER CONTACTS

Dept. of Fish & Wildlife	Illegal Dumping (DWM)	Division of Waste Management (502) 564-6716	Department of Agriculture	Kentucky Fire Commission	Fire Marshal's Office	Division of Forestry	Louisville Metro APCD
(502)	(888)	(502)	(502)	(800)	(502)	(800)	(502)
(502) 564-3400	(888) 663-8677	564-6716	502) 564-4696	(800) 782-6823	502) 564-3626	(800) 866-0555	(502) 574-6000



Division for Air Quality 803 Schenkel Lane Frankfort, KY 40601

Phone: 502-573-3382 Fax: 502-573-3787 E-mail: burnlaw@ky.gov

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KENTUCKYUNBRIDLEDSPIRIT.COM

OPEN BURNING

LEARN BEFORE YOU BURN



THIS OPEN BURN IS ILLEGAL AND SUBJECT TO A FINE UP TO \$25,000.

DIVISION FOR AIR QUALITY

www.air.ky.gov



ILLEGAL OPEN BURNING

Agriculture

Animal Bedding Hay Muck Piles (horse manure/hay)

Construction

Asbestos Materials
Buildings (houses, barns and garages)
Construction Debris
Demolition Debris
Renovation Debris
Drywall
Shingles

Household Garbage

Animal or Vegetable Plastic Cans Glass

Wood Materials

Fence Posts
Pallets
Sawdust
Wood Chips and Shavings
Wood Mulch
Painted, Stained, or Pressure-Treated Wood

Miscellaneous

Chemical Containers
Coated Wire
Insulated Wire
Rubber
Tires
Used Oil
Motor Oil
Industrial, Business, School, Church, and Farm Waste

Open burning is any open flame in the environment.

LEARN BEFORE YOU BURN

Some open burning is legal, with restrictions. But many materials are illegal to burn. The Division for Air Quality can impose fines of up to \$25,000 per day per violation of the law. It pays to learn before you burn!

OPEN BURNING FACTS

Air pollution from open burning can cause •asthma •emphysema •heart attacks •birth defects •nervous system damage •other health problems. Children and the elderly are especially sensitive to the air pollution from open burning.

WHY IS IT BETTER TO SEND YOUR TRASH TO A LANDFILL?

Backyard burn barrels and woodstoves produce low temperature fires. Burning trash at low temperatures produces a lot of smoke and releases many toxic pollutants like dioxin/furans.

EPA has shown that open burning of garbage is the largest source of dioxins in the nation. Dioxin/furans have been linked to cancer in humans. Dioxin/furans from open burning end up in our water and soil. They enter our food supply and accumulate in animal tissue.

LEGAL OPEN BURNING

Agriculture

Plant Beds
Tobacco Curing
Animal Carcasses (disease control)

Land Management

Leaves (check local laws)
Natural Growth from Land Clearing
Tree Limbs Felled by Storms
Weeds
Natural Land Management

Construction Sites

Warming Fires (clean lumber only)

Miscellaneous

Camp Fires
Ceremonial Bonfires
Cooking
Fire Training
Household Paper Products Only

RESTRICTIONS

- When a fire emergency is declared, ALL open burning is prohibited.
- During fire hazard season, burning within 150 feet of any woodland area is allowed only between 6 p.m. and 6 a.m.
- From May-September, open burning is restricted in counties that have been designated nonattainment for ozone and particulate matter.
- Do not burn within 50 feet of any structure.
- Do not burn near landfills.
- Do not burn near streams or sinkholes.
- Do not burn near utility lines.