

Appendix E

**Kentucky Division of Water
KPDES General Permit for Construction Activities**

Notice of Intent

Notice of Termination

FACT SHEET
GENERAL KPDES PERMIT FOR STORMWATER POINT SOURCE DISCHARGES
CONSTRUCTION ACTIVITIES

KPDES No.: KYR10 Date:
July 22, 2002

1. COVERAGE UNDER THIS GENERAL PERMIT

Area of Coverage:

This permit covers all areas of the Commonwealth of Kentucky.

Discharges Eligible for Coverage:

This permit covers all new and existing stormwater discharges associated with construction activity. Only construction activities that disturb five (5) acres or more are required to have coverage under this permit. Beginning in March 2003, construction activities that disturb one (1) acre or more are also required to have coverage under this permit.

Limitations on Coverage:

This permit does not authorize discharges that:

1. Are subject to an existing individual KPDES permit or application,
2. Are subject to a promulgated stormwater effluent guideline or standard,
3. The Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard or to the impairment of a 303(d) listed water, or
4. Are into a surface water that has been classified as an Exceptional or Outstanding or National Resource Water.

2. REQUIREMENTS FOR GENERAL PERMIT COVERAGE

Notice of Intent:

A signed copy of a Notice of Intent (NOI) form must be submitted to the following address 48 hours before construction activity begins:

Kentucky Division of Water
KPDES Branch
Inventory and Data Management Section
14 Reilly Road
Frankfort, Kentucky 40601

vb

Unless notified by the Director to the contrary, owners or operators who submit the above notification are authorized to discharge stormwater associated with construction activity under the terms and conditions of this permit. Discharge may begin 48 hours after the NOI is postmarked, even if the permittee has not yet received a copy of the general permit from the Division of Water.

Notice of Termination:

When all stormwater discharges associated with construction activity are eliminated and the site has been finally stabilized, the owner or operator must submit a signed copy of a Notice of Termination (NOT) form in order to end coverage under this general permit and nullify its requirements. NOTs are to be sent to the above address.

Change of Ownership:

When the owner or operator of a site covered by this permit changes, the new owner or operator must submit a notice 48 hours before the change in order to transfer coverage under this general permit. Change of ownership notices are to be sent to the above address.

3. ADDITIONAL INFORMATION

Municipal Notification:

Sites which discharge stormwater associated with construction activity to a municipal separate storm sewer system (MS4) shall submit a signed copy of the NOI to the operator of the MS4 48 hours before construction activity begins.

Other Stormwater Discharges:

Stormwater discharges authorized by this permit may be combined with other sources of stormwater that are not associated with construction activity if the resulting discharge is in compliance with this permit.

4. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

No monitoring is required.

5. JUSTIFICATION OF PERMIT CONDITIONS

The following regulations are pursuant to KRS 224.10-100, 224.70-100, and 224.70-110.

Best Management Practices:

This requirement is consistent with 401 KAR 5:065, Section 2(10).

Antidegradation:

The conditions of 401 KAR 5:029, Section 1(1) will be satisfied by coverage under this permit. A review under Section 1(2), (3), and (4) will not be applicable.

6. COMPLIANCE SCHEDULE

The permittee shall achieve compliance with all requirements upon notification of coverage under this general permit.

7. PERMIT DURATION

This permit is valid for five (5) years. Upon issuance of a new general permit, the permittee will have coverage automatically renewed. A new NOI or other notification is not necessary.

1. PERMIT INFORMATION

The application, draft permit, fact sheet, public notice, comments received, and additional information is available from the Division of Water at 14 Reilly Road, Frankfort Office Park, Frankfort, Kentucky 40601.

9. REFERENCES AND CITED DOCUMENTS

All material and documents referenced or cited in this fact sheet are part of the permit information as described above and are readily available at the Division of Water Central Office. Information regarding these materials may be obtained from the person listed below.

10. CONTACT

Additional information concerning this permit may be obtained from Ronnie Thompson at the address noted in Item 8 or at (502) 564-2225, extension 423.

11. PUBLIC NOTICE INFORMATION

Please refer to the attached Final Permit Decision Cover Letter or Public Notice for details regarding the procedures for a final permit decision, deadline for comments, and other information required by 401 KAR 5:075, Sections 12 and 4(2)(e).

PERMIT NO.: KYR10

GENERAL KPDES PERMIT FOR STORMWATER POINT SOURCE DISCHARGES

CONSTRUCTION ACTIVITIES

In compliance with the provisions of the Kentucky Revised Statutes Chapter 224 and pursuant to 401 KAR 5:055, Section 5, the following discharges are authorized:

All new and existing stormwater discharges associated with construction activity that are required to have a permit pursuant to 401 KAR 5:055, Section and KRS 224.16-050.

Specifically excluded from authorization under this permit are operations that:

1. Are subject to an existing individual KPDES permit or application,
2. Are subject to a promulgated stormwater effluent guideline or standard,
3. The Director has determined to be or may reasonably be expected to be contributing to a violation of a water quality standard or to the impairment of a 303(d) listed water, or
4. Are into a surface water that has been classified as an Exceptional or Outstanding or National Resource Water.

The receiving water for any discharge authorized by this permit is located within the political boundaries of the Commonwealth of Kentucky. Such authorization is in accordance with the effluent limitations and other conditions set forth in PARTS I, II, III, and IV hereof. This permit consists of this cover sheet, PART I 1 page, PART II 1 page, PART III 1 page, and PART IV 4 pages.

This permit shall become effective on October 1, 2002.

This permit and the authorization to discharge shall expire at midnight, September 30, 2007.

Date Signed

Jeffrey W. Pratt, Director
Division of Water

Robert W. Logan
Commissioner

DEPARTMENT FOR ENVIRONMENTAL PROTECTION
Division of Water, Frankfort Office Park, 14 Reilly Road
Frankfort, Kentucky 40601

Printed on Recycled Paper

A. Effluent Limitations and Monitoring Requirements

No monitoring is required.

B. Schedule of Compliance

The permittee shall achieve compliance with all requirements upon notification of coverage under this general permit.

STANDARD CONDITIONS FOR KPDES PERMIT

The permittee is also advised that all KPDES permit conditions in KPDES Regulation 401 KAR 5:065, Section 1 will apply to all discharges authorized by this permit.

This permit has been issued under the provisions of KRS Chapter 224 and regulations promulgated pursuant thereto. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits or licenses required by this Cabinet and other state, federal, and local agencies.

PART III

OTHER REQUIREMENTS

A. Retention of Records:

The permittee shall keep the Best Management Practices (BMP) plan developed in accordance with PART IV of this permit one (1) year after coverage under this permit ends. This period may be extended by request of the Director at anytime.

B. Reopener Clause:

This permit shall be modified, or alternatively revoked and reissued, to comply with any applicable effluent standard or limitation issued or approved under 401 KAR 5:050 through 5:080 and KRS 224 if the effluent standard or limitation so issued or approved:

1. Contains different conditions or is otherwise more stringent than any effluent limitation in this permit; or
2. Controls any pollutant not limited in this permit.

The permit as modified or reissued under this paragraph shall also contain any other requirements of KRS Chapter 224 when applicable.

C. Other Discharges:

All discharges covered by this permit shall be composed entirely of stormwater except for discharges from fire fighting activities, fire hydrant flushing, potable water sources, waterline flushing, irrigation or lawn watering, detergent free building or pavement washing where spills or leaks of toxic materials have not occurred or have been completely removed, air conditioning condensation, natural springs, and uncontaminated ground water sources.

This permit can only authorize stormwater discharges from construction activity that are mixed with stormwater discharges from other industrial activity, including dedicated asphalt and concrete plants, if the other industrial activity discharge is in compliance with a different KPDES permit.

D. Releases in Excess of Reportable Quantities:

The presence of hazardous substances or oil in the stormwater discharge shall be minimized in accordance with the BMP plan. Coverage under this permit does not relieve the permittee of the reporting requirements of 40 CFR Part 117 and 40 CFR Part 302.

PART IV

BEST MANAGEMENT PRACTICES

A stormwater Best Management Practices (BMP) plan shall be developed in accordance with good engineering practices for each site covered by this permit. The BMP plan shall identify potential sources of pollution that may reasonably be expected to affect the quality of stormwater discharges from the site. The BMP plan shall describe and ensure the implementation of practices that are to be used to reduce the pollutants in stormwater discharges and to assure compliance with the terms and conditions of this permit. Facilities must implement the BMP plan required by this PART as a condition of this permit.

The BMP plan shall:

1. Be completed before submittal of the NOI for coverage under this permit.
2. Be implemented beginning with the initiation of construction activities.

Signature and Plan Review:

The BMP plan shall be signed in accordance with PART II and shall be kept onsite.

The permittee shall make the BMP plan available upon request to the Director, to a state or local agency approving sediment, erosion, grading or stormwater management plans, or in the case of a stormwater discharge to a MS4 with a KPDES permit, to the operator of the system.

After a review, the permittee may be notified that the BMP plan does not meet the minimum requirements of this PART. In that case, the permittee shall modify the BMP plan within seven (7) days of notification and shall submit a written certification that the requested changes have been made.

BMP plans required by this permit are considered reports that shall be made available to the public, upon written request by the public, in accordance with Section 308(b) of the Clean Water Act (CWA). However, the permittee may claim any portion of the BMP plan as confidential, in accordance with 40 CFR Part 2.

Plan Modification:

The permittee shall modify the BMP plan when there is a change in design, construction, operation, or maintenance of the site which has a significant effect on the potential for the discharge of pollutants to waters of the Commonwealth and shall implement the changes within seven (7) days.

Modification for Ineffectiveness:

The permittee shall amend the BMP plan if it proves to be ineffective in controlling the discharge of pollutants to waters of the Commonwealth and shall implement the changes within seven (7) days.

Minimum Requirements:

The BMP plan shall include, as a minimum, Items A through H.

A. Site Description:

The BMP plan shall include a clear description of the nature of the construction activity, the order of major soil disturbing activities, estimates of the total project area and the total disturbed area, the post construction runoff coefficient, any existing data describing soil condition or discharge quality, receiving water name, and a site map. The site map shall indicate drainage patterns and show approximate slopes after grading, areas of disturbance, the location of control measures, surface waters or wetlands, and stormwater discharge locations.

B. Sediment and Erosion Control Measures:

The BMP plan shall include a clear description of what sediment and erosion control measures will be used and when they will be implemented. (For example, perimeter controls for one (1) portion of the site will be installed after the necessary clearing and grubbing, but before clearing and grubbing the remaining portions of the site. Perimeter controls will be actively maintained until upward portions of the site are stabilized). The following control measures shall be used as a minimum.

1. Soil Stabilization Practices - Existing vegetation shall be preserved where possible. All disturbed areas of the site shall be stabilized. Stabilization shall begin within 14 days on areas of the site where construction activities have permanently or temporarily (for 21 days or more) ceased. When snow cover causes delays, stabilization shall begin as soon as possible.

Stabilization practices include seeding, mulching, placing sod, planting trees or shrubs, and using geotextile fabrics and other appropriate measures.

2. Perimeter Structural Practices - Silt fences or other equivalent structural practices shall be used on all side and down slope borders of the site. Alternatively, a sediment basin shall be used that provides 3,600 cubic feet of storage capacity per disturbed acre drained. For common drainage locations that serve more than ten (10) disturbed acres at one time, a sediment basin must be used if possible.

Structural practices include protecting drain inlets and outlets and using silt fences, earthen dikes, drainage swales, sediment traps, check dams, subsurface drains, pipe slope drains, reinforced soil retaining systems, gabions, sediment basins and other appropriate measures. The installation of these devices may be subject to Section 404 of the CWA.

3. Stormwater Management Devices - Management devices shall be installed during construction to control the pollutants in stormwater discharges that will occur after construction has been completed. Velocity dissipation devices shall be placed at discharge locations and along the length of any outfall channel as necessary to provide a non-erosive flow so that the original physical and biological characteristics and functions of the receiving waters, such as the hydroperiod and hydrodynamics, are maintained and protected. When considering stormwater management devices, the goal should be 80% removal of Total Suspended Solids that exceed predevelopment levels. If this goal is not met, the permittee shall provide justification for refusing each device based on site conditions.

Management devices include velocity dissipation devices, stormwater retention and detention basins, wet ponds, vegetated swales and natural depressions used for flow reduction, runoff infiltration devices, sequential systems that combine several devices and other appropriate measures. The installation of these devices may be subject to Section 404 of the CWA.

The permittee is not responsible for the maintenance of these devices once discharges associated with construction activity have been eliminated.

C. Other Control Measures:

No solid materials, including building materials, shall be discharged to waters of the Commonwealth, except as authorized by a Section 404 permit.

Off-site vehicle sediment tracking and dust generation shall be minimized.

Waste disposal methods and sanitary sewer or septic systems shall comply with applicable state or local regulations.

D. Other State or Local Plans:

The BMP plan shall include any requirements specified in sediment and erosion control plans, stormwater management plans or permits that have been approved by other state or local officials. Upon submittal of the NOI, other requirements for surface water protection are incorporated by reference into and are enforceable under this permit (even if they are not specifically included in the BMP plan required by this permit). This provision does not apply to master or comprehensive plans, non-enforceable guidelines or technical guidance documents that are not identified in a specific plan or permit issued for the construction site by state or local officials.

E. Maintenance:

The BMP plan shall include a clear description of the maintenance procedures necessary to keep the control measures in good and effective operating condition.

F. Inspections:

Qualified personnel shall inspect all stormwater control measures, discharge locations, vehicle exits, disturbed areas of the construction site and material storage areas at least once every seven (7) days (and within 24 hours of the end of a storm that is 0.5 inches or greater) and areas that have been temporarily or finally stabilized at least once a month. Revisions to the BMP plan based on the results of the inspection shall be implemented within seven(7) days.

Control measures shall be inspected to ensure correct operation. Accessible discharge locations shall be inspected to ensure that velocity dissipation devices are effective in preventing significant impacts to receiving waters. Vehicle exits shall be inspected for evidence of, or the potential for, off-site sediment tracking. Disturbed areas and material storage areas that are exposed to precipitation shall be inspected for evidence of, or the potential for, pollutants entering the drainage system.

A report summarizing the scope of the inspection, names and qualifications of personnel making the inspection, the date of the inspection, major observations relating to the implementation of the BMP plan, and any corrective actions taken shall be made and kept as part of the BMP plan for at least three (3) years after the date of inspection, or until one (1) year after coverage under this permit ends. The report shall be signed in accordance with Part II of this permit.

G. Non-Stormwater Discharges:

The BMP plan shall identify and ensure the implementation of appropriate pollution prevention measures for any non-stormwater component of a discharge as listed in PART III C, except for flows from fire fighting activities.

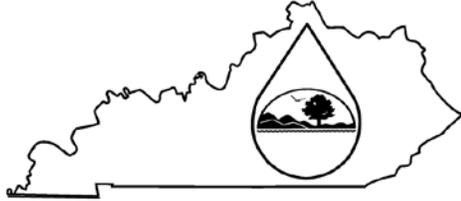
H. Contractors and Subcontractors:

The BMP plan shall clearly state the contractor or subcontractors that will implement each control measure identified in the BMP plan. All contractors and subcontractors identified in the BMP plan must sign a copy of the certification statement below in accordance with PART II of this permit before conducting any professional service at the site:

"I certify under penalty of law that I understand the terms and conditions of the general National Pollutant Discharge Elimination System (NPDES) permit that authorizes the stormwater discharges associated with industrial activity from the construction site identified as part of this certification."

The certification must include the name and title of the person providing the signature, the name, address, and telephone number of the contracted firm, the address, or other identifying description of the site and the date the certification is made. All certification statements must be included in the BMP plan.

KPDES FORM NOI-SW

	<p style="margin: 0;">Kentucky Pollutant Discharge Elimination System (KPDES) Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity Under the KPDES General Permit</p>
---	---

Submission of this Notice of Intent constitutes notice that the party identified in Section I of this form intends to be authorized by a KPDES permit issued for stormwater discharges associated with industrial activity. Becoming a permittee obligates such discharger to comply with the terms and conditions of the permit.

ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM (See Instructions on back)

I. Facility Operator Information

Name:		Phone:	
Address:		Status of Owner/Operator:	
City, State, Zip Code:			

II. Facility/Site Location Information

Name:			
Address:			
City, State, Zip Code:			
County:			
Site Latitude: (degrees/minutes/seconds)		Site Longitude: (degrees/minutes/seconds)	

III. Site Activity Information

MS4 Operator Name:			
Receiving Water Body:			
Are there existing quantitative data?	Yes <input type="checkbox"/>	If Yes, submit with this form.	
	No <input type="checkbox"/>		
If this facility is a member of a Group Application, enter Group Application Number:			
If you have other existing KPDES Permits, enter Permit Numbers:			

IV. Additional Information Required FOR CONSTRUCTION ACTIVITIES ONLY

Project Start Date:		Completion Date:	
Estimated Area to be disturbed (in acres):			
Is the Stormwater Pollution Prevention Plan in Compliance with State and/or Local Sediment and Erosion Plans?	Yes <input type="checkbox"/>	No <input type="checkbox"/>	

V. Certification: I certify under penalty of law 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 gather and evaluate 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. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Printed or Typed Name:			
Signature:		Date:	

**Kentucky Pollutant Discharge Elimination System (KPDES)
Instructions
Notice of Intent (NOI) for Stormwater Discharges Associated with Industrial Activity
To Be Covered Under The KPDES General Permit**

WHO MUST FILE A NOTICE OF INTENT (NOI) FORM

Federal law at 40 CFR Part 122 prohibits point source discharges of stormwater associated with industrial activity to a water body of the Commonwealth of Kentucky without a Kentucky Pollutant Discharge Elimination System (KPDES) permit. The operator of an industrial activity that has such a stormwater discharge must submit a NOI to obtain coverage under the KPDES Stormwater General Permit. If you have questions about whether you need a permit under the KPDES Stormwater program, or if you need information as to whether a particular program is administered by the state agency, call the **Stormwater Contact, Industrial Section, Kentucky Division of Water at (502) 564-3410**.

WHERE TO FILE NOI FORM

NOIs must be sent to the following address:

**Section Supervisor
Inventory & Data Management Section
KPDES Branch, Division of Water
Frankfort Office Park
14 Reilly Road
Frankfort, KY 40601**

COMPLETING THE FORM

Type or print legibly in the appropriate areas only. If you have any questions regarding the completion of this form call the **Stormwater Contact, Industrial Section, at (502) 564-3410**.

SECTION I - FACILITY OPERATOR INFORMATION

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same as the name of the facility. The responsible party is the legal entity that controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Enter the appropriate letter to indicate the legal status of the operator of the facility.

F = Federal M = Public (other than federal or state)
S = State P = Private

SECTION II - FACILITY/SITE LOCATION INFORMATION

Enter the facility's or site's official or legal name and complete street address, including city, state, and ZIP code.

SECTION III - SITE ACTIVITY INFORMATION

If the stormwater discharges to a municipal separate storm sewer system (MS4), enter the name of the operator of the MS4 (e.g., municipality name, county name) and the receiving water of the discharge from the MS4. (A MS4 is defined as a conveyance or system of conveyances (including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains) that is owned or operated by a state, city, town, borough, county, parish, district, association, or other public body which is designed or used for collecting or conveying stormwater.)

If the facility discharges stormwater directly to receiving water(s), enter the name of the receiving water.

Indicate whether or not the owner or operator of the facility has existing quantitative data that represent the characteristics and concentration of pollutants in stormwater discharges. If data is available submit with this form.

List, in descending order of significance, up to four 4-digit standard industrial classification (SIC) codes that best describe the principal products or services provided at the facility or site identified in Section II of this application.

If the facility listed in Section II has participated in Part 1 of an approved stormwater group application and a group number has been assigned, enter the group application number in the space provided.

If there are other KPDES permits presently issued for the facility or site listed in Section II, list the permit numbers.

SECTION IV - ADDITIONAL INFORMATION REQUIRED FOR CONSTRUCTION ACTIVITIES ONLY

Construction activities must complete Section IV in addition of Sections I through III. Only construction activities need to complete Section IV.

Enter the project start date and the estimated completion date for the entire development plan.

Provide an estimate of the total number of acres of the site on which soil will be disturbed (round to the nearest acre).

Indicate whether the stormwater pollution prevention plan for the site is in compliance with approved state and/or local sediment and erosion plans, permits, or stormwater management plans.

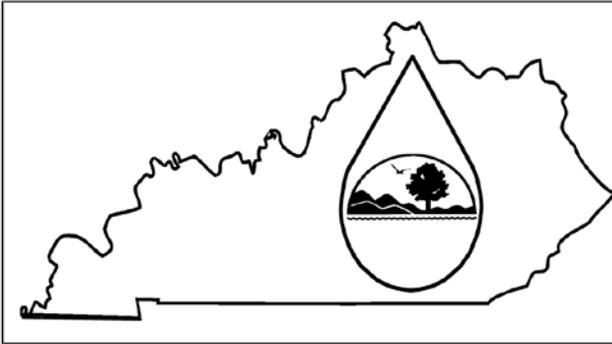
SECTION V - CERTIFICATION

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or

For a municipality, state, Federal, or other public facility: by either a principal executive officer or ranking elected official.



Kentucky Pollutant Discharge
Elimination System (KPDES)

NOTICE OF TERMINATION (NOT)
of Coverage Under the KPDES
General Permit for Stormwater
Discharges Associated with
Industrial Activity

Submission of this Notice of Termination constitutes notice that the party identified in Section II of this form is no longer authorized to discharge stormwater associated with industrial activity under the KPDES program.

ALL NECESSARY INFORMATION MUST BE PROVIDED ON THIS FORM.
(Please see instructions on back before completing this form.)

I. PERMIT INFORMATION
KPDES Stormwater General Permit Number:
Check here if you are no longer the Operator of the Facility: <input type="checkbox"/>
Check here if the Stormwater Discharge is Being Terminated: <input type="checkbox"/>
II. FACILITY OPERATOR INFORMATION
Name:
Address:
City/State/Zip Code:
Telephone Number:
III. FACILITY/SITE LOCATION INFORMATION
Name:
Address:
City/State/Zip Code:

Certification: I certify under penalty of law that all stormwater discharges associated with industrial activity from the identified facility that are authorized by a KPDES general permit have been eliminated or that I am no longer the operator of the facility or construction site. I understand that by submitting this Notice of Termination, I am no longer authorized to discharge stormwater associated with industrial activity under this general permit, and that discharging pollutants in stormwater associated with industrial activity of waters of the Commonwealth is unlawful under the Clean Water Act and Kentucky Regulations where the discharge is not authorized by a KPDES permit. I also understand that the submittal of this Notice of Termination does not release an operator from liability for any violations of this permit or the Kentucky Revised Statutes.

NAME (Print or Type)	TITLE
SIGNATURE	DATE

INSTRUCTIONS
NOTICE OF TERMINATION (NOT) OF COVERAGE UNDER THE KPDES GENERAL PERMIT
FOR STORMWATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY

Who May File a Notice of Termination (NOT) Form

Permittees who are presently covered under the Kentucky Pollutant Discharge Elimination System (KPDES) General Permit for Stormwater Discharges Associated with Industrial Activity may submit a Notice of Termination (NOT) form when their facilities no longer have any stormwater discharges associated with industrial activity as defined in the stormwater regulations at 40 CFR 122.26 (b)(14), or when they are no longer the operator of the facilities.

For construction activities, elimination of all stormwater discharges associated with industrial activity occurs when disturbed soils at the construction site have been finally stabilized and temporary erosion and sediment control measures have been removed or will be removed at an appropriate time, or that all stormwater discharges associated with industrial activity from the construction site that are authorized by a KPDES general permit have otherwise been eliminated. Final stabilization means that all soil-disturbing activities at the site have been completed, and that a uniform perennial vegetative cover with a density of 70% of the cover for unpaved areas and areas not covered by permanent structures has been established, or equivalent permanent stabilization measures (such as the use of riprap, gabions, or geotextiles have been employed.

Where to File NOT Form

Send this form to the following address:

Section Supervisor
Inventory & Data Management Section
KPDES Branch, Division of Water
14 Reilly Road, Frankfort Office Park
Frankfort, KY 40601

Completing the Form

Type or print legibly in the appropriate areas and according to the instructions given for each section. If you have questions about this form, call the Stormwater Contact, Industrial Section, at (502) 564-3410.

Section I - Permit Information

Enter the existing KPDES Stormwater General Permit number assigned to the facility or site identified in Section III. If you do not know the permit number, **call the Stormwater Contact, Industrial Section at (502) 564-3410.**

Indicate your reason for submitting this Notice of Termination by checking the appropriate box. If there has been a change of operator and you are no longer the operator of the facility or site identified in Section III, check the corresponding box. If all stormwater discharges at the facility or site identified in Section III have been terminated, check the corresponding box.

Section II - Facility Operator Information

Give the legal name of the person, firm, public organization, or any other entity that operates the facility or site described in this application. The name of the operator may or may not be the same name as the facility. The operator of the facility is the legal entity which controls the facility's operation, rather than the plant or site manager. Do not use a colloquial name. Enter the complete address and telephone number of the operator.

Section III - Facility/Site Location Information

Enter the facility's or site's official or legal name and complete address, including city, state and ZIP code. If the facility lacks a street address, indicate the state, the latitude and longitude of the facility to the nearest 15 seconds, or the quarter, section, township, and range (to the nearest quarter section) of the approximate center of the site.

Section IV - Certification

Federal statutes provide for severe penalties for submitting false information on this application form. Federal regulations require this application to be signed as follows:

For a corporation: by a responsible corporate officer, which means: (i) president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions, or (ii) the manager of one or more manufacturing, production or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures;

For a partnership or sole proprietorship: by a general partner or the proprietor; or
For a municipality, State, Federal, or other public facility: by either a principal executive.

Appendix F

USACE 404 Summary

U.S. Army Corps of Engineers

BACKGROUND ON DREDGE AND FILL/WETLANDS REQUIREMENTS FOR
CONSTRUCTION ACTIVITIES

DEFINITIONS

Dredged Material: Material that is excavated or dredged from waters of the United States.

Fill Material: Material placed in waters of the United States where the material has the effect of:

- Replacing any portion of a water of the United States with dry land, or
- Changing the bottom elevation of any portion of a water of the United States.

Examples of fill material include rock, sand, soil, clay, plastics, construction debris, wood chips, overburden from mining or other excavation activities, and materials used to create any structure or infrastructure in waters of the United States. The term “fill material” does not include trash or garbage.

Incidental Fallback. Redeposit of small volumes of dredged material that is incidental to excavation activity in waters of the United States when such material falls back to substantially the same place as the initial removal. Examples of incidental fallback include soil that is disturbed when dirt is shoveled and the back-spill from a bucket falls into substantially the same place from which it was initially removed.

Waters of the United States (United States Waters). See 40 CFR Part 122.2 for the complete definition. Waters include, but are not limited to:

- All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to ebb and flow of the tide,
- All interstate waters including interstate wetlands, and
- All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce.

Wetlands. Areas inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do

support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas.

ACRONYMS

US ACE - United States Army Corps of Engineers

CWA - Clean Water Act

NWP - Nationwide Permit

PCN - Preconstruction Notification

APPLICABILITY

US ACE defines discharges of dredged material at 33 CFR 323. These discharges, which require permits under Section 404 of the CWA, include:

The addition of dredged material to a specified discharge site located in waters of the United States; the runoff or overflow from a contained land or water disposal area; and any addition, including redeposit other than incidental fallback, of dredged material, including excavated material, into waters of the United States that is incidental to any activity, including mechanized land clearing, ditching, channelization, or other excavation.

US ACE also defines discharges of fill material at 33 CFR 323. These discharges, which require permits under Section 404 of the CWA, include: placement of fill necessary for the construction of any structure or infrastructure in a water of the United States; building of any structure, infrastructure, or impoundment in waters of the United States requiring rock, sand, dirt, or other material for its construction; site-development fills in waters of the United States for recreational, industrial, commercial, residential, or other uses; causeways or road fills, dams and dikes, artificial islands, beach nourishment, levees, and artificial reefs; property protection and/or reclamation devices such as rip rap, groins, seawalls, breakwaters, and revetments; fill for structures such as sewage treatment facilities; intake and outfall pipes associated with power plants and subaqueous utility lines; placement of fill material in waters of the United States for construction or maintenance of any liner, berm, or other infrastructure associated with solid waste landfills; and placement of overburden, slurry, or tailings or similar mining-related materials in waters of the United States. Contact the state environmental or permitting office and the US ACE District Office to determine whether permits are required for the construction project.

SECTION 404 PERMIT PROCESS REQUIREMENTS

Section 404 requires that no discharge of dredged or fill material be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. When applying for a permit, a wetlands mitigation must be performed to show that the project: avoided wetland impacts where practicable; minimized potential impacts

to wetlands; and will provide compensation for any remaining, unavoidable impacts through activities to restore or create wetlands.

US ACE may issue permits, after notice and opportunity for public hearings, for the discharge of dredged or fill material into waters of the United States at specified disposal sites. Prior to issuing Section 404 permits, state approval must also be obtained (Section 401 certification). There are two types of Section 404 permits: general permits and individual permits. For discharges that have only minimal adverse effects, US ACE issues general permits. General permits may be issued on a nationwide, regional, or state basis for particular categories of activities. Attachment C includes a list of current Nationwide Permits (NWP). Individual permits are usually required for activities with potentially significant impacts.

General Permit Process. An NWP may require that the US ACE District Engineer (DE) of the construction activity be notified in a preconstruction notification (PCN). If required, the PCN should be submitted as early as possible. Within 30 days, the DE will determine whether the PCN is complete and may request additional information. The PCN review process will not begin until all required information is submitted. Construction activity may not begin until one of the following occurs:

- (1) Notification that the activity may proceed is received from the DE. This notification may include special conditions imposed on the specific construction activity.
- (2) Notification that an individual permit is required is received from the DE, and the individual permit is issued.
- (3) Forty-five days have passed since the DE received the complete PCN and no written notice has been received from the DE.

The text of the NWPs should be reviewed to assess whether a particular NWP applies to the construction project (see 67 FRN 2020 or the on-line guide at http://www.usace.army.mil/inet/functions/cw/cecwo/reg/nationwide_permits.htm). Some items to check include:

NWP use limits (e.g., NWP 19 Minor Dredging only applies if the site dredges less than 25 cubic yards); and

Applicable waters (e.g., NWP 13 Bank Stabilization does not apply to special aquatic sites (i.e., sanctuaries and refuges, wetlands, mud flats, vegetated shallows, coral reefs, and riffle and pool complexes)).

If the construction activity is covered under an NWP, the site must comply with the general conditions listed for the permit. The US ACE District Office or state environmental department should be contacted for information on regional and state general permits.

Individual Permit Process. The following steps need to be completed to obtain an individual permit:

Application. To receive a Section 404 individual permit, operators must complete an Application for Department of Army Permit (available on line at: <http://www.usace.army.mil/inet/functions/cw/cecwo/reg/eng4345a.pdf>). US ACE requires, among other things, that permit applicants describe the project and its purpose, the reasons for discharging dredged or fill material, types of material being discharged (and volume of each type in cubic yards), and the surface area of wetlands or other waters filled (in acres). Applicants must also submit one set of drawings showing location and character of proposed activity. The application is submitted to the DE having jurisdiction over the location of the proposed activity. (Note that states may contact the US ACE in conjunction with granting state approval for the project. The application process varies by state; contact the state and US ACE District Office for details.)

Public Notice. US ACE will issue a public notice once the complete permit application has been received. The notice includes the proposed activity, location, and potential environmental impacts.

Comment Period. The public comment period lasts between 15-30 days, depending on the proposed activity. The application and comments are reviewed by the US ACE and other interested federal and state agencies, organizations, and individuals. US ACE also determines whether an Environmental Impact Statement is necessary.

Public Hearing. Citizens may request that US ACE conduct a public hearing; however, public hearings are not usually held.

Permit Evaluation. COE, along with states and other federal agencies, evaluates the permit application, taking into account the comments received.

Permit Award or Denial. Based on the steps above, US ACE may either approve or deny the application.

Environmental Assessment and Statement of Findings. The *Statement of Finding* document explains how the permit decision was made. This document is made available to the public.

The above steps are a basic example of the requirements to obtain an individual permit. The process may require additional steps such as a pre-application meeting with the US ACE district engineer or state officials or negotiation of mitigation plans.

Appendix G

Definitions

Unless specifically defined in this section, words or phrases are usually interpreted so as to give them the meaning they have in common usage.

1-year Frequency Storm—A storm event defined in general to be 2.5 inches in 24 hours.

2-year Frequency Storm—A storm event with a fifty (50) percent chance of being equaled or exceeded in a given year. Defined in general to be 3.3 inches in 24 hours.

5-year Frequency Storm—A storm event with a twenty (20) percent chance of being equaled or exceeded in any given year. Defined in general to be 4.1 inches in 24 hours.

10-year Frequency Storm—A storm event with a ten (10) percent chance of being equaled or exceeded in any given year. Defined in general to be 4.8 inches in 24 hours.

25-year Frequency Storm—A storm event with a four (4) percent chance of being equaled or exceeded in any given year. Defined in general to be 5.5 inches in 24 hours.

100-year Frequency Storm—A storm event with a one (1) percent chance of being equaled or exceeded in any given year. Defined in general to be 6.5 inches in 24 hours.

500-year Frequency Storm—A storm event with a one-fifth (1/5) of one (1) percent chance of being equaled or exceeded in any given year. Defined in general to be 7.6 inches in 24 hours.

100-year Flood Elevation—The elevation of the 100-year flood at any given location.

500-year Flood Elevation—The elevation of the 500-year flood at any given location.

Active Channel—The area of the stream that is most subject to water flow and that includes the portion of the channel below the top-of-bank.

As-Built Certification—As-built, field-verified plans signed and sealed by a registered professional engineer and/or a registered land surveyor, both licensed to practice in the Commonwealth of Kentucky, showing contours, elevations, grades, locations, drainage and hydraulic structures, and detention basin volumes.

Base Flood Elevation (BFE)—The 100-year flood elevation at any given location.

Best Management Practices (BMP or BMPs)—Schedules of activities, prohibitions of practices, maintenance procedures, structural controls and other management practices designed to prevent or reduce the pollution of waters of the United States. BMPs may include structural devices or non-structural practices.

Best Management Practices Plan (BMP Plan)—An analysis of the drainage system for a proposed development and analysis of the proposed new drainage system that includes a map showing the extent of the land development activity and BMPs such as project phasing, erosion prevention and sediment control measures, stormwater pollution prevention measures, good housekeeping practices, drainage system controls, slope protection methods, vegetative measures, and other BMPs designed to keep pollutants out of the stormwater system and surface water bodies. Also known as a Storm Water Pollution Prevention Plan.

Blue-Line Stream—Any stream that is shown on a 7.5 minute USGS quadrangle map, unless determined otherwise by the Kentucky Division of Water or USACE.

Channel—A natural watercourse of perceptible extent, with definite bed and banks to confine and conduct continuously or periodically flowing water (*see also* Ditch).

Clearing—The removal of vegetation or disturbance of soil before grading or excavation in anticipation of construction or other activities. Clearing can also refer to wide area land disturbance in anticipation of nonconstruction activities; for instance, cleared forested land to convert forest land to pasture for wildlife management purposes.

Commencement of Construction or Commencement of Land Disturbing Activities—The initial disturbance of soils associated with clearing, grading, or excavating activities or other construction activities.

Construction—Any placement, assembly, or installation of facilities or equipment (including contractual obligations to purchase such facilities or equipment) at the premises where such equipment will be used, including preparation work at such premises.

Construction Related Wastes—Refuse or unused materials that can result from construction activities. Construction related wastes can include, but are not limited to, unused building and landscaping materials, chemicals, litter, sanitary waste, paint waste, and concrete truck washout.

Conveyance—The capacity of a channel, ditch, or pipe to carry stormwater.

Covenants for Permanent Maintenance of Stormwater Facilities and Best Management Practices—A legal document executed by the property owner, homeowners' association as owner of record, or other owner of real property that guarantees perpetual and proper maintenance of stormwater facilities and BMPs.

Critical Areas—Areas of construction activity that discharge directly into, or immediately upstream from, waters of the state recognized as impaired for siltation or those waters, or waters designated as high-quality waters. A property is considered to have a direct discharge if stormwater runoff from the property does not cross any other property before entering waters of the state.

Development—Any land change that alters the hydrologic or hydraulic conditions of any property. Often referred to as *site development*. Development includes, but is not limited to, providing access to a site, clearing of vegetation, grading, earth moving, providing utilities, roads and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land.

Discharge—Dispose, deposit, spill, pour, inject, seep, dump, leak or place by any means, or that which is disposed, deposited, spilled, poured, injected, seeped, dumped, leaked, or placed by any means including any direct or indirect entry of any solid or liquid matter into the stormwater system by any means intentional or otherwise.

Disturbed Area—Portion of any site that has been altered from existing conditions including, but not limited to, the following: providing access to a site, clearing of vegetation, grading, earth moving, providing utilities and other services such as parking facilities, stormwater management and erosion control systems, potable water and wastewater systems, altering land forms, or construction or demolition of a structure on the land. Also called bare soil area.

Ditch—A man-made watercourse of perceptible extent, usually constructed for the purpose of draining surface water.

Drainage Basin—The area of land, buildings, roads, parking lots, and other surfaces contributing stormwater runoff to a single point.

Drainage System—The system of pipes, channels, culverts, and ditches that convey stormwater from and through public and private land.

Erosion—The removal of soil particles by the action of water, wind, ice or other geological agents, whether naturally occurring or acting in conjunction with or promoted by anthropogenic activities or effects.

Excavation—A cavity or hole in the land surface that is caused by the cutting, digging, or scooping and removal of soil, rock, or other materials.

Filling—Any deposit or stockpiling of dirt, rocks, stumps, or other natural or man-made solid material.

Flood—Water from a river, stream, watercourse, lake or other body of standing water that temporarily overflows and inundates adjacent lands and that can affect other lands and activities through increased surface water levels, or increased groundwater level.

Floodplain—The relatively flat or lowland area adjoining a river, stream, watercourse, lake, or other body of standing water, which has been or may be covered temporarily by flood water. Floodplains are typically assigned a recurrence interval (i.e., the 100-year floodplain), which defines the magnitude of the flood event that causes the inundation. The 100-year floodplain is the area subject to flood for the 100-year flood.

Flood Proofing—A combination of structural provisions, changes, or adjustments to properties and structures subject to flooding primarily for the reduction or elimination of flood damages to properties, water and sanitary facilities, structures, and contents of buildings in a flood hazard area.

Floodway—That portion of the stream channel and adjacent floodplain required for the passage or conveyance of a 100-year flood discharge without cumulatively increasing the 100-year water surface elevation more than one foot. The floodway is the portion of special flood hazard area characterized by significant depths and velocities.

Floodway Encroachment—Any obstruction, fill, construction, improvement, or other alteration that changes the hydraulic characteristics of the regulatory floodway.

Grading—Any clearing, excavating, filling or other disturbance of terrain.

Grading Permit—A permit issued by a local government authorizing the commencement of land disturbing activities.

High Quality Waters—Surface waters of the Commonwealth of Kentucky that are identified as Tier II or *high quality waters*. Includes most waters of the United States within the state. Characteristics include waters where existing conditions are better than water quality standards.

Illicit Discharge—Any discharge to the stormwater system that is not composed entirely of stormwater and not specifically exempted by state or federal regulations. Specifically, floor drains, wastewater treatment system discharges, cesspool discharges, sink drains, and all other non-stormwater discharges to the stormwater system and surface streams are illicit discharges, whether discharged directly or through a pipe, ditch, swale, drain tile, rolling stock, or other man-made conveyance.

Impervious Area—Impermeable surfaces that prevent the percolation of water into the soil including, but not limited to, pavement, parking areas and driveways, packed gravel or soil, or rooftops.

Kentucky Pollutant Discharge Elimination System (NPDES)—The program administered by the Commonwealth of Kentucky for the U.S. Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States. (See also National Pollutant Discharge Elimination System.)

Lake—An inland body of standing water, usually of considerable size.

Land Disturbing Activity—Any activity on a property that results in a change in the existing soil (both vegetative and nonvegetative) or the existing soil topography. Land disturbing activities include, but are not limited to, development, redevelopment, demolition, construction, reconstruction, clearing, grading, filling, logging or tree chipping operations, haul roads associated with the development, and excavation.

Municipal Separate Storm Sewer System (MS4)—A conveyance or system of conveyances (including roads with drainage systems, streets, catch basins, curbs, gutters, ditches, constructed channels, and storm drains) designed or used for collecting or conveying stormwater. However, sanitary and combined sewers are not included in the definition of the Municipal Separate Storm Sewer System.

National Pollutant Discharge Elimination System (NPDES)—The program administered by the U.S. Environmental Protection Agency to eliminate or reduce pollutant discharges to the waters of the United States. In Kentucky, it is known as the Kentucky Pollutant Discharge Elimination System.

Natural Resources Conservation Service (NRCS)—An organization within the U.S. Department of Agriculture that has published standard drainage procedures in the form of Technical Release No. 55. Formerly known as the Soil Conservation Service (SCS).

Outfall—The terminus of a stormwater system where the contents are released into a larger public or private stormwater management system or into a stream or other water body.

Owner or Operator—Any party associated with a construction project that meets either of the following two criteria: (a) The party has operational control over construction plans and specifications, including the ability to authorize modifications to those plans and specifications (this will typically be the owner or developer); or (b) The party has day-to-day operational control of those activities at a project that are necessary to ensure compliance with a BMP Plan (also known as a stormwater pollution prevention plan) for the site or other permit conditions (e.g., they are authorized to direct workers at a site to carry out activities required by the BMP Plan or comply with other permit conditions). (This will typically include the general contractor and can also include excavation contractors and erosion control contractors.) Owners and operators are required to ensure permit coverage for all construction sites with a disturbed area of one acre or more.

Pond—An inland body of standing water that is usually smaller than a lake.

Peak Discharge—The maximum instantaneous rate of flow of water at a particular point resulting from a storm event. Also, the maximum discharge computed for a given design flood event.

Person—Any individual, firm, corporation, partnership, association, organization or entity, including governmental entities, or any combination thereof.

Public Water—Stormwater runoff that originates in whole or part from or is conveyed by publicly owned facilities such as roads.

Redevelopment—The improvement of a lot or lots that have been previously developed.

Riprap—A combination of large stone, cobbles and boulders used to line channels, stabilize stream banks, and reduce runoff velocities.

Runoff—The water resulting from precipitation that is not absorbed by the soil. It can also be referred to as stormwater runoff.

Sanitary Sewer—A system of underground conduits that collects and delivers wastewater from toilets, sinks, and other plumbing fixtures to a wastewater treatment plant.

Sediment—Solid material, either mineral or organic, that is in suspension, is being transported, or has been moved from its site of origin by erosion.

Sewage—Human wastes carried by water from residences, buildings, industrial establishments or other places, together with such industrial wastes, stormwater or other water as may be present; or any substance discharged from a sanitary sewer collection system.

Sinkhole—A depression in karst areas, often but not always characterized by closed contours on a topographic map. A sinkhole throat, or opening to the subsurface, may or may not be visible. Field verification may be required in areas where the depth of the depression is below the tolerance of currently available topographic mapping. The extent of the area considered to be a sinkhole includes an appropriate vegetated or other buffer zone to ensure filtration and protection from contamination by surface runoff.

Stormwater—Runoff from rain, snow, or other forms of precipitation that results in surface runoff and drainage.

Stormwater System—The system of roadside drainage, roadside curbs and gutters, curb inlets, swales, catch basins, manholes, gutters, ditches, pipes, lakes, ponds, sinkholes, channels, creeks, streams, storm drains, water quality BMPs, and similar conveyances and facilities, both natural and man-made, that are designated or used for collecting, storing, or conveying stormwater, or through which stormwater is collected, treated, stored or conveyed.

Stormwater Management Facilities—Structures and constructed features designed for the collection, conveyance, storage, treatment and disposal of stormwater runoff into and through the stormwater system. Stormwater management facilities include vegetative or structural measures, or both, to control the increased volume, rate, and quality of stormwater runoff caused by man-made changes to the land.

Stormwater Pollution Prevention Plan—An analysis of the drainage system for a proposed development and analysis of the proposed new drainage system that includes a map showing the extent of the land development activity and BMPs such as project phasing, erosion prevention and sediment control measures, stormwater pollution prevention measures, good housekeeping practices, drainage system controls, slope protection methods, vegetative measures, and other BMPs designed to keep pollutants out of the stormwater system and surface water bodies. Also known as a BMP Plan.

Stormwater Master Plan—An engineering and planning study for the drainage system of a watershed that consists of a plan for stormwater management in the watershed. Stormwater master plans can address flooding problems, water quality problems, potential stormwater capital improvements, land use patterns, and regulatory issues for existing and future conditions.

Stream—A linear surface water conveyance that can be characterized with either perennial or ephemeral base flow. They are characterized as a blue line on a 7.5-minute USGS quadrangle, or as any natural surface water conveyance that has a defined bed and banks and that carries runoff water or base flow.

Structure—Anything constructed or erected such that its use requires a more or less permanent location on or in the ground. Such construction includes, but is not limited to, objects such as buildings, towers, smokestacks, overhead transmission lines, carports, and walls.

Top of Bank—The uppermost limit of the active channel of a stream containing normal flows, usually marked by a break in slope. Often it is referred to as the elevation of flowing water during bankfull flows, which occur every 2–3 years.

Total Maximum Daily Load (TMDL)—A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the source(s) of the pollutant.

Transporting—Any moving of earth materials from one place to another, other than such movement incidental to grading, as authorized on an approved plan.

USACE—United States Army Corps of Engineers.

Utility, public or private—Any agency that, under public franchise or ownership or under certification of convenience and necessity, provides the public with electricity, natural gas, steam, communication, rail transportation, water, sewage collection, or other similar service.

Vegetation—Collection of plant life, including trees, shrubs, bushes, and grass.

Wastes, industrial/commercial—Liquid or other wastes resulting from any process of industry, manufacture, trade or business, or from the development of any natural resources.

Wastes, other—Decayed wood; sawdust; shavings; fallen bark; fallen leaves; lawn clippings; animal wastes; used or previously applied lime; garbage; trash; refuse, loose used paper, paper products, plastic containers, or metal containers; ashes, offal, discarded tar; discarded paint; discarded or uncontained solvents; used, discarded, or spilled petroleum products, antifreeze, motor vehicle fluids; used or discarded tires, gas tanks, or chemicals; or any other used, uncontained, or unpackaged, or disposed of materials that can discharge to or otherwise enter the stormwater system.

Waters or Waters of the State—Any and all water, public or private, on or beneath the surface of the ground that are contained within, flow through or border upon Kentucky or any portion thereof except those bodies of water confined to and retained within the limits of private property in single ownership that do not combine or effect a junction with natural surface or underground waters.

Water Quality Buffer—A use-restricted, vegetated area that is along the perimeter of local waters, containing natural vegetation and grasses, enhanced or restored vegetation.

Watercourse—A channel, natural depression, gully, stream, creek, pond, reservoir or lake in which stormwater runoff and floodwater flows either regularly or infrequently. This includes major drainageways for carrying urban stormwater runoff.

Watershed—A region or area bounded peripherally by a divide and draining ultimately to a specific watercourse or body of water.

Wetlands—An area that is inundated or saturated by surface water or groundwater at a frequency and duration sufficient to support, and that under normal circumstances does support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetland determination must be made by the USACE, and/or the Kentucky Division of Water, and/or the Natural Resources Conservation Service.

This manual was produced by Richard Walker and Barry Tanning of Tetra Tech, Inc., with support from the Kentucky Environmental and Public Protection Cabinet. Emily Faalasi of Tetra Tech created the illustrations and layout. Photographs were provided by the Kentucky Transportation Cabinet, the Upper Chattahoochee Riverkeeper, Tetra Tech, product vendors, and other sources. Primary technical support was provided by John Kosco and William Marshall of Tetra Tech. The Environmental and Public Protection Cabinet (EPPC) and Tetra Tech do not discriminate on the basis of race, color, national origin, sex, age, religion, or disability. The EPPC and Tetra Tech will provide, on request, reasonable accommodations including auxiliary aids and services necessary to afford an individual with a disability an equal opportunity to participate in all services, programs and activities. To request materials in an alternative format, contact the Kentucky Division of Water, 14 Reilly Road, Frankfort, KY, 40601 or call (502) 564-3410 or contact Tetra Tech, 10306 Eaton Place, Suite 340, Fairfax VA 22030, (703) 385-6000.