TDEC Small MS4 Annual Report 1st Year, July 1, 2003 – June 30, 2004 Report due September 30, 2004

Permittee Tracking No. TNS 075582

Permittee Name: Knox County MS4, Knox County, Tennessee

This report must be signed by a ranking elected official or by a duly authorized representative of that person. See signatory requirements in part 6.7 of the small MS4 general permit.

"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."

Signed

Dated

Mike Ragsdale, Knox County Mayor Printed Name and Title

Send the annual report to the two addresses shown on the next page.

Submit your annual report to the Environmental Assistance Center for your county as shown in the map below and to the following address: **Chris Moran Tennessee Division of Water Pollution Control** L&C Annex, 6th Floor **401 Church Street** Nashville, TN 37243-1534 **Tennessee Department of Environment and Conservation Environmental Assistance Center Boundaries** 1-888-891-TDEC Johnson City EAC (JC) Jackson EAC (J) Nashville EAC (N) Cookeville EAC (CK) 362 Carriage House Drive Jackson, TN 38305-2222 fax 731-661-6283 1221 South Willow Avenue Cookeville, TN 38506 fax 931-432-6952 2305 Silverdale Road Johnson City, TN 37601-2162 fax 423-854-5401 711 R.S. Gass Boulevard Nashville, TN 37243 fax 615-687-7078 731-512-1300 931-432-4015 423-854-5400 615-687-7000 WPC Mgr - Joe Holland EAC Mgr - Brenda Apple Env. Coord - Charles Jobe Administrator - Steve Janes WPC Mgr - Pat Patrick WPC Mgr - Fran Baker WPC Mgr - Andrew Tolley EAC Mgr - Mark Braswell Env Coord - Janice Bowers EAC Mgr - Jummy Lee Clark Env Coord - John Bowers Administrator - D. Jan Tollett EAC Mgr - Rudy Collins Env Coord - Vaughn Cassidy Administrator - Carol Pollan Administrator - Larna Smith Jackson Nashville Cookeville Johnson Citv BULLINA T. CLAY MACON CLAIBO R.N 0.810.8 HENR VEAKLE 00080 CARROLI инте SEVIER **бирож** BEDFOR LEWIS Knoxville CHESTER SHELBY ARDI GILES FRANKLI POLK LINCOLN Chattanooga Memphis Columbia RWMc 1/9/03 Chattanooga EAC (CH) Suite 550, State Offoce Bldg. 540 McCallie Avenue Chattanooga, TN 37402 fax 423-634-6389 Memphis EAC (M) Knoxville EAC (K) Columbia EAC (CL) Suite E-645, Perimeter Park 2510 Mount Moriah Road Memphis, TN 38115-1520 fax 901-368-7979 Suite 220 State Plaza 2700 Middlebrook Pike Knoxville, TN 37921 fax 865-594-6105 2484 Park Plus Drive Columbia, TN 38401 fax 931-380-3397 423-634-5745 931-380-3371 865-594-6035 901-368-7939 WPC Mgr - Paul Schmierbach WPC Mgr - Richard Urban WPC Mgr - Terry Templeton EAC Mgr - Jim Chaney Env Coord - Vaughn Cassidy Administrator - Bill Relker WPC Mar - Tim Wilder EAC Mgr - Joe Holmes Env Coord - John Bowers Administrator - Shelia Woodard EAC Mgr - Phil Chambers Env Coord - Mark Penland Administrator - Mark Sweat EAC Mgr - Stan Boyd Env Coord -Administrator - Andra Kelley

Water Pollution Control

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I. Status of Compliance with Permit Conditions (5.4.1) Six Minimum Measures, BMPs and Milestones

A. Status of Compliance with BMP Milestones

The following table is designed for you to report the status of your progress in implementing storm water management BMPs. The table includes a list of BMPs by the code number. These BMP codes refer to the BMPs, and the respective codes, that you submitted to us in your NOI. [Or, in annual reports for years 2-5, these codes refer to amended BMPs as you reported to us in the previous year's annual report]. Add rows if you have more than four BMPs; e.g., 1A, 1B, 1C, 1D, 1E, 1F.

Likewise, the milestone refers to the Year 1 milestone that you included in your NOI. [Or, in subsequent annual reports, the milestone refers to the milestone that you reported to us in the previous year's annual report.]

You must check Yes or No for each of the BMPs that you submitted in your NOI.

- Check **Yes** if the BMP is essentially unchanged and you accomplished the milestone. Indicate a date of completion.
- Check No if you did not accomplish the milestone. If you check No, and you are not changing or replacing the BMP or the milestones, indicate the date you expect to complete the milestone.
- Check in one of the Amended columns if you wish us to recognize an amended BMP or an amended milestone. If you are amending the BMP, most likely you will also need to amend the milestone, and in that case, check both Amended BMP and Amended Milestone. If the BMP is unchanged, but you are changing milestones in subsequent years, check in the Amended Milestones column.
- If you indicate an amended BMP or milestone, then you should check in last column as well, indicating that you describe the amendment below and provide the necessary analysis in Part VIII.

BMP Code	Milestone	Yes	No	Date completed or If "No," Date to be completed	Amended/Replaced		An "Amended" response is described below and in Part VIII.
	ļ	ļ		be completed	BMP	Milestones	Yes/No
1A	Year 1-5	Х		June 2004			
1 B	Year 1-5	X		June 2004			
1 C	Year 1-5	Х		June 2004			
1D	Year 1-5	Х		September 2004		Х	Yes
1E	Year 1-5	Х		June 2004			
1F	Year 1-5	Х		December 2003			
2A	Year 1-5	Х		June 2004			

2B	Year 1-5	Х		June 2004			
2C	Year 1-5	Х		June 2004			
2D	Year 1-5	X		June 2004			
2E	Year 1-5	X		June 2004			
3A	Year 1	X		June 2004			
3A	Year 2		Х	June 2005		<u>.</u>	
3A	Year 3		Х	June 2006			
3A	Year 4		Х	June 2007			
3A	Year 5		Х	June 2008			
3B	Year 1	X		June 2004			
3B	Year 2		Х	June 2005			
3B	Year 3		Х	June 2006			
3B	Year 4		Х	June 2007			
3B	Year 5		Х	June 2008			
3C	Year 1	X		June 2004			
3C	Year 2		Х	June 2005			
3C	Year 3		Х	June 2006			
3C	Year 4		Х	June 2007			
3C	Year 5		Х	June 2008			
3D	Year 2		Х	June 2005			
3 E	Year 1-5		X	December 2004		Х	Yes
	X7 1.5			1 2004			
4A	Year 1-5	X		June 2004			
4B	Year 1-5	X		June 2004			
4C	Year 2		Х	June 2005			
4D	Year 2		Х	June 2005			
4E	Year 2		Х	June 2005			
4F	Year 1-5	X		June 2004			
4G	Year 2		Χ	February 2005			
4G	Year 3		Х	June 2006			
4H	Year 1-5	X		June 2004			
5A	Year 1	X		September 2002			
	1			:	:	:	:

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6D	Year 1		X	December 2004	 	
6C	Year 1	Х		July 2003		
6B	Year 1	Х		July 2003		
6A	Year 1	Х		February 2004		
5C	Year 5		Х	June 2007		
5B	Year 1-5	Х		June 2004		
5A	Year 5		Х	December 2005		
5A	Year 4		Х	January 2005		
5A	Year 3		Х	January 2005		

B. Status of compliance for *amended and replaced BMPs*

For every amended/replaced BMP and/or milestone above, provide the compliance status with respect to the new milestone for this year. The new milestones must be detailed in Part VIII.

BMP Code	Mile- stone	Milestone Description	Yes	No	Date completed or If "No," Date to be completed
1D	Year 1	Promote Tennessee Growth Readiness program, make or facilitate presentations and/or speaker training programs offered in the Knox County area. Continue to aid in TGR program development and refinement as needed.	X		September 2004
3E	Year 1-5	Use information gathered through watershed initiatives (analysis and sampling, BMP 2E), Illicit Discharge Database (BMP 3A), to prioritize and scope an outfall mapping procedure.		Х	February 2005
6A	Year 2-5	Knox County will expand and continue Pollution Prevention training for staff		X	June 2005

Explanation for "No" Responses in either table above

BMP Code	Explanation for "No" Response
1D	Although the Tennessee Growth Readiness material has been used in many presentations given during the year, formal presentations and training of presenters has been done by others and was not clearly documented. Knox County has continued to work on fine-tuning and promoting the program.
3A-3D (Years 2-5)	These were not anticipated in the Year 1.
3E	An effort to begin mapping in conjunction with a watershed initiative and college GIS program provided input as to how the process should be shaped, but schedule commitments on the part of the other parties involved slowed progress. Cooperative projects with TVA and the University of Tennessee have been explored to do 'beta' outfall mapping in specific watersheds. Knox County staff believes more time than originally anticipated will be required to develop the most efficient method of mapping.
4C-4E, 4G, 5A, 5C	These were not anticipated in the Year 1.
6D	A policy has been developed by and with several departments within Knox County, but coordination of implementing the policy to all departments to whatever extent practical has taken longer than anticipated.

Go to next page.

II. Assessment of the appropriateness of identified BMPs (5.4.1)

For every BMP or amended BMP, assess the appropriateness of the BMP in the following table. For the first year annual report, assume "Good" unless you have evidence to support an inappropriate, minimal or superior assessment.

BMP	Short title	We consi				
Code		Inappro- priate	Minimal	Good	Superior	
				Х		
1A	Grading Permit Brochure			Х		
1B	Adopt-a-Watershed Program			Х		
1C	Water Quality Forum World Wide Web Site			Х		
1D	Tennessee Growth Readiness			Х		
1E	Grab Bag Programs/Events	••••••••••••••••••••••••••••••••••••••		Х		
1F	Erosion/Sediment Control Training			Х		
2A	Water Quality Forum			Х		
2B	Adopt-a-Stream			Х		
2C	Environmental Stewardship Program			Х		
2D	River/Stream Clean-Up (and Awareness) Days	÷		Х		
2E	Watershed Initiatives			Х		
3A	Illicit Discharge Complaint Tracking Database			Х		
3B	Non-Stormwater Screening Area Prioritization Map			Х		
3C	Illicit Discharge Education for Citizens			Х		
3D	Stormwater Ordinance Amendments			Х		
3 E	Outfall Mapping			Х		
4A	Pre-Construction Meetings for Site Development and Capital Improvement Projects			Х		
4B	Construction Site Inspections			Х		
4C	Buffer Zone Protection			Х		
4D	Erosion and Sediment Control Note Required on Design Plans	\$		Х		
4E	Stormwater Ordinance Amendments			Х		
4F	Erosion and Sediment Control Design Education			Х		******
4G	Grading Permit Requirements – Tracking Responsible Parties			Х		
4H	Complaint Receipt			Х		

5A	Knox County Site Planning Roundtable		Х	
5B	Environmental Stewardship Program		Х	
5C	Stormwater Management Ordinance		Х	
6A	Pollution Prevention Training		Х	
6B	Salt Storage Facility		Х	
6C	Truck Wash Rack	 <u></u>	Х	
6D	Pollution Prevention Policy		Х	

III. Progress with respect to MEP and Measurable Goals (5.4.1)

Element 5.4.1 requires you to report progress towards achieving the statutory goal of reducing the discharge of pollutants to the maximum extent practicable (MEP)¹, and the measurable goals for each of the minimum control measures.

A. MEP

Of the $[25]^2$ BMPs that comprise our storm water management program in the six minimum measures, we have accomplished Year 1 milestones for $[23 \text{ of } 25]^3$. This **does** represent substantial progress in achieving the statutory goal of reducing the discharge of pollutants to the MEP.

B. Measurable goals

Of the [25] *BMPs shown above, we have accomplished Year 1 milestones for* [23 of 25]. *This represents progress toward achieving the measurable goals identified in our original NOI and in this annual report. For the measurable parameters/goals we have been able to track for this past year, the measurements are recorded in Part IX*.

Signed

Dated

Mike Ragsdale, Knox County Mayor Printed Name and Title

Go to next page.

IV. Results of Information Collected and Analyzed (5.4.2)

Element 5.4.2 of the permit requires you to report results of information collected and analyzed, if any, during the reporting period, including monitoring data used to assess the success of the program at reducing the discharge of pollutants to the MEP

A brief summary of information, including analytical and/or non-analytical monitoring results, is listed below. Detailed information is collected and available at the offices of the MS4.

Parameter	Relevant BMP, or Purpose of Information	Conclusions
N/A	N/A	N/A

Go to next page.

V. Planned Activities and Proposed Changes to the Storm Water Management Program (5.4.3 and 5.4.4)

A. Storm water activities planned for next reporting cycle

Element 5.4.3 requires a summary of the storm water activities you plan to undertake during the next reporting cycle (including an implementation schedule).

The storm water activities planned for the next reporting cycle are the BMPs as reflected in our NOI and as amended (if any) in subsequent annual reports, including this annual report, and are as follows:

BMP Code	Title/Name of BMP	Milestone for next reporting cycle
1A	Grading Permit Brochure	Continue to distribute the brochure
1B	Adopt-a-Watershed Program	Provide financial support equal to or exceeding \$15,000
1C	Water Quality Forum World Wide Web Site	Funding and support of Web site development. A project activity log documenting time, content and financial contributions will be developed.
1D	Tennessee Growth Readiness	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR presentations.
1E	Grab Bag Programs/Events	Knox County will document support for the activities listed (in the BMP) or any additional activities.
1F	Erosion/Sediment Control Training	Maintain documentation of staff training and monitor attendance of local offerings of the TDEC ESC class.
2A	Water Quality Forum	Continuation of involvement in Water Quality Forum activities. These activities will be documented by Knox County.
28	Adopt-a-Stream	Continued support of Adopt-a-Stream by Knox County. The support will be documented in terms of time and financial contributions. Printed and digital media with information about the Adopt-a-Stream program will be maintained by Knox County.
2C	Environmental Stewardship Program	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
2D	River/Stream Clean-Up (and Awareness) Days	Continued support with documentation by Knox County.
2E	Watershed Initiatives	Knox County support of watershed initiatives in one or more Knox County watersheds. Activities and contributions will be documented.
3A	Illicit Discharge Complaint Tracking Database	Select software platform for database.
3B	Non-Stormwater Screening Area	Develop map showing priority areas.

	Prioritization Map	
3C	Illicit Discharge Education for Citizens	Research established education programs for identified illicit discharge hazards.
3D	Stormwater Ordinance Amendments	Review and amend Knox County Ordinance, if necessary.
3E	Outfall Mapping	Finalize a stream ("waters of the US") digital map for Knox County
4A	Pre-Construction Meetings for Site Development and Capital Improvement Projects	Knox County will document pre-construction meetings.
4B	Construction Site Inspections	Continue inspection and maintain documentation in the form of site inspection logs, file memos, or work order files.
4C	Buffer Zone Protection	Knox County will develop design requirements to protect riparian buffers during construction.
4D	Erosion and Sediment Control Note Required on Design Plans	Knox County will require a note to be included in desig plans stating the owner is responsible for installation an maintenance of construction site pollution prevention controls.
4E	Stormwater Ordinance Amendments	Amend Knox County Stormwater Management Ordinance to meet local needs and NPDES II requirements.
4F	Erosion and Sediment Control Design Education	All Knox County inspection and plans review staff will complete TDEC training and Knox County will advertis course and coordinate scheduling with TDEC.
4G	Grading Permit Requirements – Tracking Responsible Parties	Using recommendations from the Knox County Site Planning Roundtable, develop a process to streamline permitting while better tracking responsible parties.
4H	Complaint Receipt	Knox County will use a database to track and keep records of complaints received from the public. Also, develop and implement a protocol for receiving complaints, inspections, and enforcement.
5A	Knox County Site Planning Roundtable	Knox County will complete the Roundtable process and report the findings of the Roundtable.
5B	Environmental Stewardship Program	Knox County will continue financial and staff support and make public presentations. Documentation will be made of activities.
5C	Stormwater Management Ordinance	NA
6A	Pollution Prevention Training	Continue Year 1 milestone
6B	Salt Storage Facility	NA
6C	Truck Wash Rack	NA
6D	Pollution Prevention Policy	Implement and document a policy to be applied by all departments outlining pollution prevention practices and training protocols.

Additional, significant activities planned for the next reporting cycle are noted below.

Activity	Summary Description	Purpose
NA	NA	NA

B. Proposed changes to storm water management program

Element 5.4.4 requires a report on proposed changes to your storm water management program, including changes to any BMPs or any identified measurable goals that apply to the program elements.

Amended and replacement BMPs (if any) are reflected in Part I.A. and Part VIII, and in the above table and will not be repeated here. Additional, proposed changes are noted below.

Change to Program	Summary Description	Rationale
Expand process of developing outfall mapping	Allow flexibility in the time frame for instituting GIS outfall mapping.	To be done correctly and efficiently, outfall mapping can be done in conjunction with other activities such as watershed initiatives, or construction inspection.

VI. Water Quality Controls for Discharges to Impaired Waterbodies (3.1.2)

The table below lists impaired waterbodies affected by discharges from this MS4, the pollutants of concern, and the two BMPs we believe to be the most significant in controlling discharges of these pollutants.

Stream Name	Pollutants	Priority BMP 1	Priority BMP 2
Beaver Creek and Tributaries (Grassy Creek, Meadow Creek, Knob Fork, Hines Branch, etc.)	Siltation, habitat alterations, pathogens, nutrients	4B, Construction Site Inpsections	2E, Watershed Initiatives (includes partnerships with Utilities, TVA, USDA and others to address habitat restoration, wastewater system repair or retrofit, and agricultural BMPs
Stock Creek	Siltation, habitat alterations, pathogen	4B, Construction Site Inpsections	2E, Watershed Initiatives (includes partnerships with Utilities, TVA, USDA and others to address habitat restoration, wastewater system repair or retrofit, and agricultural BMPs
Bullrun Creek	Siltation, habitat alteration, pathogens	4B, Construction Site Inpsections	2E, Watershed Initiatives (includes partnerships with Utilities, TVA, USDA and others to address habitat restoration, wastewater system repair or retrofit, and agricultural BMPs
Roseberry Creek	Pathogens	2E, Watershed Initiatives (includes partnerships with Utilities, TVA, USDA and others to address habitat restoration, wastewater system repair or retrofit, and agricultural BMPs	3A, Illicit Discharge Complaint Tracking Database
Swanpond Creek	Siltation, habitat alterations	4B, Construction Site Inpsections	2B, Adopt-a-Stream
Little Flat Creek	Pathogens	2E, Watershed Initiatives (includes partnerships with Utilities, TVA, USDA and others to address habitat restoration, wastewater system repair or retrofit, and agricultural BMPs	3A, Illicit Discharge Complaint Tracking Database
Flat Creek	Siltation, habitat alterations	4B, Construction Site Inpsections	2C, Environmental Stewardship Program

The table below lists impaired waterbodies for which the state has promulgated a TMDL. For the waterbodies indicated, we have complied with the requirements of the permit as noted by the check marks. [The table below includes two columns for two TMDLs. If additional space is needed, add additional table(s).]

	Waterbody Name/ Pollutant of Concern	Waterbody Name/ Pollutant of Concern
Permit Requirement		
3.1.3.1 Is the pollutant likely to be found in storm water discharges from the MS4?	NA	NA
3.1.3.2 Does the <u>TMDL</u> include a pollutant wasteload allocation, implementation recommendations, or other performance requirements specifically for storm water discharges from your MS4?		
3.1.3.3 Does the TMDL address a flow regime likely to occur during periods of storm water discharge?		
3.1.3.4 If the above three questions are true, does implementation of existing storm water control measures meet the TMDL provisions?		
3.1.3.4-Or are additional control measures are necessary?		
3.1.3.5 Current and planned control measures are documented.		
3.1.3.6 Describe method to evaluate whether storm water controls are adequate to meet the requirements of the TMDL.		
3.1.3.7 If additional or modified controls are necessary, describe the type and schedule for the control additions/revisions.		

VII. Protection of Listed Threatened or Endangered Species (3.2)

We have followed the procedures given in section 3.2 of the Tennessee small MS4 general permit to ascertain whether or not storm water discharges from the MS4 are likely to jeopardize the continued existence of any species that are listed as endangered or threatened under the ESA, or result in the adverse modification or destruction of habitat that is designated as critical under the ESA ("critical habitat"). Below is a table indicating the procedures we have followed. We retain documentation of the evaluations and decisions reached through the evaluation.

[See the permit at section 3.2 for more detailed list of evaluation criteria.]

Evaluation criteria	Yes/No	Notes
3.2.1.2.1 Criteria A: No endangered or threatened species or critical habitat in proximity to MS4 or the point where discharges reach the receiving water		
3.2.1.2.2 Criteria B: Formal or informal consultation with the Fish and Wildlife Service under Section 7 of the Endangered Species Act (ESA) has been concluded and that consultation addressed effects of storm water activities or resulted in a no jeopardy or not-likely-to- affect opinion.		
3.2.1.2.3 Criteria C: Activities are authorized under Section 10 of the ESA		
3.2.1.2.4 Criteria D: Evaluated the effects of storm water discharges; we do not have reason to believe the discharge and discharge-related activities will jeopardize species or cause adverse modification or destruction of critical habitat.	No	Knox County will review policies and procedures pertaining to the Endangered Species requirements of the MS4 permit. However, Knox County requests guidance from TDEC to understand County responsibilities to meet the ESA requirements.
3.2.1.2.5 Criteria E: Our storm water discharges and related activities are already addressed in another operator's certification of eligibility. We agree to comply with conditions of that eligibility.		

Signed

Dated

Mike Ragsdale, Knox County Mayor Printed Name and Title

VIII. Explanation of Amended or Replaced BMPs (from Part I)

The following table provides description(s) of BMPs and/or milestones we wish to amend this reporting year and subsequent years, as indicated. [Add tables as necessary.]

For every BMP that is being amended or replaced, provide the following information and analysis. The BMPs you describe here should match the ones you indicated as "Amended/Replaced" in Part I.A. of this annual report.

BMP Code:1D	BMP: Tennessee Growth Readiness		
New BMP short title:	same		
New BMP description:	same		
BMP is being amended/replaced as:	Ineffective 🗖 Infeasible 🗖 See narrative. 🗹		
Expected effectiveness of new BMP:	Good		
Why is the replacement BMP expected to achieve goals:	Purpose of BMP is the same. The amendment is only in the method of delivery.		
BMP Milestone Year 1	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR-based presentations made in the Knox County area.		
BMP Milestone Year 2	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR-based presentations made in the Knox County area.		
BMP Milestone Year 3	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR-based presentations made in the Knox County area.		
BMP Milestone Year 4	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR-based presentations made in the Knox County area.		
BMP Milestone Year 5	Provide support and promotion of the Tennessee Growth Readiness Program. As best as possible, maintain a log of TGR-based presentations made in the Knox County area.		
Narrative:	This BMP should be changed to allow support of the program to be considered and to allow consideration for other parties making Tennessee Growth Readiness presentations. The purpose of the Tennessee Growth Readiness program is to train individuals who may not be government officials to make educational presentations.		

BMP Code:3E	BMP: Outfall Mapping		
New BMP short title:	same		
New BMP description:	same		
BMP is being amended/replaced as:	Ineffective 🗖 Infeasible 🗖 See narrative. 🗹		
Expected effectiveness of new BMP:	Good		
Why is the replacement BMP expected to achieve goals:	The BMP purpose remains the same. The amendment clarifies that the time will be needed to plan mapping efficiently.		
BMP Milestone Year 1	Scope method and equipment needed to establish digital mapping of outfalls to "waters of the US" in Knox County.		
BMP Milestone Year 2	Finalize a stream ("waters of the US") digital map for Knox County		
BMP Milestone Year 3	Begin outfall mapping effort and establish mechanism for updating to reflect changes in outfalls due to new construction.		
BMP Milestone Year 4	Continue mapping existing and new outfalls.		
BMP Milestone Year 5	Continue mapping existing and new outfalls.		
Narrative:	The timing and sequence for implementation of this BMP was not clearly delineated in the NOI. This amendment clarifies the process and provides clear milestones.		

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BMP Code:4B	BMP: Construction Site Inspections		
New BMP short title:	same		
New BMP description:	same		
BMP is being amended/replaced as:	Ineffective 🗖 Infeasible 🗖 See narrative. 🗹		
Expected effectiveness of new BMP:	Good		
Why is the replacement BMP expected to achieve goals:	Purpose of BMP is the same. The amendment is only in the method of documentation.		
BMP Milestone Year 1	Continue inspection and maintain documentation in the form of site inspection logs		
BMP Milestone Year 2	Continue inspection and maintain documentation in the form of site inspection logs		
BMP Milestone Year 3	Continue inspection and maintain documentation in the form of site inspection logs		
BMP Milestone Year 4	Continue inspection and maintain documentation in the form of site inspection logs		
BMP Milestone Year 5	Continue inspection and maintain documentation in the form of site inspection logs		
Narrative:	This BMP should be changed to allow more flexible documentation on the part of construction inspectors. Inspection journals proved to be very time- consuming to keep up-to-date and staff believes that complaint database logs combined with file memos for construction sites are a suitable substitute if journals are not always practical to maintain.		

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IX. Tracking of measurable goals

For each of your BMPs, you should have established a measurable parameter, and goal in terms of that measurable parameter. Measurable parameters are ways to measure activities or effects of a BMP. The goal is the parameter value established as a target. If you are not yet measuring the parameter for a given BMP, indicate Not Applicable Yet (NAY) in the Result column.

BMP Code	BMP Title	Measurable parameter	Result	Goal
1A	Grading Permit Brochure	Number of Grading Permits Issued	Brochure provided with grading permits and at public information events.	Distribute brochure with grading permits
1B	Adopt-a-Watershed Program	Support of Adopt-a-Watershed	\$30K support dedicated for AAW program for 2003-2004	Support equal or exceeding \$15,000
1C	Water Quality Forum World Wide Web Site	Funding and support of the WWW site, progress logged	Continued support of Web site	Continued support of Web site
1D	Tennessee Growth Readiness	Support Tennessee Growth Readiness program presentations in Knox County area	NAY	Log presentations of TGR.
1E	Grab Bag Programs/Events	Document support of various public education activities	Support of Activities Documented	Support of Activities Documented
1F	Erosion/Sediment Control Training	Completion of Erosion and Sediment Control Training by Knox County staff	Training of all key staff completed	Training of all key staff completed
2A	Water Quality Forum	Documented participation in Water Quality Forum activities by Knox County	Activities have been documented though WQF Web site, executive committee meeting minutes, etc.	Documented participation in Water Quality Forum activities.
2B	Adopt-a-Stream	Continued financial and logistical support of Adopt-a- Stream	Support has been provided and documented through logs and legislative record of Knox	Continued financial and logistical support of Adopt-a- Stream

			County Commission	
2C	Environmental Stewardship Program	Continued financial and logistical support of Environmental Stewardship Program	Support has been provided and documented through logs and legislative record of Knox County	Continued financial and logistical support of Environmental Stewardship Program
2D	River/Stream Clean-Up (and Awareness) Days	Continued support by participation, promotion, material or financial support	Knox County support has been provided and logged in an activity journal.	Continued support by participation, promotion, material or financial support
2E	Watershed Initiatives	Leadership in watershed planning initiatives.	Watershed planning initiative activities have been logged through meeting minutes and record of financial support	Documentation of leadership in watershed planning initiatives
3A	Illicit Discharge Complaint Tracking Database	Develop a scope of needs for an illicit discharge complaint tracking database	Developed a working document of the database needs.	Develop a scope for database development.
3B	Non-Stormwater Screening Area Prioritization Map	Identify priority land uses for potential non-stormwater screening sites	Priority land uses by zoning/MPC land use data have been compiled.	Produce a list of priority land uses
3C	Illicit Discharge Education for Citizens	Compile a list of potential illicit discharge hazards in Knox County.	A list of hazards has been developed.	Produce a list of illicit discharge hazards.
3D	Stormwater Ordinance Amendments	Review and amend the Stormwater Management Ordinance.	NAY	NAY
3E	Outfall Mapping	Develop a map showing location of stormwater outfalls to waters of the US.	Knox County watersheds have been delineated. Outfalls have been located through stream	NAY

			walks by student groups or as part of watershed initiatives.	
4A	Pre-Construction Meetings for Site Development and Capital Improvement Projects	Number of pre-construction meetings held.	Documentation of pre- construction meetings collected.	Pre- construction meetings held for new construction permitting.
4B	Construction Site Inspections	Continue construction site inspection.	Some documentation of construction site inspections and work order history showing construction- related inspections	Documentation of construction site inspections maintained by Knox County.
4C	Buffer Zone Protection	Develop design requirements to protect riparian buffers	NAY	NAY
4D	Erosion and Sediment Control Note Required on Design Plans	Require note on design plans.	NAY	NAY
4E	Stormwater Ordinance Amendments	Amendments to Stormwater Management Ordinance	NAY	NAY
4F	Erosion and Sediment Control Design Education	County staff to complete ESC training and promote courses to contractors and other potential clients	All inspection and management staff have completed TDEC ESC training.	Maintained documentation showing staff is trained in Erosion and Sediment control using TDEC courses
4G	Grading Permit Requirements – Tracking Responsible Parties	Improvements to client tracking for the Grading Permit process	NAY	NAY
4H	Complaint Receipt	Use of database to track erosion and sediment control complaints received from the public	Erosion and sediment control complaint tracking has been added to Knox County' 'work order' database	Documented use of database to track erosion and sediment control complaints.
5A	Knox County Site Planning Roundtable	Begin site planning roundtable process	Site planning roundtable meetings conducted throughout the permit year.	Documentation of the Site Planning Roundtable process in Knox County

			Meeting minutes, notes or attendee lists are on file.	
5B	Environmental Stewardship Program	Financial support of ESP program.	Knox County has provided \$15,000 plus extensive staff time in support of the ESP program. The ESP program has been presented in public presentations as well.	Continued financial support and promotion of the ESP program
5C	Stormwater Management Ordinance	Update to Stormwater Management Ordinance	NAY	NAY
6A	Pollution Prevention Training	Training of Knox County staff	County service center, road maintenance supervisors, and school administrators have been trained in the basics of pollution prevention	On-going training with documentation
6B	Salt Storage Facility	Installation of a facility to protect the on-site storm sewer system from runoff from stored road salt	New salt storage shed constructed.	New salt storage shed constructed.
6C	Truck Wash Rack	Installation of a facility to protect the on-site storm sewer system from runoff from truck and vehicle washing	Truck wash constructed.	Truck wash constructed.
6D	Pollution Prevention Policy	Development of pollution prevention policy	A policy has been developed for the Knox County Fleet Service Center and for Knox County Schools. Further development and implementation will continue in the following	Development of pollution prevention policy to be used by all departments of Knox County government.

Footnotes

¹ *Maximum extent practicable* (MEP) is the statutory standard that establishes the level of pollutant reductions that operators of regulated MS4s must achieve. The CWA requires that NPDES permits for discharges from MS4s ''shall require controls to reduce the discharge of pollutants to the maximum extent practicable, including management practices, control techniques and system, design and engineering methods.'' CWA 402(p)(3)(B)(iii). ² Insert the number of BMPs listed in your NOI, as updated by subsequent annual reports. Example: if each minimum

² Insert the number of BMPs listed in your NOI, as updated by subsequent annual reports. Example: if each minimum measure has five BMPs associated with it, you would insert [30] as the number of BMPs. [6 X 5]

³ Insert the number of Year 1 milestones accomplished. For example, if 27 Year 1 milestones are accomplished at the end of Year 1, then you would insert [27 of 30] in these brackets.