Section I. Program Administration

1. Resources and Overall Program Management

The State of Tennessee:

The National Pollutant Discharge Elimination System (NPDES) program is administered in Tennessee by the Tennessee Department of Environment and Conservation (TDEC), Division of Water Pollution Control (WPC). TDEC has its central office in Nashville. In addition to the central office, TDEC has eight Environmental Assistance Centers (EACs), which handle environmental issues in specified counties. EAC staff are responsible for inspections, compliance and ambient monitoring, as well as certain enforcement functions. The EACs are located in Chattanooga, Columbia, Cookeville, Jackson, Johnson City, Knoxville, Memphis, and Nashville.

Two sections of TDCE handle the NPDES permitting. The Mining Section (in Knoxville) handles all mining-related permitting, while the Permit Section (in TDEC’s central office) handles all other permitting issues (i.e., industrial, municipal, stormwater, general permits). The Enforcement and Compliance Section (also in TDEC’s central office) handles all enforcement (with assistance from the EACs), with the exception of enforcement involving mining facilities, which is handled by the Mining Section.

The NPDES program is organized to provide close coordination with the water quality standards and total maximum daily loading (TMDL) programs to ensure that NPDES permits accurately include the most recent wasteload allocations and state water quality standards. This is done on a case-by-case basis, and such coordination can include individual staff discussions between the programs as well as use of an in-house permit database.
The most current memorandum of agreement between the EPA Region 4 and TDEC regarding the implementation of the NPDES program is dated October 22, 1993.

Table 1: Tennessee Resource and Program Summary

<table>
<thead>
<tr>
<th>Scope of NPDES Program in Tennessee</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>NPDES Permit Program(^a)</td>
<td>12/28/1977</td>
</tr>
<tr>
<td>Federal Facilities</td>
<td>9/30/1986</td>
</tr>
<tr>
<td>Pretreatment Program</td>
<td>8/10/1983</td>
</tr>
<tr>
<td>General Permits</td>
<td>4/18/1991</td>
</tr>
<tr>
<td>Biosolids</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

\(^a\) The stormwater and concentrated animal feeding operations (CAFOs) permitting authority was authorized at the same time as the base NPDES program. TDEC is responsible for all Phase I and Phase II stormwater and CAFO NPDES activity in the State.

NPDES Universe in Tennessee\(^b\)

<table>
<thead>
<tr>
<th>Fiscal Year (FY) 2003</th>
<th>Major Facilities</th>
<th>Minor Facilities</th>
<th>Minor Non-Stormwater Facilities with General Permits</th>
</tr>
</thead>
<tbody>
<tr>
<td>No. of Sources</td>
<td>159</td>
<td>1288</td>
<td>852</td>
</tr>
<tr>
<td>% National Universe</td>
<td>2.4%</td>
<td>3.1%</td>
<td>2.2%</td>
</tr>
</tbody>
</table>

\(^b\) Numbers are from the 7/9/2004 Management Report

Tennessee's NPDES Program Resources \(^c\)

<table>
<thead>
<tr>
<th>Source</th>
<th>Amount for FY2003</th>
</tr>
</thead>
<tbody>
<tr>
<td>State(^d)</td>
<td>3,090,271</td>
</tr>
<tr>
<td>Federal Funding</td>
<td>1,722,622</td>
</tr>
<tr>
<td>Total Funding</td>
<td>4,812,893</td>
</tr>
<tr>
<td>Workyears</td>
<td>79</td>
</tr>
</tbody>
</table>

\(^c\) From Tennessee’s Section 106 program estimates.
\(^d\) The State is also funded through permitting fees.

The financial resources cover permitting, compliance, enforcement, technical assistance, compliance investigations, data entry, monitoring, and legal costs that TDEC incurs for the authorized NPDES program, which includes the municipal, industrial, and mining programs, combined sewer overflow (CSO) program, sanitary sewer overflow (SSO) program, stormwater management program, and pretreatment programs. Water quality standards and ambient water quality programs are also supported by these resources.

The major obstacle for the State in administering the NPDES program is maintaining a high-quality, experienced staff.

Training is accomplished through several means. First, new employees are mentored by experienced staff. All field inspectors also receive in-the-field training with experienced staff. Technical classes may
be given to NPDES and enforcement staff. Staff members are required to attend EPA’s NPDES Permit Writers’ Training Course. Senior-level staff members are encouraged to attend the Water Quality Standards Academy. The division also provides training at its annual statewide staff meeting. In addition, the division has developed standard operating procedures and protocols for such functions as permit writing, inspections, and sampling.

**EPA Region 4:**

EPA Region 4’s Water Management Division, Permits, Grants, and Technical Assistance Branch (PGTAB) and Water Programs Enforcement Branch (WPEB) administer the NPDES program in the Region. Permitting responsibilities in the NPDES and Biosolids Permits Section of the PGTAB, and enforcement responsibilities for the NPDES program are shared by the Central, Gulf, and Eastern Enforcement Sections of the WPEB.

The permitting and enforcement sections coordinate activities pertaining to Region 4’s direct implementation of the NPDES program. For example, the enforcement section reviews all draft non-delegated permits prepared in Region 4, and the permitting section identifies potential areas of concern for enforcement, which are highlighted in permit applications. For all Region 4 permitting activities, all permit compliance data are entered into the Permit Compliance System (PCS) by the enforcement section.

The NPDES program is organized to provide close coordination with the water quality standards and TMDL programs to ensure that NPDES permits accurately include the most recent wasteload allocations and reflect appropriate state water quality standards and federal standards.

The Region has direct implementation responsibilities for issuing permits on Indian lands in Alabama, Florida, Mississippi, and North Carolina; for offshore oil and gas extraction facilities and other offshore activities in the Gulf of Mexico and the Atlantic Ocean in Alabama, Florida, Georgia, Mississippi, North Carolina, and South Carolina; and for one publicly owned treatment works (POTW) in Florida that discharges to federal waters. The Region does not have any direct implementation responsibilities in Kentucky or Tennessee, except for biosolids.

The NPDES and Biosolids Permits Section has dedicated 1.0 full-time equivalent (FTE) staff member for implementation of the biosolids permitting program. A draft general permit is in the final stage of preparation and will be issued to cover sludge management facilities in all eight States in the Region. The resources for the biosolids permitting program are adequate at this time.

**2. State Program Assistance**

**EPA Region 4:**

The Region serves as the permitting authority for biosolids for all eight Region 4 States because none have an approved biosolids program. The Region will assist the States in assuming authorization for the biosolids program as requests are received.
3. EPA Activities in Indian Country

Not applicable because there are no federally recognized Tribes in Tennessee.

4. Legal Authorities

_EPA is conducting a comprehensive review of the State’s legal authorities. This review has not yet been completed. As a result, EPA is reserving this section of the profile; when the legal reviews are complete, EPA will update profiles to include the results of the reviews._

On November 24, 2004, the Johnson County Citizen Committee for Clean Air and Water (JCCCAW) filed a petition to withdraw Tennessee’s NPDES authority based on concerns about public participation and judicial review in the NPDES permitting process.¹

5. Public Participation

_An evaluation of the State’s legal authorities regarding public participation will be included in the legal authority review. As noted above, the legal authority review section of this profile is reserved pending completion of the legal authority review._

_The State of Tennessee:_

The State provides for public participation in its NPDES program under the Tennessee regulations, section 1200-4-5. The State does not have a specific definition of “public.”

Tennessee’s public participation procedures include publication of public notices in newspapers and procedures for public comments, public meetings, and administrative hearings. The formal procedures for public participation in permitting activities are listed in Tennessee’s regulations, section 1200-4-5. Under State law, third parties do not have an appeal right that is the same as a permittee’s right to appeal an issued permit. Third parties do have rights to argue either the environmental impact of a permit under the Tennessee Water Quality Control Act or the permit process under the Uniform Administrative Procedures Act. Tennessee clarifies these avenues in section 1200-4-5.

The State holds public meetings for watershed involvement. With respect to permit issuance, the State considers holding a public hearing, even for one requestor.

The public can access Tennessee’s information on TDEC’s Web site at [http://www.state.tn.us/environment/](http://www.state.tn.us/environment/). The Web site provides information on persons to contact, permit application forms, water quality standards, rules and regulations, watershed information, public notices, and publications. The Web site does not provide information on individual final permits or enforcement activities. General permits can be accessed on Tennessee’s Web site at [http://www.state.tn.us/environment/permits/#wpc/](http://www.state.tn.us/environment/permits/#wpc/). Although individual permits are not available on

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¹ This petition is not reflected in the National Data Sources column of the Management Report, measure #16, because the national data are based on information from the Withdrawal Petition Database as of April 12, 2004, and the petition was filed in November 2004.
TDEC’s Web site, some individual NPDES permits and fact sheets issued by TDEC may be accessed online through EPA’s Web site. Generally, this includes all permits for major facilities issued since November 2002. Instructions for accessing these documents are available at http://www.epa.gov/npdes/permitdocuments. Individual permits can be obtained by contacting TDEC’s central office or the EAC that serves the area where the facility is located.

**EPA Region 4:**
Region 4 has an NPDES permitting Web site, which can be accessed at http://www.epa.gov/region4/water/permits. The Web site includes information regarding the Region 4 permit organization, permit access through a link to Envirofacts, access to general permits, and overall NPDES information. The Region maintains a hard copy filing system for all permitted facilities. All files are arranged by State and NPDES number.

### 6. Permit Issuance Management Strategy

#### The State of Tennessee:
The State of Tennessee administers all point source pollution control programs with the exception of point sources in Indian lands. At the end of 2003, Tennessee’s permit rate for major facilities was 89.8%, which is above the national average (84.2%), but just short of meeting the national current permit goal (90%) for major facilities. The State’s permit rate for minor facilities covered by individual permits was 93.7%, which far exceeds the national permit average (81.4%) in 2003 and meets the 2004 national goal for minor facilities of 90%. As of July 2004, the permits for five major dischargers had been expired for more than 2 years. One municipal separate storm sewer system (MS4) permit had an expired for more than 2 years. The permits for three minor dischargers had been expired more than 2 years, but none of these permits had been expired for more than 4 years. The permit issuance and trend data for 2000 through 2003 are shown below.

The State of Tennessee’s permit issuance and trend data show a consistent rate of timely issued permits over the past 4 years. The State’s strategy to increase permit issuance includes monthly meetings between the Permitting Manager and individual permit writers to discuss permitting issues to ensure that permit issuance is timely and to discuss problems that might prevent the issuance of permits as they arise. Previously, permit issuance was often delayed by a cumbersome public notice verification process in which the State required the permittees to publish the public notice in a newspaper and send TDEC an affidavit certifying it had been done. The situation was remedied by the promulgation of the new permitting rules that give the State flexibility in the public notice process.
Table 2: Percentage of Facilities Covered by Current Permits in Tennessee
(State-issued permits)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Facilities</td>
<td>90.4%</td>
<td>91.6%</td>
<td>87.7%</td>
<td>89.8%</td>
</tr>
<tr>
<td>Minor Facilities</td>
<td>92.1%</td>
<td>94.9%</td>
<td>95.0%</td>
<td>93.7%</td>
</tr>
<tr>
<td>Covered by Individual Permits</td>
<td>69%</td>
<td>73%</td>
<td>79%</td>
<td>81%</td>
</tr>
<tr>
<td>Minor Facilities</td>
<td>N/A</td>
<td>N/A</td>
<td>90%</td>
<td>95.3%</td>
</tr>
<tr>
<td>Covered by Individual General Permits</td>
<td>N/A</td>
<td>N/A</td>
<td>85%</td>
<td>86%</td>
</tr>
</tbody>
</table>

Source: Permit Compliance System (PCS), 12/31/00; 12/31/01; 12/31/02; 12/31/03. (Values in the 2003 column are PCS data as of 12/31/03. The values in the National Data Sources column of the Management Report, measures #19 and #20, are PCS data as of 6/14/04.)

EPA Region 4:
The States within Region 4 are kept well informed of their backlog status through the Regional Low Backlog Maintenance Strategy. Since the mid-1980s, EPA Region 4 has provided the State with a monthly NPDES update report, which includes current backlog numbers. The Region reports are requested from any State having major backlogs greater than 10%. For each permit that has been expired for more than 2 years, the State must provide the reason for the backlog, issuance progress, and a tentative date for reissuance. In addition, every month, the State receives from EPA Region 4 the list of NPDES permits that have expired or will expire in the near future, for which drafts have not been received by EPA for review. The draft permits in consideration are those for which EPA has permit overview authority under the EPA/State memorandum of agreement (e.g., major facilities, minor primary facilities). The State in turn informs EPA of any draft permits that it has sent but that appear on the non-receipt list, allowing any misdirected draft permit to be located or resent quickly.

7. Data Management

The State of Tennessee:
The State uses the Permit Compliance System (PCS) to manage its NPDES program. The State also maintains an electronic discharge monitoring report (eDMR) system, called DEEMERs, which feeds data into PCS through an automated interface. The State sees the potential of DEEMERs to be a major improvement over past methods of maintaining PCS. The State enters all other data into PCS directly. The State also maintains its own database to track permit actions and correspondence. Structural integrity and relational maintenance are performed on the State permit actions database, but there is no formal data quality assurance program in place.

The State maintains geographic data at the facility level but not the pipe level. Otherwise, the State maintains data for all Water Enforcement National Data Base (WENDB) data elements. As of June 28, 2004, the DMR data entry rate for major facilities was 100% for the period of July–September 2003.
PCS is used to track limits and enforcement actions for all major and minor permits, including stormwater permits, concentrated animal feeding operations (CAFOs), and CSOs (where the ability exists). The State also requires permittees to report SSOs on their DMRs; these data are also entered into PCS.

**EPA Region 4:**
Not applicable because the Region does not have direct implementation responsibilities in Tennessee.
Section II. Program Implementation

1. Permit Quality

The State of Tennessee:

The State of Tennessee routinely assesses whether a given facility discharges to an impaired water and coordinates with its TMDL program to incorporate any wasteload allocation requirements into the NPDES permit. If a TMDL has not yet been established, Tennessee ensures that historical loadings are maintained for any parameter of concern. This practice reflects an informal policy that the State has developed to ensure the protection of impaired waters prior to the development of a TMDL. The State of Tennessee ensures that technology-based requirements, at a minimum, are incorporated into NPDES permits.

To protect water quality, Tennessee has developed “reasonable potential” procedures for both chemical-specific parameters and for whole effluent toxicity (WET). The State will use these procedures to determine when limits for toxic pollutants are to be included in permits. If available, ambient background data are used in determining RPP, or one-half the chronic criterion will be used if the ambient data are unknown. For toxic pollutants, the fact sheet/rationale will include the actual spreadsheet showing the calculated water quality data. A side-by-side comparison will be done, as appropriate, between water quality limits and effluent guideline limits to show which are more stringent.

Tennessee uses standardized language and templates, whenever possible, to streamline the permit drafting process.

The rationales for the State’s permits are generally well-written and document the development of permit limits. Data used to develop permits come from a variety of sources, such as the permittee’s application, PCS, EPA’s assessments (i.e., STORET), and other databases maintained by the State and EPA.

To improve permit quality and efficiency, Tennessee routinely uses general permits. Based on mid-2003 data, Tennessee administers five general permits for non-stormwater discharges, covering a total of 852 facilities. Tennessee also administers three general permits for stormwater discharges (see Section II.4 Stormwater for the number of facilities covered by these general permits).

In accordance with the NPDES memorandum of agreement, the State of Tennessee routinely sends all municipal and industrial major permits, all minor primary industrial permits with process wastewater, all CAFO permits and all general permits to Region 4 for concurrent review. The Region 4 State Coordinator provides comments or expresses concerns to the State after review of each permit. From July 2003 through June 2004, the Region received and reviewed approximately 80 permits from Tennessee. The Region uses checklists during normal individual permit review and during its midyear review (see EPA Region 4 activities, below). These checklists contain most of the central tenets developed by EPA.

Tennessee has developed and has been implementing a WET program and has developed reasonable potential procedures for WET. Tennessee routinely incorporates sublethal limits in NPDES permits, as
needed. Tennessee tracks DMRs and uses them to determine when a permittee violates its WET permit requirements, including WET limits. The State invests a lot of resources in an active WET monitoring program and has numerous monitoring stations that monitor during watershed cycles. In addition, the State performs compliance “sampling inspections” of its permittees. Permittees and environmental groups may perform instream monitoring to identify WET exceedances.

EPA Region 4:
Each year, Region 4 conducts a midyear and end-of-year review of the State’s NPDES program. The midyear process is used to review the administrative and technical NPDES permitting processes and to audit a representative sample of permits that did not receive concurrent review during the previous year, using a standardized format. Interviews are conducted with State NPDES management following a pre-determined questionnaire. The Water Division Director or his designee completes the midyear review with a site visit to discuss any identified issues. The State takes corrective actions, if necessary, and the Region follows up during the end-of-year evaluations conducted over the telephone.

2. Pretreatment

The State of Tennessee:
Tennessee received authorization to administer the pretreatment program on August 10, 1983. There are now 102 approved pretreatment programs in the State. These approved programs act as control authorities for 769 significant industrial users (SIUs), 340 of which are categorical industrial users (CIUs). All SIUs have control mechanisms. The State audits approximately 20% of the approved programs and inspects approximately 80% of the approved programs annually. This arrangement means that all programs should be audited within a 5-year period.

The State typically completes audit reports within 30 days of the inspection or audit. The State issues notices of violation and convenes meetings to follow up on deficiencies discovered during the audits. The State refers the violations for enforcement action if deficiencies are not corrected in a timely manner.

As a general practice, the State requires all POTWs to develop a pretreatment program if they receive wastewater from a facility identified as an SIU. The State has authority to directly regulate industrial users in the absence of an approved pretreatment program, but does not currently act as the control authority for industrial users.

EPA Region 4:
Not applicable because the Region has no direct implementation pretreatment responsibilities in Tennessee.

3. Concentrated Animal Feeding Operations

The State of Tennessee:
Tennessee is authorized to administer the NPDES program for CAFOs. The State’s new CAFO rules require CAFO operators to have manure management plans consistent with the new federal regulations. CAFO permits are issued in a timely manner.
The new federal rule requires all CAFOs to apply for permits by 2006. Tennessee’s recently revised rules meet the requirements of the new federal CAFO rule. The State has technical standards in place that conform to the revised CAFO regulations.

Tennessee issues individual NPDES permits for large CAFOs. An NPDES general permit is used for medium CAFOs. Tennessee and the Region have agreed on a schedule for implementation of the new rule. Based on the 1997 census of agriculture data, Tennessee has about 129 potentially large CAFOs. Individual CAFO permits have been issued, and 130 facilities are covered under the general permit; therefore, more than 99% of CAFO facilities in Tennessee are covered by a permit. All permits contain nutrient management plans (NMPs). New permits include the nine minimum measures from the new CAFO rule.

The State measures the effectiveness of NMPs by conducting site inspections and through its overall ambient water quality monitoring program. The State does not require that NMPs be developed by certified planners; however, large CAFOs with liquid manure management systems must develop and implement comprehensive NMPs. The State performs inspections as needed. The State plans to use receiving stream use support status to target CAFOs for these actions.

Tennessee has issued its NPDES general permit for CAFOs that meet the requirements of the new federal rule. A general permit for Class II CAFO was issued on August 6, 2004. A copy of the permit, rationale, and other information are available on the State’s Web site at http://www.state.tn.us/environment/permits/cafo.php.

**EPA Region 4:**
Not applicable because the Region does not have direct implementation for any CAFO facility at this time.

4. **Stormwater**

**The State of Tennessee:**

**Phase I Municipal Separate Storm Sewer Systems:** The State has issued four Phase I MS4s; one of them (Chattanooga) has expired on September 30, 2001. A draft of the Chattanooga permit is under development, and the State plans to reissue the permit later this year. The State is also in the early stages of drafting a Phase I/Phase II type statewide permit to address the Tennessee Department of Transportation. The delay in the reissuance of this permit is due to staff turnover and competing program priorities. All Phase I MS4s are tracked in PCS.

**Phase II Municipal Separate Storm Sewer Systems:** The State issued a general permit on February 27, 2003, to cover Phase II MS4s. Eighty-three notices of coverage (NOCs) have been issued. Several more notices of intent (NOIs) are expected because the State provided late notification to the communities. The State has set up review procedures whereby NOIs are mailed to State field offices where an initial review takes place; a second review of NOIs takes place at the State’s main office. The current count of NOCs does not include campuses or State and federal facilities. The State is developing an inventory of State and federal facilities for consideration of permitting on a case-by-case basis. A draft of the individual permit for Hamilton County was developed and public notice was given in May 2004. The final individual permit is expected to be issued by the end of September 2004.
Construction: The construction general permit covering construction sites greater than 1 or more acres became effective on March 10, 2003. The construction general permit covers 2,250 facilities. The State maintains a Web-accessible database for the public and an electronic tracking system for NOIs. NOIs are available to the public upon request.

Industrial: TDEC has chosen to cover industrial sites under a multisector general permit that became effective on March 1, 2002. The permit covers some 6,443 facilities. The State maintains a Web-accessible database for the public and an electronic tracking system for NOIs. NOIs are available to the public upon request.

EPA Region 4:
Not applicable because the Region has no direct implementation responsibilities in Tennessee.

5. Combined Sewer Overflows/Sanitary Sewer Overflows

The State of Tennessee:
Sanitary Sewer Overflows: Tennessee tracks SSOs using PCS. TDEC’s permits require each municipality to notify State authorities when an overflow has occurred and report SSOs on its DMR. Tennessee also has standard permit language that requires any permittee to post a sign at each outfall; in addition, a sign must be posted for any bypass or overflow point in the collection system (if that bypass or overflow has discharged more than five times in the past year).

Combined Sewer Overflows: All three CSO communities (Chattanooga, Clarksville, and Nashville) are required to incorporate and implement several best management practices (that contain and address the nine minimum controls measures). All long-term control plans for the three CSO communities have been developed and approved. For each community, CSO controls are completed and in place. Barriers to implementation might arise because of budget constraints on the municipal level. Staff shortages on the State level may have some effect on the review and follow-up of municipal progress reports.

- Nashville: Nashville has taken a demonstrative approach, being required to submit DMRs, monitoring data, and stream assessments.

- Clarksville: Clarksville has taken the presumptive approach. Clarksville has three CSO points and must correlate rainfall data with the CSO discharges and submit DMR data on the CSO discharges.

- Chattanooga: Chattanooga has taken the presumptive approach. The Chattanooga permit is under development for reissuance. Documentation for all permitted facilities must be submitted regularly, based on administrative orders issued with the permits. Chattanooga completed its last CSO control structure in the fall 2002. All facilities must continue to collect data and submit the data to the State upon request.

EPA Region 4:
Not applicable because the Region has no direct implementation responsibilities in Tennessee.
6. Biosolids

**The State of Tennessee:**
Tennessee does not administer the federal biosolids (sludge) program. Some sludge requirements have been incorporated into NPDES permits issued by TDEC.

**EPA Region 4:**
The Region serves as the biosolids permitting authority for all eight Regional States because none have an approved biosolids program. The Region’s NPDES and Biosolids Permits Section and the Clean Water Act Enforcement Section implement the biosolids program. The permits program provides regulatory and permitting guidance on implementation of the regulations in 40 CFR part 503 for biosolids use and disposal. These regulations are self-implementing, which means that compliance with the regulations is required without issuance of an individual or general permit. The NPDES and Biosolids Permits Section serves as the permitting authority for the biosolids program. As the permitting authority, the permits section has several biosolids functions. These include issuing individual or general permits that are deemed necessary because of potential public health or environmental concerns; reviewing and approving site closure plans; issuing approval letters for the closure of surface disposal sites; reviewing and approving equivalent pathogen reduction processes; providing technical and compliance assistance to facility personnel, consultants, and State and local officials; and providing biosolids training to States and municipalities. The permits section also works with the compliance and enforcement section to ensure the timely submittal of annual biosolids reports. The compliance and enforcement section implements the enforcement program by reviewing and assessing annual biosolids reports, conducting compliance evaluation inspections, drafting inspection reports, developing various types of enforcement actions, providing technical and compliance assistance, and providing training on the biosolids program.
Section III. NPDES Compliance Monitoring and Enforcement Response

In a separate initiative, EPA’s Office of Enforcement and Compliance Assurance (OECA), EPA Regions, and the Environmental Council of the States have developed a tool for assessing State performance in enforcement and compliance assurance to ensure that States meet agreed-upon minimum performance levels and provide a consistent level of environmental and public health protection nationwide. OECA will use the State profiles to focus these efforts and identify areas needing further discussion and evaluation.

1. Enforcement Program

The State of Tennessee:
The State of Tennessee identifies and addresses all significant noncompliance violations using EPA criteria outlined in program delegation documents and the memorandum of agreement between EPA and the State. The State of Tennessee maintains a current Enforcement Management System (EMS), which describes how and when the State will take action on violations. The EMS also addresses the level of formal enforcement that should be taken, which includes consideration of several factors related to violations such as the environmental and health impacts.

Once the State has issued a formal enforcement order, the State enters the information into a Microsoft Access database tracking system to ensure the order is complied with.

Data reported to EPA by the State of Tennessee indicate that the State took 14 formal enforcement actions against facilities in fiscal year (FY) 2003 with a total of $1,042,311 collected in penalties. This was an increase from four formal enforcement actions taken in FY2002 with a total of $651,000 collected in penalties. To date, two formal enforcement actions have been taken in FY2004 and a total of $65,000 has been collected in penalties.

EPA’s data trend indicates that Tennessee’s percentage of major facilities in significant noncompliance is above the national average of 21%, and increased from 24% in FY2002 to 35% in FY2003.

EPA Region 4:
Region 4’s Water Management Division, Water Programs Enforcement Branch (WPEB), is responsible for compliance tracking, inspections, and enforcement of permits for biosolids facilities in all eight Region 4 States.

During FY2003, 1 administrative order, 19 administrative penalty orders, and 19 settlements were issued for biosolids violations. As of midyear 2004, 2 administrative orders, 8 administrative penalty orders, and 8 settlements have been issued for biosolids violations.

WPEB addresses all noncompliance problems. Those which cause environmental or human health impacts are addressed in accordance with the EMS, which includes escalation of action and a penalty for noncompliance causing environmental or human health impacts.
WPEB uses the EMS along with EPA national and Regional guidance to address violations that occur at biosolids facilities. Staff members recommend and prepare actions, which are reviewed and signed off on by management to ensure consistency with national and Regional guidance and policies.

WPEB has enforcement staff assigned to each enforcement action issued to facilities under direct implementation. The enforcement officer is responsible for ensuring that all provisions of the action are completed in accordance with the requirements and the deadlines set as part of the action. Because the assigned enforcement officer is usually the person who provided input into the action when it was issued, the enforcement officer is very familiar with the requirements and due dates. All enforcement actions are entered into PCS, which allows for the tracking of all schedule items. Follow-up site visits or meetings are held, as needed, to observe and discuss the completion of requirements. These meetings and visits allow WPEB to learn early on of any foreseen problems in meeting deadlines so that alternatives can be discussed and WPEB management briefed.

WPEB escalates enforcement, including penalties, based on the EMS.

### 2. Record Keeping and Reporting

**The State of Tennessee:**

For Pretreatment: The State maintains all documents that are part of the pretreatment program in a separate pretreatment program file. The pretreatment program records are well organized.

Other Enforcement: Two copies of the NPDES conventional and stormwater files are kept; one at the regional offices and one at the central enforcement office in Nashville. Not all records document the rationale for penalties, but this was brought to the attention of the State during the 2001 midyear review process. A follow-up has not been conducted to determine whether the State has addressed this element. Data are reported to the national data system in accordance with the work plan prepared in connection with State grant funding under Clean Water Action section 106.

**EPA Region 4:**

WPEB maintains compliance and enforcement files in a central location. A formal records policy is being drafted to ensure consistency in record keeping among all the NPDES programs. Files are maintained for each facility to which the Region has issued a permit or granted coverage under a general permit. The files contain DMR data, correspondence, permits, inspection reports, and enforcement actions.

### 3. Inspections

**The State of Tennessee:**

The State of Tennessee is conducting inspections in accordance with the section 106 Water Grant Commitment. This work plan incorporates the Major/Minor/Stormwater Strategy, which allows tradeoffs between major and minor NPDES facilities, the tradeoff being two minor facilities for every major one.
The State of Tennessee inspected 47% of its major facilities in FY2003, which is less than the national average of 67%. In addition, during FY2003, 76% of the inspections conducted by the State of Tennessee were at minor facilities.

During FY2003, the State participated with EPA in a stormwater inspection initiative.

**EPA Region 4:**
For biosolids facilities, assigned enforcement officers focus their compliance tracking efforts in environmental justice areas and within impaired watersheds identified by the Water Management Division. Biosolids inspections are focused in environmental justice areas and within impaired watersheds identified by the Water Management Division as well as in States that have rescinded their biosolids regulations. During the 2003 inspection year, WPEB conducted a total of 7 biosolids inspections at minor facilities and 19 inspections at major facilities throughout the Region. As of midyear 2004, WPEB had conducted biosolids inspections at 2 minor facilities and 17 major facilities throughout the Region.

**4. Compliance Assistance**

**The State of Tennessee:**
Region 4 States, including Tennessee, have improved environmental performance through the development and implementation of compliance assistance activities. These activities, which have been incorporated into work with individual entities, groups of regulated entities, and trade associations, include innovative strategies, pollution prevention, and sustainable management practices. Specific examples are as follows:

**Pretreatment:** The State has been active in providing compliance assistance information to its POTWs and industries. Entities are referred to the University of Tennessee’s pollution prevention program for assistance. The State has been instrumental in organizing workshops on the administrative aspects of the pretreatment program.

**Other enforcement:** TDEC has developed an NOV database that will allow NOVs to be issued in a more timely fashion, and allow the State to keep track of noncompliance. TDEC has started the process to implement electronic DMR submittal. After a successful pilot program involving a small number of facilities, TDEC started sending out the software in batches to major permittees.

The State is working proactively with its municipalities on the issue of controlling oil and grease problems in the collection, transmission, and treatment systems. The State has played a large role in drafting a guidance document for the municipalities’ use. The document was finalized in June 2002.

**EPA Region 4:**
The Region provides biosolids compliance assistance to both facilities and States through presentations at workshops and conferences.
Section IV. Related Water Programs and Environmental Outcomes

1. Monitoring

The State of Tennessee:
Tennessee submitted a draft monitoring strategy encompassing all 10 elements on August 31, 2004, and the Region is preparing comments on this draft. A final document is expected by December 31, 2004.

Tennessee implements a probability monitoring program in some small lakes and ponds and uses a rotating basin approach to water quality monitoring to maximize monitoring results in any given year for targeted water bodies.

Monitoring is conducted for major facilities to assist with determinations of water quality-based effluent limits. The need for information and the permit cycle dictate the extent of monitoring conducted each year.

EPA Region 4:
Not applicable because EPA does not have any direct implementation responsibilities in Tennessee.

2. Environmental Outcomes

The State of Tennessee:
Surface Water Quality: According to the State’s 2002 water quality inventory prepared under Clean Water Act section 305(b), 70% of assessed river and stream miles and 79% of assessed lake acres fully support their designated areas.

An accurate trend analysis cannot be conducted at this time because of changes in State sampling protocols and reporting methods and because of limited funding for complete, long-term monitoring coverage.

TMDL development is under way in Tennessee. It is expected that Tennessee will meet the TMDL development schedule of 13 years from the date of original listing. TMDL development is dictated by a consent decree. Currently, Tennessee is 100% on schedule for meeting its TMDL development commitment.

Delays have occurred in TMDL finalization for specific water bodies with scientifically difficult pollutant conditions in Tennessee. These TMDLs are undergoing additional review and will either be proposed again with more appropriate allocations or finalized over the course of the next year.

EPA Region 4:
Not applicable because EPA does not have any direct implementation responsibilities in Tennessee.
3. Water Quality Standards

The State of Tennessee:

The State of Tennessee has integrated the water quality standards and NPDES programs in part by conducting timely reviews of its water quality standards and having no outstanding EPA disapprovals of standards. The State conducts a review every three years and uses that time to adopt newly required EPA criteria. The State has recently adopted statewide narrative criteria to address nutrients, and has submitted a draft plan describing how it intends to proceed with respect to numeric nutrient criteria. Other reviews and updates to water quality standards are conducted when considered appropriate by the State.

As the State adopts or revises water quality standards, a thorough examination of how the standards will be implemented through NPDES permits is conducted. When a water quality standard is made available for public comment, the State explains to the interested NPDES permit holders and other interested groups exactly how that standard will be implemented, especially in relation to dischargers. Permit fact sheets explain the basis for each water quality-based effluent limit and identify designated uses of the receiving water body and applicable standards. Additional information is maintained in facility-specific files that are available for public review.

Tennessee has provisions for compliance schedules, which are used when needed.

Certain water quality standards are difficult to implement, but those are addressed permit by permit. To date, the State has not conducted a use attainability analysis to address these situations.

Tennessee has adopted standards for E. coli that were approved by EPA. Recently Tennessee’s Board adopted revisions to these standards. The revisions are under review by EPA and have not yet been approved.

The State designates water bodies used as drinking water sources as having a domestic water supply use. These water bodies all have criteria associated with protection of the drinking water supply. All wasteload allocation and water quality-based effluent limits are written to comply with the criteria associated with the drinking water designated use.

EPA Region 4:

Not applicable because EPA does not have any direct implementation responsibilities in Tennessee.

4. Total Maximum Daily Loads

The State of Tennessee:

Tennessee incorporates wasteload allocations into NPDES permits as they are expressed in the TMDL (as a load or a concentration). Tennessee’s watershed approach allows all permits in a watershed to be reviewed at the same time, and ensures that wasteload allocations are appropriately incorporated into permits. The State’s permitting staff coordinate with the TMDL staff when drafting NPDES permits to ensure that wasteload allocations derived from the TMDL are incorporated into the NPDES permits. The permit’s fact sheet discusses the TMDL and appropriate wasteload allocation. As determined by the
State, a permit for a facility that discharges a parameter of concern to a stream that is listed on the State’s list of impaired water bodies prepared under Clean Water Act section 303(d), may contain a reopener clause to modify the permit when a TMDL is approved.

EPA Region 4:
Not applicable because EPA does not have any direct implementation responsibilities in Tennessee.

5. Safe Drinking Water Act

The State of Tennessee:
As previously stated, Tennessee designates water bodies used as drinking water sources as having a domestic water supply use. Those water bodies all have criteria associated with the protection of the drinking water supply. All wasteload allocations and water quality-based effluent limitations are written to comply with the criteria associated with the drinking water designated use. NPDES permits are written using the more stringent water quality standard, where applicable.

All permits have standard language that requires the permittee to report to Tennessee within 24 hours any noncompliance that could cause a threat to public drinking water supplies.

EPA Region 4:
Not applicable because EPA does not have any direct implementation responsibilities in Tennessee.
Section V. Other Program Highlights

The State of Tennessee:
TDEC has a toll-free hotline number that directs in-state callers to the appropriate Environmental Assistance Center to make comments or to have questions answered.

Several years ago, the State began to align the expiration of permits in the same watershed so that expiration dates would fall within the same year. For the most part, permits are being issued during their watershed cycle. The State has also used general permits to improve efficiency within the program. Templates and mail-merged information from the permit database are used to assist staff in the preparation of individual permits and general permit coverages.

TDEC also handles non-NPDES regulated activities, such as State-issued permits for collection systems and other non-discharging treatment and disposal systems that do not fall under the authority of the Clean Water Act.
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>% minor facilities covered by individual permits (42,057 total)</td>
<td>1.1</td>
<td>n/a</td>
<td>1,288</td>
<td>0</td>
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<tr>
<td># major facilities covered by non-storm water general permits (39,183 total)</td>
<td>1.1</td>
<td>n/a</td>
<td>852</td>
<td>0</td>
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<tr>
<td>% major permits issued as scheduled (1,482 total)</td>
<td>II.6</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>% Phase I storm water permits not yet issued (5 total)</td>
<td>II.4</td>
<td>n/a</td>
<td>0</td>
<td>n/a</td>
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<tr>
<td>% of CSO permittees with long-term control plans developed or required (22 total)</td>
<td>II.5</td>
<td>75%</td>
<td>2008</td>
<td>82.2%</td>
</tr>
<tr>
<td># biosolids facilities (TBD 05)</td>
<td>II.6</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td># POTWs covered by individual permits (15,197 total)</td>
<td>II.1</td>
<td>n/a</td>
<td>455</td>
<td>0</td>
</tr>
<tr>
<td>% of pretreatment programs</td>
<td>II.2</td>
<td>46.3%</td>
<td>3%</td>
<td>99.0%</td>
</tr>
<tr>
<td># minor facilities covered by non-storm water general permits</td>
<td>1.6</td>
<td>90%</td>
<td>12/04</td>
<td>87.0%</td>
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<tr>
<td># major facilities w/permits expired &gt;10 yrs. (56 total)</td>
<td>II.6</td>
<td>35%</td>
<td>2005</td>
<td>--</td>
</tr>
<tr>
<td>% of CAFOs covered by NPDES permits</td>
<td>II.3</td>
<td>35%</td>
<td>2008</td>
<td>100%</td>
</tr>
<tr>
<td>% biosolids facilities that have satisfied part 503 requirements (TBD 05)</td>
<td>II.6</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td># Phase I storm water permits issued but not current (78 total)</td>
<td>II.4</td>
<td>n/a</td>
<td>1</td>
<td>n/a</td>
</tr>
<tr>
<td>% Phase II storm water small MS4 permits current (35 States)</td>
<td>II.4</td>
<td>100%</td>
<td>states 2008</td>
<td>Y</td>
</tr>
<tr>
<td>% of CAFOs returned to compliance w/o FEA</td>
<td>II.1</td>
<td>70%</td>
<td>2008</td>
<td>81%</td>
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<tr>
<td># FEAs at minor facilities (6,909 total)</td>
<td>II.3</td>
<td>71%</td>
<td>2007</td>
<td>47%</td>
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<tr>
<td>% State CAFO legal authority expected (TBD)</td>
<td>II.3</td>
<td>76%</td>
<td>2008</td>
<td>76%</td>
</tr>
<tr>
<td>% inspections at minors/total inspections at majors and minors</td>
<td>III.1</td>
<td>76%</td>
<td>2008</td>
<td>76%</td>
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<tr>
<td>% major facilities in significant non-compliance (SNC)</td>
<td>III.1</td>
<td>20%</td>
<td>2008</td>
<td>36%</td>
</tr>
<tr>
<td>% SNCs addressed by formal enforcement action (FEA)</td>
<td>III.1</td>
<td>14%</td>
<td>2008</td>
<td>2%</td>
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<tr>
<td># FEAs at major facilities (566 total)</td>
<td>III.1</td>
<td>n/a</td>
<td>5</td>
<td>3</td>
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<tr>
<td>% FEAs at minor facilities (1,660 total)</td>
<td>III.1</td>
<td>n/a</td>
<td>9</td>
<td>0</td>
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</table>
## Water Quality Progress

<table>
<thead>
<tr>
<th>Water Quality Progress</th>
<th>Profile Section</th>
<th>GPR Goal Nat. Avg.</th>
<th>State Activities</th>
<th>EPA Activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>River/stream miles</td>
<td>IV.2</td>
<td>n/a</td>
<td>61,125</td>
<td>n/a</td>
</tr>
<tr>
<td>Lake acres</td>
<td>IV.2</td>
<td>n/a</td>
<td>433,182</td>
<td>n/a</td>
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<tr>
<td>Total # TMDLs in docket at end of FY 2003</td>
<td>IV.4</td>
<td>n/a</td>
<td>1,628</td>
<td>--</td>
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<tr>
<td># TMDLs committed to in FY 2003 management agreement</td>
<td>IV.4</td>
<td>n/a</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td># Watersheds (2,341 total)</td>
<td>IV.2</td>
<td>n/a</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>On-time WQI Standards (WQS) triennial review completed</td>
<td>IV.3</td>
<td>n/a</td>
<td>Y</td>
<td>n/a</td>
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<tr>
<td># WQS submissions that have not been fully acted on after 90 days</td>
<td>IV.3</td>
<td>&lt;25% submissions</td>
<td>n/a</td>
<td>n/a</td>
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<tr>
<td>State is implementing a comprehensive monitoring strategy (Y/N) (TBD)</td>
<td>IV.1</td>
<td>all states 2005</td>
<td>--</td>
<td>--</td>
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<tr>
<td>% river/stream miles assessed for recreation</td>
<td>IV.2</td>
<td>13.8%</td>
<td>48.3%</td>
<td>n/a</td>
</tr>
<tr>
<td>% river/stream miles assessed for aquatic life</td>
<td>IV.2</td>
<td>22.0%</td>
<td>48.3%</td>
<td>n/a</td>
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<tr>
<td>% lake acres assessed for recreation</td>
<td>IV.2</td>
<td>49.4%</td>
<td>99.0%</td>
<td>n/a</td>
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<tr>
<td>% lake acres assessed for aquatic life</td>
<td>IV.2</td>
<td>48.5%</td>
<td>99.0%</td>
<td>n/a</td>
</tr>
<tr>
<td># outstanding WQS disapprovals (23 total)</td>
<td>IV.3</td>
<td>n/a</td>
<td>0</td>
<td>n/a</td>
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<tr>
<td>WQS for E. coli or enterococci for coastal recreational waters</td>
<td>IV.3</td>
<td>35 states 2008</td>
<td>n/a</td>
<td>n/a</td>
</tr>
<tr>
<td>WQS for nutrients or Nutrient Criteria Plan in place (11 States)</td>
<td>IV.3</td>
<td>25 states 2008</td>
<td>n/a</td>
<td>N</td>
</tr>
<tr>
<td>Cumulative # TMDLs completed through FY 2003 (19,807 total)</td>
<td>IV.4</td>
<td>n/a</td>
<td>94</td>
<td>--</td>
</tr>
<tr>
<td># TMDLs completed in FY 2003 (2,929 total)</td>
<td>IV.4</td>
<td>n/a</td>
<td>71</td>
<td>0</td>
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<tr>
<td># TMDLs completed through FY 2003 that include at least one point source WLA (5,036 total)</td>
<td>IV.4</td>
<td>n/a</td>
<td>84</td>
<td>--</td>
</tr>
<tr>
<td>% Assessed river/stream miles impaired for swimming in 2000</td>
<td>IV.2</td>
<td>--</td>
<td>12.6%</td>
<td>n/a</td>
</tr>
<tr>
<td>% Assessed lake acres impaired for swimming in 2000</td>
<td>IV.2</td>
<td>--</td>
<td>18.6%</td>
<td>n/a</td>
</tr>
<tr>
<td>Watersheds in which at least 20% of the water segments have been assessed and, of those assessed, 80% or more are meeting WQI (440 total)</td>
<td>IV.2</td>
<td>500 2008</td>
<td>n/a</td>
<td>--</td>
</tr>
</tbody>
</table>

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### Explanation of Column Headers:

- **Profile Section:** For each measure, this column lists the section of the profile where the program area (including any additional data for the measure) is discussed.

- **National Data Sources:** The information in these two columns is drawn from two types of sources:
  1. EPA-managed databases of record for the national water program, such as PCS, the National Assessment Database, and the National TMDL Tracking System. NPDES authorities are responsible for populating PCS with required data elements and for assuring the quality of the data. EPA is working to phase in full use of NAD and NTTS as national databases.
  2. Other tracking information maintained by EPA Headquarters for program areas such as CAFOs, CSOs, and storm water.

- **Additional Data:** These columns provide additional data in cases where information from other data sources differs from information in the National Data Sources column for reasons such as different timing of the data “snapshot.” Additional data should generally adhere to the same narrative definitions as data in the National Data Sources, and should be derived using similar processes and criteria. Our goal is to work with the States on these discrepancies to ensure consistent and accurate reporting. A State contact is available who can respond to queries. The profiles discuss each additional data element.

- **State Activities:** Information in these columns reflects activities conducted by the State program. (Shaded cells in these columns indicate that the work may not be entirely the State's responsibility, but a breakdown of the data into EPA and State responsibilities is unavailable.)

- **EPA Activities:** Information in these columns reflects activities conducted by the EPA Region within the State.