



**STATE OF TENNESSEE**  
**DEPARTMENT OF ENVIRONMENT AND CONSERVATION**  
NASHVILLE, TENNESSEE 37243-0435

**ROBERT J. MARTINEAU, JR.**  
COMMISSIONER

**BILL HASLAM**  
GOVERNOR

**MEMORANDUM**

**TO:** The Honorable Bill Haslam  
Governor of the State of Tennessee

The Honorable Ron Ramsey  
Lieutenant Governor and Speaker of the Senate

The Honorable Beth Harwell  
Speaker of the House of Representatives

**FROM:** Robert J. Martineau, Jr., Commissioner  
Department of Environment and Conservation

**DATE:** September 16, 2016

**RE:** Department of Environment and Conservation  
Environmental Permitting Efficiency Report

A handwritten signature in blue ink, appearing to be "RJM", located to the right of the "FROM:" field.

Tennessee Code Annotated (T.C.A.) 4-3-506 requires the commissioner of the Department of Environment and Conservation (the Department) to electronically submit semiannual reports to the Governor and the General Assembly each year. Please find attached our Fiscal Year 2016 Environmental Permitting Report.

The statute requires the Department to report all permit applications submitted to the Department during the reporting period. There are two main reporting categories; (1) completing permit completeness decisions review within the time periods set by regulation and (2) completing final permit decisions within the time periods set by regulation. The Fiscal Year 2016 Environmental Permitting report includes data for all permit applications that were on hand but not processed by July 1, 2015 and all permit applications submitted from July 1, 2015 thru June 30, 2016 that are subject to this statute. For this report, the Department defines "permit" as any permit, license, certification, accreditation or registration with a specified number of days by regulation for permit completeness decisions and/or a specified number of days by regulation to make a final permit decision. The statute requires the Department to report:

1. The number of permit completeness decisions made within the time period set by regulation;
2. The number of permit completeness decisions that exceeded the days set by regulations;
3. The reasons permit completeness decisions that were not made within the time period set by regulation;
4. Actions the Department will take to improve the timeliness of permit completeness decisions;
5. The number of final permit decisions the Department made within the time limit set by regulation;
6. The number of final permit decisions the Department made that exceeded the time limit set by regulation;
7. The reasons final permit decisions were not made within the time period set by regulation; and
8. Actions the Department will take to improve the permit decision-making process.

The Honorable Bill Haslam, The Honorable Ron Ramsey, The Honorable Beth Harwell  
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Additionally, the Department has provided information that compares TDEC FY 2013, 2014, 2015 and 2016 permitting data. The data comparison demonstrates the Department is making permitting decisions more efficiently while the number of permit applications received is increasing. Attached with this memorandum is an electronic copy of the August report. The Department will also post this report on its website. Please feel free to contact my staff or me if you have any questions.



**Tennessee Department of Environment and Conservation**  
**Fiscal Year 2016**  
**Environmental Permitting Report**

**Robert J. Martineau, Jr., Commissioner**

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## Tennessee Department of Environment and Conservation Fiscal Year 2016 Annual Environmental Permitting Report

### EXECUTIVE SUMMARY

The Tennessee Department of Environment & Conservation (TDEC) is committed to protecting and improving the quality of Tennessee's air, land and water. Our environmental programs and initiatives protect human health and the environment, support economic development, promote job creation, enhance quality of life through education of citizens and the regulated community and conservation of our natural resources, and ensure effective implementation of state and federally delegated environmental programs.

Environmental permitting is an important component of TDEC's mission. Our ability to effectively and efficiently issue environmental permits is critical to:

- Protecting Tennessee's natural resources;
- Preserving our quality of life;
- Making Tennessee an attractive place to work, live and play.
- Protecting our environment and the success of our state's business and industry sectors;
- Making Tennessee the best state in the southeast for high quality jobs.

There are specific time limits in our environmental statutes and rules that TDEC is required to meet for determining if permit applications are complete and making final permit decisions. TDEC defines a permit as any permit, license, registration, certification and/or accreditation application subject to the requirements for permitting in Tennessee Code Annotated (T.C.A.) 4-3-501.

In 2012, the General Assembly amended T.C.A. 4-3-506; requiring TDEC to provide the General Assembly with two reports each fiscal year that demonstrate TDEC's progress in making Permit Application Completeness decisions and Final Permit decisions. TDEC provides the Legislature with reports that demonstrate the Department's success in meeting statutory and regulatory permitting requirements. The Semiannual Legislative Permitting Report provides the data for permit processing for the first six months of the Fiscal Year. The Annual Legislative Permitting report provides the data for permit processing for the entire Fiscal Year. This is the Fiscal Year (FY) 2016 Annual Legislative Permitting Report

For Permit Applications, TDEC made completeness determinations for 97.5% of all permit applications (13,073 of 13,411) within regulatory time limits. TDEC had a slight increase (0.2%) in productivity from 97.3% in FY 2015 to 97.5% in FY 2016.

TDEC made final permit decisions for 96.5% of all complete permit applications (40,528 of 41,988) for the FY 2016 reporting period. This is a decrease from our 99.3% Permit Decision efficiency in FY 2015. For FY 2016, the number of permit applications submitted was statistically the same as FY

2015. Just as important as making permit decisions within specified time limits, TDEC makes final permit decisions based on science and fact. Combining efficiency with science and fact ensures protection of public health and the environment and respects the time value of money and business schedules.

TDEC is committed to meeting the regulatory time limits for permit completeness review and making final permit decisions. Each division reviews its permitting processes regularly to determine if there are more effective business processes for permit review and to develop more user-friendly permit applications. This report compares TDEC's permitting efficiency for:

1. the July 1, 2012 through June 30, 2013 time period (FY 2013);
2. the July 1, 2013 through June 30, 2014 time period (FY 2014);
3. the July 1, 2014 through June 30, 2015 time period (FY 2015); and
4. the July 1, 2015 through June 30, 2016 time period (FY 2016).

Comparing permitting efficiency results from year to year allows TDEC to identify areas for improvement. When we do not meet performance expectations, we examine the reasons we did not meet expectations and evaluate ideas to improve performance. This includes modifying permitting processes, shifting staff to meet workload requirements and implementing changes suggested by staff members. Measuring permitting performance helps emphasize to TDEC staff that each staff member is accountable for their work performance. Measuring our permitting performance gives TDEC an appreciation of the efforts the regulated community must make to comply with the environmental statutes and regulations TDEC implements.

We believe this report provides the General Assembly with a comprehensive picture of TDEC's permitting success. We look forward to receiving comments from the General Assembly and all Tennesseans about this report. We appreciate any ideas that will improve the quality of this report and our service to our customers.

## **INTRODUCTION**

The Tennessee General Assembly adopted legislation in 2012 that amended T.C.A. 4-3-506-. This Act, included as Appendix 1, requires TDEC to provide the General Assembly with reports that demonstrate how effectively TDEC makes permit completeness decisions and final permit decisions. The reports compare permitting decisions made each year with the time limits for permit decisions set by statute and rule. TDEC is required to submit permitting status reports twice per fiscal year; the Semiannual Permit Report for July 1 through December 31 period of each fiscal year and the Annual Permit Report in August for the entire fiscal year (July 1 through June 30). There are 13 different rules with specific language requiring TDEC to make permit completeness decisions and final permit decisions. The regulations that TDEC is required to follow for permit completeness review and final permit application decisions are provided below:

<b>Regulatory Citations for Permit Completeness Review and Permit Decisions</b>	
<b>Rule</b>	<b>Rule Number</b>
Solid Waste Regulations	Rules 0400-11-01 .01 thru .13
Hazardous Waste Regulations	Rules 0400-12-01-.01 thru .12
Hazardous Waste Regulations	Rules 0400-12-02 -.01 thru .3
Regulation of X-ray and Radioactive Materials	Rules 0400-20-05 -.01 thru .165
Water Pollution Control	Rules 0400-40 thru 0400-49
Water Supply	Rules 0400-45-01 - .01 thru .41
Underground Injection Control	Rules 0400-45-06 -.01 thru .19
Safe Dams	Rules 0400-45-07 -.01 thru .10
Oil and Gas Production	Rules 0400-51 through 0400-58 .
Asbestos Accreditation	Rules 1200-1-20-.01 thru .08
Lead Based Paint Abatement	Rules 1200-1-18-.01 thru .06
Air Pollution Control	Rules 1200.03-01 thru 16
Water Pollution Control	Rules 0400-40 thru 0400-49

TDEC provides tables in this report for each Environmental Division with permitting responsibilities. The tables compare permit completeness determinations and final permit decisions made by TDEC with the regulatory time limits set by rule for each type of permit. In addition, TDEC compared permitting data from FY 2013, FY 2014, FY 2015 and FY 2016 in this report.

All tables are presented at the end of the report:

- Table 1. Summary of TDEC – Bureau of Environment Permitting Performance – FY 2016 Permit Completeness
- Table 2. Summary of TDEC – Bureau of Environment Permitting Performance – FY 2016 Permit Final Permit Decisions
- Table 3. Summary of TDEC – Bureau of Environment Permitting Performance – Comparison of Fiscal Years 2013, 2014, 2015 and 2016 Data - Compliance with Permit Completeness Review Regulatory Time Limits; and
- Table 4. Summary of TDEC – Bureau of Environment Permitting Performance – Comparison of Fiscal Years 2013, 2014, 2015 and 2016 Data - Compliance with Final Permit Decision Regulatory Time Limits

Tables 1. and 2. provide a comprehensive view of TDEC’s success in meeting regulatory time limits for permit completeness determinations and final permit decisions. Tables 3. and 4. measures TDEC’s permit performance with the regulatory time limits for permitting decisions for Fiscal Years 2013 through 2016.



## **DIVISION OF SOLID WASTE MANAGEMENT**

The Division of Solid Waste Management (SWM) is responsible for four different and distinct regulatory programs that are implemented via the authority of different environmental statutes and regulations:

1. The Tennessee Solid Waste Disposal Act, T.C.A. 68-211-101 et.seq and the associated regulations 0400-11-01 .01 thru .13;
2. The Tennessee Hazardous Waste Management Act, T.C.A. 68-212-101 et.seq. and the t associated regulations 0400-12-01-.01 thru .12 and 0400-12-02 -.01 thru .3 ;
3. The Tennessee Lead-Based Paint Abatement Certification Act of 1997 (T.C.A. 68-131-401 et. seq.) and the associated regulations 1200-1-18-.01 thru .06 ; and
4. The Tennessee Asbestos Contractor Accreditation and Regulation Act (T.C.A. 62-41-101 et. seq.) and the pursuant regulations 1200-1-20-.01 thru .08.

For the purposes of this report, all metrics for permit completeness decisions and final permit decisions were combined.

### **SOLID WASTE PROGRAM**

SWM issues permits for processing, storing, and disposal of solid waste in Tennessee. EPA Region 4 has approved Tennessee's Solid Waste Program. TDEC issues Solid Waste permits for Solid Waste Processing facilities, Convenience Centers, Composting Operations and Demolition, Industrial and Municipal Solid Waste Landfills. SWM also reviews and approves or denies requests to dispose of "special waste" in permitted landfills. The permits and special waste approvals issued by SWM prevent illegal disposal of solid wastes. Requiring permit applicants to properly design, construct, and operate, properly close solid waste landfills and processing facilities ensures protection of public health and the environment. Members of the regulated community seeking either a new permit or a permit modification are required to submit permit applications and permit modifications to SWM and receive an approved permit or permit modification from SWM before beginning construction or expansion activities.

### **HAZARDOUS WASTE PROGRAM**

The Hazardous Waste Management Program issues permits for hazardous waste processing, storage, transport, treatment and disposal. SWM received delegation of authority from EPA Region 4 and serves as the primary regulatory agency for Tennessee entities that generate, treat, dispose or store hazardous waste in Tennessee. Hazardous Waste Management permits ensure that hazardous waste is safely managed and protects public health and the environment

Members of the regulated community who pursue either a new Hazardous Waste permit or modification of an existing permit are required to submit an application to SWM. Construction activities should not begin until the applicant has received approval from SWM for the new facility or modifications of the existing facilities. As with the Solid Waste Program, SWM has specific time frames to perform permit application completeness reviews and to make final permit decisions.



## TOXIC SUBSTANCES PROGRAM

The Lead Based Paint and Asbestos Programs, or the Toxics Programs, are responsible for ensuring that companies and individual workers who repair, renovate and/or remove Lead Based Paint and Asbestos from buildings are properly trained. Department staff members review the education, training, experience and qualifications of the professionals and the companies who train Asbestos and Lead Based Paint workers.

Asbestos and Lead Based Paint Training program accreditations ensure that the curriculum and training provided by instructors meets the need of the persons attending training and helps protect worker health and safety by reducing worker exposure to asbestos and lead. SWM has agreements with EPA Region 4 to implement these programs in lieu of EPA. The purpose of the Lead Based Paint and Asbestos accreditation and certification programs is to ensure that:

1. Companies that remove asbestos and lead based paint from buildings and especially company workers safely perform their work;
2. Lead based paint and asbestos debris removed from buildings is properly disposed; and
3. Once removal work is completed, the building is safe for human occupation.

For accreditations and certifications in the Toxics Program, the permit completeness decision and the final permit decision are made concurrently. This is the reason there is such a large difference between the number of permit completeness determinations reported in Table 1. and the number of final permit decisions reported in Table 2 for SWM.

Table 1. reports SWM's FY 2016 success in meeting the time limit to determine if permit applications are complete. For FY 2016, SWM made permit completeness decisions for 100% of the permit applications received during this fiscal year (342 of 342) within regulatory time limits.

Table 2. reports SWM's FY 2016 success in making Final Permit Decisions for complete permit applications. For FY 2016, SWM made final permit decisions for 100% of the complete permit applications received during this fiscal year (5,248 of 5,248) within regulatory time limits.

Table 3. compares the efficiency of permit application completeness decisions for Fiscal Years 2013, 2014, 2015 and 2016. During those 4 years, SWM received an average of 401 permit applications for completeness review per Fiscal Year. During those 4 years, SWM made permit completeness decisions for 99.7% of all permit applications received within regulatory time limits.

Table 4. compares the efficiency of final permit decisions for Fiscal Years 2013, 2014, 2015 and 2016. During those 4 years, SWM received an average of 4,918 permit applications for final permit decisions per Fiscal Year. During those 4 years, SWM made final permit decisions for 99.2% of all permit applications received within regulatory time limits.

## DIVISION OF RADIOLOGICAL HEALTH

The Division of Radiological Health (DRH) is responsible for the X-Ray Registration and Radioactive Materials Licensing Programs in Tennessee. Authority for implementation of the programs is granted via:

1. The Radiological Health Service Act, T.C.A. 68-202- 201 et.seq; and
2. Tennessee Rule 0400-20-05 - .01 thru .165.

For the purposes of this report, all metrics for permit completeness decisions and final permit decisions have been combined.

### X-RAY EQUIPMENT and RADIOACTIVE MATERIALS

The Division of Radiological Health (DRH) issues licenses for equipment and devices that contain radioactive materials and to businesses that process low-level radioactive waste. The Nuclear Regulatory Commission (NRC) granted TDEC the authority to issue radioactive materials licenses to facilities in Tennessee. This transfer of authority by the NRC to DRH for Radioactive Materials licensing applies to all facilities in Tennessee except the Department of Energy facility in Oak Ridge, Nuclear Fuel Services in Erwin and TVA Nuclear Power Plants. TDEC issues radioactive material licenses to a wide variety of facilities/locations; i.e. hospitals, doctor's offices, dentists, veterinarians, industries, businesses, and building contractors. The licenses and registrations issued by TDEC contain provisions that prevent the citizens of Tennessee from over exposure to ionizing radiation. The licenses and registrations require the recipients to monitor and repair equipment and devices. Licenses for radioactive material processing ensure that the companies performing this work ship processed waste to facilities designed to accept specific levels of radioactivity.

Hospitals, doctors, dentists, veterinarians and outpatient treatment centers commonly have X-ray devices. DRH requires registration of equipment and machines that generate X-rays. The regulation of X-ray equipment protects Tennesseans from exposure to radiation that may affect their personal health. Properly maintaining X-ray equipment ensures that the public is not over-exposed to ionizing radiation.

Members of the regulated community pursuing a new radioactive material license, modification of an existing radioactive material license or registration of equipment and devices that produce X-rays are required to submit applications to DRH for review and approval. TDEC determines if the equipment to be operated and the plans for its use meet specific regulatory health and safety standards.

Table 1. reports DRH's FY 2016 success in meeting the regulatory time limit to decide if permit applications are complete. For FY 2016, DRH made permit completeness decisions for 100% of the permit applications received during this fiscal year within regulatory time limits (4,672 of 4,672).

Table 2. reports DRH's FY 2016 success in making Final Permit Decisions for complete permit applications. For FY 2016, DRH made final permit decisions for 100% of all complete permit applications during this fiscal year within regulatory time limits (4,672 of 4,672).

Table 3. compares the efficiency of permit application completeness decisions for Fiscal Years 2013, 2014, 2015 and 2016. DRH received an average 4,076 of permit applications for completeness review each Fiscal Year. During those 4 years, DRH made permit completeness determinations for 100% of all permit applications received within regulatory time limits.

Table 4. compares the efficiency of final permit decisions for Fiscal Years 2013, 2014, 2015 and 2016. DRH received an average of 4,076 permit applications for final permit decisions each Fiscal Year. During those 4 years, DRH made final permit decisions for 100% of all applications received within regulatory time limits.

## **AIR POLLUTION CONTROL**

The Division of Air Pollution Control (APC) is responsible for issuing permits to facilities with emissions from their operations to the air. Authority for implementation of the APC permitting programs is granted via:

1. The Tennessee Air Quality Act; T.C.A. 68-201- 101 et.seq; and
2. Tennessee Rule 1200-03-01 through 37

For the purposes of this report, all metrics for permit completeness decisions and final permit decisions have been combined.

## **AIR POLLUTION CONTROL PERMITTING PROGRAM**

APC is responsible for maintaining and improving air quality across Tennessee. This protects public health and environment. APC issues permits for businesses and industries that generate air emissions. As a part of the Air Pollution Control regulatory program, APC works with businesses, industries, local governments and local citizens to ensure air emissions meet state and federal air quality standards. It is APC's goal to improve air quality in those parts of the state where air quality does not meet state and federal standards. The U.S. Environmental Protection Agency (EPA) Region IV office delegated authority to TDEC to implement federal air pollution control regulations in Tennessee.

During the air permitting process, APC reviews permit applications and modifications for completeness. Because clean air is important to Tennesseans, EPA and TDEC have developed air emission standards that limit the amount of emissions released into the atmosphere. This protects public health and the environment. APC is required to determine if permit applications and permit modifications are complete within regulatory time limits. Once APC determines a permit application is complete, APC is required to approve or deny the permit request within regulatory time limits. For some permit applications, APC is required to exchange permit applications/modifications with EPA.

Making permit decisions within regulatory time limits helps Tennessee competitively recruit new business and industry to the state and retaining current businesses and industries that are expanding.

Table 1. reports APC's FY 2016 success in meeting the time limit to determine if permit applications are complete. For FY 2016, APC made permit completeness decisions for 100% of the permit applications received during the fiscal year within regulatory time limits (1,485 of 1,485).

Table 2. reports APC's FY 2016 success in making Final Permit Decisions for complete APC Construction and Operating permit applications. For FY 2016, APC made final permit decisions for 97.0% of the permit applications received during the fiscal year within regulatory time limits (1,594 of 1,644).

Table 3. compares the efficiency of permit application completeness decisions for Fiscal Years 2013, 2014, 2015 and 2016. APC has received an average of 957 permit applications for completeness review per Fiscal Year. APC made permit completeness decisions for 99.5% of all permit applications received within regulatory time limits.

Table 4. compares the efficiency of final permit decisions for Fiscal Years 2013, 2014, 2015 and 2016. APC received an average of 1,451 permit applications for final permit decisions per Fiscal Year. During those 4 years, APC made final permit decisions for 89.2% of all applications received within regulatory time limits. APC has made tremendous improvement in making final permit decisions, from 59.8% in FY 2013 to 97.0% in FY 2016.

APC has made significant improvements in meeting the permit decision regulatory time limits. This increase was due to (1) business process improvement using LEAN, (2) better use of the APC database SMOGLOG that tracks permit application receipt and progress and (3) an emphasis on employee accountability through Individual Performance Plans. APC increased its overall final permit decision efficiency by 37.7% over the last four years. APC continues to implement ideas and business process improvements to meet the regulatory time limits for permit decisions. We believe improving our business processes such that 97.0% of all permit application decisions made within regulatory time limits during FY 2016, demonstrating great improvement in APC permit review. We will continue to seek opportunities to increase efficiency while issuing permits that are protective of human health and the environment.

## DIVISION OF WATER RESOURCES

The Division of Water Resources (DWR) issues permits for wastewater treatment, drinking water treatment and distribution, alteration of streams, installing water wells, construction of small dams, treating wastewater from individual homes or businesses and disposal of water underground. DWR is empowered to review the planned activity and either approve or deny the activity via a permit decision. Authority for implementation of the DWR permitting programs is granted via:

1. T.C.A. 68-221-401 et. seq. (governing subsurface sewage disposal systems) and Rules 400-48-01- .01 thru .24;
2. The Tennessee Safe Drinking Water Act, T.C.A. 68-221-701 et.seq; and TN Rule 0400-45-01 - .01 thru .41;
3. The Water Quality Control Act of 1977, T.C.A. 69-3-101 et.seq.; TN Rules 0400-45-06 -.01 thru .19
4. T.C.A. 69-10-101 et. seq. and TN Rules 400-45-09-.01 (governing water well drillers)
5. The Safe Dams Act of 1973; T.C.A. 69-11-101 et. seq.; and TN Rules 0400-45-07 -.01 thru .10; and
6. T.C.A. 60-1-101 et. seq. (governing oil and gas production) and TN Rules 0400-51 through 0400-58.

For the purposes of this report, the many different types of permit applications are combined.

DWR is responsible for issuing permits that protect the quality and quantity of two of Tennessee's most valuable natural resources; surface water (springs, creeks, rivers and lakes) and ground water. As more businesses and industries come to Tennessee and our state population grows; our state is challenged to continue to provide clean, safe and abundant water. Currently, more than 5,000,000 Tennesseans get their drinking water from public water systems as well as using municipal sewer systems for wastewater disposal. TDEC ensures that Tennessee citizens, visitors and businesses have:

- Safe and plentiful drinking water;
- Proper collection and treatment of wastewater
- Enjoyable and safe aquatic recreational opportunities;
- The water resources needed to operate business and industry; and
- Diverse fish and aquatic life in Tennessee waters;

Water is a complex natural resource issue. Wise management of our water resources becomes more important every year. Business and industry finds Tennessee a great place to operate because of its bountiful supply of water.

For the purposes of this report, all metrics for water related permit completeness and final permit decisions have been combined.



## NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM PERMITTING

This is a national EPA water pollution prevention program that regulates the direct discharge of wastewater into rivers and streams. EPA delegated to Tennessee the authority to implement the federal Clean Water Act that regulates the collection and treatment of wastewater that is directly discharged to streams. DWR implements the clean water program in Tennessee. DWR receives permit applications from businesses, industries, city, county, state and federal governments and other entities who wish to discharge wastewater into rivers and streams. The NPDES permit specifies the amount of wastewater and the quality of wastewater that is directly discharged into a stream. During the permitting process, DWR:

- Assesses the water quality and quantity of the receiving stream;
- Sets limits for the volume of wastewater that can be discharged per day into the stream;
- Sets the level of chemical, biological and radiological constituents that can be discharged into the stream; and
- Sets the temperature of wastewater discharged into the stream.

This ensures the receiving stream continues to meet all its classified uses: domestic water supply, fish and aquatic life, recreational use, etc.

## SAFE DRINKING WATER PROGRAM

DWR is responsible for ensuring that Tennesseans have a safe and plentiful source of drinking water. More than 5,000,000 citizens depend upon public water supply systems for their drinking water. Implementation of the Safe Drinking Water regulations ensures that public water systems provide their customers (businesses, industry and local citizens) with water that is safe to drink, has adequate water pressure and that water from public water systems is available in the amount needed to meet the needs of local citizens and industries.

## SUBSURFACE SEWAGE DISPOSAL PROGRAM

There are areas in Tennessee without public wastewater treatment systems (sewer systems). These areas depend on Subsurface Sewage Disposal (SSD) systems, commonly referred to as Septic Tanks and Field lines, for wastewater treatment. DWR implements the SSD regulations. DWR staff members evaluate the soil receiving wastewater, determines the "treatment capacity of the soil, designs the SSD system and performs inspections during SSD system installation to ensure the SSD system is installed properly. The SSD Program ensures that when SSD systems are installed, domestic wastewater is treated properly. When SSD systems fail in areas without public sewer service, then realistically, the home or business is no longer habitable. This greatly reduces the value of the home or business due to lack of wastewater treatment. When SSD systems fail, untreated wastewater comes to the ground surface creating a public health hazard.

## AQUATIC RESOURCES ALTERATION PROGRAM PERMITTING

DWR permits activities that alter the physical, chemical, and/or biological characteristics of streams and the impact of withdrawing water from streams. Persons who plan to alter a stream are required to submit a permit application and receive approval from DWR for their planned activities via the Aquatic Resources Alteration Program (ARAP) permitting process. Examples of activities that require ARAP

permits are changes in stream course, construction in streams (road projects, building projects) and altering a stream's channel. TDEC approves permit applications for the activity only when the permit provisions protect fish and aquatic life and limit the change in stream water quality and quantity.

### STATE OPERATING PERMIT PROGRAM

DWR oversees the treatment of wastewater that is disposed by spray irrigation or drip irrigation of treated wastewater onto the ground surface or the dispersal of wastewater below the surface of the ground. This form of wastewater treatment is only used in areas where there is not a local stream nearby or the stream cannot accept the volume of wastewater to be discharged without affecting the health of the stream. DWR ensures that the soil in the area of wastewater dispersal can effectively absorb the wastewater and that public health and the environment are protected. A common example of wastewater treatment via a State Operating Permit is the collection of wastewater from subdivisions without public sewer systems. For subdivisions without public sewers, a State Operating permit is issued that authorizes the installation of a wastewater collection system, transport of the wastewater to a wastewater treatment system and then using the treated wastewater to irrigate fields.

### NON-POINT SOURCE POLLUTION PREVENTION

In the Non-Point Source Pollution Prevention Program, DWR requires persons to obtain a permit to ensure that when rainfall events occur, proper controls are in place to prevent surface water runoff from entering local streams and causing pollution. Non-point source pollution occurs when there is heavy rainfall in highly developed areas (parking lots, roads, industrial parks, shopping centers, etc.) and surface water runoff moves very quickly and in high volumes directly into neighboring streams. The surface water runoff causes stream siltation that negatively affects plant and animal life at the bottom of the stream. Surface water runoff also transports nutrients such as nitrates and phosphates into streams. These nutrients promote increased algae growth that lowers the water quality of the stream. When the nutrient levels in the stream decrease, the algae dies, causing taste and odor problems in the stream as well as the death of aquatic organisms due to the use of dissolved oxygen in the stream as the algae decomposes. When the dissolved oxygen level in streams decreases, fish and aquatic life often die.

### OIL AND GAS PRODUCTION

There are deposits of oil and natural gas below the ground surface in eastern Tennessee. Companies produce oil and gas by installing wells into these hydrocarbon reservoirs. To ensure that wells are properly installed and that public health and the environment are protected, particularly groundwater, any person installing a well to produce oil and/or gas is required to apply for and receive an Oil and Gas permit from DWR.

### SURFACE MINING

DWR does not directly regulate mining activities. However, surface mining often results in surface water runoff that flows directly into streams. When this occurs, the mining operator must obtain a permit from TDEC. The permit requires surface water runoff from mining be controlled and treated to



prevent stream damage. If the mine has a direct discharge (open pipe) to a stream, then an NPDES permit is required.

UNDERGROUND INJECTION CONTROL

The Underground Injection Control (UIC) Program ensures (1) that liquids or gases injected into ground water do not cause ground water contamination and (2) that ground water remains usable as a drinking water source. Regulation of underground injection prevents the injection of fluids in a manner that may adversely affect public health or the environment.

SAFE DAMS

Tennessee Dam Safety Act provides DWR with the responsibility to permit dams. Safe Dam permits require the dam to be designed by an engineer, constructed as designed and properly maintained throughout their lifetime. DWR regulates small dams that are not within the purview of the Federal Emergency Management Act. DWR does not regulate dams that create “farm ponds”.

Members of the regulated community pursuing a permit or modification of a permit for any of the DWR Water Quality Programs are required to submit permit applications to TDEC for review. TDEC determines if the proposed activity or change in the currently permitted activity protects surface water, ground water, public health and the environment. The statutes and regulations authorizing water permits set regulatory time limits for permit application review and approval. These regulations require DWR to make permit completeness and final permit decisions within regulatory time limits.

Table 1. reports DWR’s FY 2016 success in meeting the time limit to determine if permit applications are complete. For FY 2016, DWR made permit completeness decisions within regulatory time limits for 95.1% of the permit applications received this fiscal year (6,574 of 6,912);

Table 2. reports DWR’s FY 2016 success in making Final Permit Decisions for complete DWR permit applications. For FY 2016, DWR made final permit decisions within the regulatory time limits for 95.4% of the permit applications received this fiscal year (29,014 of 30,474)

Table 3. compares the efficiency of permit application completeness decisions for Fiscal Years 2013, 2014, 2015 and 2016. DWR has received an average of 8,069 permit applications each year for completeness review. During those 4 years, DWR made permit completeness decisions within regulatory time limits for 95.4% of all applications received.

Table 4. compares the efficiency of final permit decisions for Fiscal Years 2013, 2014, 2015 and 2016. DWR has received an average 36,360 permit applications each year for final permit decisions per Fiscal Year. During those 4 years, DWR made final permit decisions within the regulatory time limits for 96.8% of all applications received.

## **CONCLUSIONS for the FY 2016 REPORTING PERIOD**

TDEC works to meet regulatory time limits for permit completeness and final permit decisions. We recognize that making permitting decisions within regulatory time limits is required by statute and regulation, but it is also important to persons applying for permits. TDEC makes permit decisions based on science and fact, but we also recognize the time value of money for those persons seeking a permit or permit modification. When TDEC makes timely permit decisions, it allows businesses and industry to operate more efficiently. TDEC will continue its efforts to make timely permit decisions by reviewing internal business processes for improvement opportunities.

Table 1. provides TDEC's metrics for permit completeness decisions. For the FY 2016 reporting period, TDEC made permit completeness decisions for 97.5% of all permit applications received this fiscal year (13,131 of 13,506).

Table 2. provides TDEC's metrics for final permit decisions. For the FY 2016 reporting period, TDEC made final permit decisions for 96.5% of all permit applications within regulatory time limits (40,528 of 41,988).

Table 3. compares FY 2013, FY 2014, FY 2015 and FY 2016 data for permit completeness decisions. TDEC received 11,529 permit applications for completeness review in FY 2013 as compared to 13,411 permit applications in FY 2016. This is an increase of 1,882 permit applications between the two reporting periods. However, over the last four Fiscal Years, TDEC has averaged receiving 13,506 permit applications per year. There is little statistical difference in the number of permit applications received for completeness review when comparing FY 2016 numbers to the four-year average. This is also true when comparing permit application completeness review within regulatory time limits; 97.5% in FY 2016 vs 97.2% average over the last four Fiscal Years.

Table 4. compares FY 2013, FY 2014, FY 2015 and FY 2016 data for final permit decisions. TDEC received 22,040 permit applications for approval/denial in FY 2013 vs. 41,988 permit applications in FY 2016. This is an increase of 19,948 permit applications between the two reporting periods. However, over the last four Fiscal Years, TDEC has averaged receiving 36,444 permit applications per year. The reasons for the large difference between FY 2013 and the other 3 fiscal years are (1) some permit applications were not included in FY 2013, (2) the permit for managing Biosolids was added and (3) improvement in the economy. A better economy has stimulated building which in turn has caused a significant increase in the number of SSD system and construction storm water permit applications. When the number of permit applications received for Fiscal Years 2014, 2015 and 2016 are compared, there is no significant difference.

TDEC increased the rate of final permit decisions made within regulatory limits for its final permit from 91.6% in FY 2013 to 96.5% in FY 2016, an increase of 4.9%. TDEC believes this increase in efficiency illustrates the success of internal changes made to improve permit review efficiency (as an example LEAN Business Process changes), actively measuring the rate of making final permit decisions and encouraging employee accountability. We are especially pleased with this good news.

TDEC continues to review its business processes and evaluates methods to equally distribute workload among staff, We are also providing training opportunities for staff. Another avenue TDEC is

pursuing to increase the rate permit decisions within regulatory time limits is the evaluation of the requirements for different types of permits. Where state and federal statutes and rules provide flexibility, TDEC is considering transitioning from individual permit applications to general permit applications. We are also investigating moving some activities authorized via a general permit to notification of activity. When this transition occurs, applicants will be required to meet specific reporting and inspection requirements to ensure protection of public health and the environment.

While TDEC has worked to decrease the time required to make permit decisions, we have not lost sight of the need to improve permit quality and our public participation process. The same LEAN analyses that were conducted to improve the timeliness of permit decisions have also led to environmental permits the permittee can more easily read, understand and implement. We have worked to improve our public participation process, incorporating the assistance of our Regional Directors of External Affairs. The Regional External Affairs Directors developed a standard protocol to alert any interested parties of public meetings and hearings about permit applications. We have also modified the structure of public meetings to ensure maximum attendee participation. We have trained more staff members to help with public meetings, which in turn make more staff members available to conduct public meetings and hearings as well as talk informally with meeting attendees.

The changes in environmental permitting processes made by TDEC help ensure that environmental permit decisions are:

1. Made in a timely manner, respecting the time value of money and construction and operational schedules;
2. Based on science and fact, providing environmental and public health protection;
3. Made following standard procedures to ensure consistency in permit requirements;
4. Made transparently, maximizing the opportunity for public participation; and
5. Made professionally to ensure our staff treats the permit applicant respectfully.

Should anyone have questions, comments or concerns about this report, please feel free to contact Chuck Head with the TDEC Bureau of Environment. You may contact Chuck at:

Chuck Head, Senior Advisor  
Bureau of Environment  
TN Department of Environment and Conservation  
2<sup>nd</sup> Floor Tennessee Tower  
312 Rosa Parks Blvd.  
Nashville, TN 37243  
Phone: 615 532-0998  
E-mail: [Chuck.Head@tn.gov](mailto:Chuck.Head@tn.gov)

Table 1. Summary of TDEC - Bureau of Environment Permitting Performance FY 2016 Permit Completeness Decisions				
Compliance with Permit Review Completeness Decision Time Limits				
PERMIT APPLICATIONS & MODIFICATIONS - PERMIT APPLICATION COMPLETENESS DETERMINATION	Permit Applications to be reviewed for Completeness Decisions within the Regulatory Time Limits	Permit Application Completeness Decisions made within Regulatory Time Limits	Permit Applications Completeness Decisions exceeding Regulatory Time Limits	% Permit Application Completeness Decisions made within the Regulatory Time Limits
APC	1,485	1,485	0	100.0%
DRH	4,672	4,672	0	100.0%
DWR	6,912	6,574	338	95.1%
SWM	342	342	0	100.0%
Totals	13,411	13,073	338	97.5%

Table 2. Summary of TDEC - Bureau of Environment Permitting Performance FY 2016 Final Permit Decisions				
Compliance with Final Permit Decision Time Limits				
PERMIT APPLICATIONS & MODIFICATIONS - FINAL PERMIT DECISIONS	Final Permit Decisions to be made within the Regulatory Time Limits	Final Permit Decisions made within Regulatory Time Limits	Final Permit Decisions exceeding Regulatory Time Limits	% Final Permit Decisions made within the Regulatory Time Limits
APC	1,644	1,594	50	97.0%
DRH	4,672	4,672	0	100.0%
DWR	30,424	29,014	1,410	95.4%
SWM	5,248	5,248	0	100.0%
Totals	41,988	40,528	1,460	96.5%



**Table 3. Summary of TDEC - Bureau of Environment Permitting Performance  
Comparison of Fiscal Years 2013, 2014, 2015 and 2016 Data**

<b>Compliance with Permit Completeness Review Regulatory Time Limits</b>						
<b>Air Pollution Control</b>						
	<b>Applications Received</b>	<b>Applications Under Review - Time Remaining</b>	<b>Applications to be Reviewed</b>	<b>Applications Reviewed by Deadline</b>	<b>Applications not Reviewed by Deadline</b>	<b>% Permit Completeness Review on Time</b>
<b>FY 13</b>	924	63	861	861	0	100.0%
<b>FY 14</b>	1,153	456	697	679	18	97.4%
<b>FY 15</b>	896	111	785	785	0	100.0%
<b>FY 16</b>	1,545	60	1,485	1,485	0	100.0%
<b>Average</b>	1,130	173	957	953	5	99.5%
<b>Radiological Health</b>						
	<b>Applications Received</b>	<b>Applications Under Review - Time Remaining</b>	<b>Applications to be Reviewed</b>	<b>Applications Reviewed by Deadline</b>	<b>Applications not Reviewed by Deadline</b>	<b>% Permit Completeness Review on Time</b>
<b>FY 13</b>	3,376	0	3,376	3,376	0	100.0%
<b>FY 14</b>	3,767	0	3,767	3,767	0	100.0%
<b>FY 15</b>	4,489	0	4,489	4,489	0	100.0%
<b>FY 16</b>	4,672	0	4,672	4,672	0	100.0%
<b>Average</b>	4,076	0	4,076	4,076	0	100.0%
<b>Solid Waste Management</b>						
	<b>Applications Received</b>	<b>Applications Under Review - Time Remaining</b>	<b>Applications to be Reviewed</b>	<b>Applications Reviewed by Deadline</b>	<b>Applications not Reviewed by Deadline</b>	<b>% Permit Completeness Review on Time</b>
<b>FY 13</b>	470	5	465	462	3	99.4%
<b>FY 14</b>	500	8	492	490	2	99.6%
<b>FY 15</b>	325	11	314	314	0	100.0%
<b>FY 16</b>	336	3	333	333	0	100.0%
<b>Average</b>	408	7	401	400	1	99.7%
<b>Water Resources</b>						
	<b>Applications Received</b>	<b>Applications Under Review - Time Remaining</b>	<b>Applications to be Reviewed</b>	<b>Applications Reviewed by Deadline</b>	<b>Applications not Reviewed by Deadline</b>	<b>% Permit Completeness Review on Time</b>
<b>FY 13</b>	6,868	41	6,827	6,435	392	94.3%
<b>FY 14</b>	6,353	88	6,265	6,003	262	95.8%
<b>FY 15</b>	12,487	216	12,271	11,788	483	96.1%
<b>FY 16</b>	6,928	16	6,912	6,574	338	95.1%
<b>Average</b>	8,159	90	8,069	7,700	369	95.4%
<b>Bureau of Environment</b>						
	<b>Applications Received</b>	<b>Applications Under Review - Time Remaining</b>	<b>Applications to be Reviewed</b>	<b>Applications Reviewed by Deadline</b>	<b>Applications not Reviewed by Deadline</b>	<b>% Permit Completeness Review on Time</b>
<b>FY 13</b>	11,638	109	11,529	11,134	395	96.6%
<b>FY 14</b>	11,773	552	11,221	10,939	282	97.5%
<b>FY 15</b>	18,197	338	17,859	17,376	483	97.3%
<b>FY 16</b>	13,511	100	13,411	13,073	338	97.5%
<b>Average</b>	13,780	275	13,505	13,131	375	97.2%

**Table 4. Summary of TDEC - Bureau of Environment Permitting Performance**

**Comparison of Fiscal Years 2013, 2014, 2015 and 2016 Data**

**Compliance with Final Permit Decision Regulatory Time Limits**

**Air Pollution Control**

	Applications Received	Applications Under Review - Time Remaining	Applications to be Reviewed	Applications Decision Made by Deadline	Applications Decisions not Made by Deadline	% Permit Decisions Made within Review Time
FY 13	1,248	238	1,010	604	406	59.8%
FY 14	1,428	307	1,121	1,001	120	89.3%
FY 15	2,734	708	2,026	1,975	51	97.5%
FY 16	2,257	613	1,644	1,594	50	97.0%
Average	1,917	467	1,451	1,294	157	89.2%

**Radiological Health**

	Applications Received	Applications Under Review - Time Remaining	Applications to be Reviewed	Applications Decision Made by Deadline	Applications Decisions not Made by Deadline	% Permit Decisions Made within Review Time
FY 13	3,376	0	3,376	3,376	0	100.0%
FY 14	3,767	0	3,767	3,767	0	100.0%
FY 15	4,489	0	4,489	4,489	0	100.0%
FY 16	4,672	0	4,672	4,672	0	100.0%
Average	4,076	0	4,076	4,076	0	100.0%

**Solid Waste Management**

	Applications Received	Applications Under Review - Time Remaining	Applications to be Reviewed	Applications Decision Made by Deadline	Applications Decisions not Made by Deadline	% Permit Decisions Made within Review Time
FY 13	3,961	0	3,961	3,800	161	95.9%
FY 14	5,445	14	5,431	5,425	6	99.9%
FY 15	5,209	9	5,200	5,199	1	100.0%
FY 16	5,311	63	5,248	5,248	0	100.0%
Average	4,982	22	4,960	4,918	42	99.2%

**Water Resources**

	Applications Received	Applications Under Review - Time Remaining	Applications to be Reviewed	Applications Decision Made by Deadline	Applications Decisions not Made by Deadline	% Permit Decisions Made within Review Time
FY 13	14,081	388	13,693	12,409	1,284	90.6%
FY 14	30,445	98	30,347	29,957	55	98.7%
FY 15	30,114	748	29,366	29,118	248	99.2%
FY 16	30,427	3	30,424	29,014	1,410	95.4%
Average	26,267	309	25,958	25,125	749	96.8%

**Bureau of Environment**

	Applications Received	Applications Under Review - Time Remaining	Applications to be Reviewed	Applications Decision Made by Deadline	Applications Decisions not Made by Deadline	% Permit Decisions Made within Review Time
FY 13	22,666	626	22,040	20,189	1,851	91.6%
FY 14	41,085	419	40,666	40,150	181	98.7%
FY 15	42,546	1,465	41,081	40,781	300	99.3%
FY 16	42,667	679	41,988	40,528	1,460	96.5%
Average	37,241	797	36,444	35,412	948	97.2%

## Appendix 1

### Title 4 State Government

### Chapter 3 Creation, Organization and Powers of Administrative Departments and Divisions

### Part 5 Department of Environment and Conservation

Tenn. Code Ann. § 4-3-506 (2012)

4-3-506. Making completeness determinations and issuing or denying permits within time frames specified in department's rules and regulations.

- (a) It is the intent of the general assembly that the department of environment and conservation seek to accomplish making a completeness determination and issuing or denying any permit within the time frames specified by the department's rules and regulations.
- (b)(1) The commissioner shall prepare semiannual permitting efficiency reports that include statistics on whether the department has timely acted on permit applications pursuant to the appropriate rule. The reports are due February 1 and August 1 of each year beginning in 2013.
- (2) For permit applications that have not met the time frame required by rule, the report must state the reasons for not meeting the time frame. In stating the reasons for not meeting the time frame, the commissioner shall separately identify delays caused by the responsiveness of the applicant, lack of staff, scientific or technical disagreements, or the level of public engagement.
- (3) The report shall specify the number of days from initial submission of the application to the day of determination that the application is complete. The report due August 1 of each year must aggregate the data for the year and assess whether the program or system changes are necessary to achieve the time frame as specified by rule.
- (4) The report shall be posted on the department's web site and electronically submitted to the governor and members of the general assembly.

HISTORY: Acts 2012, ch. 980, § 1