

## STATE OF TENNESSEE DEPARTMENT OF ENVIRONMENT AND CONSERVATION

NASHVILLE, TENNESSEE 37243-0435

ROBERT J. MARTINEAU, JR. COMMISSIONER

BILL HASLAM GOVERNOR

#### **MEMORANDUM**

TO:

Governor Bill Haslam

Governor of the State of Tennessee

Lieutenant Governor Ron Ramsey

Speaker of the Senate

Speaker Beth Harwell

Speaker of the House of Representatives

FROM:

Robert J. Martineau, Jr., Commissioner

Department of Environment and Conservation

DATE:

August 25, 2014

RE:

Department of Environment and Conservation Environmental Permitting Efficiency Report

Tennessee Code Annotated (T.C.A.) 4-3-506 et. seq. requires the commissioner of the Department of Environment and Conservation (the Department) to electronically submit an annual report to the Governor and the General Assembly each year. Please find our August 2014 Environmental Permitting Report attached.

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) permit completeness decisions reviewed within the time periods set by regulation and (2) final permit decisions completed within the time periods set by regulation. The August 2014 Environmental Permitting report includes data for all permit applications that were on hand but not processed by July 1, 2013 and all permit applications submitted from July 1, 2013 thru June 30, 2014 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 performed 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.

Additionally, the Department has provided information that compares TDEC FY 13/14 permitting data with TDEC FY 12/13 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 Environmental Permitting Report August 2014

Robert J. Martineau, Jr., Commissioner

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# Tennessee Department of Environment and Conservation FY 13/14 Annual Environmental Permitting Report

#### **EXECUTIVE SUMMARY**

The Tennessee Department of Environment & Conservation (the Department) 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 laws.

Environmental permitting is an important component of the Department's charge to protect Tennessee's natural resources and preserve the quality of life; making Tennessee an attractive place to work, live and play. Timely and effectively issuing environmentally protective permits is critical to the success of our state's business and industry sectors and Tennessee's efforts to be the best state in the southeast for high quality jobs. Because there are specific time limits established in statute and rule to determine if applications are complete and specific time limits for final permitting decisions, TDEC defines a permit as any permit, license, registration, certification and accreditation applications subject to the requirements for permitting in Tennessee Code Annotated (T.C.A.) 4-3-501 et. seq.

In 2012 the General Assembly amended Tennessee Code Annotated 4-3-506; requiring the Department to provide the General Assembly with two reports each fiscal year that demonstrate the Department's progress in meeting specific time limits for permit completeness determinations and final permit decisions set by regulation. This report provides a summary of the departmental permitting activities for the time period between July 1, 2013 and June 30, 2014. For permit applications subject to completeness decision deadlines, the Department reviewed 97.8% (11,720 of 11,988) of the permit applications within regulatory time limits. The Department made final permit decisions for 98.7% (40,170 of 40,686) of all complete permit applications within statutory and regulatory time limits. This is a 2.4% increase in efficiency when compared with the August 2013 legislative report.

The Department is committed to meeting the statutory and 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 develop more user-friendly permit applications. During the July 1, 2013 through June 30, 2014 time period, two Divisions recognized a specific need to improve permit review and decision processes. As an example, the Division of Air Pollution Control (APC) has made changes in its business processes for making administrative permit modifications and promulgated new

regulations that allow APC to issue General Permits for small emission sources. The Division of Solid Waste Management used the LEAN Business Process to increase its efficiency for Asbestos and Lead Based Paint permit processing.

This report also compares the Department's performance between FY 12/13 and FY 13/14 for (1) permit completeness decisions and (2) making final permit decisions within regulatory time limits. This comparison demonstrates that the Department did improve its performance for both Permit Completeness Review and Final Permit Decisions.

We hope the information in this report is of assistance to the General Assembly and look forward to receiving comments from members of the General Assembly and the citizenry at large about its content. 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 Tennessee Code Annotated (T.C.A.) 4-3-501 et. seq. This Act provides for the creation of the Department of Environment and Conservation (the Department). The 2012 amendment, included as Appendix 1., requires the Department to submit to the General Assembly a report providing how effectively the Department is permit completeness decisions and final permit decisions and hour performance compares with statutes and regulations. The Department is required to submit permitting status reports twice per year; the Semi-Annual Permit Report in February of each year and the Annual Permit Report in August of each year. There are 13 different rules with specific language requiring the Department to make permit completeness decisions and final permit decisions. Please find below the regulations the Department is required to follow for permit completeness review and final permit application approval /denial.

Regulatory Citations for Permit Completeness Review and Permit Decisions						
Rule	Rule Number					
Solid Waste Regulations	Rules 0400-11-01 .01 thru .13					
Hazardous Waste Regulations	Rules 0400-12-0101 thru .12					
Hazardous Waste Regulations	Rules 0400-12-0201 thru .3					
Regulation of X-ray and Radioactive Materials	Rules 0400-20-0501 thru .146					
Certification of Hydrologic Professionals	Rules 0400-40-701 thru .04					
Water Supply	Rules 0400-45-0101 thru .40					
Underground Injection Control	Rules 0400-45-0601 thru .19					
Safe Dams	Rules 0400-45-0701 thru .10					
Subsurface Sewage Disposal	Rules 1200-01-0601 thru .34					
Asbestos Accreditation	Rules 1200-1-2001 thru .08					
Lead Based Paint Abatement	Rules 1200-1-1801 thru .06					
Air Pollution Control	Rules 1200-3-01 thru 37					
Water Pollution Control	Rules 1200-4-01 thru 14					

The Department has created tables in this report for each Environmental Division with permitting responsibilities. The tables provide the status for permit completeness determinations and final permit decisions within the statutory and regulatory time limits for each type of permit. Also, the Department compared FY 12/13 permitting data with FY 13/14 permitting data in this report.

The format of the report has changed from last year. The Department reduced the number of tables in this report from 16 to four. All tables are presented at the end of the report:

- Table 1. Measuring FY 13/14 Performance for Permit Completeness Review:
- Table 2. Measuring FY 13/14 Performance for Final Permit Decisions;

- Table 3. Comparison of FY 12/13 and FY 13/14 Permit Completeness Decisions; and
- Table 4. Comparison of FY 12/13 and FY 13/14 Final Permit Decisions.

We believe the information presented in the Tables 1. and 2. provide a comprehensive view of the Department's effectiveness in meeting the statutory and regulatory requirements for permit completeness determinations and making final permit decisions within regulatory time limits. Tables 3. and 4. compare this year's performance with last year and measures the improvements the Department has made in our environmental permitting programs.

#### LAND

The Divisions of Solid Waste Management (SWM) and Radiological Health (DRH) are responsible for issuing permits, licenses, registrations, certifications and accreditations as part of their regulatory duties. There are four different environmental programs within these Divisions that have permitting responsibility:

- Solid Waste:
- 2. Hazardous Waste;
- 3. Toxic Substances; and
- 4. X-ray equipment and Radioactive Materials

#### SOLID WASTE

The Solid Waste Program issues permits for processing, storing, and disposing solid waste in Tennessee. EPA Region 4 has approved the Department's Solid Waste Program for solid waste disposal. The Department issues Solid Waste permits for Solid Waste Processing facilities, Convenience Centers, Composting Operations and Demolition, Industrial and Municipal Solid Waste Landfills. The Department also reviews and approves/denies requests to dispose of "special waste" in the landfills it regulates. The permits and special waste approvals issued by the Department for solid waste management are an integral part of preventing the illegal disposal of solid wastes in Tennessee. Disposal of solid waste at permitted facilities helps ensure that the facilities where solid waste is stored, processed or disposed are properly designed, constructed according to engineering design, operated according to the Solid Waste regulations, closed properly and then monitored after closure. Proper disposal of solid waste ensures protection of public health and the environment. Members of the regulated community either pursuing a new permit or modifying a permit for an existing facility are required to submit permit applications and permit modifications and then receive approval from the Department before beginning construction or expansion activities. Under the Solid Waste regulations, the Department has specific time limits to review permit applications and modifications for completeness and then specific time limits to approve or deny permit applications and modifications.

Table 1. reports the Department's success in meeting statutory and regulatory time limits for the review of solid waste permit applications for completeness. SWM reviewed 534 of 540 (98.9%) permit applications for completeness within regulatory time limits. Table 2. reports the Department's success in making decisions for complete solid waste permit applications and modifications within statutory and regulatory time limits. SWM reviewed 554 of 560 (98.9%) permit applications for completeness within regulatory time limits.

Table 3. compares permit completeness and permit decisions between FY 12/13 and FY 13/14. For the Solid Waste Program, 129 more permit applications were reviewed for completeness than were reviewed in FY 12/13. This is an increase of 29.8% in the number of permits reviewed for completeness in FY 13/14 than in FY 12/13. When comparing the rate of completeness review within regulatory time limits between FY 12/13 and FY 13/14, there was a slight decrease of 0.4%; from 99.3% in FY 12/13 to 98.9% in FY 13/14

Table 4. reports the Department made 144 more final permit decisions in FY 13/14 than in FY 12/13, a 34.6% increase. When comparing the rate of permit decisions made within permit decision time limits there was a slight decrease of 0.4% from FY 12/13 (99.3%) to FY 13/14 (98.9%).

#### HAZARDOUS WASTE

The Hazardous Waste Program issues permits for hazardous waste processing, storage, transport, treatment and disposal. The Department has received delegation from EPA Region 4 to serve as the primary regulatory authority for implementation of the federal hazardous waste regulations in Tennessee. Hazardous waste management permits are an integral part of preventing the illegal disposal of hazardous wastes in our state. Transport, treatment and disposal of hazardous waste under specified permit conditions helps ensure that hazardous wastes are transported, stored, treated and/or or disposed of properly; protecting 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 the Department. Construction activities should not begin until the applicant has received approval from the Department for the new facility or modifications of the existing facilities.

Table 1. reports the Department's success in meeting statutory and regulatory time limits for hazardous waste permit application completeness review. For FY 13/14 all permit applications received (282) were reviewed for completeness within regulatory time limits. Table 2. reports the Department's success in making decisions for complete solid waste permit applications and modifications within statutory and regulatory time limits. For FY 13/14 all 282 permit applications received were approved/denied within established time limits.

Table 3. compares the efficiency of making permit completeness decisions in FY 12/13 with FY 13/14. For the Solid Waste Program 238 more permit applications were reviewed for completeness than in FY 12/13. This increase of 238 permit applications between FY 12/13 to FY 13/14 was primarily due to including the hazardous waste transporter permit applications in this year's report. The good news is that the Department completed completeness review for 100% of all permit applications. When comparing the efficiency of permit completeness decisions between FY 12/13 and FY 13/14, there was no change. One hundred percent of all permit completeness reviews were completed within regulatory time limits.

Table 4. reports the Department's efficiency for final permit decisions. The number of permit decisions and the efficiency of permit decisions is the same as reported in Table 3. for permit completeness decisions.

#### TOXIC SUBSTANCES

The Lead Based Paint and Asbestos 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 employees of companies who train Asbestos and Lead Based Paint workers.

Accreditation of training programs ensures the curriculum and the training provided by instructors meets the need of the persons attending the training and helps protect worker health and safety by reducing worker exposure to asbestos and lead. The Department has agreements with EPA Region 4 to implement these programs in Tennessee.

The purpose of the Lead Based Paint and Asbestos accreditation and certification programs is to ensure that:

- 1. The companies and especially company workers are capable of managing the removal of asbestos and/or lead based paint;
- 2. The renovation or repair of buildings with asbestos and/or lead based paint is performed using techniques to protect worker health and safety;
- 3. Lead based paint debris and asbestos removed from buildings is properly disposed; and
- 4. Once work is completed, the building is safe for human occupation.

For accreditations and certifications in the Toxics Program, the permit completeness review and the permit decision, by regulation, are performed at the same time. Table 2. reports the Department's success in making permit completeness and final permit decisions for Lead Based Paint and Asbestos Certification and Accreditation applications. For this reporting period, the Asbestos and Lead Based Paint Programs met all requirements for reviewing applications for completeness and issuing or denying applications within statutory and regulatory time limits; the Department processed 4,609 permit applications.

As reported in Table 3., the Department made 1,348 (4609 vs. 3261) more final permit decisions in FY 13/14 than in FY 12/13. This is an increase in permit applications reviewed of 41%. The Department also increased its efficiency for final permit decisions by 6.8%; from 93.2% in FY 12/13 to 100% in FY 13/14. This increase in productivity was achieved by reviewing the business process used for permit application decisions and applying the LEAN Process. The LEAN Process is a business analysis tool that examines the current business process using staff within the program and some staff from outside the program with two primary goals. The first step is examining and improving the current business process and the second step is ensuring that the new/revised business process is documented via a Standard Operating procedure is used business process consistency and to train new staff.

#### **Solid Waste Management Summary**

The Division of Solid Waste Management reviewed 822 permit applications for completeness during FY 13/14 and made permit completeness decisions for 816 permit applications (99.3%) within the regulatory time limits. This is a 0.1% decrease in permit completeness review efficiency.

Given the increase in the number of permit applications reviewed; 465 in FY 12/13 versus 822 in FY 13/14, an increase of 357 permit applications, SWM continued its excellent success in permit completeness review.

The Division of Solid Waste Management made final permit decisions for 5,451 permit applications in FY 13/14 and made 5,445 final permit decisions within the regulatory time limits. This is an increase of 1,490 permit applications from FY 12/13 to FY 13/14. SWM increased its rate of permit decisions within the regulatory time limits by 5.6%; from 94.3% in FY 12/13 to 99.9% in FY 13/14. SWM improved its permit decision efficiency in a year where the number of permit applications increased significantly and while a major business process change was implemented for the Lead Based Paint and Asbestos Programs.

#### X-RAY EQUIPMENT and RADIOACTIVE MATERIALS

The Radiological Health Program (DRH) issues licenses and certifications for equipment and devices that contain radioactive materials and machines that generate X-rays. The Program also issues licenses to businesses that process low-level radioactive waste. The Nuclear Regulatory Commission (NRC) has granted the Department authority to operate the Radioactive Materials Licensing Program for facilities in Tennessee. This transfer of authority applies to all facilities except the Department of Energy facility in Oak Ridge, Nuclear Fuel Services in Erwin and TVA Nuclear Power Plants. The Department issues radioactive material licenses and X-ray registrations 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 the Department 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 the final waste to facilities designed to accept this waste for disposal.

The regulation of X-ray equipment and equipment containing radioactive materials and the regulation of radioactive materials protects the citizens of Tennessee from exposure to radiation that may affect their personal health. Ensuring that radioactive materials are managed properly also ensures that this material is not released into the environment.

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 the Department for review. The Department determines if the equipment to be operated and the plans for its use meet health and safety standards. Under the Radiological Health regulations, the Department has set time limits to review applications and modifications for completeness. The Department also has the responsibility to review and decide to issue or deny complete applications within a specific time period.

Table 1. reports the Department's success in meeting statutory and regulatory limits for radioactive material license and X-ray registration application completeness reviews. During this reporting period, the Department made 987 completeness determinations for Radioactive Material and 2,780 X-Ray Permit Applications within regulatory time limits. Permit completeness decisions were made for 100% of the permit applications received in FY 13/14.

Table 2. reports the Department's success in approving/denying Radioactive Material License and X-Ray Registration applications and modifications within statutory and regulatory time limits. For this reporting period, the Radioactive Material and X-ray Program made final permit application

decisions for all permit applications, 987 Radioactive Material permit applications and 2,780 X-Ray permit applications totaling 3,757 permit applications, within statutory and regulatory time limits.

Tables 3. and 4. compare the differences between FY 12/13 and FY 13/14 permit application completeness reviews and permit decisions. DRH made permit application completeness decisions and final permit decisions for 100% of all permit applications in FY 12/13 and FY 13/14. DRH received 391 more permit applications in FY 13/14 than in FY 12/13, an increase of 11.6%

#### **AIR POLLUTION CONTROL**

The Department is responsible for maintaining the air quality across the state to protect public health and environment. As a part of the Air Pollution Control regulatory program, the Department's Division of Air Pollution Control (APC) works with business, industry, local governments and local citizens to improve air quality in those parts of the state where air quality does not meet state and federal standards. One strategy to maintain and improve air quality is the regulation of equipment that produces air emissions. APC issues permits for sources that generate air pollution. Given the complexity of air quality analysis and the need to protect our natural resources, the Department issues air pollution control permits that ensure air emissions from business and industry are at levels that are protective of public health and the environment. The U.S. Environmental Protection Agency (EPA) Region IV office has granted APC the authority to implement federal air pollution control regulations promulgated under the Clean Air Act in lieu of EPA. This includes issuing or denying permit applications to release air contaminants into the atmosphere.

During the air permitting process, the Department reviews permit applications and modifications for completeness. Given that clean air is important to Tennesseans, EPA and the Department have developed air emission standards that limit the amount of emissions released into the atmosphere, protecting public health and the environment. The Department is required to evaluate permit applications and modifications for completeness. Once the Department has a complete permit application or modification, it is required to approve or deny the permit modification request within specified time limits as set by the regulations. For some permit types, the Department is required to exchange permit applications/modifications with EPA. Making permit decisions within regulatory and statutory time limits helps Tennessee be competitive in recruiting new business and industry to the state as well as retaining current businesses and industries.

Table 1. reports the Department's success in meeting statutory and regulatory limits for APC Construction and Operating Permit Application Completeness review. During this reporting period, the Department made 964 Construction permit completeness decisions. All Construction permits were deemed complete because the permit application reviews were performed within the regulatory time limit or the permit applications were considered complete by regulation even though the Department did not meet the regulatory time limit for completeness review. APC received 170 Operating Permit Applications for completeness review. All Operating permits were deemed complete because the permit application reviews were performed within the regulatory time limit or the permit applications were considered complete by regulation even though the Department did not meet the regulatory time limit for completeness review.

Table 2. reports the Department's success in approving/denying APC Construction and Operating permit application requests. For FY 13/14 APC made 828 Construction Permit decisions, 777 of the decisions were made within the regulatory time limit. Fifty-one (51) permit decisions were not made within the regulatory time. The two most common causes for failure were (1) permit applicants failing to respond back to the department when notified additional information was

needed and vacant staff positions. The permitting decision efficiency for Construction permit applications was 93.8%.

For FY 13/14, APC made 293 Operating Permit decisions, 224 of the decisions were made within the regulatory time limit and 69 permit decisions required more time than set by regulation. The reasons 69 permit decisions required more time than set by regulation was APC's decision to devote staff resources to issuing construction permits. Under the Uniform Administrative Procedures Act, if a facility has a permit and the permittee submits a new/updated permit application before the current permit expires, then the permittee may continue to operate under the terms and conditions of the "old" permit. Focusing APC's effort on Construction permits helps ensure new businesses can begin operation as quickly as possible. The permitting decision efficiency for Operating permit applications was 76.5%

Table 3. compares FY 12/13 permit application completeness review data with FY 13/14 data. APC made permit completeness decisions for 100% of all permit applications in each fiscal year. There were 273 more permit applications submitted for completeness review in FY 13/14 (1,134) than in FY 12/13 ((861). This is a 31.7% increase in permit applications in FY 13/14.

Table 4. compares the number of final permit decisions made in FY 12/13 with the number made in FY 13/14. In FY12/13 APC made 1,010 final permit decisions, 604 final permit decisions were made within the regulatory time limit and 406 of the final permit decisions exceeded the regulatory time limit. In FY 13/14, APC made 1,121 final permit decisions; 1,001 of these final permit decisions were made within the regulatory time limit and 120 final permit decisions exceeded the regulatory time period. APC improved its final permit decision performance by 29.5%; from 59.8% in FY 12/13 to 89.3 % in FY 13/14. APC made 111 more final permit decisions increased in FY 13/14 than in FY 12/13. This is an 11.1% increase between FY 12/13 and FY 13/14.

APC has made significant improvements in meeting the permit decision time limits set in regulation. This increase is attributed to business process improvement using LEAN, better use of the APC database SMOGLOG that tracks permit application receipt and progress and an emphasis on employee accountability. APC increased its overall final permit decision efficiency by 29.5%. APC continues to implement ideas and business process improvements to meet the regulatory time limits for permit decisions including:

- 1. Additional LEAN events to improve permit business processes;
- 2. Development of general permits that require less time for the regulated community and the Department to review, but provide the same level of public health and environmental protection;
- 3. Re-organizing the Division's Permitting Program, increasing the number of permit writers and decreasing the number of managers; and
- 4. Changing the TN APC regulations to allow the adoption by reference changes in the EPA Air Pollution Control regulations; specifically changes that allow registration of certain industries that have very low air emissions rather than requiring both construction and operating permits of those industries.

#### **WATER RESOURCES**

The Department of Environment and Conservation, through its Division of Water Resources (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 has the challenge to continue provide the amount of water needed and ensuring the quality of the water provided. Providing drinking water to our citizens, ensuring business and industry has the water resources needed to operate, ensuring that our citizens and visitors have safe and enjoyable water recreational opportunities and protecting the diverse fish and aquatic life in Tennessee waters 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. The responsibilities of the Division of Water Resources are divided into three primary programs; Surface Water, Water Supply and Subsurface Sewage Disposal. The Department implements the requirements of Tennessee statutes and rules to protect our water resources by:

- 1. Regulating the discharge of wastewater from public and private wastewater treatment plants;
- 2. Overseeing the design and operation of public water supplies;
- 3. Limiting the impact of construction on rivers and streams;
- 4. Regulating the disposal of surface water runoff and the installation and operation of septic systems (subsurface sewage disposal) to protect ground water;
- 5. Overseeing the construction and operation of dams; and
- 6. Regulating the amount of water taken from rivers and streams to ensure that everyone has the quantity of water needed for local business and industry.

DWR has a greater variety of permit applications and the more permit applications to process than any other division in the Department. To fulfill the legislative commitment and report water resources permit processing; DWR permit processing is divided into three categories.

#### SURFACE WATER

The Surface Water Program implements the regulations that require permits for activities that impact or potentially impact surface water. The primary programs are described below.

1. National Pollution Discharge Elimination System (NPDES) Permitting – This is a national EPA water pollution prevention program that regulates the direct discharge of wastewater into rivers and streams. EPA granted DWR the authority to implement the federal water pollution control regulations in Tennessee. DWR receives permit applications from business, industry, city, county, state and federal governments and other entities who wish to discharge wastewater into rivers and streams. The permitting process evaluates the quality and quantity of the receiving stream, the quantity and quality of wastewater discharged into rivers and streams to determine if wastewater may be discharged into a stream. The Department, via the permit, sets the quantity and quality of wastewater

discharged by a permittee directly into a river or stream. This ensures the receiving stream continues to meet all its classified uses; domestic water supply, fish and aquatic life, recreational use, etc.

- 2. Aquatic Resource Alteration Program (ARAP) Permitting This is a state program that requires anyone who wants to alter the chemical, biological, and/or physical properties of a stream or change the flow of a stream to receive permission from the Department via a permit before any activity begins. 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. The Department approves permit applications for the activity only when the permit limits protects the quality and the quantity of the river or stream.
- 3. State Operating Program (SOP) Permits This is a state program that regulates treatment of wastewater when there is no direct discharge of treated wastewater to a river or stream. A common example of this is the collection of wastewater from subdivisions, transport of the wastewater to an on-site wastewater treatment system and then using the treated wastewater to irrigate fields.
- 4. Non-point Source Pollution In this program, permits are required to ensure that when rain events occur proper controls are in place to prevent surface water from running into local streams and causing pollution. There are two primary contributors to water pollution during rainfall events and the operation of Concentrated Animal Feeding Operations (CAFOs). Siltation of the stream occurs during rainfall events, affecting plant and animal life at the bottom of the stream. Surface water runoff also transports nutrients such as nitrates and phosphates into streams. The 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 decreased availability of oxygen available due to algae decomposition.
- 5. Oil and Gas Production In eastern Tennessee, there are deposits of oil and natural gas below the ground surface. Companies pursue the production of oil and gas by installing wells into these hydrocarbon reservoirs. To ensure that wells are installed that protect public health and the environment, particularly ground water, any person installing a well for oil and/or gas production must apply for and receive a permit from the Department.
- 6. 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 the Department. 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

Table 1. provides permit completeness data for this reporting period. The Department received 4,706 permit applications for completeness determinations in FY 13/14. Completeness determinations were made for 4,444 (94.4%) permit applications within regulatory time limits. The Department will concentrate on improving the rate of timely completeness determinations for Aquatic Resource Alteration Program and Construction Stormwater Program permit applications. For these programs, the Department received 3,897 permit applications and made permit completeness determinations for 3,665 (94.0%) permit applications within regulatory time limits. This is a 5.7% increase in efficiency from FY 12/13, but further improvements can be made.

Table 2. provides the number of final permit decisions made in FY 13/14. During this period, the Department received 6,247 complete permit applications. Final permit decisions were made for 5,912 permit applications (94.6%) within the regulatory time limit. Filling vacant positions and providing permit writer training should allow the Department to improve its final permit decision rate.

Table 3. compares permit completeness determinations from FY 12/13 with FY 13/14. DWR received 551 fewer permit applications for completeness review in FY 13/14 than in FY 12/13; a decrease of 8.1%. While the number of permit applications for completeness review decreased, the rate of permit completeness determinations within regulatory time limits increased by 2.5% from 92.3% in FY 12/13 to 94.5% in FY 13/14.

Table 4. compares final permit decisions from FY 12/13 with FY 13/14. DWR received 1,207 more permit applications for final permit decisions in FY 13/14 than in FY 12/13; an increase of 23.9%. The rate of final permit decisions made within regulatory time limits decreased from 94.9% in FY 12/13 to 94.6% in FY 13/14; a 0.3% annual decrease. Given the additional number of final permit decisions made in FY 13/14, the Department believes its overall level of performance has improved.

#### WATER SUPPLY

The Department 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 pressure and that water from the public water systems is available in quantities to meet the needs of local citizens and industries. The regulation of fluids injected into the subsurface via our Underground Injection Control Program ensures that liquids or gases injected into ground water do not cause ground water contamination nor render the ground water as unsafe for use as a drinking water supply. Regulation of underground injection prevents the injection of fluids in a manner that may adversely affect public health or the environment. The third component of the Water Supply Program is the regulation of dams, under the Dam Safety Act. The Department regulates dams that are not regulated by the federal government, reservoirs that are above a specific size and that do not qualify as farm ponds.

The data for this reporting period for permit completeness review and permit decisions is presented in Tables 1. and 2. During this reporting period, the Department reviewed all permit applications and plans for completeness within the regulatory time period. This included 1,599 permit completeness determinations and 1,562 final permit decisions.

Table 3. compares permitting completeness decisions for the Water Supply Program in FY 13/14 with the numbers in FY 12/13. The primary difference in the two fiscal years is the number of permit applications reviewed for completeness. In FY 12/13, we received 1,730 permit applications for completeness review and 1,559 for FY 13/14, a decrease of 9.8%. The rate of permit completeness determinations made in both years was excellent; 99.5% in FY 12/13 and 100% in FY 13/14.

Table 4. compares final permit decisions for the Water Supply Program in FY 13/14 with FY 12/13. The primary difference in the two fiscal years is the number of final permit decisions. In FY 12/13, DWR received 1,727 permit applications for completeness review as compared to 1,562 permit applications for FY 13/14, a decrease of 9.6%. In FY 13/14, DWR completed final permit decisions for 100% of all permit applications within regulatory time limits. The rate of final permit decisions made in both years was excellent; 99.5% in FY 12/13 and 100% in FY 13/14.

#### SUBSURFACE SEWAGE DISPOSAL

The Department implements the Subsurface Sewage Disposal (SSD) regulations within the Division of Water Resources. The Subsurface Sewage Disposal (SSD) Program reviews applications for the disposal of domestic sewage via a septic tank and field lines. The SSD Program provides for the proper collection and treatment of domestic wastewater in areas without wastewater treatment plants and wastewater collection systems (sewer lines). 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 because wastewater from the home or business cannot be treated. This also 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.

Each year thousands of permit applications are received for SSD systems in areas of the state without public sewer service. Once the SSD Program receives a permit application, DWR evaluates the property where the SSD system will be installed. This review ensures that soil on the property where a home or business will be built can effectively treat the volume of wastewater generated by the home or business. DWR also visits the property and provides the applicant with a drawing that lays out where the septic tank and field lines should be installed. Once the permit application is approved, DWR visits the site during construction to ensure the system is installed properly, including the location and depth of the field lines. Once the SSD system has been installed, DWR then performs a final inspection. If the SSD system has been installed properly then DWR provides the permit applicant with a final permit. Many times, a property developer plans to build a subdivision with several homes. In these cases, DWR reviews the property to be developed, with an emphasis on the type and depth of soil cover. From this soil analysis, DWR determines the size and number of lots that can be used for home construction. In many cases a private Soils Scientist performs this work. Under such circumstances, DWR reviews the Soils Scientist's plan to ensure that the property has been properly evaluated.

DWR issues licenses to persons who install SSD systems and persons who remove waste from septic tanks once the tank is full or nearly full of solid material. SSD installers are required to pass a test administered by DWR and demonstrate their ability to properly install SSD systems before receiving an SSD installer's license. DWR licenses people who "pump" septic tanks to ensure the "pumper" understands that the solid material removed from septic tanks must be disposed of properly. In situations where the solid material "pumped" from septic tanks cannot be taken to a local wastewater treatment plant, DWR receives requests to permit sites for domestic sewage disposal. When DWR receives these applications, the soil type and depth of soil on the proposed site is evaluated to determine if the waste material can be safely disposed. Once a site has been approved for disposal of waste material, DWR provides the applicant with a drawing for construction of trenches for disposal.

In the Subsurface Sewage Program, the permit completeness review and final permit decision occur simultaneously. Given that, the permitting data for the Subsurface Sewage Program is provided in Table 2. DWR processed 30,347 permit applications in FY 13/14. DWR made 29,957 final permit decisions

within the regulatory time limit. DWR processed 99.8% of all final permit applications within regulatory time limits.

Table 4. compares final permit decision data for the SSD Program in FY 13/14 with FY 12/13 data. For permitting efficiency, the rate of final permit decisions made within the regulatory time limits were essentially the same; 99.7% in FY 12/13 and 99.8% in FY 13/14. The biggest difference is the number of final permit decisions made; 10,180 in FY 12/13 and 30,347 in FY 13/14. The reason for this difference is the FY 12/13 data did not include some permit decision categories, particularly permit requirements for final inspections. A truer comparison is the number of SSD Applications submitted. There were 5,772 SSD permit applications submitted in FY 12/13 versus 7,609 SSD permit applications in FY 13/14. This is an increase of 31.8%. Given this, DWR performed very well in making final permit decisions within regulatory time limits.

#### Water Resources Summary - Surface Water, Drinking Water and Subsurface Sewage Programs

DWR improved its efficiency in making permit completeness determinations in FY 13/14. In FY 12/13, 93.3% of all permits submitted were reviewed for completeness within the regulatory time limit. For FY 13/14, 95.8% of all permit applications were reviewed for completeness within the regulatory time limits. This is an overall increase of 2.5%. The number of permit applications for completeness review dropped slightly from 6,816 in FY 12/13 to 6,265 in FY 13/14. This is a decrease of 8.1%; 551 fewer permit applications for completeness review.

For final permit decisions, the number of final permit decisions made in FY 13/14 increased greatly from FY 12/13. In FY 12/13, Water Resources made 16,497 final permit decisions compared with 30,347 final permit decisions in FY 13/14; an increase of 13,400 permit applications between the two years. The reason for the dramatic increase is that the FY 13/14 data included final permit decisions at locations with SSD systems, approximately 9,000 sites. When this is taken into account, the increase in final permit decisions is approximately 4,400 more final permit decisions in FY 13/14 than in FY 12/13; an increase of 22.7%. DWR also increased the percentage of final permit decisions made within regulatory limits from 98.2% in FY 12/13 to 98.7% in FY 13/14; a 0.5% increase.

#### CONCLUSIONS

The Department continues to work diligently to meet statutory and regulatory time limits for permit completeness review and final permit decisions. Table 1. provides the metrics for permit completeness decisions. For permit completeness decisions, the Department made 11,988 permit completeness decisions; 11,720 of the permit completeness decisions were made within the time limits set by regulation. TDEC successfully met the regulatory deadline for permit completeness review for 97.8% of all permit applications.

Table 2. provides the metrics for final permit decisions. The Department made 40,686 final permit decisions; 40,170 of the final permit decisions were made within the time limits set by regulation. TDEC successfully met the regulatory deadline for final permit decisions for 98.7% of all permit applications.

The Department had 15,392 more permit applications for final permit decisions in FY 13/14 than in FY 12/13. However, approximately 9,000 of those final permit decisions were for permit types that were not counted in FY 12/13. When this is taken into consideration, the increase in final permit decisions increased by approximately 5,800 permit application from FY 12/13; a 25.4% increase. The biggest increase in permit applications from FY 12/13 to FY 13/14 was in the SSD Program with 1,887 more SSD permit applications.

Table 3. compares FY 12/13 and FY 13/14 permit completeness decision data. The Department received 11,988 permit applications for completeness review in FY 13/14 as compared to 11,518 permit applications in FY 12/13. This is an increase of 470 permit applications; 4.1% more than FY 12/13. For FY 13/14, the rate of permit completeness decisions within regulatory time limits was 97.8% versus 96.4% in FY 12/13, an improvement of 1.4%

Table 4. compares the number of final permit decisions made in FY 12/13 to the number of decisions made in FY 13/14. In FY 13/14, the Department made 40,686 final permit decisions compared to 25,294 final permit decisions in FY 12/13. However, approximately 9,000 of the permit applications decisions made in FY 13/14 were in categories the Department did not include in its FY 12/13 report. When this is considered, the increase in permit application is approximately 5,800; a 25.4% in the number of final permit decisions made in FY 13/14 when compared to FY 12/13. The Department made final permit decisions in FY 13/14 for 98.7% of all permit applications received within the regulatory time limit. In FY 12/13, the rate of final permit decisions within regulatory time limits was 96.3%. The Department increased its final permit decision efficiency rate by 2.4% in FY 13/14

The Department made two significant business process changes in FY 13/14 to increase productivity; using the LEAN Process to improve the Lead Based Paint and Asbestos permitting process and to improve the permit process for permit modification in the Air Pollution Control Program. LEAN is a business analysis tool that brings together staff members performing the business activity under review, business process experts and facilitators to review a specific business process and determine how it can be performed more efficiently. Generally, the best ideas for improved efficiency come from the staff members who perform the work. The LEAN Team is empowered to make business process change, implement the change(s) and measure improved performance once changes are implemented.

The Department continues to review its business processes and evaluates methods to equally distribute workload among staff and provide training opportunities for staff. Another avenue the Department is pursuing to increase permit application review within regulatory time limits is the evaluation of the requirements for different types of permits. Where state and federal statutes and rules provide flexibility, the Department will consider transitioning from individual permits to general permits and in some cases possibly moving from a general permit to notification of activity with specific reporting and inspection requirements to ensure protection of public health and the environment.

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

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Table 1. Bureau of Environment
Timely Permit Application Completeness Reviews – FY 13/14

Permit Completeness Decisions - FY 13/14									
7-1-2013 to 6/30/14									
Division	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit					
	Air Pollu	tion Control							
Construction Permits	964	964	0	100.0%					
Operating Permits	170	170	0	100.0%					
Total Permits	1134	1134	0	100.0%					
	Radiolog	gical Health							
Radioactive Material			_						
Licenses	987	987	0	100.0%					
X-Ray Certifications	2780	2780	0	100.0%					
Total Permits	3767	3767	0	100.0%					
	Solid Wast	e Management							
Solid Waste Program	540	534	6	98.9%					
Hazardous Waste Program	282	282	0	100.0%					
Total Permits	822	816	6	99.3%					
Water Resources									
Surface Water	4706	4444	262	94.4%					
Drinking Water Total	1559	1559	0	100.0%					
Total Permits	6265	6003	262	95.8%					
Bureau Totals									
Grand Total	11988	11720	268	97.8%					

Table 2. Bureau of Environment
Timely Environmental Permit Decisions- FY 13/14

Permit Completeness Decisions - FY 13/14								
7-1-2013 to 6/30/14								
Division	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit				
Air Pollution Control								
Construction Permits	828	777	51	93.8%				
Operating Permits	293	224	69	76.5%				
Total APC Permits	1121	1001	120	89.3%				
Radiological Health								
Radioactive Material Licenses	987	987	0	100.0%				
X-Ray Certifications	2780	2780	0	100.0%				
Total DRH Permits	3767	3767	0	100.0%				
Solid Waste Management								
Solid Waste Program	560	554	6	98.9%				
Hazardous Waste Program	282	282	0	100.0%				
Toxics Program	4609	4609	0	100.0%				
Total SWM Permits	5451	5445	6	99.9%				
Water Resources								
Surface Water	6247	5912	335	94.6%				
Drinking Water Total	1562	1562	0	100.0%				
Subsurface Sewage	22538	22483	55	99.8%				
Total DWR Permits	30347	29957	390	98.7%				
Grand Total	40686	40170	516	98.7%				

Table 3. Comparison of FY 12/13 and FY13/14 Permit Completeness Review

Permit Completeness Decision Comparison – FY 12/13 & FY 13/14										
7-1-2012 to 6-30-13				7-1-13 to 6-30-2-14						
Division	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit	+/- Change from FY 12/13	Change in Number of Permit Applications
Air Pollution Control										
Construction Permits	690	690	0	100.0%	964	964	0	100.0%	0.0%	274
Operating Permits	171	171	0	100.0%	170	170	0	100.0%	0.0%	-1
Total Permits	861	861	0	100.0%	1134	1134	0	100.0%	0.0%	273
Radiological Health										
Radioactive Material Licenses	1159	1159	0	100.0%	987	987	0	100.0%	0.0%	-172
X-Ray Certifications	2217	2217	0	100.0%	2780	2780	0	100.0%	0.0%	563
Total Permits	3376	3376	0	100.0%	3767	3767	0	100.0%	0.0%	391
Solid Waste Mgmt.										
Solid Waste	421	418	3	99.3%	540	534	6	98.9%	-0.4%	119
Hazardous Waste	44	44	0	100.0%	282	282	0	100.0%	0.0%	238
Total Permits	465	462	3	99.4%	822	816	6	99.3%	-0.1%	357
Water Resources										
Surface Water	5086	4693	393	92.3%	5706	4444	262	94.4%	2.2%	620
Drinking Water Total	1730	1722	8	99.5%	1559	1559	0	100.0%	0.5%	-171
Total Permits	6816	6415	401	93.3%	6265	6003	262	95.8%	2.5%	-551
Grand Total	11,518	11,114	404	96.4%	11,988	11,720	268	97.8%	1.4%	470

Table 4. Comparison of FY 12/13 and FY 13/14 TDEC Final Permit Decisions

Final Permit Decision Comparison – FY 12/13 & FY 13/14										
7-1-2012 to 6-30-13				7-1-13 to 6-30-14						
Division	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit	Total Permit Applications	Permit Applications within Regulatory Limit	Permit Applications exceeding Regulatory Limit	% Compliance with Regulatory Limit	+/- Change from FY 12/13	Change in Number of Permit Applications
Air Pollution Control										
Construction Permits	585	463	122	79.1%	828	777	51	93.8%	14.7%	243
Operating Permits	425	141	284	33.2%	293	224	69	76.5%	43.3%	-132
Total Permits	1010	604	406	59.8%	1121	1001	120	89.3%	29.5%	111
Radiological Health										
Radioactive Material Licenses	1159	1159	0	100.0%	987	987	0	100.0%	0.0%	-172
X-Ray Certifications	2217	2217	0	100.0%	2780	2780	0	100.0%	0.0%	563
Total Permits	3376	3376	0	100.0%	3767	3767	0	100.0%	0.0%	391
Solid Waste Mgmt.										
Solid Waste Program	416	413	3	99.3%	560	554	6	98.9%	-0.4%	144
Hazardous Waste Program	284	284	0	100.0%	282	282	0	100.0%	0.0%	-2
Toxics	3261	3038	223	93.2%	4609	4609	0	100.0%	6.8%	1348
Total Permits	3961	3735	226	94.3%	5451	5445	6	99.9%	5.6%	1490
Water Resources										
Surface Water	5040	4783	257	94.9%	6247	5912	335	94.6%	-0.3%	1207
Drinking Water Total	1737	1728	9	99.5%	1562	1562	0	100.0%	0.5%	-165
Subsurface Sewage	10180	10148	32	99.7%	22538	22483	55	99.8%	0.1%	12358
Total Permits	16947	16650	297	99.3%	30347	29957	390	98.7%	-0.6%	16549
Grand Total	25294	24365	929	96.3%	40686	40170	516	98.7%	2.4%	15392

#### Appendix 1.

## 2012 Amendment to the Department of Environment and Conservation Statute - Review of Permits for Completeness and Permit Decisions

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 frame 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