



Department of  
**Environment &  
Conservation**

# Evolution of Tennessee's Air Programs

## This Ain't Your Daddy's APC

2018 AWMA Southern Section

Jimmy Johnston - TDEC Division of Air Pollution  
Control



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**Environment &  
Conservation**

# Evolution of Tennessee's Air Programs

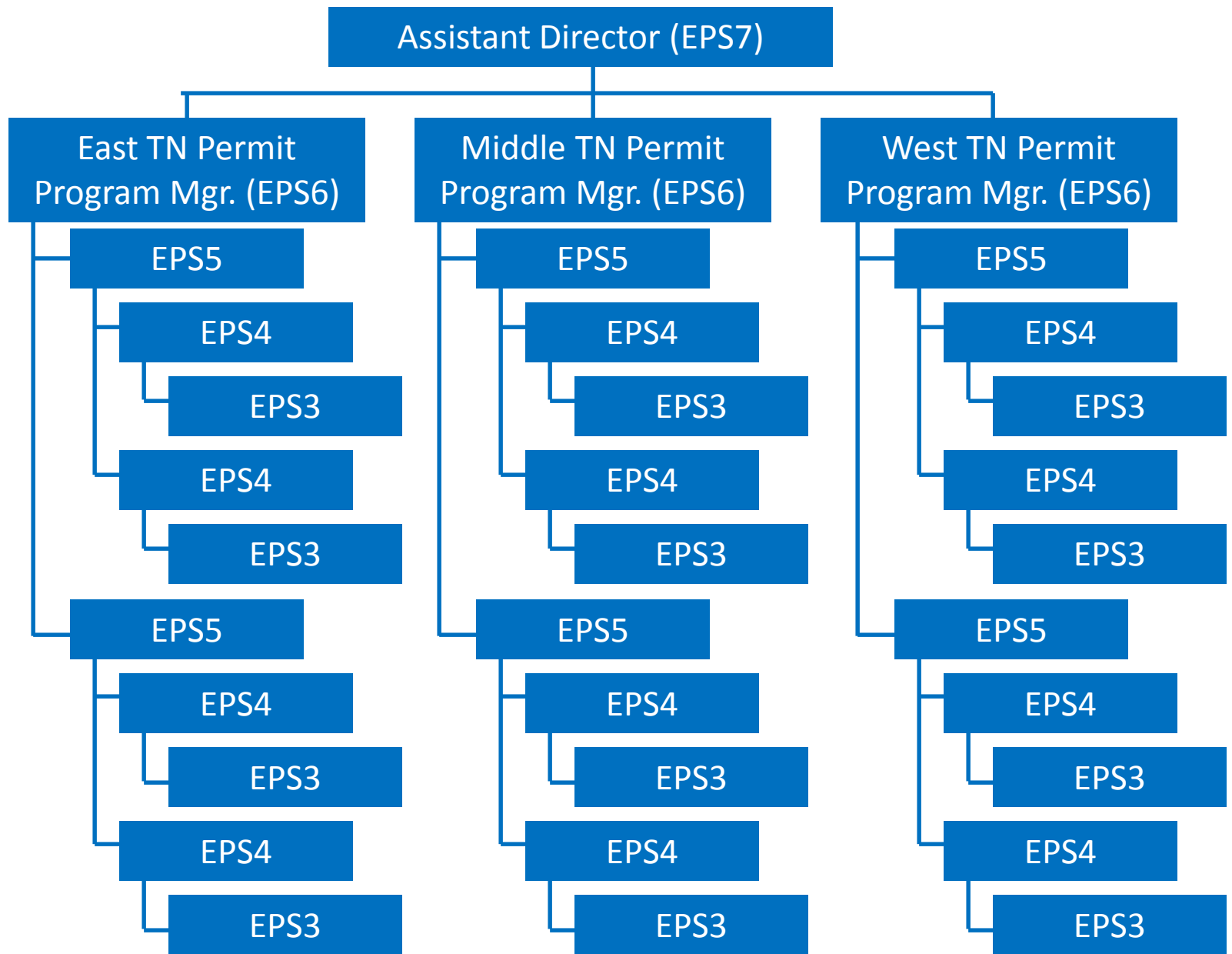
This Ain't ~~Your Daddy's~~ APC

2018 AWMA *Barry's* Southern Section

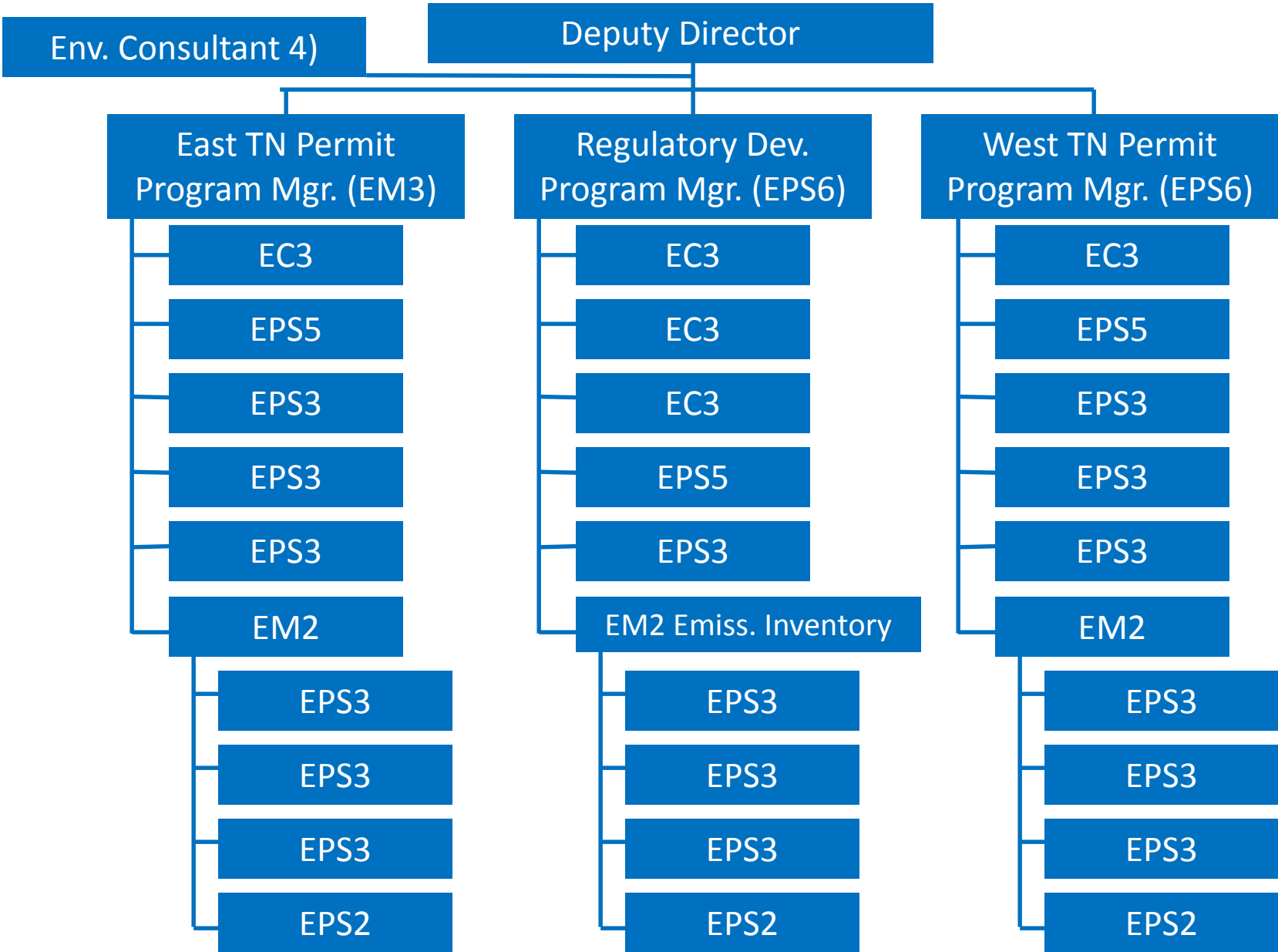
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# “Dual Track”

- 2014 - 2015
- Created an alternative Technical Track in addition to existing Management Track
  - All Engineer, Scientist, and Manager Job Series re-done
  - New Technical Track
    - Environmental Fellow
    - Environmental Consultant Series
      - Expanded career track for Scientists by three steps
      - Added one step in Engineer career track
  - New “Junior Manager” Position (Environmental Manager 2 or EM2)
    - Same pay grade as senior engineer position
  - Senior Technical Staff Relieve of Supervisory Responsibilities
    - Some managed one position (or a vacancy)



**PERMIT PROGRAM BEFORE DUAL TRACK (Illustrative)**



**PERMIT PROGRAM AFTER DUAL TRACK (Illustrative)**



# Dual Track changes

- **Permitting**

- Assistant Director became Lead Environmental Consultant
- All three program managers became Environmental Consultants
- Hired/promoted three new “junior managers”, three new program managers, new Deputy Director
- Two additional engineers became Environmental Consultants
- Reorganized from East, Middle, West Permitting to East, West, and Regulatory Development/Special Permits

- **Enforcement**

- Program manager became Environmental Consultant
- Promoted technical staff member to Program Manager
- Three scientists/engineers became Environmental Consultants
- Became Separate Program (was partially incorporated within Permitting)

# Dual Track changes

- **Technical Services (ambient monitoring)**
  - Program Manager became “Environmental Fellow” for Division
  - Technical staff promoted to Program Manager
  - Two Scientists became Environmental Consultants
- **Compliance Validation (stack testing)**
  - Program Manager became Environmental Consultant
  - Technical staff promoted to Program Manager
- **Field Services**
  - One manager became technical staff
  - Promoted one technical staff to junior manager
  - Merged four offices into two (but still located separately)
  - **Four managers stayed managers**
  - Several Scientists became Environmental Consultants
- **Mobile & Air Resources Management (MARM)**
  - **Manager remained manager**
  - Three scientists/engineers became Environmental Consultants



# Post-Dual Track Personnel Changes

- **Director Barry Stephens Retired – Replace by Michelle Owenby**
- **Deputy Director of Field Services Carol Williams Retired – Replaced by Knoxville Field Services Manager Martie Carpenter**
  - Knoxville Environmental Consultant Promoted to Knoxville Manager
- **Deputy Director Quincy Styke Retired – Replaced by Compliance Validation Manager Alvin Pratt**
  - Compliance Validation Consultant promoted to Program Manager
- **New Business Administrator Position Created & Filled**
- **MARM Program Manager Retired**

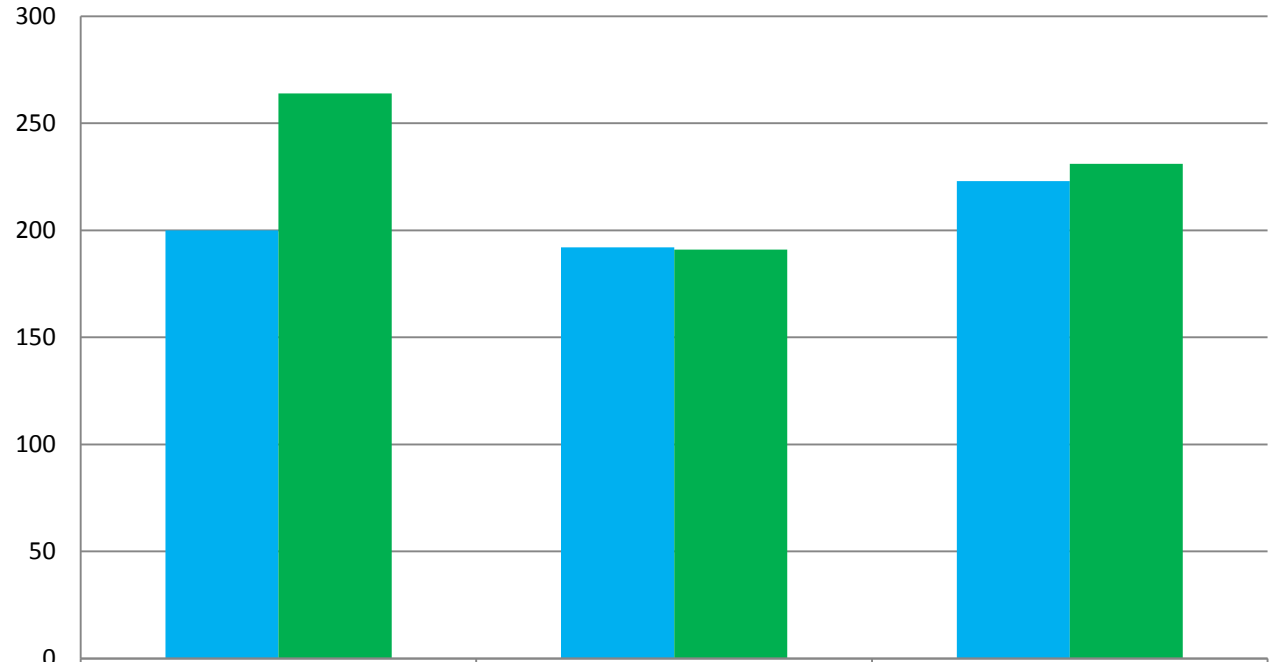
# Programmatic Changes

- **Field Services**
  - Environmental Consultants given more responsibilities (i.e., lead on MACT standards, oversight of vehicle inspection program audits, reviewing draft permits)
  - All Field Service Managers, including one junior manager, report directly to Field Serviced Deputy Director
  - Outreach and Education
  - Use of WebEx for field staff meetings & training
  - Implementing Alternative Work Place Solutions (aka teleworking)

# Field Services Productivity Improvements

ADS Pilot Test of Three Field Offices

## Productivity



	Inspections	Complaints	Report Review
■ August 14, 2016 to February 15, 2017	200	192	223
■ August 14, 2017 to February 15, 2018	264	191	231

# Programmatic Changes

- **Ambient Monitoring (Tech Services)**
  - **Split into two Programs –**
    - Recommendation from 2016 TSA Audit
    - Tech Services Program & Quality Assurance Program
      - both with new managers
    - Separates QA auditing functions from data collection functions
  - **Moved PM<sub>2.5</sub> filter analyses from state lab to private lab**
    - Due to invalidation of multiple years of data resulting from TSA Audit
  - **Move from filter-based PM<sub>2.5</sub> monitors to continuous PM<sub>2.5</sub> monitors**
    - To reduce analysis and filter costs, eliminate lab-related issues
  - **Upgrade Most of Monitoring Network**
    - Replacing all shelters
    - Replacing gaseous monitors
    - Replacing calibration units
    - Upgrading communications equipment
    - \$1.5 MM in state appropriations

# Add Ambient Monitoring Metric

Cost savings (IML costs) from switching from filter based monitors to continuous monitors

FRM Filter Based Sampling				FEM Continuous Based sampling			
Year	Lab Expense	Shipping Expense	Totals	Year	Lab Expense	Shipping Expense	BAM Tape
2015	\$48,807	\$4,437	\$53,244	2015	-	-	\$5,070**
2016	\$55,769	\$8,143	\$63,911	2016	-	-	\$5,070**
2017	\$41,654	\$7,325	\$48,979	2017	-	-	\$5,070**
2018*	\$8,929	\$226	\$9,156	2018	-	-	\$5,070**
* Estimated costs, partial year				**BAM network became operational 2018			

# Programmatic Changes

- **MARM**

- Handled mobile sources, asbestos, data management
- Manager retired
- Management position used for new Ambient Monitoring Quality Assurance Program
- Program eliminated
  - Existing staff reassigned to other programs
    - Mobile sources to Regulatory Development
    - Asbestos to Compliance Validation
    - Data Management to Enforcement

# Programmatic Changes

- **Enforcement**
  - Two consecutive EPA audits found problems with timely reporting
  - Enforcement Data Entry & Management Approached with Division-Wide Approach
    - Enforcement Program
    - Field Services Program
    - Permit Program
    - Compliance Validation Program
    - Data Entry Staff moved from MARM to Enforcement
  - Enforcement Program Trained Other Programs on Enforcement Procedures
  - Implementing Alternative Workplace Solutions

# Enforcement Data from EPA's ECHO Report

Metric ID	Metric Name	Metric Type	National Goal	National Average (2015 Frozen Data)	TN (2015 Frozen Data)	National Average (2016 Frozen Data)	TN (2016 Frozen Data)	National Average (2017 Frozen Data)	TN (2017 Frozen Data)	National Average (2018 Production Data)	TN (2018 Production Data)
3a2	Timely reporting of HPV determinations	Goal	100%	100%	100%	17%	0%	41%	69%	57%	100%
3b1	Timely reporting of compliance monitoring MDRs	Goal	100%	59%	95%	81%	84%	82%	85%	93%	99%
3b2	Timely reporting of stack tests and stack test results	Goal	100%	60%	86%	77%	71%	67%	97%	76%	100%
3b3	Timely reporting of enforcement MDRs	Goal	100%	47%	54%	77%	93%	78%	96%	87%	99%
5a	FCE coverage: majors and mega-sites	Goal	100%	87%	100%	85%	100%	89%	100%	76%	99%
5b	FCE coverage: SM-80s	Goal	100%	91%	100%	91%	100%	94%	100%	88%	100%
5c	FCE coverage: minor and synthetics minor (non-SM80s) sources that are part of a CMS Plan and Alternative CMS Facilities	Goal	100%	77%	100%	80%	100%	86%	100%	58%	100%
5e	Reviews of Title V annual compliance certifications completed	Goal	100%	65%	93%	70%	94%	77%	96%	75%	92%
13	Timeliness of HPV Identification	Goal	100%	86%	100%	84%	100%	88%	92%	89%	100%



# Programmatic Changes

- **Emissions Inventory Program**
  - Separate from Regulatory Development
  - EM2 (Junior Manager) promoted to EM3
  - Development of Automatic Emissions Inventory Spreadsheet (EDL) Checker
  - SLEIS (State & Local Emissions Inventory System)
    - On-line Emissions Inventory Submission
      - Will link inventory data to APC permitting database
    - Title V Semiannual Report and Annual Compliance Certification
    - Annual Emissions Fee Report submission
    - Scheduled for 2018 emissions inventory (due 2019)

# Programmatic Changes

- **Regulatory Development Program**
  - **Development of Photochemical Modeling Team**
  - **Air Quality Modeling Web Page**
    - **Draft Modeling Guidance for Tennessee**
    - **Tennessee Guidance on use of MERPs**
  - **Technical Support for VW Settlement Efforts**

# Compliance Validation

- **Added Smoke Schools in East Tennessee**
- **New Smoke School Electronic Application**
- **Implementing AWS**

# Programmatic Changes

- **Permitting**
  - **Construction Permit LEAN Process**
  - **General Permits**
  - **Permits-by-Rule**
  - **Combined Construction and Operating Permits**
  - **Ownership Transfer through Permit Amendment**
  - **Move from Geographic to Sector-Based Permitting**
  - **Elimination of “Junior Manager” Structure**

# Improvements in Permitting Program

- **June 2014**
  - 28 Backlogged (past regulatory deadline or APC Goal) Construction Permits
  - 17 Backlogged Title V Permits
  - ~40 Backlogged Conditional Major (i.e., Synthetic Minor) Permits
  - 392 Backlogged True Minor Operating Permits
  - 61 Backlogged Permit Modifications
- **September 2018**
  - 1 Backlogged Title V Permit
  - 1 Backlogged Permit Modification

# Improvements in Permitting Program

- **General Permits**
  - Two Permits for Dry Cleaners Issued 2/2/2017
  - 32 “Notices of Coverage” Issued
  - Issuance Time = 3 to 44 days, Average = 17
- **Permits-by-Rule**
  - Adopted for
    - Gasoline Dispensing Facilities
    - Stationary Emergency Engines
    - Autobody Paint Shops
  - 939 Issued since September, 2017
  - Average “Notice of Authorization” Issuance Time = 14 days
  - Issued by Administrative Staff
- **Average Issuance Time for Traditional Permits**
  - Construction – 76 days
  - True Minor Operating - 108 days

Jimmy Johnston  
Deputy Director  
TDEC Division of Air Pollution Control  
[james.johnston@tn.gov](mailto:james.johnston@tn.gov)  
615-253-7319



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Questions?