



Department of  
**Environment &  
Conservation**

# Data Verification for Recycling & Diversion Reports

# Objective

- Improve quality of data submitted
- Improve consistency of reporting
- Minimize the QA/QC review period
- Reduce costs and time associated with APR
- Discuss problem areas within the Annual Progress Reports with an emphasis on Objective 1: *Recycling Reports, Waste Diversion Reports, and Landfill Disposal Reports*

# Examples of Variation in Reporting

- Disposal Reports
  - New industry
  - Loss of industry
  - APR vs. SWOR data reported
  - Disaster event
  - Data entry error
  - Changes in reporting format
  - Report author changes (Landfill/Transfer Station)
  - Report reviewer changes (TDEC)
- Recycling and Diversion Reports
  - Variability in Residential, Commercial and Industry reporting
  - Market fluctuations
  - Disaster event
  - Data entry error
  - Changes in reporting format
  - Report author/reviewer changes (TDEC/APR)

# Process Changes to Improve Accuracy

- TDEC
  - Develop QA/QC SOPs
    - Improve documentation of QA/QC process and reconciliation of data with reporting entities
    - Document fluctuations associated with commercial/business changes and natural disasters
    - Prevent inconsistency in reporting as a result of staff turnover
    - Understand discrepancies and relationships between ARP and Origin Reports
  - Investigate opportunities to tie MM grants and funding to accurate reporting
  - Review required reporting elements and APR format for user-friendliness
  - Provide greater assistance in promoting and/or procuring recycling marketing and partnership efforts
- Regions
  - Investigate opportunities to better compel accurate reporting from reporting entities
  - Develop comprehensive APR SOPs (some work already completed this spring)
    - Improve documentation of data collection process with reporting entities
    - Document fluctuations associated with commercial/business changes and natural disasters
    - Prevent inconsistency in reporting as a result of staff turnover

# Best Practices for Gathering Data

- Contact entities that reported recycling and diversion the previous year
- To ensure consistency, use the written communication (cover letter and survey) provided in the *LOCAL SOLID WASTE MANAGEMENT REPORTING AND PLANNING GUIDANCE*
  - <http://www.tn.gov/environment/article/sw-mm-annual-progress-report>
- Compare data reported from previous year
  - Do you maintain historical data?
  - How do you compare data year over year?
  - Do you look for inconsistencies?
  - How many entities report previous year's data?
  - Ask questions or follow up with the reporting entity if any numbers look funny or stand out, prior to submittal. Document discussion.
  - What are recommended strategies for getting data when surveys are not returned?

# Improving Data Quality

- Select the appropriate sector.
- Ensure contact name, phone number, and email is entered and up-to-date.
- Anonymous entries are allowed
  - Must have own CRR/CDR entry with commodities broken out
  - May have an unique anonymous Identifier
  - Must be discussed with TDEC personnel **before** APR due
- Split, do not aggregate, the following
  - Submit separate reports for each Walmart store
  - Submit separate reports for each business/generator
- T.C.A. §68-211-861(c)(2a)
  - a multiplier of 3 is applied to aluminum beverage containers and plastic bottles
  - TDEC will calculate the multiplier for ABC and plastic bottles

# TDEC QA/QC Process

TDEC compares recycling and diversion reports to the past 2 years and looks for:

- New or missing entities
- Missing contact information
- 10% Rule
  - Increase/decrease of tonnages
- New or missing materials reported
- Unusually large or small amounts/number reported
  - pounds
  - gallons or
  - other conversion units; such as number of lamps
- If data is unverifiable, TDEC will delete the CRR or CDR.

# Disposal Data Sources

- Disposed of inside TN
  - Solid Waste Origin Reports (SWOR) from TN Class I landfills and transfer stations
  - Quarterly reports to TDEC
  - Compared to Fee Section reports
- Exported out of TN
  - APR disposal reports or
  - Class I transfer stations
- Class III/IV
  - Submitting SWOR to TDEC annually
- County Records
  - Compare SWOR with public sector records to better evaluate local government control.