Emission Banking and Trading
Area and Mobile Source Credit Generation
Potential Rulemaking

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Overview

- Purpose of the potential rulemaking
- Anticipated timeline
- Rules affected
- Background on:
  - Area and mobile emissions
  - How point, area, and mobile sources are modeled
- Draft strategy
- Request for informal comments
Purpose

- **Current rules**
  - Allow for generating credits from Area and Mobile Sources

- **Implementation issues**
  - Surplus and Real
  - Quantifiable
  - Permanent and Enforceable

- **Commission direction**
Anticipated Timeline

• Proposal: March 2017

• Public hearings: April 2017

• Adoption: August 2017
Rules Affected

- 30 Texas Administrative Code Chapter 101, Subchapter H

  - Emission Credit Program, Division 1
    - Commonly known as Emission Reduction Credit (ERC) Program

  - Discrete Emission Credit Program, Division 4
    - Commonly known as Discrete Emission Reduction Credit (DERC) Program
2014 HGB & DFW VOC Emissions

**HGB**
- **Area Source**: 61.0%
- **Point Source**: 16.4%
- **Mobile Source**: 22.6%

**DFW**
- **Area Source**: 65%
- **Point Source**: 6%
- **Mobile Source**: 29%
2014 HGB & DFW NO$_X$ Emissions

**HGB**
- Mobile Source: 67%
- Point Source: 26%
- Area Source: 7%

**DFW**
- Mobile Source: 78%
- Point Source: 10%
- Area Source: 12%
State Implementation Plan (SIP) Emissions

- Emission credits must be surplus to “SIP emissions”
  - SIP emissions are based on the “Projection-Base Year Inventory” used for SIP modeling
- For point sources, these inventories are based on site-specific data
  - EPA’s Air Markets Program data for electric generating units (EGU)
  - Texas Emissions Inventory (EI) data for non-EGU
- For area and mobile sources, sources are not tracked individually
  - Inventories are based on higher level data
Area Source
Projection-Base Year SIP Inventories

- Area source emissions are generally county-level estimates from the Texas Air Emissions Repository (TexAER)
  - TexAER is analogous to the point source EI
  - Emissions are typically calculated by multiplying an emission factor (emissions per unit of activity) by the activity that generates the emissions
    - Sometimes activity surrogates are used
    - Population is a commonly used activity surrogate
Mobile source emissions are also generally county-level and are based on models
- Distinct modeling for non-road, on-road, and airports

These models estimate emissions based on:
- vehicle-type emission factors; and
- activity estimates, such as vehicle miles traveled

Shipping emissions are estimated for each non-attainment area
- Use data from shipping industry to calculate emissions estimates
Overview of Potential Requirements Under Consideration for the Proposal

- To address implementation issues associated with generation and use of area and mobile credits, the TCEQ is considering rulemaking to address:
  - the types of sources that would be eligible to generate credits;
  - the quantity of credits that could be generated by area and mobile sources;
  - the timeframe for credit generation; and
  - recordkeeping and reporting.
Overview of Potential Requirements Under Consideration for the Proposal

- The potential new requirements under discussion today may or may not be included in the proposal.

- Additional new requirements not discussed today may be included in the proposal.
Ensuring Emission Reductions are Real and Surplus

- Do not issue credits to the following area and mobile sources:
  - sources that did not operate during the SIP emissions year
  - sources that cannot generate at least 0.1 ton of credit after all discounts are applied
  - sources that do not use verifiable records with approved methods to quantify emissions
  - residential area sources
  - the shutdown of specific inelastic area sources (e.g., gas stations and dry cleaners)
Ensuring Emission Reductions are Real and Surplus

- Do not issue credits to the following area and mobile sources (cont):
  - emission reductions from shifting activity
  - the shutdown or replacement of a mobile source unless it is made permanently inoperable
  - on-road mobile sources that are not part of a fleet
  - mobile sources that do not operate mostly within the nonattainment area (e.g., captive fleets)
Ensuring Emission Reductions are Real and Surplus

• Reduce the available SIP emissions by:
  – 20%—30% for the area and non-road mobile source categories
  – 5%—15% for the on-road mobile source category

• Reduce the credits issued for the shutdown of an area source by 20% (minimum 0.1 ton).
Ensuring Emission Reductions are Real and Surplus

- Determine the historical adjusted emissions based on the average annual emissions from any consecutive two-years within the five-years immediately preceding the emission reduction.
  - As opposed to 10-year look back now in rules

- Reduce the credits issued for a mobile source based on its remaining useful life.
  - Consistent with SIP methodology that accounts for fleet turnover
Ensuring Emission Reductions are Quantifiable, Permanent, and Enforceable

- Determine baseline emissions using the EPA-approved protocol for that source or the same source type if available, or follow the protocol approval requirements in Chapter 101.
- Require monitoring, testing, recordkeeping, and/or reporting until the source shuts down.
- Require a permit issued under Chapter 116, a certified registration issued under Chapter 106, or a certification issued under Chapter 101.
Ensuring Emission Reductions are Quantifiable, Permanent, and Enforceable

- Reduce the amount of credits issued for an individual source based on the quality of the data used to quantify the emissions by:
  - 0%—10% for source-specific continuous emissions monitoring
  - 5%—15% (minimum 0.1 ton) for source-specific monitoring or testing
  - 10%—20% (minimum 0.1 ton) for approved-alternative methods (e.g., AP-42)
- If this reduction is combined with a reduction for the shutdown of an individual area source, limit the combined percent reduction to no more than 20%—30%.
Informal Comments

• Requesting informal comments on:
  
  - Modifications or alternatives to the draft strategy
  
  - Recommended percentages for the various discounts
  
  - Concerns or issues with the draft strategy
  
  - Types of credit generation projects anticipated

• Input essential to drafting a proposal that can be adopted in a timely way
Informal Comments

- Submit comments by **August 12, 2016**
- Electronic comments are preferable, and may be submitted via e-mail to
  Daphne.McMurrer@tceq.texas.gov and Guy.Hoffman@tceq.texas.gov
  - All electronic comments should reference “Area and Mobile Source Credits” in the subject line
- Please mail comments to:
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