

Ohio EPA

Division of Air Pollution Control

Engineering Guide #79

Question: What is the Standard Operating Procedure for receipt of a permit application requiring emission reductions or Emission Reduction Credits (ERCs) for the purpose of offsetting proposed emission increases in a nonattainment area or a permit application requiring emission reductions or ERCs for netting? What steps need to be followed if the ERCs needed are from emission reductions that occurred before the current base year emissions inventory?

Answer: When the District Office or Local Air Agency (DO/Laa) receives a permit application requiring emission reductions or ERCs for offsets or netting, the permit writer/reviewer should follow the procedures outlined in this guide.

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# Procedures for Tracking ERCs for SIP Purposes

## Background

As part of Ohio's State Implementation Plan (SIP) process, base year inventories are periodically submitted for approval into Ohio's SIP. Base year inventories affect the ability for a source installing or modifying in nonattainment areas to obtain necessary emission offsets, in accordance with Ohio Administrative Code rule 3745-31-24. The current base year is 2005. Therefore, a source needing offsets in a nonattainment county must find reductions that occurred on or after January 1, 2005.

However, On June 7, 2010, Ohio EPA submitted a revised Inventory SIP for all counties in Ohio to include PM2.5, NOx, VOC, and SO2 emissions from units that shut down prior to 2005 (December 31, 2004 or earlier). The revised Inventory SIP provided a demonstration showing that additional pre-2005 emissions across the state of Ohio would still allow for attainment and maintenance of the air quality standards for which the 2005 base year was used. Until the 2005 base year inventory is replaced with a future base year inventory, these added emissions, up to a ceiling level established by county, can now be used in permits for offsetting.

In order to ensure that the ceiling level of available emission reductions for each county is not exceeded, all permits that include offsetting will need to be tracked. In addition, to ease the preparation of future inventories and any analysis relevant to incorporating pre-base year emissions, Ohio EPA will be incorporating the tracking mechanism outlined below for the following types of permits that use emission reductions regardless of if they are pre- or post-2005 emission reductions:

- Offsetting in nonattainment counties, and
- Netting in both attainment and nonattainment counties.

The restriction on using pre-2005 emission reductions up to the ceiling level is only applicable in nonattainment counties for the pollutant of concern. Ohio EPA is tracking the use of emission reductions in all counties to assist in future SIP preparation. As U.S. EPA revises air quality standards, nonattainment areas and counties can change over time. Tracking the use of emission reductions in all counties will better aide Ohio EPA in developing future inventory SIPs and attainment demonstration SIPs.

This system is different than the Emission Reduction Credit (ERC) Banking Program. The ERC Banking Program is a voluntary program that provides a mechanism for the **generation, transfer and use** of emissions reductions primarily for offsets and netting. Any entity that needs netting or offsetting as part of a permit process must have emission reductions regardless if they are participating in the ERC Banking Program. Any entity with an emission reduction can participate in the ERC Banking Program without limit on the amount of ERCs they can **generate or transfer**. However, pre-2005 emission reductions, or ERCs, that are **used in a nonattainment county** can never exceed the ceiling level established as part of the revised Inventory SIP. This ensures that emissions in a nonattainment county never increase (in actuality they will likely

decrease due to the offset ratios). For example,

Mythical County, Ohio (nonattainment for ozone)

Mythical County has 2,850 tons per year (TPY) of VOC emissions in the 2005 base year inventory SIP. As part of the revised Inventory SIP, an additional 400 TPY of ceiling level emissions were incorporated into the inventory. Therefore, the SIP accounts for 3250 TPY of VOC emissions in Mythical County.

1. Facility A is installing a new unit and requires 125 TPY of VOC emissions as offsets. Facility B is providing the offsets from two units that were shutdown. Unit 1 shutdown in 2002 and provided 75 TPY (see Transaction in “Pre-2005” column) and Unit 2 shutdown in 2007 and provided the remaining 50 TPY (see Transaction in “2005 or later” column).

	Pre-2005	2005 or later		Current total level
		Adding	Using	
<b>Start</b>	400	2850		3250
<b>Transaction</b>	-75	+125	-50	3250
<b>Balance</b>	325	2925		3250

2. Facility C is modifying an existing unit and will increase VOC emissions but has had reductions at their facility so they will be using netting. The increase is 150 TPY. Three units previously shutdown will be used in the netting. Unit 1 shutdown in 2001 and provided 80 TPY, Unit 2 shutdown in 2004 and provided 20 TPY, and unit 3 shutdown in 2005 and provided 50 TPY.

	Pre-2005	2005 or later		Current total level
		Adding	Using	
<b>Start</b>	325	2925		3250
<b>Transaction</b>	-80, -20	+150	-50	3250
<b>Balance</b>	225	3025		3250

The revised Inventory SIP can be found at: [http://www.epa.ohio.gov/dapc/SIP/E\\_Inventory.aspx](http://www.epa.ohio.gov/dapc/SIP/E_Inventory.aspx). Table 1 of the revised Inventory SIP identifies the ceiling levels by county and pollutant. Table 2 identifies a list of potential ERCs by county. The revised Inventory SIP represents all possible pre-2005 emissions reductions that “could be” used for permitting purposes. None of these emissions have been verified as ERCs as a part of Ohio’s ERC Banking Program which dictates the final verification procedures that must be followed before any emission reductions can be used for permitting. The Inventory SIP emissions represent what was known in the STARS2 system as shutdown at the point in time when the revised inventory was created. This means other possible emission reductions, that had yet to be recorded in the STARS2 system, may exist out there. What is most important to recognize is that the ceiling level for each county will never increase, regardless of the

ERCs verified by Ohio EPA. Meaning, we can never distribute more ERCs than we included in the inventory ceiling level, regardless of what may be apparent in the ERC Bank. Therefore, it is essential to track all ERCs used to ensure we do not exceed the ceiling levels.

#### When are ERCs Used?

- ERCs are required to offset new emissions in nonattainment areas.
- ERCs are used for netting purposes in any area.
- Pre-2005 inventory emissions used as ERCs will be for the same pollutant within the nonattainment area where they were generated. Ohio EPA prefers to use ERCs within the same county as generated when available. Adjacent county emissions may be used when discussed with the Inventory Tracking Coordinator.

The following procedures are being implemented in order to coordinate the sharing of information between permitting staff reviewing permit applications and issuing permits and banking and inventory tracking staff. The following persons are the key contacts in this process:

**Sarah VanderWielen – Inventory Tracking Coordinator**  
**Jennifer Avellana – ERC Banking Coordinator**

#### What Coordination/Tracking is Needed?

- Permit writers/reviewers should coordinate with the ERC Banking Coordinator.
- The ERC Banking Coordinator should coordinate with the Inventory Tracking Coordinator.
- The Inventory Tracking Coordinator will keep a balance sheet of available all available inventory emissions and ceiling levels.
- Prior to committing ERCs to a permit, the ERC Banking Coordinator will check the availability of emissions with the Inventory Tracking Coordinator.
- Any available inventory emissions will be held once an application is received and the amount needed is verified.
- The Inventory Tracking Coordinator will deduct emissions from the ceiling level upon issuance of the permit.
- Whenever the ERC Banking Coordinator quantifies any ERCs, the Inventory Tracking Coordinator is notified and provided a copy of the final verification certificate.

#### What if the number of requested ERCs to be used exceeds the ceiling level?

- Requested use of ERCs cannot exceed the inventory ceiling level. If the needed emission reductions are not available, additional discussions between the parties involved regarding options should be initiated.

#### Tracking Procedure – Offsetting

1. When the permit writer/reviewer becomes aware that a facility is seeking offsetting emissions, it is the permit writer/reviewers responsibility to confirm that ERCs are available in the requested area with the ERC Banking Coordinator. The ERC Banking Coordinator may need to consult with the Inventory Tracking Coordinator as to the potential list of pre-2005 sources that may be available.
2. For applicants participating in the ERC Banking Program, the permit writer/reviewer will notify the permit applicant that they must submit an ERC Use Notification Form (ERC Form-3) before they can use the ERCs. The permit applicant must be the current owner of the ERCs to be able to use the ERCs. If the applicant is not the current owner of the ERCs, then the applicant and the current owner must submit an ERC Transfer Notification (ERC Form - 2), to transfer ERC ownership. For applicants not participating in the ERC Banking Program, the Banking Coordinator will verify the ERCs using information supplied by the applicant. The permit writer/reviewer will assist in obtaining the necessary information to verify ERCs and any transfer of ownership. Verifying ERCs and ownership prior to the permitting application process will give the permit applicant assurance that enough ERCs are available for the project early on in the permitting process.
3. The ERC Banking Coordinator should initially verify with the Inventory Tracking Coordinator that sufficient emissions are available in the inventory. The ERC Banking Coordinator should provide the following information:
  - ERCs requested to be used by county and pollutant
  - Company obtaining the ERCs
  - Company providing the offsets including identification of emissions units, shutdown date and amount of ERCs by emissions unit and pollutant
4. After the ERCs have been officially verified, it is the responsibility of the ERC Banking Coordinator to notify the Inventory Tracking Coordinator of the exact location and amount of ERCs verified.
5. The Inventory Tracking Coordinator will confirm that the number of ERCs needed will not exceed the ceiling level of available emission established for that county. The Inventory Tracking Coordinator will “reserve” these emissions once ERC verification has occurred and an application is submitted.
6. If all required ERCs are available and do not exceed the ceiling level, the permit may continue as planned.
7. The permit writer/reviewer will immediately notify the ERC Banking Coordinator, who will consult with the Inventory Tracking Coordinator, when any changes to the original request are needed. The permit cannot be issued with ERCs greater than originally disclosed without repeating the above procedures.
8. The permit writer/reviewer will notify the ERC Banking Coordinator when the final permit is issued and the ERC Banking Coordinator will provide verification of the exact amount of ERCs used including the following information to the Inventory Tracking Coordinator:
  - Permit number and effective date
  - ERCs used by county and pollutant
  - Company obtaining the ERCs

- Company providing the offsets including identification of emissions units, shutdown date and amount of ERCs by emissions unit and pollutant
9. The Inventory Tracking Coordinator will deduct the appropriate emissions from the tracking sheet.

#### Tracking Procedure – Netting

1. When the permit writer/reviewer becomes aware that a facility is seeking a netting permit, it is the permit writer/reviewer's responsibility to evaluate the netting requirements are valid.
2. For applicants participating in the ERC Banking Program, the permit writer/reviewer will notify the permit applicant that they must submit an ERC Use Notification Form (ERC Form-3) before they can use the ERCs.
3. The permit writer/reviewer will notify the ERC Banking Coordinator and the Inventory Tracking Coordinator of the proposed netting break down including:
  - Company name
  - Balance sheet of offsetting emissions by emissions unit, county and pollutant
  - Method of offsetting (e.g., prior shutdown of unit, federally enforceable restriction, etc.) along with applicable dates (e.g., shutdown date, when the restriction became federally enforceable, etc.)
4. The ERC Banking Coordinator and Inventory Tracking Coordinator will verify there are no implications or inconsistencies (e.g., some reductions previously used already) and provide confirmation to the permit writer/reviewer.
5. The Inventory Tracking Coordinator will “reserve” any applicable emissions accounted for in the inventory once an application is submitted.
6. The permit writer/reviewer will immediately notify the ERC Banking Coordinator, who will consult with the Inventory Tracking Coordinator, when any changes to the original request are needed.
7. The permit writer/reviewer will notify the ERC Banking Coordinator and Inventory Tracking Coordinator when the final permit is issued providing verification of the exact amount of netting applicable, including the following information, to the Inventory Tracking Coordinator:
  - Permit number and effective date
  - Company name
  - Balance sheet of offsetting emissions by emissions unit, county and pollutant
  - Method of offsetting (e.g., prior shutdown of unit, federally enforceable restriction, etc.) along with applicable dates (e.g., shutdown date, when the restriction became federally enforceable, etc.)

The Inventory Tracking Coordinator will deduct any appropriate emissions from the tracking sheet and keep a log of all netting relevant emissions.

