

Regulation XIII – New Source Review



Working Group Meeting #4

May 14, 2020

Join Zoom Meeting

<https://scaqmd.zoom.us/j/4285162364>

Meeting ID: 428 516 2364

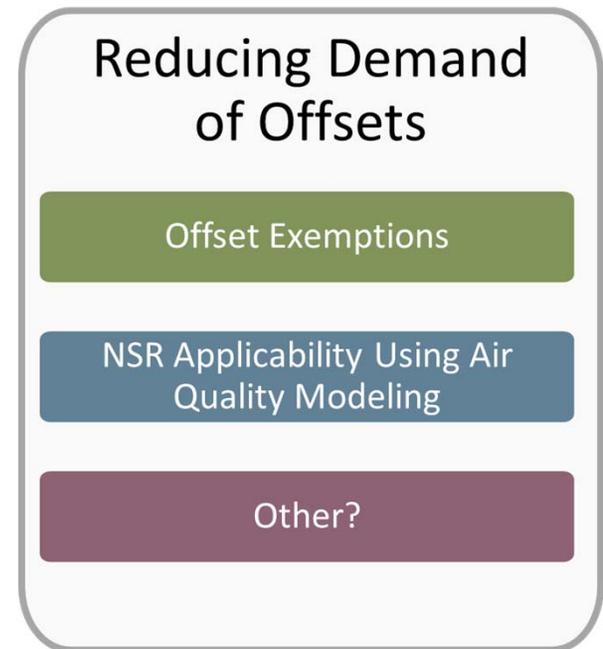
Teleconference Dial-In: 1-669-900-6833

Agenda

- Previous Working Group Meeting Summary
- Meeting with U.S. EPA
- Stakeholder Comment Letters
- Concepts for a Large Source Bank
- Additional Topics for the Large Source Bank

Previous Working Group Meeting Summary

- At the previous Working Group Meeting (February 20, 2020) discussed concepts to reduce the demand for offsets
 - Availability of offsets is needed to ensure permits are issued
- Evaluated five scenarios that would qualify for an exemption from offsets when complying with a South Coast AQMD ozone precursor rule (NO_x BARCT)¹
- Discussed the use of air modeling to evaluate NSR applicability for co-pollutants emitted from installations and modifications to comply with NO_x BARCT rules



¹ Rule 1304(c)(4), Federal CAA 182(e)(2), and CA H&SC §42301.2 specify offsetting exemptions only – no exemption for BACT

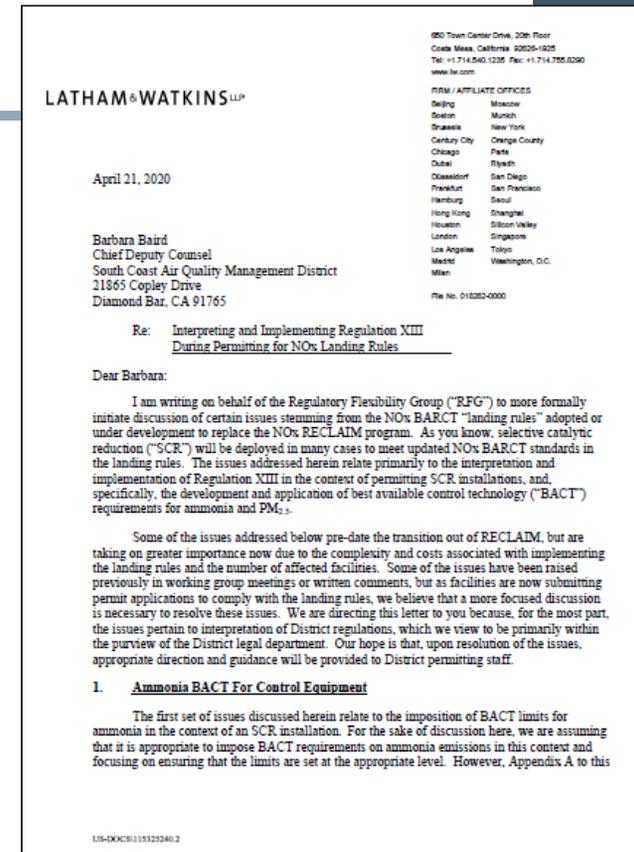
Face-to-Face Meeting with U.S. EPA

- March 5, 2020 staff met with U.S. EPA (video conference)
- Update of regulatory timeline
- Air quality modeling for NSR applicability
- RECLAIM transition
- Summary of availability of offsets in the Open Market and Internal Bank
- Methodology for BARCT Discount for Internal Bank
- Use of Internal Bank offsets for sources > 4 tons per year



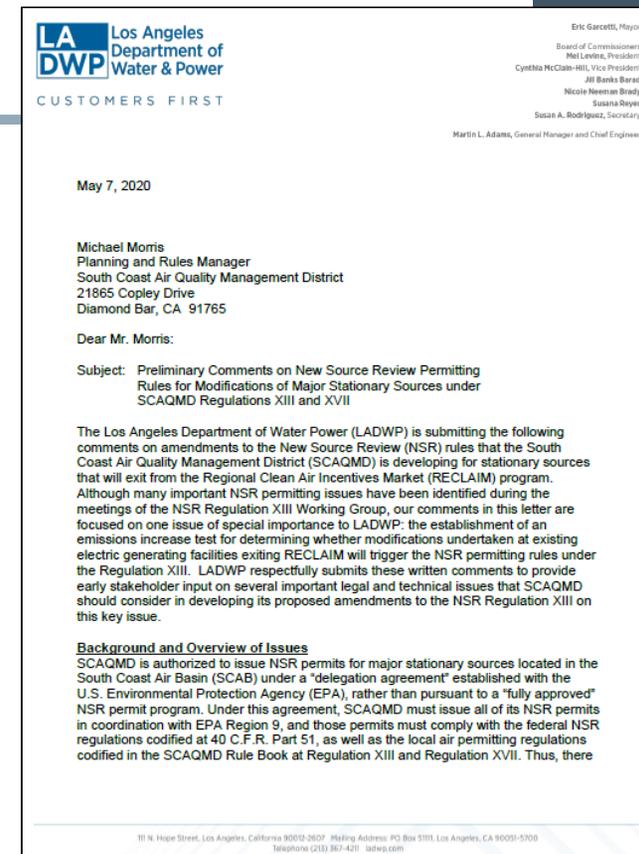
Regulatory Flexibility Group (RFG) Comment Letter

- On April 21, 2020, RFG submitted a comment letter regarding Interpreting and Implementing Regulation XIII During Permitting for NOx Landing Rules
- Comments focus on implementation of Regulation XIII for permitting SCR installations, specifically the development and application of best available control technology (BACT) for ammonia and PM2.5
- For the two issues for ammonia and PM BACT, the letter included a series of issues
- Staff continues to work with U.S. EPA on this issue and discuss this more fully at the next Working Group meeting
- Comment letter is posted on South Coast AQMD's website under Proposed Rules – Regulation XIII



Los Angeles Department of Water & Power (LADWP) Comment Letter

- LADWP submitted a comment letter on May 7, 2020
- Addresses preliminary comments on NSR permitting rules for modifications of major stationary sources
- Comments focus on the emission increase test for determining whether major source modifications will trigger NSR permitting under Regulation XIII
- Staff will continue to work on this issue and discuss at a future Working Group meeting
- Comment letter is posted on South Coast AQMD's website under Proposed Rules – Regulation XIII



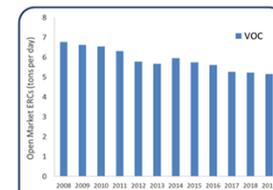


Establishing a Large Source Bank

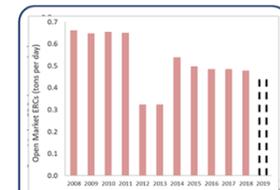
Recap of Offset Availability

- Staff provided a general overview of the availability of offsets with U.S. EPA
 - Open market not viable source of offsets post-RECLAIM - Offsets are most needed for NO_x, but also PM₁₀ and SO_x
 - Internal Bank has more offsets available than the open market
 - Decreasing trend in NO_x offsets – NO_x RECLAIM facilities will create a bigger decrease in NO_x offsets
- Revisions to NSR to address U.S. EPA's comments regarding NSR applicability and offset calculations for major modifications will also increase the demand for offsets

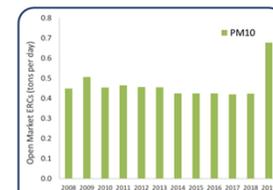
Open Market ERCs



Based on supply and ERC cost (average \$21,000 per ton¹), exploring other offset options is not needed



Annual average NO_x ERC cost is \$69,000/ton¹. With RECLAIM, NO_x ERCs in the open market could be depleted within 1 year



Based on the high price (average \$536,000 per ton¹), other options for PM₁₀ offsets should be explored



Based on the high price (average \$365,000 per ton¹), will continue to analyze potential demand from SO_x RECLAIM to understand impacts

Use of Offsets in the Internal Bank to Seed the Large Source Bank

- May 2019 Working Meeting, discussed creating a Large NOx Source Bank for sources with a PTE \geq 4 tons per year, post-RECLAIM
- At the face-to-face meeting with U.S. EPA, staff discussed using offsets from the Internal Bank to seed a Large Source Bank for NOx, SOx, and PM10 to better ensure availability of offsets in the future
- U.S. EPA staff explained that the approval of Rule 1315, which establishes requirements for quantifying offsets was based in part on the limited use of those offsets
 - Rule 1304 – exempts sources from providing offsets and sources with a PTE less than 4 tons per year
 - Rule 1309.1 – allows access to essential public services

Evolution of Thought for the Large Source Bank

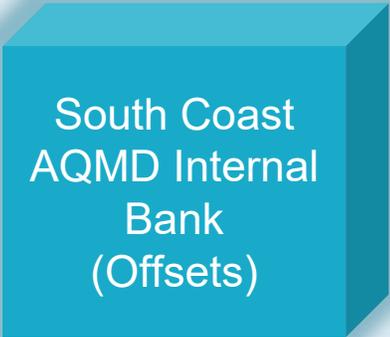
- Based on input from U.S. EPA and analysis of the availability of offsets, staff has developed additional concepts for the Large Source Bank
- A Large Source Bank for NO_x, SO_x, and PM₁₀ will be created, that will be managed by the South Coast AQMD
- Offsets from the Internal Bank will not be used to seed the Large Source Bank, unless they can meet the same criteria for generation of offsets for the Large Source Bank
- New emission reductions would be used to seed the Large Source Bank
- New provisions to generate offsets for the Large Source Bank will be developed that meet state and federal requirements

Overview of Potential Offset Sources Post-RECLAIM



Open Market (ERCs)

- Available to all sources
- Cost of ERCs based on market value



South Coast AQMD Internal Bank (Offsets)

- Available to sources exempt under Rule 1304 or eligible for Rule 1309 – Priority Reserve
- No usage fee



South Coast AQMD Large Source Bank (Offsets)

PROPOSED

- Available to facilities w/ PTE \geq 4 tons/year

Key Elements of Large Source Bank

Establish a Large Source Bank

- Three large source banks: NO_x, PM₁₀, and SO_x

Use of Offsets from the Large Source Bank

- Sources with a PTE \geq 4 tons per year (for each pollutant) that are not eligible to use existing Internal Bank per Rules 1304 and 1309.1

Key Features

- Emission reductions used for offsets would be tracked
- Begin calculating offsets for the Large Source Bank – July 2020
- Apply a source specific discounting approach
- Fee for using offsets – fee to be determined

General Overview of Offset Generation for the Open Market and Internal Bank

- Offsets are generated through reductions from a modification or shutdown of a source (equipment or process)
- Currently offsets can be generated for use in either the Open Market or Internal Bank
- For Open Market offsets, an Emission Reduction Credit (ERC) application must be submitted
 - ERCs are issued to the applicant for use in the Open Market
- In general, reductions from a modification or shutdown where no ERC is issued is an Orphan Reduction or Orphan Shutdown, which is deposited in the Internal Bank

Generation of Offsets for the Open Market and Internal Bank

Open Market ERCs

Applicable Rule

Generated pursuant to Rule 1306 – Emissions Calculations

Reduction Type

Emission reductions from modification or shutdown of equipment

Application

Must submit an Application
(Pursuant to Rule 1309)

Issuance

ERC is issued to applicant
(Provided Rules 1306 and 1309 requirements are met)

Internal Bank Offsets

Generated pursuant to Rule 1315 – Federal New Source Review Tracking System

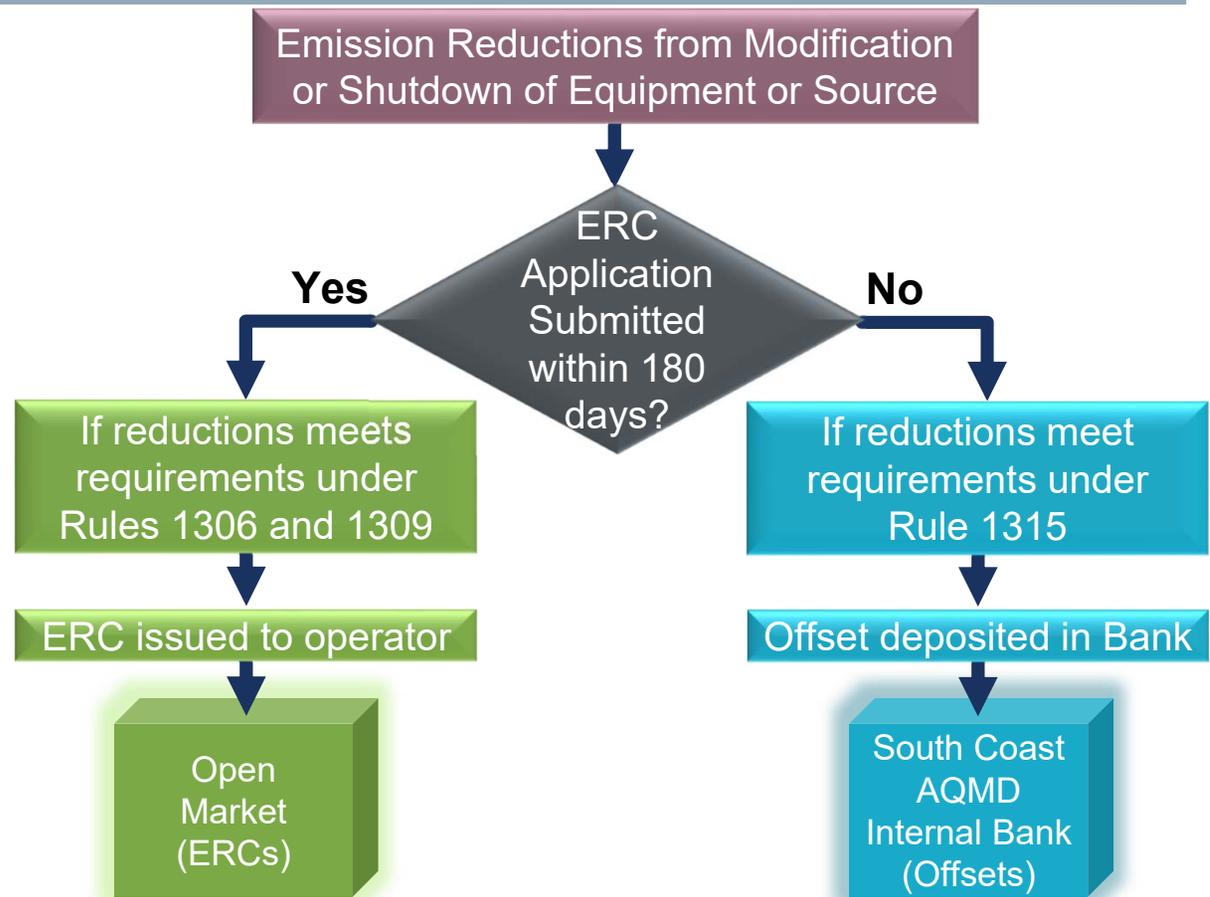
Same as ERC, provided no ERC was issued
(Orphan Reductions or Shutdowns)

No Application
Must wait 180 days to allow an operator to submit an ERC Application

Offset is deposited in the Internal Bank
(Provided Rule 1315 requirements are met)

Origin of Offsets for the Open Market and Internal Bank

- Origin of offsets for the Open Market and Internal Bank are the same
- Pathway to Open Market or Internal Bank is based on if an ERC application is submitted
- Offset calculations differ depending on the pathway

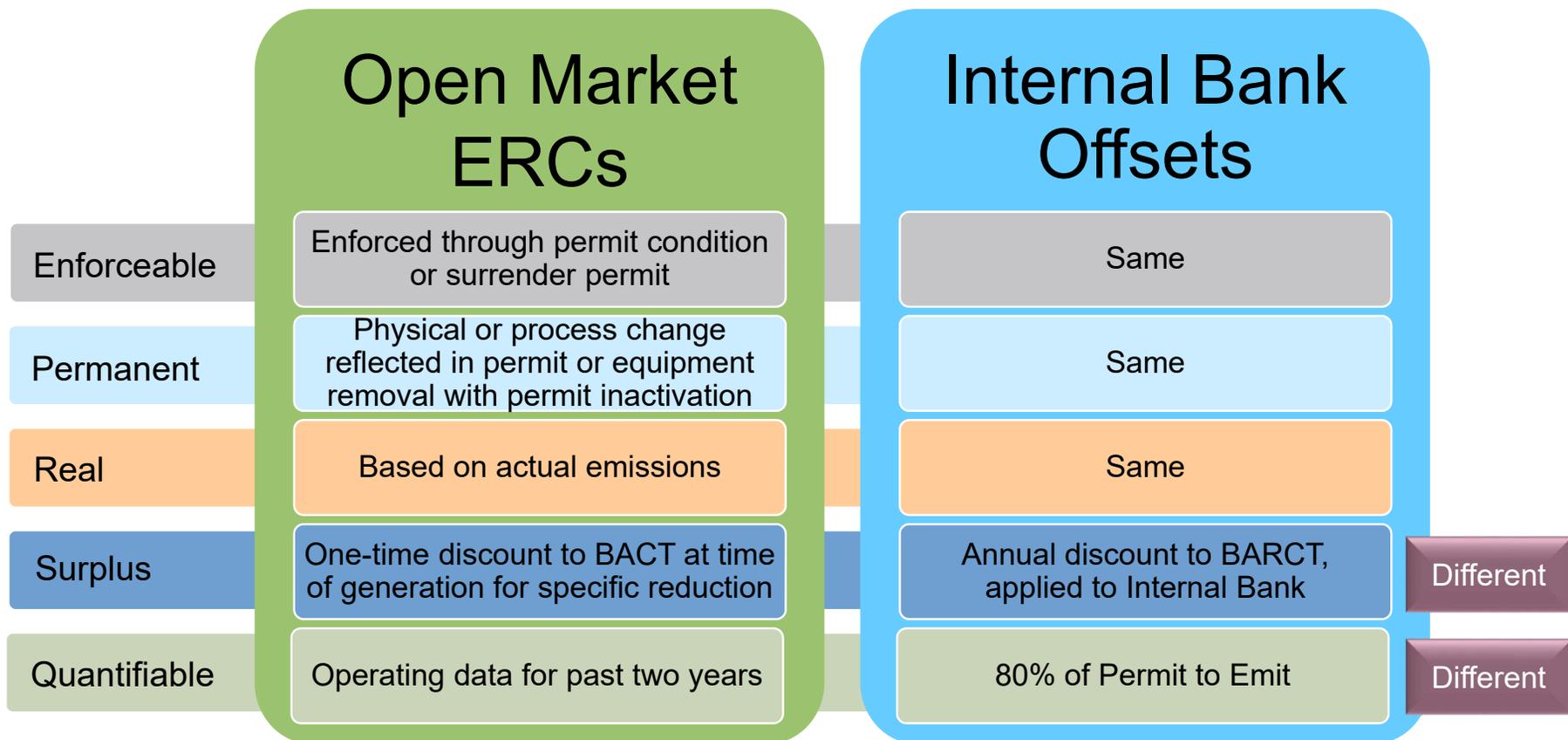


Federal Integrity Criteria for Offsets

- Regardless of the path, existing rules ensure all offsets meet the federal integrity criteria for offsets
 - **Real:** Actual emissions
 - **Quantifiable:** Emission reductions must be verifiable
 - **Permanent:** Permanent through permit conditions or permit closures
 - **Enforceable:** Legally and practically enforceable through permit conditions or permit closures
 - **Surplus:** Reductions beyond those required by the Federal CAA for SIP planning or other applicable rules and regulations
- Open Market and the Internal Bank have:
 - Similar provisions to ensure offsets are real, permanent, and enforceable
 - Different provisions to ensure offsets are surplus and quantifiable

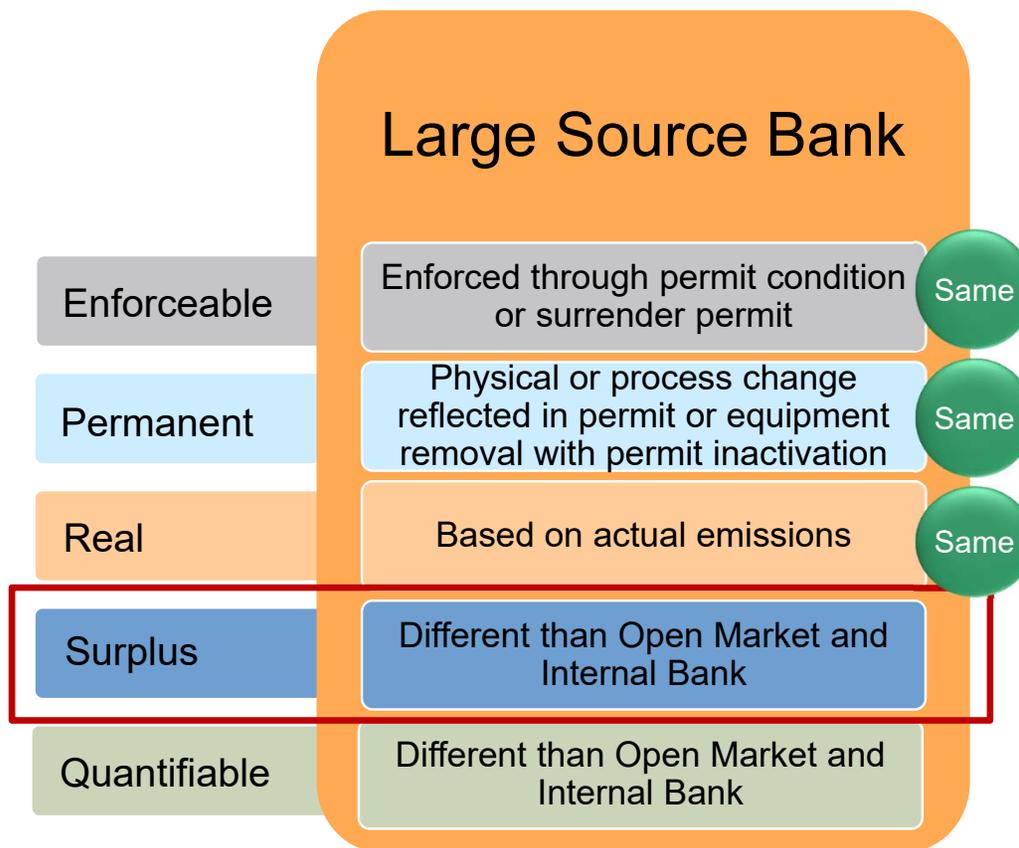


Comparison of Federal Integrity Criteria for the Open Market and Internal Bank



Federal Integrity Criteria for the Large Source Bank

- Large Source Bank will have similar provisions as the Open Market and Internal Bank to ensure offsets are real, permanent, and enforceable
- Large Source Bank will have different provisions to ensure offsets are surplus and quantifiable
- Today's discussion will focus on initial concepts for surplus requirements for the Large Source Bank

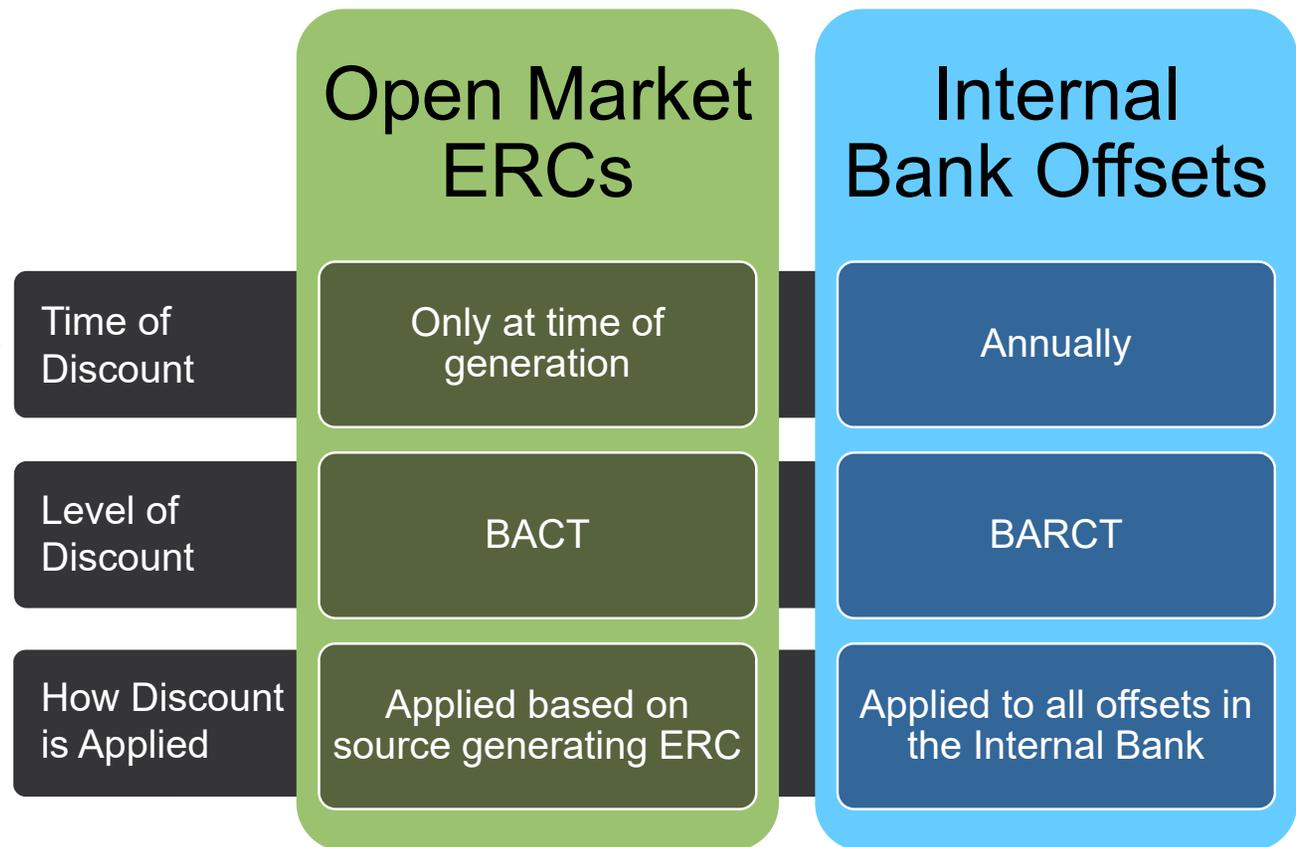


Surplus Requirement

- To meet federal integrity criteria, offsets must be surplus beyond reductions required by:
 - Air Quality Management Plan (AQMP); or
 - Applicable federal, state, or local rule or regulation (e.g. BARCT)
- Emission reductions used to generate offsets must be surplus to ensure there is no double counting
- Offsets are discounted at time of generation and at time of use, if needed to ensure surplus at time of use

Discounting Offsets to Ensure Surplus at Time of Use

- U.S. EPA allows local agencies to adapt different approaches to ensure offsets are surplus
 - Discount method cannot be less stringent than what is Federally required
- Large Source Bank will use a discounting approach that is a hybrid of the Open Market and Internal Bank



Federal Guidance for Discounting

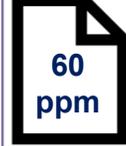
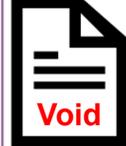
- Typically the surplus at time of use adjustment is based on applying the same reduction for any new regulatory requirement to the same source category that created the offset
- Federal guidance requires that offsets be surplus of all requirements of the Clean Air Act
 - Based on reductions required by all applicable federal, state, or local rule or regulation (e.g., BARCT)¹
- Offset adjustments must account for all new requirements that become applicable for the source category on or before the date that an offset is used (at permit issuance)

¹ Federal memorandum specifically responded to an inquiry regarding adjusting to Reasonable Achievable Control Technology (RACT) at time of use

Proposed Discounting to Ensure Offsets are Surplus for the Large Source Bank

- Proposing to use a source specific approach to discount offsets
- Emission reductions for the Large Source Bank will be tracked with specific information in order to use a source specific approach to discount offsets
- Allows for more accurate application of discounts that are specific to the source that generated the offset
- Discounting approach for the Large Source Bank will require specific information about the equipment or process:
 - Source type and category
 - Concentration or emission level
- Emission reductions for offsets will be tracked using information about the source that generated the offset (next slide)

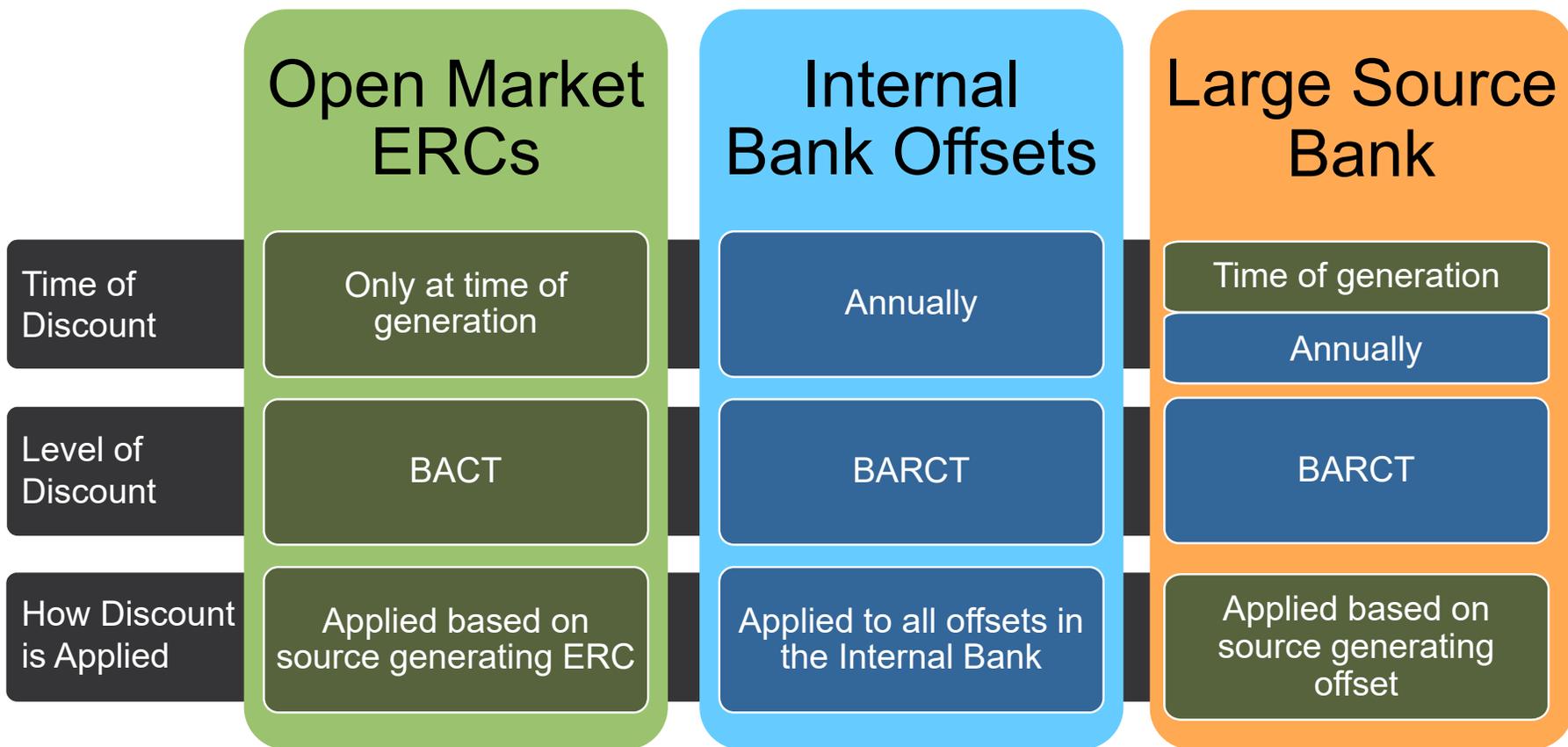
Information Needed for Offsets for the Large Source Bank

 <p>Facility ID that generated the offset</p>	 <p>Equipment type or source</p>	 <p>Current pollutant level such as NOx concentration</p>
 <p>Hours of operation</p>	 <p>Date of emission reduction</p>	 <p>Date permit surrendered</p>
 <p>Date offset deposited</p>	 <p>Reason for emission reduction (shutdown, process change, installed pollution control)</p>	 <p>Total emission reductions based on actual emissions</p>

Discounting Offsets for the Large Source Bank

- Offsets will be discounted at time of generation (when deposited) and annually, if needed to ensure surplus at time of use
- Source category and concentration or emission levels for each offset will be known, BARCT discount can be applied according to source specific rule reductions
- Annual BARCT discount for each pollutant would vary year-to-year depending on the percent reduction required for each source category applicable rules

Discounting Offsets to Ensure Surplus at Time of Use for the Open Market, Internal Bank, and Large Source Bank



Additional Topics for the Large Source Bank

Quantification of Offsets for Large Source Bank

Interaction Between the Open Market, Internal Bank, and Large Source Bank

Ensuring Availability of Offsets for Existing Internal Bank Sources

Establishing the Price of Offsets

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