Public Workshop for 2022-2023 Annual Offset Equivalency Demonstration

November 2, 2023

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District Air Quality Efforts

- Long history of implementing air quality strategies, with numerous plans achieving significant emissions reductions
  - Adopted over 650 of the most stringent rules in the nation for stationary sources under District jurisdiction
  - Innovative clean air incentive programs accelerating deployment of cleanest technologies ($5.7 billion public/private investment)
- Stationary source NOx emissions (primary precursor for both ozone and PM2.5) have been reduced by over 93%
- District also implements a permitting program designed under state law to ensure on a regional basis there is no net increase in emissions for new or modified sources

District's New Source Review Permitting Process

- Requirements of the District's NSR rule include:
  - New or modifying permitted sources must be equipped with the best available air pollution control technology (BACT)
  - Prohibition on new/modifying equipment that would generate a significant health risk to the surrounding population
  - Public notification with an opportunity to comment prior to permit issuance for significant projects
  - New or modifying permitted sources must provide offsets (ERCs) to further mitigate emission increases above specified thresholds
- ERCs cannot be used in lieu of meeting other air pollution control requirements
- As allowed by the federal Clean Air Act, the District operates an offset equivalency system as its program differs from a direct implementation of the federal offsetting requirements

Recent Rule 2201 Amendments

Amendments to Rule 2201

- On April 20, 2023, the District's Governing Board approved amendments to District Rule 2201
- Amended rule became effective on August 9, 2023
- Established a Multi-Path Federal Offsetting Approach
- Path for NOx and VOC emissions:
  - For New Major Sources (NMS) and Federal Major Modifications (FMM), implement project-level federal offsetting program
- For PM10, PM2.5, and SOx emissions:
  - Maintain offset equivalency to federal offsetting requirements

Amendments to Rule 2201: Offset Equivalency

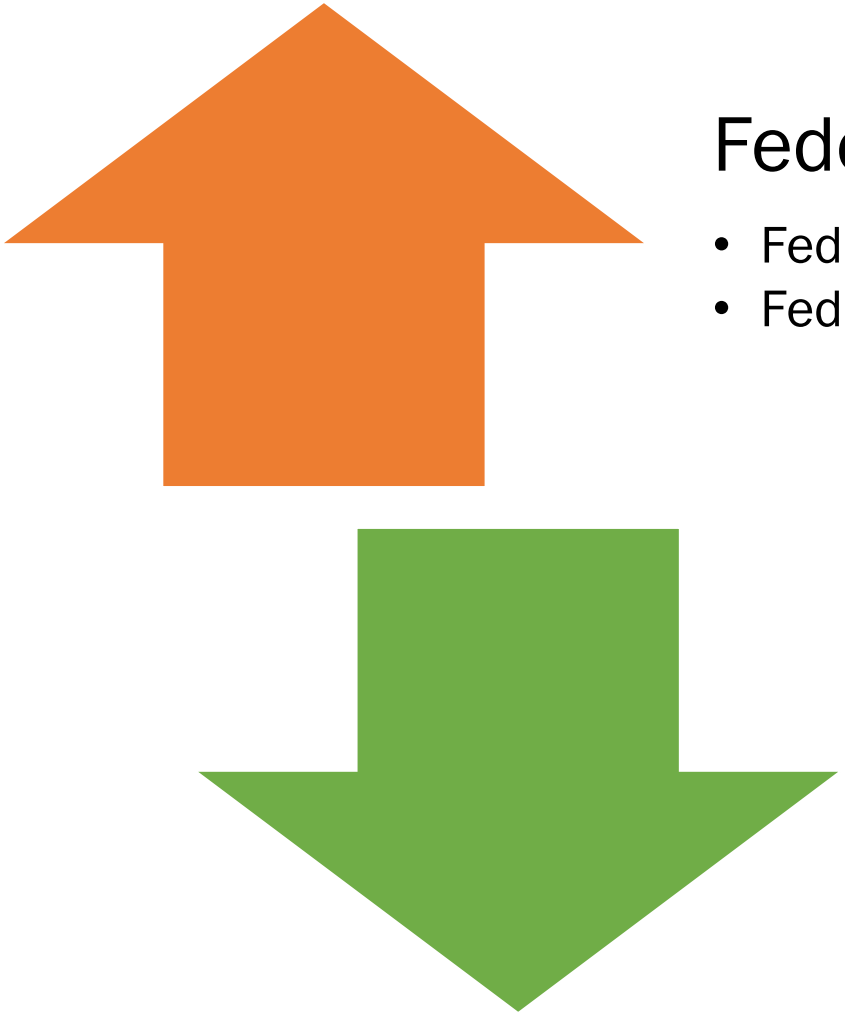
- NOx and VOC tracking is no longer necessary
  - Federal NSR offsetting requirements will be applied to New Major Source (NMS) or Federal Major Modification (FMM) for NOx or VOC
- PM10, PM2.5, and SOx will remain in the tracking system
  - Replace the two-test demonstration with a single test (surplus value test)
- District's equivalency system will demonstrate ongoing equivalency at the time of ATC issuance
  - Each ATC project that is a NMS or FMM will demonstrate equivalency before the District proceeds with a preliminary decision to approve the ATC(s)
  - The demonstration is included as part of the ATC application review, which is subject to EPA, CARB, and public review
- The annual equivalency report will be a summary of the previous years' projects and updates to the carryover balances for each pollutant and no longer the primary focus of the demonstration

Equivalency Demonstration

District Offset Equivalency Program

- District performs an annual demonstration that the District's ERC program is at least as stringent as federal offsetting requirements
  - Approach approved by EPA and CARB in 2001
  - Demonstration submitted to EPA and CARB annually for review and presented to Governing Board at public hearing
- Annual report must demonstrate both of the following:
  - Test 1: The quantity of offsets required by Rule 2201 equals or exceeds the quantity of federal offsets that would have been required
  - Test 2: The surplus value of offsets required by Rule 2201, plus the surplus value of additional creditable emission reductions, equals or exceeds the quantity of federal offsets that would have been required
- Future offset equivalency demonstrations will be based on the requirements of the newly amended Rule 2201 (effective as of 8/9/23)
- Should the system fail to demonstrate equivalency, Rule 2201 contains tailored remedies that are enacted

Components of Equivalency



Federal NSR (increases)

- Federal Offset Quantity for New Major Sources
- Federal Offset Quantity for Major Modifications

District NSR (decreases)

- ERCs Reserved/Withdrawn (District Offset Quantity)
- ERCs Surrendered
- ERCs Newly Issued (AQID)
- *Actual Emission Reductions from Orphan Shutdowns*
- *Actual Emission Reductions from BACT on Existing Equipment at Minor Sources*

Federal Offset Quantity

- Each project resulting in a New Major Source (NMS) or Federal Major Modification (FMM) is tracked based on date the Authority to Construct (ATC) is issued
- The quantity of surplus at time of use offsets required under federal NSR (federal offset quantity) is determined during the evaluation of the project prior to issuance of the ATCs
- New Major Sources or Federal Major Modifications projects are subject to public notification and review prior to ATC issuance and are concurrently submitted to EPA and ARB for review

ERCs Reserved/Withdrawn

- Each project requiring District offsets under Rule 2201 is tracked based on the date the project is final
- The ERCs reserved/withdrawn to satisfy the offsetting obligation are tracked
  - Quantity of ERCs (surplus value at time of banking)
  - Surplus value of ERCs at time of use & ongoing surplus value of ERCs
- The quantity of ERCs reserved/withdrawn is used as necessary to demonstrate Quantity of Offset Equivalency
  - Unused balance is carried forward
- The surplus value of ERCs reserved/withdrawn is used as necessary to demonstrate Surplus Value Equivalency
  - Unused balance is included in the surplus carry-over

ERCs Surrendered

- Each ERC that is surrendered to the District is tracked based on the date the ERC surrender project is final
  - Quantity of ERCs (surplus value at time of banking)
  - Surplus value of ERCs at time of use & ongoing surplus value of ERCs
- The surplus value of ERCs surrendered is used as necessary to demonstrate Surplus Value Equivalency
  - Unused balance is included in the surplus carry-over
- The surplus value of ERCs surrendered can also be used as necessary to satisfy Quantity of Offset Equivalency shortfalls

ERCs Issued

- Each newly issued ERC is tracked based on the date that the banking project is final
- At time of banking, the actual emission reduction associated with the ERC is discounted by 10% and the District takes ownership in the form of the Air Quality Improvement Deduction (AQID)
- The surplus value of AQID is tracked over time and used as necessary to demonstrate Surplus Value equivalency
- Unused AQID is included in the surplus carry-over
- The surplus value of AQID can also be used as necessary to satisfy Quantity of Offset Equivalency shortfalls

2022-2023 Offset Equivalency Demonstration

Current Status of Equivalency
from 2021-2022 Report

Equivalent?	PM10	PM2.5	SOx
Test 1: Offset Quantity	Yes	Yes	Yes
Test 2: Surplus Value	Yes	Yes	Yes

2022-2023 Offset Equivalency Demonstration

- District finalizing 2022-2023 Offset Equivalency Report
- End of current tracking period was August 20, 2023
- Tracked federal projects for this tracking period
  - No Federal Major Modifications for SOx, PM10, or PM2.5
  - No New Major Sources for SOx, PM10, or PM2.5
- No Federal offsets for SOx, PM10, or PM2.5 required during current tracking period
- Carryover balance adjusted/re-surplused annually to account for recently adopted rules

San Joaquin Valley APCD

DRAFT Annual Offset Equivalency Report

Offset Quantity Equivalency

Summary for 08/20/2022 through 08/19/2023

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets Required under Federal NSR (a)	Offsets Required under District NSR (b)	Current Year Excess or Shortfall (c) = (b) - (a)	Previous Year-End Total Carryover Excess or Shortfall (d)	Year-to-Year Adjustment to Carryover Balance (e)	Year-End Total Carryover Excess or Shortfall (f)=(d)+(e)+(c)
PM10	0	0	0.0	8.2	8.2	356.1	-0.1	364.2
PM2.5	0	0	0.0	0.0	0.0	192.3	0.0	192.3
SOx	0	0	0.0	0.0	0.0	1,229.2	0.0	1,229.2

Notes:

- All values are in tons per year

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DRAFT Annual Offset Equivalency Report

Surplus Value Equivalency

Summary for 08/20/2022 through 08/19/2023

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets Required under Federal NSR (a)	Surplus Reductions Used for Equivalency This Year (b)	Current Year Excess or Shortfall (c) = (b) - (a)	Previous Year-End Total Carry-over Creditable Reductions (d)	Year-to-Year Adjustment to Carryover Balance (e)	Current Year New Creditable Reductions (f)	Year-End Total Carry-over Creditable Reductions (g)=(d)+(e)+(c)+(f)
PM10	0	0	0.0	0.0	0.0	361.5	-32.1	3.3	332.7
PM2.5	0	0	0.0	0.0	0.0	218.9	-30.4	3.3	191.9
SOx	0	0	0.0	0.0	0.0	342.8	-0.1	0.0	342.7

Notes:

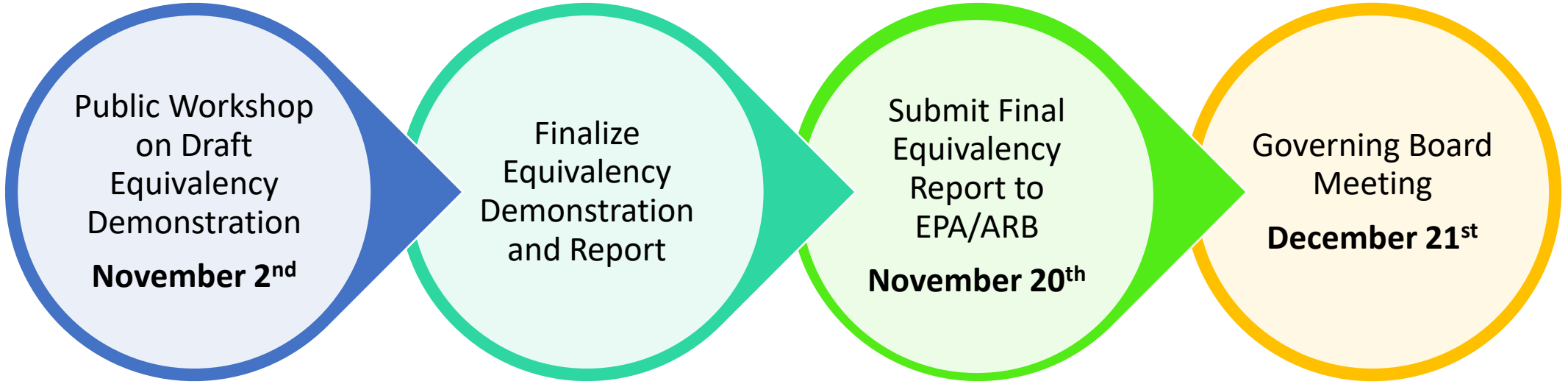
- All values are in tons per year

2022-2023 Offset Equivalency Outcome

Equivalent?	PM10	PM2.5	SOx
Test 1: Offset Quantity	Yes	Yes	Yes
Test 2: Surplus Value	Yes	Yes	Yes

- No change to the outcome of the equivalency demonstration
- Equivalency has been demonstrated for PM10, PM2.5, and SOx

2023 Offset Equivalency Next Steps



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Comments/Questions

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