

Public Workshop for 2021-2022 Annual Offset Equivalency Demonstration

November 10, 2022

District Air Quality Efforts

- Long history of implementing air quality strategies, with numerous plans achieving significant emissions reductions
 - Adopted nearly 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 (\$3 billion public/private investment)
- Stationary source NO_x emissions (primary precursor for both ozone and PM_{2.5}) have been reduced by over 90%
- 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 mitigation 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

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
- 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 date 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

2021-2022 Offset Equivalency Demonstration

Current Status of Equivalency

from 2020-2021 Report

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

2021-2022 Offset Equivalency Demonstration

- District finalizing 2021-2022 Offset Equivalency Report
- End of the current tracking period was August 20, 2022
- Tracked federal projects for this tracking period
 - No Federal Major Modifications for SO_x, PM₁₀, or PM_{2.5}
 - No New Major Sources for SO_x, PM₁₀, or PM_{2.5}
- No Federal offsets for SO_x, PM₁₀, or PM_{2.5} required during current tracking period

San Joaquin Valley APCD

Annual Offset Equivalency Report

Offset Quantity Equivalency

Summary for 08/20/2021 through 08/19/2022

Pollutant	Number of New Major Sources	Federal Major Mods	Offsets		Current Year Excess or Shortfall	Previous Year-End Total Carryover Excess or Shortfall	Year-to-Year Adjustment to Carryover Balance	Year-End Total Carryover Excess or Shortfall
			Number of Required under Federal NSR	Offsets Required under District NSR				
			(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f) = (d) + (e) + (c)
PM10	0	0	0.0	20.3	20.3	336.7	-0.9	356.1
PM2.5	0	0	0.0	0.0	0.0	192.3	0.0	192.3
CO	0	0	0.0	0.0	0.0	198.1	0.0	198.1
SOx	0	0	0.0	0.0	0.0	1,229.6	-0.4	1,229.2

Notes:

- All values are in tons per year

San Joaquin Valley APCD

Annual Offset Equivalency Report

Surplus Value Equivalency

Summary for 08/20/2021 through 08/19/2022

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets	Surplus	Current Year Excess or Shortfall	Previous	Year-to-	Current Year New Creditable Reductions	Year-End Total Carry-over Creditable Reductions
			Required under Federal NSR	Reductions Used for Equivalency This Year		Year-End Total Carry-over Creditable Reductions	Year Adjustment to Carryover Balance		
			(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f)	(g)=(d)+(e)+(c)+(f)
PM10	0	0	0.0	0.0	0.0	341.7	-0.9	20.7	361.5
PM2.5	0	0	0.0	0.0	0.0	203.3	0.0	15.6	218.9
CO	0	0	0.0	0.0	0.0	763.0	0.0	0.0	763.0
SOx	0	0	0.0	0.0	0.0	343.0	-0.2	0.0	342.8

Notes:

- All values are in tons per year

2021-2022 Offset Equivalency Outcome

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

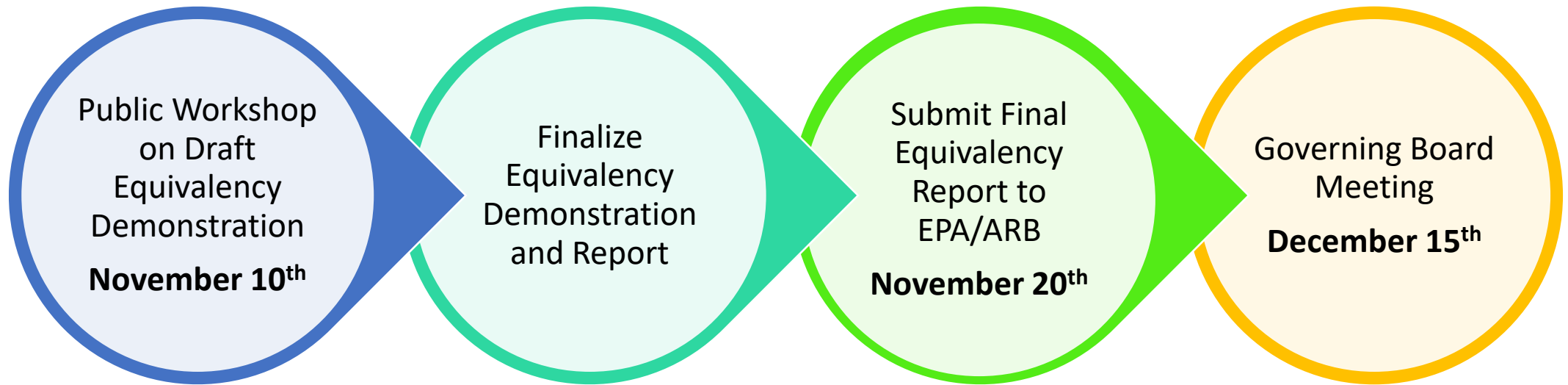
2021-2022 Offset Equivalency Implications

- Test 1 – Offset Quantity
 - No change to current status
 - PM10, PM2.5, SOx, and CO demonstrate equivalency
- Test 2 – Surplus Value
 - No change to current status
 - PM10, PM2.5, SOx, and CO demonstrate equivalency

Rule 2201 Amendments Affecting Offset Equivalency

- On October 26, 2022, the District held a Public Workshop to discuss amendments to District Rules 2201 and 2301
- The District is considering enhancements to the equivalency system
 - Replace the two-test demonstration with a single test
 - Transitioning from an annual demonstration to a system that demonstrates ongoing equivalency at the time of ATC issuance
- Additional details on the potential amendments to offset equivalency are available on the District website:
https://www.valleyair.org/Workshops/public_workshops_idx.htm#10-26-22

2022 Offset Equivalency Next Steps



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Comments/Questions