Emission Reduction Credit Program
Public Advisory Workgroup

August 5, 2021

Overview

- RECAP OF DISTRICT EFFORTS TO DATE
- CURRENT FOCUS – MUTLIPATH APPROACH
- 2021 OFFSET EQUIVALENCY DEMONSTRATION

Recap of District Efforts

CARB Review of SJV ERC Program

- June 2020 - CARB report finalized
  - District did not know what implications their findings would have to the District's Offset Equivalency Program
- Began evaluating CARB comments and determining what effects it could have on the District's programs
- Based on District's evaluation, Governing Board removed all AG-ICE and OSD credits from offset equivalency banks
  - With removal unable to demonstrate Surplus Quantity (Test 2) Equivalency for NOx and VOC
  - Effective September 17, 2020, Rule 2201 remedy enacted
  - All new major sources (NMS) or federal major modifications (FMM) triggering NOx or VOC offsets under the District NSR rule required to provide "surplus at time of use" ERCs

ERC Public Advisory Workgroup (PAW)

- Created by District Governing Board in August 2020
  - Provide a forum for discussion/suggestions to assist the District in developing solutions/enhancements related to the District's ERC and offset equivalency system
  - Hear perspectives and receive input on the District's ERC and offset equivalency system from stakeholders
  - Provide workgroup members and interested members of the public the knowledge and tools necessary to meaningfully participate
- Kick-off Meeting held September 18, 2020
  - District has held on-going meetings (7 meetings to-date)

On-going ERC PAW Meetings

- District has presented/discussed a number of topics to the PAW committee:
  - Federal Offsetting and Offset Equivalency
  - 2020 Annual Offset Equivalency Report
  - ERC Supply and Demand
  - Role of Emission Reduction Credits in District SIPs
  - Potential new Offset Quantity Concepts
  - Potential new Creditable Emission Reductions Concepts
- Questions/input from the PAW assisted in the development of the 2020 Annual Offset Equivalency Report and will continue to assist with the District's ongoing offset program efforts

2020 Offset Equivalency Demonstration

- Significant adjustments incorporated into Demonstration
  - Removal of AG-ICE and orphan shutdown credits
  - Update carry-over balances to reflect cancelled/non-implemented projects
  - Federal Offset Ratio correction
- New public engagement and transparency enhancements
  - Enhancing the annual demonstration report to make it more understandable, including more fully characterizing adjustments made to year-to-year carry-overs to ensure the public can better understand all adjustments made in a tracking year
  - Public workshop to review and receive comment on draft annual equivalency demonstration report

2020 Offset Equivalency Outcome

Equivalent?	NOx	VOC	PM10	PM2.5	CO	SOx
Test 1: Offset Quantity	Yes	No	Yes	Yes	Yes	Yes
Test 2: Surplus Value	No	No	Yes	Yes	Yes	Yes

2020 Offset Equivalency Implications

Effective November 20, 2020:

- **VOC:** All new major sources or federal major modifications triggering offsets for VOC required to provide ERC for the full federal offset quantity and surplus at time of ATC issuance
- **NOx:** All new major sources or federal major modifications triggering offsets for NOx under the District NSR rule required to provide ERC surplus at time of ATC issuance
- **PM10, PM2.5, and SOx:** No change to the offset quantity and ERC surplus value requirements

ERCs in District State Implementation Plans

- ERCs are treated exclusively as growth in District plans
- Plans do not take any credit for emission reduction or mitigation from ERCs
- Plans demonstrate attainment and other milestones accounting for projected growth (which is inclusive of expected and capped ERC usage) as required
- Offset equivalency issues do not create any shortfalls or deficiencies within the District's plans

ERC Supply and Demand

- Given current estimates, there are approximately 3.4 tpd of VOC (24%) and 2.5 tpd of NOx (17%) in the external ERC bank that meet federal surplus requirements
- Approximately 0.48 tpd of federal VOC offsets and 0.29 tpd for NOx have been required annually (5 year average)
- Need to identify options to generate sufficient quantity of surplus credits to support federal offsetting requirements
- Preliminary analysis projects possible future shortage of VOC and NOx ERCs
  - Limited opportunities to generate additional ERCs through traditional means
  - Need to look to non-traditional sources and methods

Generation of Traditional ERCs

- Limited opportunities for the generation of new ERCs through traditional approved pathways
  - Challenging to generate new ERCs through the control of emissions that go beyond the District's stringent rules and regulations
- Most new ERCs are generated from facility and equipment shutdowns
  - In the past 5 years, 100% of NOx and VOC ERCs generated from shutdowns and over 90% in the past 10 years
  - Average 0.005 tpd VOC and 0.14 tpd NOx generated each year over the past 5 years

Efforts to Evaluate Future Equivalency Concepts

- Options to increase the quantity of offsets required under Rule 2201 to provide a larger balance of credits available for equivalency demonstration
  - Modification or removal of offset exemptions in Rule 2201
  - Modification to definition of Baseline Emissions for major sources
  - Decrease the Offset Threshold levels
  - Increase the Distance Offset Ratios
- Options to reduce the quantity of federal offsets required
  - Reduce federal offset ratio by requiring all existing major sources to be equipped with federal BACT

General Observations and Findings

- The evaluated potential changes are not likely to ensure year-to-year equivalency with the federal offsetting obligations for NOx and VOC
  - Would have even less value in surplus value equivalency as only portion of additional credits required would be surplus
- Need to identify options to generate sufficient quantity of surplus credits to support federal offsetting requirements
  - Limited opportunities to generate additional ERCs through traditional means
  - Need to look to non-traditional sources and methods

Current Focus – Multipath Approach

Multipath Approach (PM, SOx & CO)

- Maintain current equivalency approach for PM10, PM2.5, SOx, and CO
  - Feasible given fact that local District NSR rule is more stringent than federal offset requirements for these pollutants
  - Very few projects trigger federal offsetting requirements for these pollutants
  - Equivalency for these pollutants has not relied on additional creditable reductions from Orphan Facility Shutdowns (OSD) or the Agricultural IC Engine Electrification Program (AG-ICE)

Multipath Approach (VOC and NOx)

- For VOC and NOx, current focus is on identifying options to generate sufficient quantity of surplus credits for use by facilities to meet federal offsetting obligations at time of ATC issuance
  - Evaluating means to overcome hurdles to the banking of ERCs through traditional stationary source emission reduction projects
  - Evaluating non-traditional sources and methodologies for generating additional ERCs (Orphan Facility Shutdowns, Mobile Source ERCs, etc.)

2021 Offset Equivalency Demonstration

Upcoming Offset Equivalency Report

- District has begun preparations for 2020-2021 Offset Equivalency Report
  - End of the current tracking period is August 20, 2021
- Report will include evaluation of:
  - Test 1 (quantity) equivalency for NOx
  - Test 1 and Test 2 (surplus value) equivalency for PM10, PM2.5, and SOx
- Report will not include evaluation of:
  - Test 1 or Test 2 equivalency for VOC (full federal offset requirements have been in place since November 2020)
  - Test 2 equivalency for NOx (federal surplus at time of use requirements have been in place since September 2020)
- Draft report will be workshopped prior to submission to EPA

Upcoming Offset Equivalency Report

- Currently performing numerous tasks in preparation of demonstration
  - Validation of offset requirements of all tracked FMM and NMS projects finalized during this tracking period
  - Performing surplus analyses of ERCs reserved for ATC projects finalized during the tracking period (for non VOC/NOx projects)
    - For ATC projects involving VOC/NOx ERCs, surplus analysis performed at time of ATC issuance
  - Evaluating and adjusting for unimplemented/cancelled ATCs
- Continuing to enhance process and report to increase transparency and understanding of the report

Enhancements to the Equivalency Report

- Suggestions/Comments Received
  - Separate summary tables for each pollutant. Currently one table:

Offset Quantity Equivalency

Summary for 08/20/2019 through 08/19/2020

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets Required under Federal NSR	Offsets Required under District NSR	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
NOx	0	7	18.8	26.8	8.0	4,313.9	(3,968.8)	353.1
VOC	0	12	50.0	35.0	(15.0)	707.2	(2,820.6)	(2,128.4)
PM10	0	0	0.0	15.1	15.1	840.7	(529.7)	326.1
PM2.5	0	0	0.0	0.0	0.0	377.7	(185.4)	192.3
CO	0	0	0.0	0.0	0.0	198.1	0.0	198.1
SOx	0	0	0.0	8.5	8.5	2,911.1	(1,696.1)	1,223.5

  - Include sample calculations/equations for the summary tables
- Seeking suggestions on additional enhancements

Next Steps

- Continue preparing for the upcoming equivalency demonstration
- Receive/incorporate suggestions on enhancements to last year's report
- Workshop 2021 Equivalency Demonstration (mid October to early November 2021)
- Continue to identify and evaluate new methods to create surplus creditable emission reductions
- Continue to collaboratively work with EPA/CARB

Comments/Questions