Emission Reduction Credit Program
Public Advisory Workgroup

March 4, 2021

Overview

ROLE OF ERCS IN DISTRICT SIPS

CREDITABLE REDUCTIONS FROM ORPHAN SHUTDOWNS

NEXT STEPS

Role of Emission Reduction Credits in District State Implementation Plans

Background

- Pre-baseline ERCs
  - Emission reductions occurred prior to baseline year of plan
  - Emissions would not be included in baseline inventory of plan
  - Per Clean Air Act, must be added as growth and included in attainment demonstration if expected to be used during plan horizon
- EPA policy provides two ways for inclusion of these ERCs as growth in a plan
  - Demonstrate expected pre-baseline ERC usage was included in growth factor
  - Demonstrate expected pre-baseline ERC usage was not included in growth factor but was added to anticipated general growth

Background (cont'd)

- CARB generates the emission trends and growth estimates in the District's plan
  - California Emissions Projection Analysis Model (CEPAM)
  - Growth estimates from CEPAM include growth in emissions requiring offsets under the District New Source Review Rule (Rule 2201) as well as growth that does not require offsets
  - Growth estimates are generated by source category

ERCs Treated as Growth

- ERCs are treated as growth in plans – the District does not take "credit" for ERCs provided as offsets under District Rule 2201
  - Treated as if emissions were not offset
- The District utilizes the first methodology provided by EPA
  - Demonstrates that projected pre-baseline ERC usage is included in the growth factors
  - Methodology used in District plans was developed in consultation with EPA
  - Initially approved by EPA, as part of the District's 2003 PM10 Plan
  - Demonstration is included as an appendix to the plan

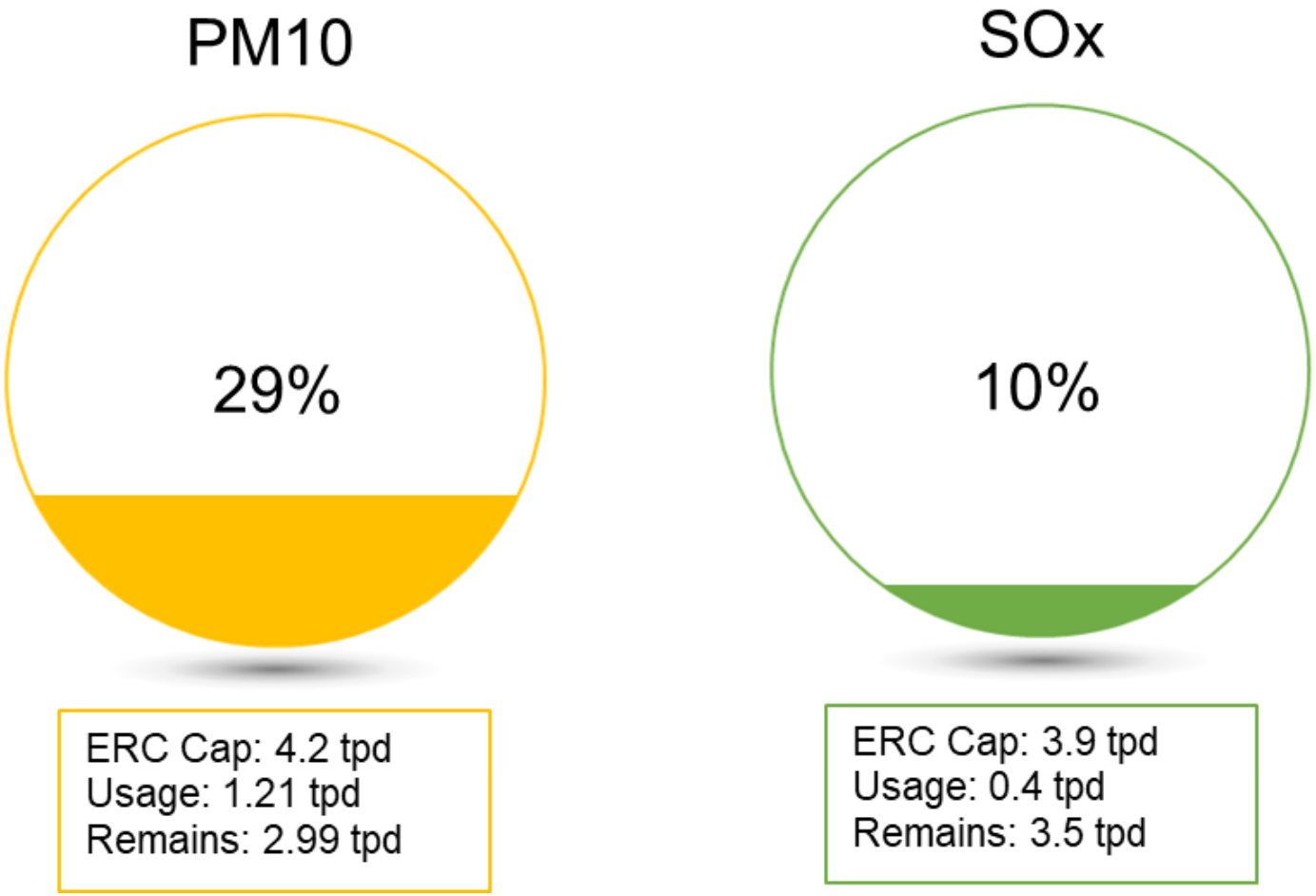
Projected ERC Demonstration

- The quantity of ERCs expected to be used during the plan's period is projected by:
  - Establishing the percentage of permitting actions for each source category that would be subject to offsetting under Rule 2201
  - Establishing the projected offset ratio for projects
  - Multiplying that percentage of permitting actions by the CEPAM growth factor for the respective source category and the projected offset ratio
- The plans assume that all projected ERC usage is pre-baseline for the purposes of the demonstration

Pre-Baseline ERC Cap

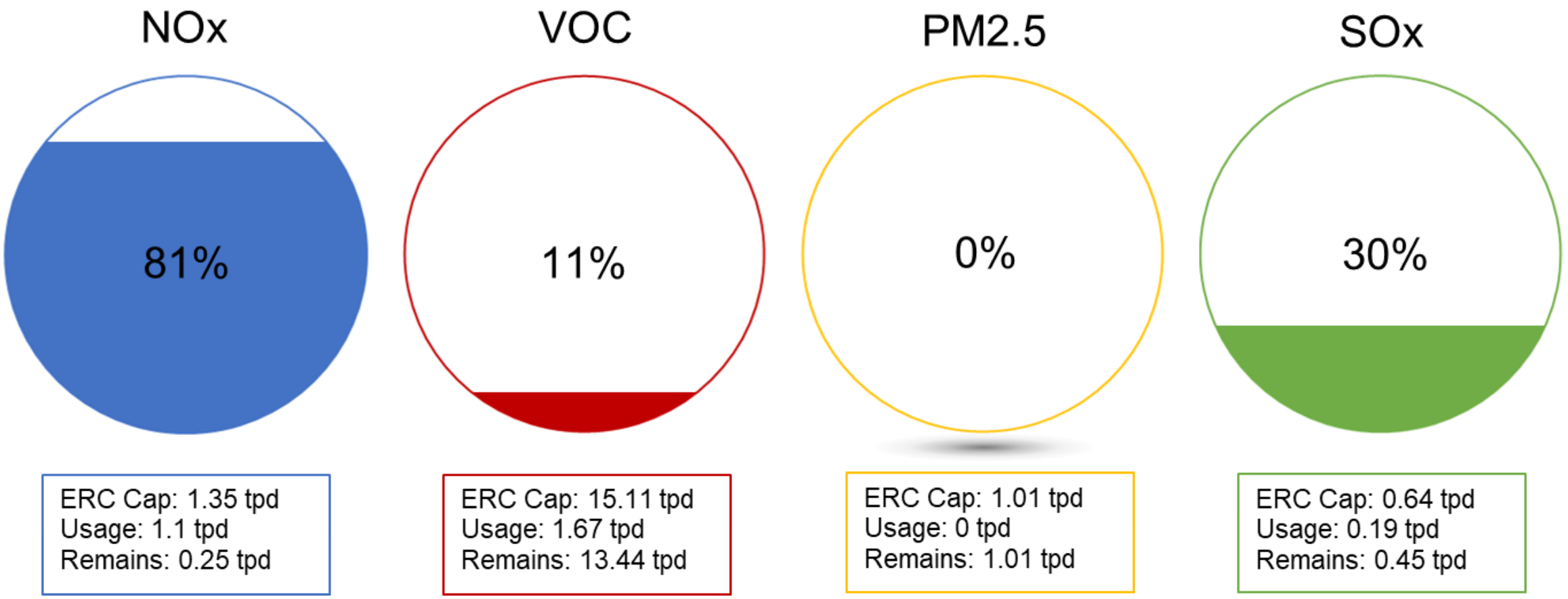
- Pursuant to Rule 2201, the District places a cap on the amount of pre-baseline credits that can be used during the plan period
- This cap is consistent with the level of usage projected in the demonstration
- If the cap will be exceeded, the District must update the plan
- ERC usage currently below all active caps
  - 2007 PM10 Maintenance Plan
  - 2007 Plan for 1997 8-hr Ozone Standard
  - 2016 Plan for 2008 8-hr Ozone Standard
  - 2018 Plan for 1997, 2006 and 2012 PM2.5 Standards

PM10 Maintenance Plan



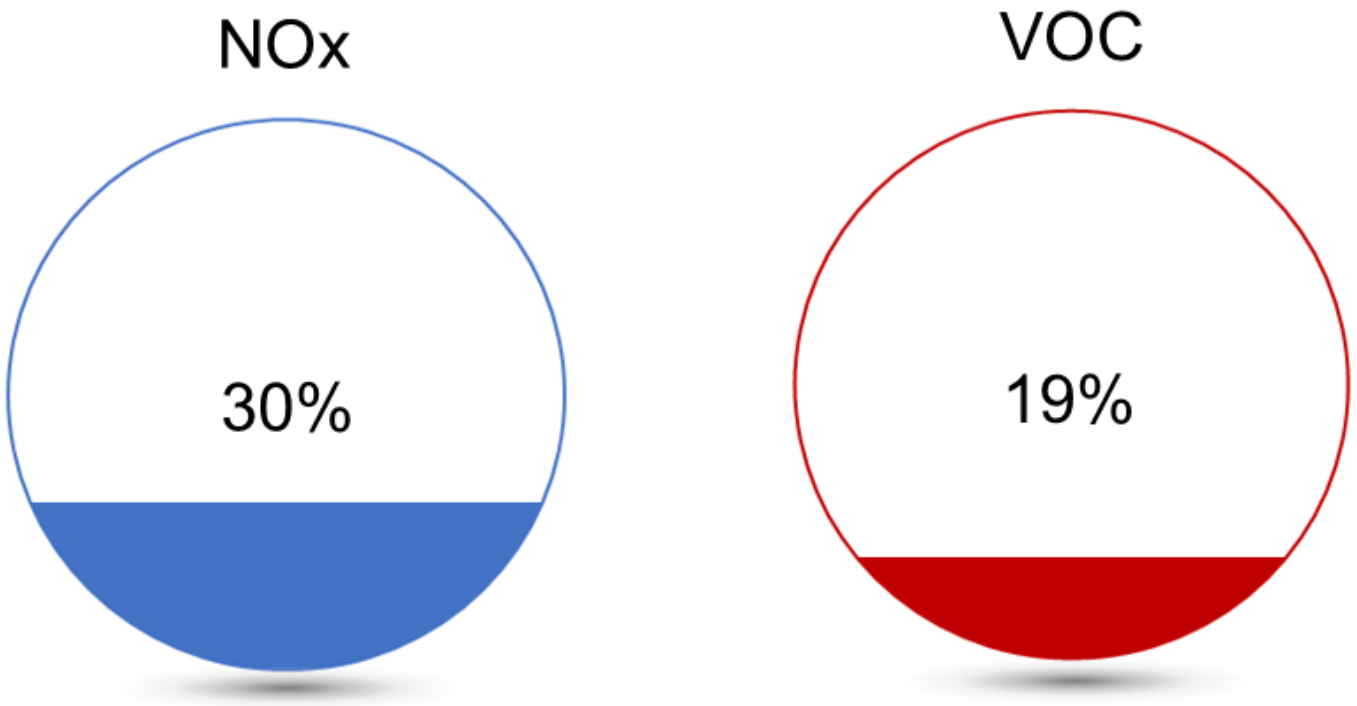
ERC Cap Period: 01/01/2011 to 12/31/2020

Plan for the 1997, 2006, & 2012 PM2.5 Standards



ERC Cap Period: 01/01/2014 to 12/31/2025

Plan for the 1997 8-hr Ozone Standard

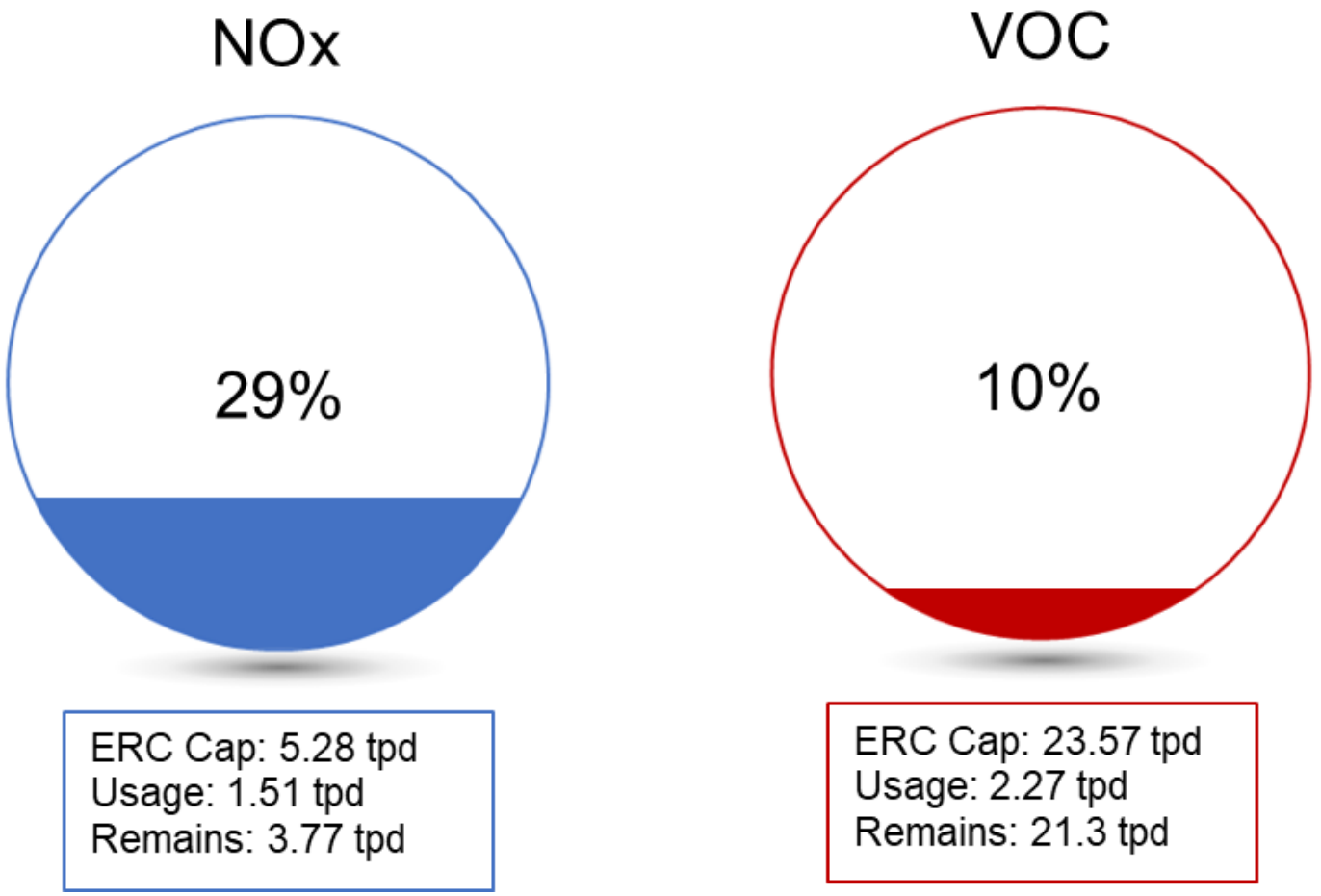


ERC Cap: 20.8 tpd
Usage: 6.3 tpd
Remains: 14.5 tpd

ERC Cap: 37.6 tpd
Usage: 7.09 tpd
Remains: 30.51 tpd

ERC Cap Period: 01/01/2003 to 12/31/2023

Plan for the 2008 8-hr Ozone Standard



ERC Cap Period: 01/01/2013 to 12/31/2031

Final Thoughts

- ERCs are treated exclusively as growth in District plans
- Plans do not rely on 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 within the District's plans

Creditable Emission Reductions from Orphan Facility and Equipment Shutdowns

Historic Treatment of Orphan Facility Shutdowns

- Emission reductions from unbanked facility shutdowns
- Prior policies valued orphan shutdowns at:
  - Actual emission reduction if record of actual emissions was available, or
  - 50% of permitted potential to emit if record of actual emissions was not available
- Orphan shutdowns surplus adjusted on an annual basis, but not surplused initially
- Used as additional creditable emission reductions for demonstrating equivalency
- Orphan facility shutdowns were provisionally removed from the system in September 2020 while reevaluating practices

Future Orphan Shutdowns (OSD) Concepts

- Emission reductions associated required to meet ERC criteria (Quantifiable, Permanent, Real, Enforceable, Surplus)
- Allow crediting of equipment unit shutdowns, not just facility shutdowns
- Exploring potential to make OSD reductions available to facilities to meet offsetting obligations
- Exploring what potential value/avenues there may be for the use of shutdowns where the District does not have a record of actual emissions
- New state criteria and toxic reporting regulation will aid with documentation of actual emissions

Orphan Facility Shutdowns

- Sampled Orphan Facility Shutdowns from 2018-19 tracking year
  - 34 facilities with NOx and/or VOC emission reductions
  - 136 permitted emission units
  - Reductions for 52 units (~40%) had available emission inventory data
- Work underway to more accurately estimate eligible shutdowns and project annual average value of creditable emission reductions from unbanked facility shutdowns

Orphan Equipment Unit Shutdowns

- Over past five years, ~300 unbanked equipment unit shutdowns not associated with facility shutdowns
  - Represents ~180 tons per year of NOx and ~600 tons per year of VOC based on permitted potential to emit
  - Actual creditable emission reduction will be less
- Work underway to more accurately estimate the projected annual average value of creditable emission reductions from unbanked equipment unit shutdowns

Next Steps

- Looking for feedback on the concepts
- Continue to assess the pros/cons of various concepts
- Continue to work with EPA/CARB in their review of the District's offset equivalency report

Comments/Questions