

U.S. and Article 5 ODS Project Protocols Version 2.0 Public Workshop



CLIMATE
ACTION
RESERVE

April 10, 2012

We will begin shortly

For audio, please dial: (646) 307-1719

Access code: 244-924-178

Please enter your Audio PIN to allow us to un-mute your line



Agenda

- Presentation of changes from V1.0 to V2.0
- Public comment and discussion of proposed changes
- Next steps



Why Version 2.0?

- Expand ODS refrigerant eligibility – U.S. only
- Change definition of start date
- Update default emission factors based on new data
- Respond to user feedback
- Incorporate errata and clarifications
- Incorporate policy memos issued since 2010

U.S. Only Eligible Refrigerant ODS (Section 2.3.1)



CLIMATE
ACTION
RESERVE

- Added refrigerants CFC-13 and CFC-113
 - Seeking comment and additional information
- Added refrigerant sourced from the federal government



Project Start Date (Section 3.2)

- Now defined according to commencement of activities within the GHG Assessment Boundary
 - Non-mixed ODS projects (not aggregated at destruction facility): day that project ODS departs for transport to destruction facility
 - Non-mixed ODS projects (aggregated at destruction facility): day that destruction commences
 - Mixed ODS projects: day that mixing procedures begin
- Projects must be submitted no more than six months after the project start date



Regulatory Compliance (Section 3.5)

- Clarified scope of regulatory compliance
 - Destruction facility
 - Mixing facility
 - Transportation to destruction facility
- Must meet regulatory compliance during implementation of project activities



Quantification (Section 5)

- Adjusted methodology to use pounds as the unit of mass until final step of quantification
- Added deduction for vapor composition risk (5.3)
 - For containers that hold a mixture of ODS, vapor composition may be different from liquid composition due to thermodynamic properties
 - Need to address risk of quantification based on liquid sample when ineligible high pressure chemical is present
 - Stakeholder consultation in February identified deficiencies of proposed REFPROP approach
 - Proposed 5% deduction in emission reductions on a container-by-container basis



U.S. Only Quantification (Section 5)

- Updated methodology to include CFC-13 and CFC-113
- Updated emission rate for CFC-115 to be conservative per ARB Compliance Offset Protocol (Table 5.2)
- Updated refrigerant substitute emission factors based on new data from EPA Vintaging Model and ARB Compliance Offset Protocol GWPs (Table 5.5 and Appendix D)

A5 Only Quantification (Section 5)



CLIMATE
ACTION
RESERVE

- Clarified definition of refrigerant recovered from equipment at end-of-life (5.1)

Project Monitoring and Operation (Section 6)



CLIMATE
ACTION
RESERVE

- Added project diagram requirement
- Changed accuracy requirement for destruction facility scale from 5% to 1% (6.6)
- Clarified re-sampling policy (6.6)
- Clarified sampling requirements for mixed ODS (6.6.1)
- Clarified requirements for non-RCRA facilities to demonstrate compliance with TEAP (6.7)
- Clarified information to be provided in COD (6.7)

U.S. Only

Project Monitoring and Operation



CLIMATE
ACTION
RESERVE

- Changed definition of stockpiled refrigerant ODS (Table 6.1)
 - Only material stockpiled prior to adoption of original protocol can utilize location of stockpile as point of origin
- Added new point of origin and guidance to allow for refrigerant sourced from federal government (Table 6.1)



Reporting Parameters (Section 7)

- Added new reporting documentation requirements:
 - Certificates of Destruction (not public)
 - Lab analysis used to quantify emission reductions (not public)
 - Project diagram (not public)



Verification (Section 8)

- Streamlined site visits requirements to individual facilities
 - Each required site shall be visited by a verification body (VB) at least once every 12 months
 - To meet requirement, site visit must have occurred no more than 12 months prior to the end date of the reporting period being verified
 - VB has discretion to visit more frequently
- Added additional site visit requirement
 - One additional project facility visit per verification chosen by VB



Policy Memos

Use of eGRID Electricity Emission Factors (May 3, 2011)

- Removed eGRID emission factor table from appendices
- Use version of eGRID from EPA website that most closely corresponds to time period electricity was consumed

Project Diagram Required at Verification (February 13, 2012)

- New requirements for a project diagram
- Part of Monitoring Plan and includes all parties involved



CLIMATE
ACTION
RESERVE

Public comments and discussion



Next Steps

- Submit written comments via ODS Revision webpage - deadline is **5 PM PDT on Tuesday, May 1**
- Submitted comments will be made public
- Response to public comments and revised protocols to be posted week of June 11
- Protocols scheduled to be considered for adoption by Board on June 27



CLIMATE
ACTION
RESERVE

Questions and Feedback

Rachel Tornek

213-891-6930

rachel@climateactionreserve.org

Max DuBuisson

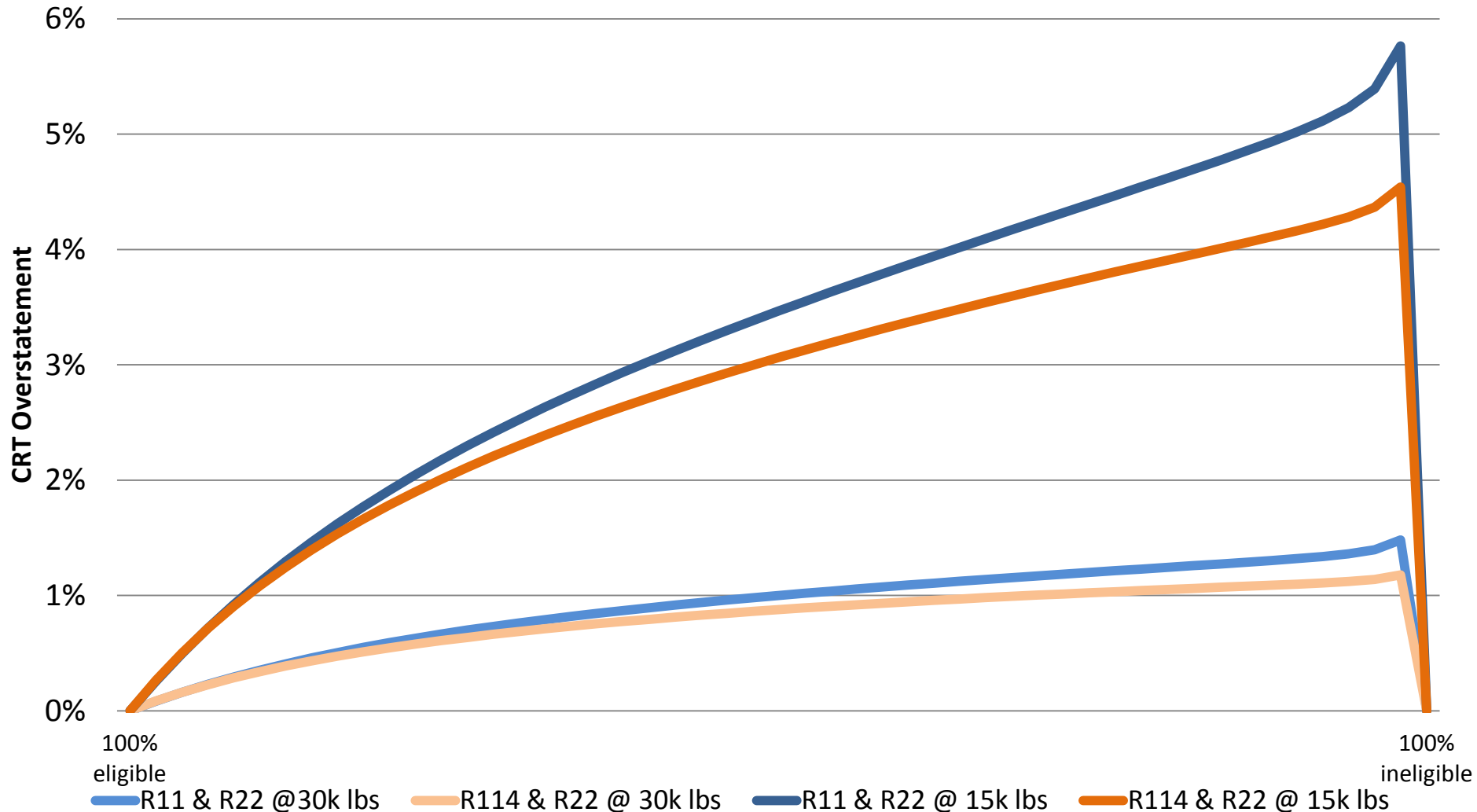
213-785-1233

max@climateactionreserve.org

Eligible low pressure (CFC-11 & CFC-114) & ineligible high pressure (HCFC-22)



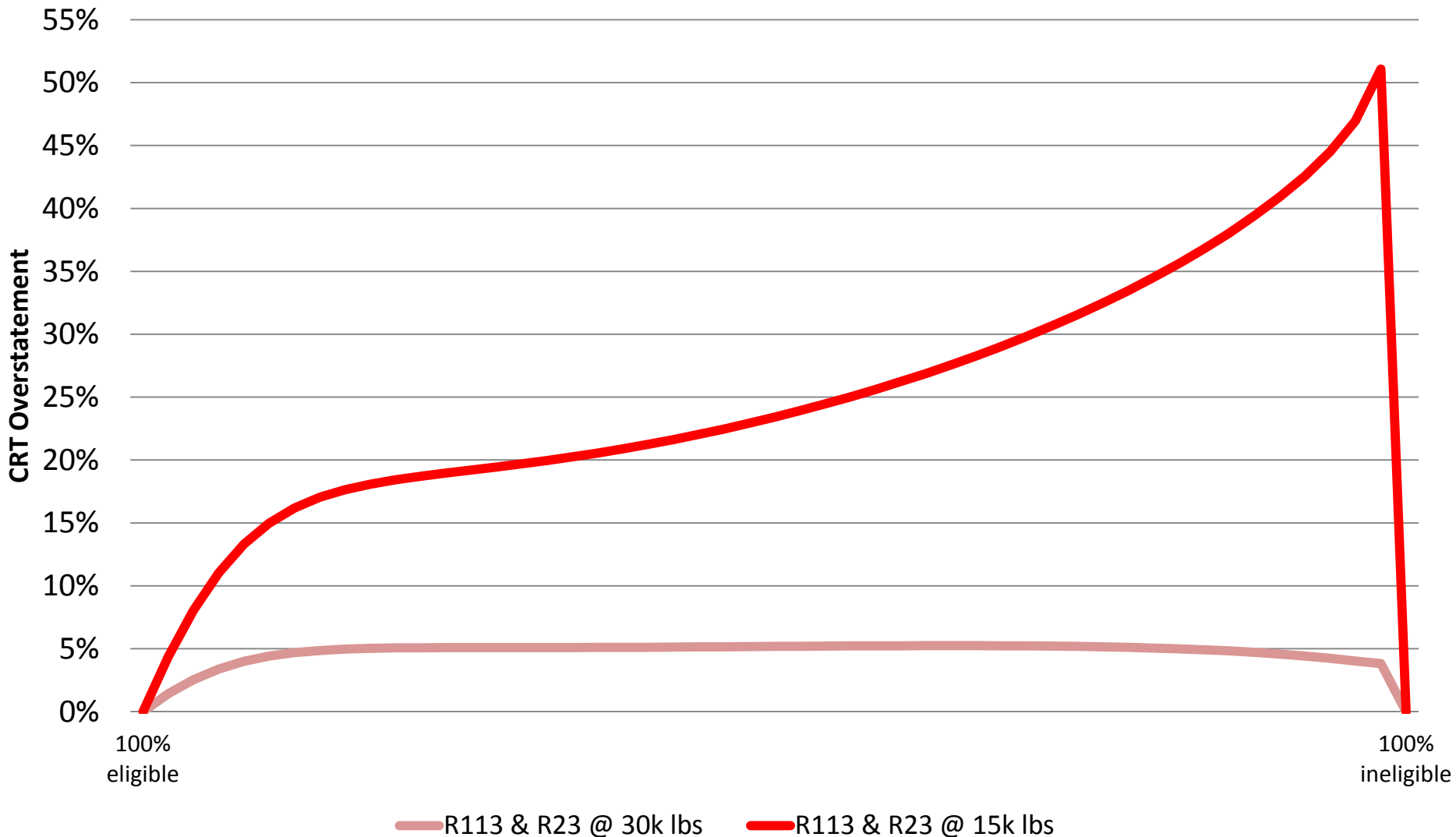
CLIMATE
ACTION
RESERVE



Worst-case scenario: CFC-113 & HFC-23



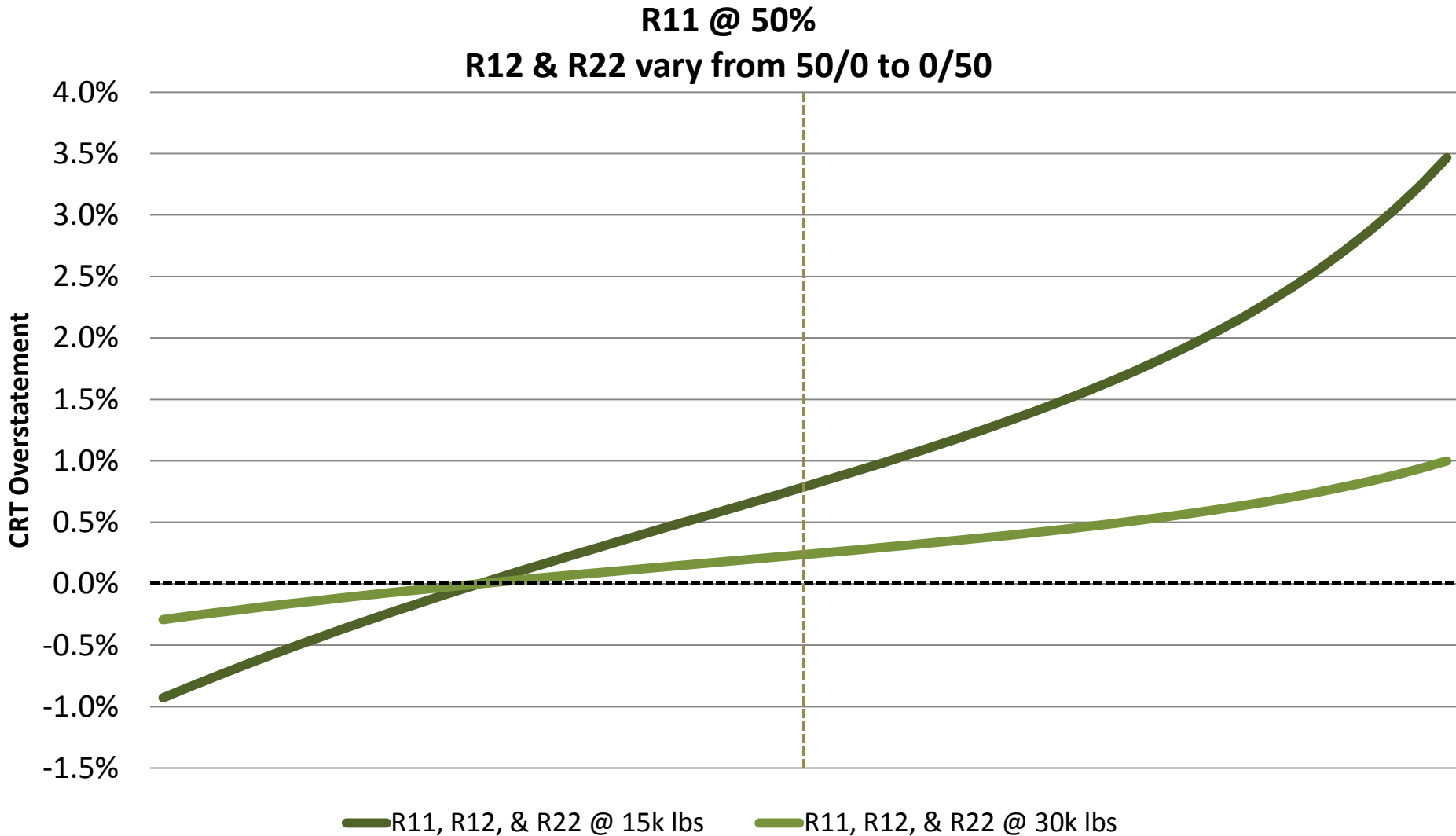
CLIMATE
ACTION
RESERVE



Effects of eligible, high pressure ODS



CLIMATE
ACTION
RESERVE





Temperature effects (CFC-11 & HCFC-22)

