Draft Comments
ODS Draft Project Protocols – Domestic
Richard Corey, Air Resources Board

The protocols are much improved from the last version. The comments focus on the U.S. Ozone Depleting Substances Project Protocol. However, most are equally applicable to the Imported Ozone Depleting Substances Project Protocol. The comments are organized by first providing general suggestions followed by more specific suggestions.

General

- The equations appear to be unnecessarily confusing and the symbology is inconsistent. For many of the equations, there are mandatory values. Perhaps the symbol is included so that it can be revised easier in future versions of the protocol but at least the value could be inserted into the definition and a simplified version presented to minimize math errors.
- The assumption that refrigerant would otherwise be recycled (challenged by some) needs to be better justified. There could be significant implications of another baseline scenario.
- Page 8: Still question rationale for start dates that go back as far as 24-months prior to effective date of protocol. For example, it would seem that certain opportunities for verification may no longer be available if the project has been completed).
- It would be very helpful to have a figure (building on Figure D.1) describing a "typical" project and the various intermediaries/their roles to understand process from cradle-to-grave including where when certificate is issued, how double counting is prevented, etc (at present, tracking the process from the text is a bit challenging and still leaves a number of questions).

Specific

- Page 6 – Suggest dropping reference to "liquid form" as some ODS would be in gaseous form or at equilibrium between a gas and liquid phase.
- Page 8 – Is there a rationale for accepting projects two years before the effective date of the protocol? It seems to make more sense to just allow projects from the effective date forward.
- Page 8 – Will the start date of within 6 months of project submission cause any problems? The crediting period is for 12 months and project developers may not know the total destroyed until the end of the 12 month period.
- Page 9 – The description of the performance standard test is confusing. It should clearly state that this means the projects are above and beyond business-as-usual practices.

- Page 9 (second paragraph 3.4.1) – The language does not recognize that ODS destruction may be recognized as an offset under a federal and or state cap-n-trade program.
- Page 11 and appendix B – The performance standard shows that not much ODS is destroyed in a year but there is no support that business-as-usual is refrigerant recycling vs. illegal venting.
- Page 20 – Landfill assumptions: the assumptions for release and degradation in landfills do not account for climatic variations but may be the most accurate available and are conservative. The equations do not account for the fact that CFC-11 (and maybe others) degrade into HFCs, whose degradation fate within the landfill is unclear. Additionally, a landfill gas system may actually mean that the gases are pulled out of the landfill before they have a chance to degrade. Since the engines and flares may not be hot enough to destroy the ODS, there may be more ODS emissions at systems with LFGTE or flares (this issue requires further clarification).
- Equations throughout document – Consistently use blowing ODS or blowing agent ODS.
- Many of the inputs (e.g., average annual weighted emissions, 10-year cumulative emissions) relay on numbers that suggest a precision that is greater than the data supports. I suggest rounding down to the nearest whole percent which still may be greater than the inputs support, but more defensible.
- Equation 5.4 – Since $BE_{treat,i}$ is always 0.19 for building insulation and 0.43 for insulating foam, can you simplify by just providing those as defaults. You could provide these equations and the simplified versions with the calculations done since they rely almost entirely on provided data except for the quantity of foam blowing ODS destroyed. It can become a much simpler equation of amount * default with a default table for the default by agent and type of foam.
- Equation 5.5 – the notations used are inconsistent. Why use Foam but not Refrigerant?
- Equation 5.8 – why is the notation different for TR and Dest from Eq 5.5? Why create De_{def}? You use DEST again in Equation 5.9.
- Table 5.14 – Checking to see how assumptions align with what we have historically used.
- Page 40 (Table 8.1) – How can verification adequately be performed for a project that was completed prior to the effective date of the protocol (same as previous comment)?
- Page 41 (8.6 ODS Verification Items): Who is charged with assessing the rigor of a verifier's assessment as the treatment of the required elements could vastly vary in quality?