

Comments concerning Version 2.0 of the U.S. Ozone Depleting Substance Protocol

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## <u>Comments Regarding 6.2 (As written with added paragraph letters for</u> <u>easy reference in discussion below).</u>

## 6.2 Point of Origin Documentation Requirements

Project developers are responsible for collecting data on the point of origin of each quantity of ODS, as defined in Table 6.1. The project developer must maintain detailed acquisition records of all quantities of ODS destroyed under the project.

<b>Table 6.1.</b> Identification of Point of Origin <b>ODS</b> 1. Refrigerant ODS stockpiled prior to February 3,2010	Defined Point of Origin Location of stockpile
2. Refrigerant ODS quantities less than 500 lbs	Location where ODS is first aggregated with other ODS to greater than 500 lbs
3. Refrigerant ODS quantities greater than 500 lbs	Site of installation where ODS is removed
4. Refrigerant ODS purchased from U.S. Defense Logistics Agency Disposition Services43	Location where ODS is stored prior to sale
5. ODS blowing agent extracted from foam	Facility where ODS blowing agent is extracted
6. ODS blowing agent in building foam	Location of building from which foam was taken

- A. Project developers must be able to document the point of origin for all ODS that will be included in the project as defined above.
- B. For destroyed ODS where the point of origin is a reservoir-style stockpile (i.e. it was not sealed), the date on which the ODS was stockpiled is established using "first-in/first-out" accounting. Specifically, the date on which a quantity of ODS was "stockpiled" is defined as the furthest date in the past on which the quantity of ODS contained in the reservoir was greater than or equal to the total quantity of all ODS removed from the reservoir since that date (including any ODS removed and destroyed as part of the project). The date must be established using management systems and logs that verify the quantities

of ODS placed into and removed from the reservoir throughout the relevant period. Provided these elements are met, and the stockpile follows the "first-in/first-out" accounting, the date on which a quantity of ODS was stockpiled may be established.

- C. For ODS collected by service technicians in individual quantities less than 500 pounds, the point of origin is defined as the holding facility where several small quantities were combined and exceeded 500 pounds in aggregate. Those handling quantities less than 500 pounds need not provide the documentation required below. However, once smaller quantities are aggregated and exceed 500 pounds collectively, tracking is required at that location and point in time forward.
- D. For containers of ODS greater than 500 pounds (determined as the weight of eligible ODS within a single container), the project developer must provide documentation as to the origin of the ODS within that container. If it is shown that, prior to aggregation in the project container, the ODS was contained as a quantity greater than 500 pounds, then the documentation must extend back to this previous container and its point of origin. The project developer must provide documentation tracking the ODS back to a point where it was either a) contained or collected as a quantity of less than 500 pounds, or b) collected by a service technician as a quantity of greater than 500 pounds.
- E. For refrigerant ODS purchased from U.S. Defense Logistics Agency (DLA) Disposition Services, the point of origin is defined as the facility where the ODS was stored prior to purchase. Tracking is required at that location and point in time forward. Note that ODS purchased from DLA Disposition Services must have documentation to show that the ODS was produced prior to the U.S. production phase-out and that it could legally be sold into the U.S. refrigerant market.<sup>44</sup> Documentation must also show that the material was not sourced from U.S. Customs. The ODS must originate from domestic U.S. supplies; imported refrigerant is not eligible under this protocol. Project developers seeking to register projects involving the domestic destruction of imported refrigerant must use the Reserve's Article 5 Ozone Depleting Substances Project Protocol.
- F. All data must be generated *at the time of collection* from the point of origin. Documentation of the point of origin of ODS shall include the following:
  - Facility name and physical address
  - Point of origin zip code
  - Identification of the system by serial number, if available, or description, location, and function, if serial number is unavailable (for quantities greater than 500 pounds)
  - Serial or ID number of containers used for storage and transport

# Discussion and Comments on Changes Included in Version 2 of the Protocol Section 6.2

As written in the above Protocol **Table 6.1.** Identification of Point of Origin **ODS** 1. Refrigerant ODS stockpiled prior to February 3, 2010

#### Requested Change Table 6.1. Identification of Point of Origin ODS

1. Refrigerant ODS stockpiled for greater than 24 monthsprior to February 3, 2010.

This change is requested for the following reasons:

- a) February 3, 2010 is no longer a relevant date as Version 1 is not mentioned in this revised Protocol.
- b) Without this change there are stockpiles created out of necessity of not having all the detailed record keeping data, that were being held for the 24 month rule, that will never be eligible. (i.e. orphans without the chance of being eligible). In the absence of a GHG reduction project, this material may be illegally vented or recovered for re-sale into the refrigerant recharge market. This is the same rationale that the Version 1.0 included a greater than 24 month eligibility for stockpiles so that material without the detailed point of origin could become eligible.
- c) There are many acceptable reasons why the documentation for point of origin is not available. In many cases it is the chain of getting material from the contractor who recovers the material to the project developer. As an example, a chiller holding 600 lbs of used eligible ODS may have been recovered in 2010. That contractor may have sent it to a branch wholesaler for proper return of ODS without the knowledge that it would be eligible for offsets and therefore no paperwork or point of origin information as required for paragraph F above is available.
- d) For legitimate competitive reasons, many businesses refuse to provide information about their customers therefore the information in paragraph F is withheld. The 24 month rule in Version 1 is the only way this material may be eligible. After the adoption of this new Version 2, then the 24 month rule is no longer valid and this type of material may be vented to the atmosphere.
- e) If this recommendation is not accepted, please at least change February 3, 2010 to "the adoption date of Version 2.0". By starting with the adoption date of this protocol will allow those stockpiles that were started prior to this new eligibility requirement and in accordance with the previous Version 1.0 of the Protocol, will be eligible and stockpiles starting after this date will not be eligible.
- f) Stockpiles earlier than February 3, 2010 should have already been destroyed but if not they would still be eligible because they are started prior to the effective date of Version 2.0 Protocol date.
- g) This requested change of the effective date will give time for operational changes in the way many developers acquire material. They will not acquire material that does not have the required documentation as desired by CAR. It is never the intent of a developer to hold material for 24 months prior to destruction but it was the "fallback" position and the only way the material could be eligible if detailed documentation is not available.
- h) There is potentially a large financial investment in this material that was acquired in good faith with the "fall back" position in mind, that could have disastrous consequences if all of a sudden the 24 month rule were to be eliminated.

### Other Comments on Section 6.2

### Paragraph F

Why are the words "at the time of collection" italicized? This causes confusion as some times it is necessary to "backtrack" and find the information required. This is especially the case when the material comes to a developer through several layers of a supply chain (local

contractor branch to contractor region office to branch wholesaler to regional wholesaler to developer). The italics raises questions as to the eligibility to developers and to verifiers of any material if the point of origin information is not recorded on a piece of paper that was created at the exact collection site at the exact time of collection.

Recommendation: Remove this sentence in its entirety to avoid confusion.. All data must be generated at the time of collection from the point of origin.

Table 6.1 3. Refrigerant ODS quantities greater than 500 lbs Site of installation where ODS is

removed recovered.

Discussion for above change: The word "recovered" from "recovery" is defined in the Glossary of Terms.

This change in terms is also recommended to be made for the word "collected" (Paragraphs C and D) in this section to the word "recovered".

### 5.3 Deduction for Vapor Composition Risk

For any given container of ODS, a portion of the container will be filled with liquid, and the remaining space will be filled with vapor. This protocol only requires that a liquid sample be taken for composition analysis. For containers that hold a mixture of ODS, the composition of ODS in the vapor may be different from the composition of ODS in the liquid due to differences in the thermodynamic properties of the chemicals. If the container holds chemicals that are not eligible for crediting, the quantification of emission reductions based on the analysis of liquid sample could overstate the actual reductions from the destruction of the material.

To address this risk, a project container that holds an eligible low pressure ODS and an ineligible high pressure chemical (e.g. HCFC-22) shall have a 5% deduction applied to the emission reductions generated by the destruction of the container. Any ineligible chemical with a boiling point below 32°F at 1 atm is considered high pressure.

If a project container holds an eligible low pressure ODS in a concentration of at least 1%, an eligible high pressure ODS (in any concentration), and an ineligible chemical with a higher pressure than the eligible ODS in a concentration greater than that of the eligible, high pressure ODS, a 5% deduction is to be applied to the emission reductions generated by the destruction of the container. Eligible ODS are defined as low pressure or high pressure according to Table 5.6 below. "Higher pressure" is defined as having a lower boiling point at a given temperature.

This deduction applies to both mixed and non-mixed ODS projects as defined in Section 6.6

Table 5.6. Eligible Low Pressure and High Pressure ODS	
Low Pressure ODS	High Pressure ODS
CFC-11	CFC-12
CFC-113	CFC-13
CFC-114	CFC-115

## Discussion and Comments on Changes Included in Version 2 of the Protocol for Section 5.3

From the explanation of the effect of vapor from an ineligible refrigerant, it appeared that the 5% reduction was "overkill" in trying to be conservative. It appeared that the ineligible gas needed to approach 100% and the eligible gas near 0% to get close to a 5% distortion. We recommend that the deduction be a 3% deduction in place of the 5%.

In most cases when the ineligible gas is contained in a mixed batch it does not exceed even 50% of the mixture. We recognize the goal of being conservative but think that 5% is too high.

#### 2.3.1 Refrigerant Sources

This source category consists of ODS material produced prior to the U.S. production phase-out that could legally be sold into the U.S. refrigerant market.<sub>13</sub> The ODS must originate from domestic U.S. supplies; imported refrigerant is not eligible under this protocol. Project developers seeking to register projects involving the domestic destruction of imported refrigerant must use the Reserve's Article 5 Ozone Depleting Substances Project Protocol.

In the absence of a GHG reduction project, this material may be illegally vented or recovered for re-sale into the refrigerant recharge market. As described in Section-05, for GHG reduction calculation purposes, this protocol conservatively assumes that the refrigerant would be reclaimed.

Only destruction of the following ODS refrigerants is eligible for crediting under this protocol:

- CFC-11
- CFC-12
- CFC-13
- CFC-113
- CFC-114
- CFC-115

Note to reviewers: The Reserve is seeking comment on the proposed inclusion of CFC-13 and CFC-113 as eligible refrigerant sources. Along with your comments, please provide any information, data or documentation on the current sources, stockpiles and uses of these chemicals that would be relevant to their inclusion as eligible refrigerants.

## Discussion and Comments on Changes Included in Version 2 of the Protocol for Section 2.3.1

The only concern we have is that R-13 is such high pressure that it is stored in high pressure cylinders. It is very difficult, if not impossible, to get a liquid sample of R-13. Without a liquid sample, the material may not be eligible.

We also do not see much R-13 in the industry at this time.