

**Comments on the Reserve’s “U.S. Ozone Depleting Substances Project Protocol: Destruction of Domestic Ozone Depleting Substances,” Public Draft Version 1.0 dated November, 20 2009**

Please note that we have elected not to comment on specific assumptions in the protocol, but rather to comment on the overall impact of the protocol for ODS destruction.

There is a limited window of opportunity for collecting and destroying unwanted ODS, and hence achieving these important climate benefits, a fact which was a critical impetus for developing the notion of ODS project protocols or methodologies in the first place. Indeed, IPCC/TEAP (2005) has found that approximately a third of the ODS banks existing in 2002 would be vented by 2015 unless action was taken, resulting in emissions of nearly 7 billion tonnes of carbon dioxide equivalent (tCO<sub>2e</sub>).

To this end, we are concerned that some of the conservative assumptions—which we certainly appreciate for credibility purposes—mean that deductions from the total amount of ODS destroyed are so significant that project developers will not be able to recoup costs, particularly in the foams sector. Our preliminary calculations of sample projects (on the right) show deductions as high as nearly 70-80% for building foam projects.<sup>1</sup> This means that even for a low-cost building foam recovery project, credits would have to far exceed \$100/tCO<sub>2e</sub> under the Reserve to turn a profit, an unlikely scenario.

This high threshold for profitability in the foams sector threatens the usefulness of such an ODS project protocol for effectively dealing with unwanted ODS around the world. This is especially problematic given that foams are projected to account for more than half of all ODS banks by 2015, on both a per tonne and GWP-weighted basis.<sup>2</sup> We strongly urge the Reserve to consider the applicability of its protocols in a real, project-based setting before finalizing assumptions.

**Project 1: Large Stationary AC**

Refrigerant: CFC-12  
Amount destroyed: 1,000 tons

	Totals
ODS destroyed (tCO <sub>2e</sub> )	10,900,000
Emission reduction credited (tCO <sub>2e</sub> )	9,591,994
Difference (%)	-12%
Credit revenue	\$67,143,958
Global project cost (low)	\$8,220,112
Global project cost (high)	\$31,300,579
U.S. project cost	\$14,899,399
Net revenue (low global cost)	\$58,923,846
Net revenue (high global cost)	\$35,843,379
Net revenue (U.S. cost)	\$52,244,559

**Project 2: Domestic Refrigerator Recovery**

Refrigerant: CFC-12  
Foam blowing agent: CFC-11  
Number of refrigerators collected: 10,000

	Totals
ODS destroyed (tCO <sub>2e</sub> )	30,704
Emission reduction credited (tCO <sub>2e</sub> )	18,774
Difference (%)	-39%
Credit revenue	\$131,415
Global project cost (low)	\$243,503
Global project cost (high)	\$323,503
U.S. project cost (low)	\$500,723
U.S. project cost (high)	\$720,723
Net revenue (low global cost)	(\$112,088)
Net revenue (high global cost)	(\$192,088)
Net revenue (low U.S. cost)	(\$369,308)
Net revenue (high U.S. cost)	(\$589,308)

**Project 3: Building Foam Recovery**

Foam blowing agent: CFC-11  
Amount of blowing agent collected: 10 tons

	Totals
ODS destroyed (tCO <sub>2e</sub> )	47,500
Emission reduction credited (tCO <sub>2e</sub> )	9,757
Difference (%)	-79%
Credit revenue	\$68,298
Global project cost (low)	\$1,205,159
Global project cost (high)	\$1,505,963
Net revenue (low cost)	(\$1,136,860)
Net revenue (high cost)	(\$1,437,665)

<sup>1</sup> Project calculations assume a CRT price of \$7/tCO<sub>2e</sub>. Project costs include both project implementation costs, as well as project transaction costs (i.e., project document preparation, verification, Reserve annual, project, and issuance fees). Project implementation costs are based on estimates provided by the Montreal Protocol’s TEAP ([http://ozone.unep.org/Assessment\\_Panels/TEAP/Reports/TEAP\\_Reports/teap-october-2009-decisionXX-7-task-force-phase2-report.pdf](http://ozone.unep.org/Assessment_Panels/TEAP/Reports/TEAP_Reports/teap-october-2009-decisionXX-7-task-force-phase2-report.pdf)). U.S. project implementation costs are based on previous research conducted by ICF International.

<sup>2</sup> TEAP (Technology and Economic Assessment Panel). 2005. Supplement to the IPCC/TEAP Report. Retrieved from: [http://ozone.unep.org/Assessment\\_Panels/TEAP/Reports/TEAP\\_Reports/teap-supplement-ippc-teap-report-nov2005.pdf](http://ozone.unep.org/Assessment_Panels/TEAP/Reports/TEAP_Reports/teap-supplement-ippc-teap-report-nov2005.pdf)