CLEANING LABORATORY EVALUATION SUMMARY

SCL #: 2003

DateRun: 03/05/2003

Experimenters: Jason Marshall, Heidi Wilcox

ClientType: State Agency

ProjectNumber: Project #2

Substrates: Ceramics, Fiberglass, Chrome

PartType: Coupon

Contaminants: Films, Soaps

Cleaning Methods: Manual Wipe

Analytical Methods: Gravimetric, Photography

Purpose: To evaluate newly supplied cleaner on SSL Soil 1 on three substrates

Experimental Procedure: One supplied cleaning product was diluted to vendor recommended concentrations for bathroom cleaning. The product was diluted with DI water. Three preweighed fiberglass, three ceramic and three chrome coupons were coated with SSL Soil 1 (Bathroom soap scum: Vaseline Dry Skin Lotion 21.4%, Dial Clean Rinsing Body Wash 14.3%, Market Basket Shampoo & Conditioner (Pert) 28.6%, Soft Soap Natural Liquid hand soap 21.4%, Coast Deodorant bar soap 7.2% and Water 7.1%) using a hand held swab and allowed to dry for 24 hours at room temperature. The contaminated coupons were weighed again to determine the amount of soil added. Photographs were taken.

Three coupons were placed into a Gardner Straight Line Washability unit. A Professional Painter's Rag was attached to the cleaning sled and soaked with 5-7 sprays of cleaning solutions. Each coupon was sprayed 7-10 times with the same cleaning solution. The cleaning unit was run for 20 cycles (~33 seconds). At the end of the cleaning, coupons were wiped once with a dry paper towel. Final weights were recorded and a second set of photographs were taken. Efficiencies were calculated and recorded.

Results: The bathroom cleaner had some difficulty removing SSL Soil 1 from the fiberglass coupons. The coupons looked streaky and were sticky to the touch. The soil was successful removed from the other two substrates, ceramic & chrome.

Table 1. Soil Removal.

Cleaner	Initial wt	Final wt	% Removed
FG Soil1	0.0405	0.0090	77.78
	0.0182	0.0055	69.78
	0.0340	0.0123	63.82
Ceramic Soil1	0.2910	0.0152	94.78
	0.1943	0.0076	96.09
	0.2215	0.0085	96.16
Chrome Soil1	0.1528	0.0124	91.88
	0.2567	0.0220	91.43
	0.2865	0.0121	95.78

Summary:

Substrates:	Ceramics, Fiberglass, Chrome				
Contaminants:	Films, Soaps				
Company Name:	**Product Name:**	**Conc.:**	**Efficiency:**	**Effective:**	**Observations:**
Rochester Midland Corporation	Washroom Cleaner	12	70.46	☐	Fiberglass
Rochester Midland Corporation	Washroom Cleaner	12	95.68	☑	Ceramic
Rochester Midland Corporation	Washroom Cleaner	12	93.03	☑	Chrome

Conclusion: The overall efficiency for the bathroom cleaner, EnviroCare Washroom Cleaner, was 86.39, passing the cut off of 85%. The glass cleaner will be tested next on SSL Soil 2.