

**Consumer Products Group**  
Honeywell  
39 Old Ridgebury Road  
Danbury, CT 06810-5109

October 25, 2006

Air Resources Board  
1001 I Street, 23rd Floor  
Sacramento, California 95814  
Attn: Clerk of the Board  
<http://www.arb.ca.gov/lispub/comm/bclist.php>

RE: Comments on the September 29, 2006 Proposed California Consumer Products Regulation

Dear Air Resources Board Members:

Honeywell Consumer Products Group produces and distributes Prestone® De-Icer Windshield Washer fluid. Honeywell presented the information for the automotive windshield washer fluid category at the Industry meeting on July 13, 2006 with you and your staff. Please find our comments below on the general reformulation costs associated with this proposed regulation.

In Appendix A under Table VII-5 there is an estimated onetime cost identified for the category of automotive windshield washer fluid (Type A). Both the low and high costs are identified as being the same at \$8,648. This is an extremely low number that would not even cover a simple reformulation. Please see the attached chart that breaks out the R&D costs for both a simple and an extensive reformulation. The cost ranges from about \$14,000 as much as \$68,000. The change from 35% VOC to 25% is not just the 10% reduction of the VOC. One point that is not very clear in your final proposed regulation is the fact that the proposed 25% VOC limit for this category does not provide the same freeze protection as the current 35% VOC limit. There is a loss of about 22 degrees Fahrenheit. In order to provide the maximum freeze point protection required, some amount of LVP solvents must be used. Also, to continue to provide the consumer with an effective product, we must add other beneficial components to the formulation. The loss of the freeze point protection must be compensated for by adding other visibility improvements such as precipitation and soil repellency, or refreeze protection, in order to add value back to the product. To not do so would result in loss of the competitive advantage our product has afforded Honeywell. These changes would be considered an extensive reformulation.

In Appendix F for the automotive windshield washer category, there were two formula comparisons, including a non-compliant formula (50%VOC) versus a proposed 25% VOC product. The 35% VOC limit has been in place for many years. When comparing costs, a 35% VOC product would be the appropriate basis. In order to obtain a true cost

comparison between the current and proposed formulas, a non-compliant formulation of 50% is not relevant. In the true comparison with the 25% product, there is a loss of 10% VOC which could be methanol. There is an increase in the LVP (to gain freeze point protection) and the inorganic ingredients that will out-weigh the savings from the methanol. In your example, methanol is \$0.29 per pound. The cost per pound of a typical LVP could range from \$0.40 - \$0.80 and the cost of an inorganic component can be as much as \$6.00 per pound. The two ingredients combined would cost more than the 10% of methanol. In this scenario, it is possible to have a 25% product cost more than the 35%. I have included a formulation comparison of low and high costs. The low cost proposal illustrates that the cost is similar. In the high cost example where Honeywell and other known companies market products, there is an increase in cost from the 35% product to the 25% product.

As I have demonstrated, there is a significant cost to manufacturers to meet the proposed VOC limit for automotive windshield washer fluids. In a category that is very cost competitive, these extra costs erode the current low margins. Also, the new limit results in a loss of overall performance, which cannot be entirely recovered through other ingredients. Although there are formulation hurdles to overcome, Honeywell supports the proposed VOC limit of 25% for the automotive windshield washer fluid category in the Type "A" areas of California.

If you have any questions on the information I have provided or if you would like to discuss further, please do not hesitate to contact me at 203-830-7812.

Sincerely,



Sean McNear  
Manager, Regulatory Affairs

Encl

cc: David Mallory, P.E., Manager, Measures Development Section

### Automotive Windshield Washer Fluid

Component	Material Cost \$/lb	Low Cost Formula				High Cost Formula			
		Current Wt %	Cost \$	Proposed Wt %	Cost \$	Current Wt %	Cost \$	Proposed Wt %	Cost \$
Methanol	0.29	35	0.10	25	0.07	35	0.10	25	0.07
LVP	0.41	0	0	0	0	2.5	0.01	5	0.02
Inorganic	5.46	0	0	0	0	0.5	0.03	2	0.11
Water	0	65	0	75	0	62	0	68	0
<b>Total Cost/Pound</b>			<b>0.10</b>		<b>0.07</b>		<b>0.14</b>		<b>0.20</b>
<b>Total Cost/Gallon</b>			<b>0.80</b>		<b>0.56</b>		<b>1.12</b>		<b>1.60</b>

**Prestone® De-Icer Washer Fluid Reformulation Resources**

**Simple Reformulation (e.g., small change in active ingredient concentrations)**

Test	Typical Resource Requirements (Days)	
	Non-exempt	Exempt
Formulating and Disposal	3	0
Freeze Point	1	0
Safety (Paint and wiper blade compatibility)	0.5	0
Foaming	2	0
Cleaning	3	1
Repellency	2	0
Label testing	0	0
"De-Icing" (Melting/ Refreeze)	3	0
Streaking (low temp)	1	0
Stability on product heels (2 wk - 3 mo. test)	0.5	0
Storage and Stability Tests (3 mo. test)	2	0
Fleet Test (1 mo. test)	5	10
Prepare Claims Substantiation	0.5	2
Trial Run	0	0
Prepare TPS & MSDS	1	0.5
Program Management (4 mo., 15 min/wk, 10 people)	0	2
<b>Total Time</b>	<b>24.5</b>	<b>15.5</b>
<b>Value of Time*</b>	<b>\$6,125</b>	<b>\$6,781</b>
<b>Value of Materials</b>	<b>\$1,000</b>	<b>--</b>

**Summed Expenses** **\$13,906**

**Extensive Reformulation (e.g., new active ingredient to offset lost performance)**

Test	Typical Resource Requirements (Days)	
	Non-exempt	Exempt
Technology searching and supplier contacts	0	10
Formulating and Disposal	10	0
Freeze Point	2	0
Safety (Paint and wiper blade compatibility)	0.5	0
Foaming	5	0
Cleaning	10	2
Repellency	5	0
Label testing	0	0
"De-Icing" (Melting/ Refreeze)	6	0
Streaking (low temp)	1	0
Stability on product heels (2 wk - 3 mo. test)	1	0
Storage and Stability Tests (3 mo. test)	2	0
Fleet Test (3 mo. test)	15	30
Prepare Claims Substantiation	0.5	2
Trial Run (5 N-e, 5 E, 2 days)	10	10
Prepare TPS, MSDS, and ADR	1	6
Program Management (12 mo., 15 min/wk, 10 people)	0	5
<b>Total Time</b>	<b>69</b>	<b>65</b>
<b>Value of Time*</b>	<b>\$17,250</b>	<b>\$28,438</b>
<b>Value of Materials</b>	<b>\$2,000</b>	<b>--</b>
<b>Artwork</b>	<b>\$20,000</b>	<b>--</b>

**Summed Expense** **\$67,688**

\*Using 240 work days, non-exempt = \$40k/yr, exempt = \$70K/ yr, benefits @ 50% of salary