PRELIMINARY DRAFT - February 20, 1997

BUG and TAR REMOVER
(Aerosol and Non-aerosol)

Preliminary Draft VOC Limit: 25% by weight

I. Product Definition:

This category includes three different product types: bug removers, bug and tar removers, and tar removers. Bug remover means any product that is designed to remove biological-type residues such as insect carcasses from painted motor vehicle surfaces without causing damage to the finish. Tar remover means any product that is designed to remove road grime, such as road tar, roadway paint markings, and asphalt as well as tree saps from painted motor vehicle surfaces without causing damage to the finish. Bug and tar remover means any product that is designed to remove both road grime such as road tar, roadway paint markings, and asphalt as well as biological-type residues such as insect carcasses and tree saps from painted motor vehicle surfaces without causing damage to the finish.

II. Typical Formulations of Complying Products:

Disclaimer: *The following sample formulations for complying products are <u>not</u> intended to be complete formulations. Air Resources Board staff realize that consumer product formulations are often complex mixtures that require extensive testing to optimize. The sample formulations are intended to illustrate the approximate proportions of compounds that may be used to formulate a consumer product that meets the draft volatile organic compound limits for the Mid-term Measures.*

A. Aerosol Products

1. Water-based formulation: - There is only one complying formulation from the survey. Therefore, to protect confidentiality, a formulation table is not provided.

2. Non-VOC propellant formulation:

Wt. %	Ingredient
20 - 40	Water
15 - 25	VOC'S
20 - 30	LVP VOC's

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20 - 30	Non-VOC Propellant

B. Non-aerosols

1. Water-based formulation:

Wt. %	Ingredient
40 - 90	Water
0 - 25	VOC's
0 - 30	LVP VOC's
0 - 10	Inorganics

2. LVP VOC based formulation:

Wt. %	Ingredient
0 - 10	Water
15 - 25	VOC's
70 - 80	LVP VOCs