State of California
AIR RESOURCES BOARD

Resolution 76-12

February 19, 1976

WHEREAS, Sections 39602, 41500 and 41601 of the Health and Safety Code direct the Air Resources Board and local air pollution control districts to endeavor to achieve and maintain the ambient air quality standards; and

WHEREAS, the ambient air quality standard for oxidant is frequently exceeded in most of the air basins in California; and

WHEREAS, hydrocarbon and other organic compounds are major precursors of photochemically generated oxidant; and

WHEREAS, some local and regional air pollution control districts have adopted regulations setting emission standards based upon an inconsistent classification of the reactivity of organic compounds; and

WHEREAS, the Board has determined that a consistent classification of reactivity is necessary to develop implementation plans to achieve and maintain ambient air quality standards for oxidant;

NOW, THEREFORE, BE IT RESOLVED, the Air Resources Board hereby adopts for the purpose of inventory and planning, the classification of organic compounds according to photochemical reactivity as set forth in Appendix V attached hereto.

APPENDIX V

ARB
REACTIVITY CLASSIFICATION OF ORGANIC COMPOUNDS

Class I (Low Reactivity)	Class II (Moderate Reactivity)	Class III (High Reactivity)
C_1-C_2 Paraffins	Mono-tert-alkyl-benzenes	All other aromatic hydrocarbons
Acetylene	Cyclic Ketones	All Olefinic hydrocarbons (including partially halogenated)
Benzene	Alkyl acetates	Aliphatic aldehydes
Benzaldehyde	2-Nitropropane	Branched alkyl Ketones
Acetone	C_3+ Paraffins	Cellosolve acetate
Methanol	Cycloparaffins	Unsaturated Ketones
Tert-alkyl alcohols	n-alkyl Ketones	Primary & secondary C_2+ alcohols
Phenyl acetate	N-methyl pyrrolidone	Diacetone alcohol
Methyl benzoate	N,N-dimethyl acetamide	Ethers
Ethyl Amines	Alkyl Phenols*	Cellosolves
Dimethyl formamide	Methyl phthalates**	Glycols*
Perhalogenated Hydrocarbons		C_2+ Alkyl phthalates**
Partially halogenated paraffins		Other Esters**
Phthalic Anhydride**		Alcohol Amines**
Phthalic Acids**		C_3+ Organic acids + di acid**
Acetonitrile*		C_3+ di acid anhydrides**
Acetic Acid		Formin** (Hexa methylene-tetramine)
Aromatic Amines		Terpenic hydrocarbons
Hydroxyl Amines		Olefin oxides**
Naphthalene*		
Chlorobenzenes*		
Nitrobenzenes*		
Phenol *		

* Reactivity data are either non-existent or inconclusive, but conclusive data from similar compounds are available; therefore, rating is uncertain but reasonable.

** Reactivity data are uncertain.