

Appendix C
ARB Prioritization Scheme
Categories and Point Distribution

1.	IARC/U.S. EPA cancer classifications (The definitions of each IARC or U.S. EPA classification are attached.):	
	IARC Group 1 or U.S. EPA Group A	4
	IARC Group 2A or U.S. EPA Group B1	3.5
	IARC Group 2B or U.S. EPA Group B2	3
	IARC Group 3 or U.S. EPA Group C	1
	IARC Group 4 or U.S. EPA Group D	0
2.	Number of known organ systems affected:	
	4 or more	4
	3	3
	2	2
	1 or Unknown	1
	No effect on an organ system considered significant	0
3.	Cancer unit risk (approved unit risk value) ($\mu\text{g}/\text{m}^3$) ⁻¹ x California emissions (primarily emissions reported under the AB 2588 “Hot Spots” program were used) ($\mu\text{g}/\text{year}$):	
	$\geq 10^{10}$	8
	$\geq 10^9$ but $< 10^{10}$	7
	$\geq 10^8$ but $< 10^9$	6
	$\geq 10^7$ but $< 10^8$	5
	$\geq 10^6$ but $< 10^7$	4
	$\geq 10^5$ but $< 10^6$	3
	$\geq 10^4$ but $< 10^5$	2
	$\geq 10^3$	1
	No California emissions data or cancer unit risk value	0
4.	California emissions / chronic Reference Exposure Level:	
	$\geq 10^{15}$	4
	$\geq 10^{12}$ but $< 10^{15}$	3
	$\geq 10^{10}$ but $< 10^{12}$	2
	$< 10^{10}$	1
	No Reference Exposure Level or California emissions data	0

Appendix C (continued)
ARB Prioritization Scheme
Categories and Point Distribution

5. Chronic, acute, reproductive or developmental toxicity (noncancer effects):	
Substance has 2 of the 3 listed effects	4
Substance has only chronic effects	2
Substance has only acute effects	2
Substance has only reproductive or developmental toxicity effects	2
No noncancer effects known	0
6. Availability of ambient monitoring data:	
6 or more months of monitoring data	4
Less than 6 months of monitoring data or monitoring to begin within 6 months	3
At least 6 month needed to develop monitoring method	2
At least 1 year needed to develop monitoring method	1
Difficulties in developing monitoring method	0
7. Atmospheric persistence, bioaccumulation, and photochemical generation:	
Substance bioaccumulates/persists in the environment and is photochemically generated	4
Substance bioaccumulates/persists in the environment	3
Substance is photochemically generated	2
Substance does not bioaccumulate/persist in the environment nor is photochemically generated	0
8. AB 2588 risk assessment considerations:	
<u>Cancer considerations</u>	
Compound drives 50% or more of the cancer risk in:	
Over 5% of the risk assessments	2
3% to 5%	1.5
1% to 2% (or is the driver in at least 1)	1
None	0
Compound contributes to the overall cancer risk in:	
Over 25% of the risk assessments	2
5% to 25%	1.5
1% to 4% (or contributes to at least 1)	1
None	0

Appendix C (continued)
ARB Prioritization Scheme
Categories and Point Distribution

Noncancer considerations

Compound has the highest hazard index in:

Over 5% of the risk assessments	2
3% to 5%	1.5
1% to 2% (or has the highest hazard index in at least 1)	1
None	0

Compound contributes to the overall noncancer risk in:

Over 20% of the risk assessments	2
5% to 20%	1.5
1% to 4%	1
None	0

Attachment
**Explanation of International Agency for Research on Cancer (IARC) and
United States Environmental Protection Agency (U.S. EPA)
Cancer Group Classifications**

IARC

U.S. EPA

Group 1 - Carcinogenic to humans

Group A - Human carcinogen
(sufficient epidemiological evidence)

Group 2A - Probably carcinogenic to humans

Group B1 - Probable human carcinogen
(sufficient animal and limited human evidence)

Group 2B - Possibly carcinogenic to humans

Group B2 - Probable human carcinogen
(sufficient animal and inadequate or no human
evidence)

Group C - Possible human carcinogen
(limited animal and no human evidence)

Group 3 - Unclassifiable as to carcinogenicity
to humans

Group D - Not classifiable as to human carcinogenicity
(insufficient evidence, or no data available, in
animals and humans)

Group 4 - Probably not carcinogenic to humans

Group E - Evidence of non-carcinogenicity for humans