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A1 Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

A2 Samples with Multiple Results

**Table 1**  
**CCMA Recreational Use Exposure Scenarios - Adult and Child**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Activity	Exposure Scenario	
	Adult	Child
<b>Motorcyclist</b>		
Lead	X	X
First Trailing	X	X
Second Trailing	X	X
<b>ATV Rider</b>		
Lead	X	X
First Trailing		X
Second Trailing	X	X
<b>SUV Driver/Rider (Windows Open)</b>		
Lead	X	X
Trailing	X	X
<b>SUV Driver/Rider (Windows Closed)</b>		
Lead	X	X
Trailing	X	X
<b>Hiker</b>		
Lead	X	X
Trailing	X	X
<b>Camper</b>	X	X
<b>Sleeping Camper</b>	X	
<b>Vehicle Washer/Vacuumer</b>		
Powerspray Wash		
Lead	X	
Trailing	X	
Hose Wash		
Lead	X	
Trailing	X	
HEPA Vacuum		
Lead	X	
Trailing	X	
Regular Vacuum	X	
<b>Post-Decon Drivers</b>	X	X
<b>Fence Builder</b>	X	

**Table 2A**  
**CCMA Recreational User Asbestos Exposure Point Concentration and Comparison to OSHA Occupational Standards - Adult**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Receptor	Number of Samples Counted	Asbestos Exposure Point Concentration (PCMe f/cc)	
		Minimum	Maximum
<b>Motorcyclist</b>			
Lead	3	9.9E-03	2.5E-02
First Trailing	3	<b>3.1E-01</b>	<b>5.1E-01</b>
Second Trailing	4	<b>3.5E-01</b>	<b>1.3E+00</b>
<b>ATV Rider</b>			
Lead	3	4.4E-03	<b>2.0E-01</b>
Trailing	2	<b>3.9E-01</b>	<b>4.3E-01</b>
<b>SUV Driver (Windows Open)</b>			
Lead	3	3.3E-02	<b>2.9E-01</b>
Trailing	2	<b>1.6E-01</b>	<b>2.6E-01</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	2	1.4E-02	<b>1.7E-01</b>
Trailing	5	4.0E-02	<b>4.8E-01</b>
<b>Hiker</b>			
Lead	5	<4.8E-03	5.1E-02
Trailing	4	4.2E-03	2.8E-02
<b>Camper</b>			
	9	4.5E-03	<b>6.5E-01</b>
<b>Sleeping Camper</b>			
	2	<2.9E-04	<2.9E-04
<b>Vehicle Washer/Vacuummer</b>			
Powerspray Wash			
Lead	2	<4.8E-03	<b>2.0E-01</b>
Trailing	1	5.2E-02	5.2E-02
Hose Wash			
Lead	2	2.8E-02	2.8E-02
Trailing	1	<b>1.7E-01</b>	<b>1.7E-01</b>
HEPA Vacuum			
Lead	2	3.0E-02	7.6E-02
Trailing	1	2.8E-02	2.8E-02
Regular Vacuum			
Lead	2	1.4E-02	1.9E-02
<b>Post Decon Drivers*</b>			
	5	4.6E-03	1.8E-02
<b>Fence Builder/Repair</b>			
	10	<4.3E-03	<b>2.6E-01</b>

Notes:

PCMe = Phase Contrast Microscope equivalent

f/cc = fibers/cubic centimeter (f/cc is equivalent to f/ml (fibers/milliliter))

For nondetected results, the analytical sensitivity value is used (shown as <X.XE-0X)

\* Post Decon Drivers includes CCMA Dan's Car, CCMA to King City SUV, and Drive BLM to King City

OSHA = Occupational Safety and Health Administration

PEL = Permissible Exposure Limit

**Bold** font values = Exceeds OSHA PEL of 0.1 fiber/cc

**Bold** font values (Shaded) = Exceeds OSHA 30-minute exposure limit of 1 fiber/cc

**Table 2B****CCMA: Within Asbestos Hazardous Zone and Outside Asbestos Hazardous Zone, Asbestos Ambient Air Concentrations - Adult***Human Health Risk Assessment**CCMA Asbestos Exposures (September 27 through 29, 2005)*

Location	Number of Samples Counted	Asbestos Ambient Air Concentration (PCMe f/cc)	
		Minimum	Maximum
<b>On-site</b>			
Staging Area #2	3	5.7E-04	5.4E-03
Staging Area #6	2	1.4E-03	1.8E-03
<b>Off-site</b>			
Oak Flat Campground	3	8.8E-04	3.4E-03
BLM Decontamination Area (Section 8)	3	2.7E-04	8.7E-04

Notes:

PCMe = Phase Contrast Microscope equivalent

f/cc = fibers/cubic centimeter (f/cc is equivalent to f/ml (fibers/milliliter))

For sampling time/volume and sensitivity, please see Table A1



Table 3A

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Exposure Assumptions - Adult

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Exposure Parameter		One-day Per Year Exposure		Reasonable Maximum Exposure (RME)		High Estimate Exposure	
		Motorcyclist	Source	Motorcyclist	Source	Motorcyclist	Source
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>ATV Rider</b>		<b>ATV Rider</b>		<b>ATV Rider</b>	
Averaging Time for carcinogens (yr)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>SUV Driver</b>		<b>SUV Driver</b>		<b>SUV Driver</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Hiker</b>		<b>Hiker</b>		<b>Hiker</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	1	EPA, 2007	4	EPA, 2005	6	EPA, 2007
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Camper</b>		<b>Camper</b>		<b>Camper</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	8	EPA, 2007	8	EPA, 2005	8	EPA, 2005
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Sleeping Camper</b>		<b>Sleeping Camper</b>		<b>Sleeping Camper</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	8	EPA, 2007	8	EPA, 2007	8	EPA, 2007
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Vehicle Washer/Vacuum</b>		<b>Vehicle Washer/Vacuum</b>		<b>Vehicle Washer/Vacuum</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	0.33	EPA, 2007	0.33	EPA, 2005	0.33	EPA, 2005
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Post Decon Driver</b>		<b>Post Decon Driver</b>		<b>Post Decon Driver</b>	
Exposure Frequency (days/year)	EF	1	EPA, 2007	5	EPA, 2007	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2007	4	EPA, 2007	4	EPA, 2007
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Fence Builder/Repair</b>		<b>Fence Builder/Repair</b>		<b>Fence Builder/Repair</b>	
Exposure Frequency (days/year)	EF	1	EPA, 2007	5	EPA, 2007	12	EPA, 2007
Exposure Time for inhalation of asbestos (hours/day)	ET	4	EPA, 2007	6	EPA, 2007	6	EPA, 2007
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989

EPA, 2007 (Region 9, Professional Judgement)

**Table 3B**  
**Exposure Assumptions, 18 Year Exposure Duration - Adult**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

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Exposure Parameter		One-day Per Year Exposure		Reasonable Maximum Exposure (RME)		High Estimate Exposure	
		Motorcyclist	Source	Motorcyclist	Source	Motorcyclist	Source
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>ATV Rider</b>		<b>ATV Rider</b>		<b>ATV Rider</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>SUV Driver</b>		<b>SUV Driver</b>		<b>SUV Driver</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	5.4	PTI, 1992	5.4	PTI, 1992	7	PTI, 1992
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Hiker</b>		<b>Hiker</b>		<b>Hiker</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	1	EPA, 2007	4	EPA, 2005	6	EPA, 2007
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Camper</b>		<b>Camper</b>		<b>Camper</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	8	EPA, 2007	8	EPA, 2005	8	EPA, 2005
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Sleeping Camper</b>		<b>Sleeping Camper</b>		<b>Sleeping Camper</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	8	EPA, 2007	8	EPA, 2007	8	EPA, 2007
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Post Decon Driver</b>		<b>Post Decon Driver</b>		<b>Post Decon Driver</b>	
Exposure Frequency (days/year)	EF	1	EPA, 2007	5	EPA, 2007	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2007	4	EPA, 2007	4	EPA, 2007
Exposure Duration (years)	ED	18	EPA, 1989	18	EPA, 1989	18	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Fence Builder/Repair</b>		<b>Fence Builder/Repair</b>		<b>Fence Builder/Repair</b>	
Exposure Frequency (days/year)	EF	1	EPA, 2007	5	EPA, 2007	12	EPA, 2007
Exposure Time for inhalation of asbestos (hours/day)	ET	4	EPA, 2007	6	EPA, 2007	6	EPA, 2007
Exposure Duration (years)	ED	30	EPA, 1989	30	EPA, 1989	30	EPA, 1989
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989

EPA, 2007 (Region 9, Professional Judgement)

Table 3C

DRAFT

Exposure Assumptions - Child (12 Year Exposure Duration)

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Exposure Parameter		One-day Per Year Exposure		Reasonable Maximum Exposure (RME)		High Estimate Exposure	
		Motorcyclist	Source	Motorcyclist	Source	Motorcyclist	Source
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2005	5.4	EPA, 2005	5.4	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>ATV Rider</b>		<b>ATV Rider</b>		<b>ATV Rider</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2005	5.4	EPA, 2005	5.4	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>SUV Rider</b>		<b>SUV Rider</b>		<b>SUV Rider</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2005	5.4	EPA, 2005	5.4	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>SUV Commuter</b>		<b>SUV Commuter</b>		<b>SUV Commuter</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	1	EPA, 2005	1.5	EPA, 2005	2	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Hiker</b>		<b>Hiker</b>		<b>Hiker</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	1	EPA, 2005	2	EPA, 2005	2	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Camper</b>		<b>Camper</b>		<b>Camper</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	8	EPA, 2005	8	EPA, 2005	8	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989
		<b>Post-Decon Rider</b>		<b>Post-Decon Rider</b>		<b>Post-Decon Rider</b>	
Exposure Frequency (days/year)	EF	1	PTI, 1992	5	PTI, 1992	12	PTI, 1992
Exposure Time for inhalation of asbestos (hours/day)	ET	2	EPA, 2005	4	EPA, 2005	4	EPA, 2005
Exposure Duration (years)	ED	12	EPA, 2005	12	EPA, 2005	12	EPA, 2005
Averaging Time for carcinogens (yr)	ATc	70	EPA, 1989	70	EPA, 1989	70	EPA, 1989

EPA, 2005 (Region 9, Professional Judgement)

Reasonable maximum exposure = 5 days/year

High estimate exposure = 12 days/year

Table 4A

Summary of Adult Excess Lifetime Cancer Risk Results (Minimum) Using IRIS Unit Risk

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	6E-07	<b>3E-06</b>	<b>9E-06</b>
First Trailing	<b>2E-05</b>	<b>9E-05</b>	<b>3E-04</b>
Second Trailing	<b>2E-05</b>	<b>1E-04</b>	<b>3E-04</b>
<b>ATV Rider</b>			
Lead	3E-07	1E-06	<b>4E-06</b>
Trailing	<b>2E-05</b>	<b>1E-04</b>	<b>4E-04</b>
<b>SUV Driver (Windows Open)</b>			
Lead	<b>2E-06</b>	<b>1E-05</b>	<b>3E-05</b>
Trailing	<b>1E-05</b>	<b>5E-05</b>	<b>2E-04</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	9E-07	<b>4E-06</b>	<b>1E-05</b>
Trailing	<b>2E-06</b>	<b>1E-05</b>	<b>4E-05</b>
<b>Hiker</b>			
Lead	5E-08	1E-06	<b>4E-06</b>
Trailing	5E-08	9E-07	<b>3E-06</b>
<b>Camper</b>	4E-07	<b>2E-06</b>	<b>5E-06</b>
<b>Sleeping Camper</b>	3E-08	1E-07	3E-07
<b>Vehicle Washer/Vacuumer</b>			
<b>Powerspray Wash</b>			
Lead	2E-08	9E-08	2E-07
Trailing	2E-07	1E-06	<b>2E-06</b>
<b>Hose Wash</b>			
Lead	1E-07	5E-07	1E-06
Trailing	6E-07	<b>3E-06</b>	<b>8E-06</b>
<b>HEPA Vacuum</b>			
Lead	1E-07	6E-07	1E-06
Trailing	1E-07	5E-07	1E-06
<b>Regular Vacuum</b>	5E-08	3E-07	6E-07
<b>Post Decon Driver</b>	1E-07	1E-06	<b>2E-06</b>
<b>Fence Builder/Repair</b>	2E-07	1E-06	<b>3E-06</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results** (Shaded) = an excess lifetime cancer risk greater than 1E-04

**Table 4B**  
**Summary of Adult Excess Lifetime Cancer Risk Results (Maximum) Using IRIS Unit Risk**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	2E-06	8E-06	2E-05
First Trailing	3E-05	2E-04	5E-04
Second Trailing	8E-05	4E-04	1E-03
<b>ATV Rider</b>			
Lead	1E-05	6E-05	2E-04
Trailing	3E-05	1E-04	4E-04
<b>SUV Driver (Windows Open)</b>			
Lead	2E-05	9E-05	3E-04
Trailing	2E-05	8E-05	2E-04
<b>SUV Driver (Windows Closed)</b>			
Lead	1E-05	5E-05	2E-04
Trailing	3E-05	1E-04	5E-04
<b>Hiker</b>			
Lead	6E-07	1E-05	4E-05
Trailing	3E-07	6E-06	2E-05
<b>Camper</b>	6E-05	3E-04	7E-04
<b>Sleeping Camper</b>	3E-08	1E-07	3E-07
<b>Vehicle Washer/Vacuum</b>			
<b>Powerspray Wash</b>			
Lead	7E-07	4E-06	9E-06
Trailing	2E-07	1E-06	2E-06
<b>Hose Wash</b>			
Lead	1E-07	5E-07	1E-06
Trailing	6E-07	3E-06	8E-06
<b>HEPA Vacuum</b>			
Lead	3E-07	1E-06	8E-06
Trailing	3E-07	1E-06	1E-06
<b>Regular Vacuum</b>	7E-08	4E-07	8E-07
<b>Post Decon Driver</b>	4E-07	4E-06	1E-05
<b>Fence Builder/Repair</b>	1E-05	9E-05	2E-04

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Table 4C

## Summary of Adult Excess Lifetime Cancer Risk Results (Minimum) using OEHHA Unit Risk

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	5E-06	2E-05	8E-05
First Trailing	2E-04	8E-04	2E-03
Second Trailing	2E-04	9E-04	3E-03
<b>ATV Rider</b>			
Lead	2E-06	1E-05	3E-05
Trailing	2E-04	1E-03	3E-03
<b>SUV Driver (Windows Open)</b>			
Lead	2E-05	8E-05	3E-04
Trailing	8E-05	4E-04	1E-03
<b>SUV Driver (Windows Closed)</b>			
Lead	7E-06	4E-05	1E-04
Trailing	2E-05	1E-04	3E-04
<b>Hiker</b>			
Lead	4E-07	9E-06	3E-05
Trailing	4E-07	8E-06	3E-05
<b>Camper</b>	3E-06	2E-05	4E-05
<b>Sleeping Camper</b>	2E-07	1E-06	3E-06
<b>Vehicle Washer/Vacuum</b>			
<b>Powerspray Wash</b>			
Lead	1E-07	7E-07	2E-06
Trailing	2E-06	8E-06	2E-05
<b>Hose Wash</b>			
Lead	9E-07	4E-06	1E-05
Trailing	5E-06	3E-05	6E-05
<b>HEPA Vacuum</b>			
Lead	9E-07	5E-06	1E-05
Trailing	9E-07	4E-06	1E-05
<b>Regular Vacuum</b>	4E-07	2E-06	5E-06
<b>Post Decon Driver</b>	9E-07	9E-06	2E-05
<b>Fence Builder/Repair</b>	2E-06	1E-05	2E-05

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Table 4D

## Summary of Adult Excess Lifetime Cancer Risk Results (Maximum) Using OEHHA Unit Risk

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	<b>1E-05</b>	<b>6E-05</b>	<b>2E-04</b>
First Trailing	<b>3E-04</b>	<b>1E-03</b>	<b>4E-03</b>
Second Trailing	<b>7E-04</b>	<b>3E-03</b>	<b>1E-02</b>
<b>ATV Rider</b>			
Lead	<b>1E-04</b>	<b>5E-04</b>	<b>2E-03</b>
Trailing	<b>2E-04</b>	<b>1E-03</b>	<b>3E-03</b>
<b>SUV Driver (Windows Open)</b>			
Lead	<b>1E-04</b>	<b>7E-04</b>	<b>2E-03</b>
Trailing	<b>1E-04</b>	<b>7E-04</b>	<b>2E-03</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	<b>9E-05</b>	<b>4E-04</b>	<b>1E-03</b>
Trailing	<b>2E-04</b>	<b>1E-03</b>	<b>4E-03</b>
<b>Hiker</b>			
Lead	<b>5E-06</b>	<b>9E-05</b>	<b>3E-04</b>
Trailing	<b>3E-06</b>	<b>5E-05</b>	<b>2E-04</b>
<b>Camper</b>	<b>5E-04</b>	<b>2E-03</b>	<b>6E-03</b>
<b>Sleeping Camper</b>	2E-07	1E-06	3E-06
<b>Vehicle Washer/Vacuum</b>			
<b>Powerspray Wash</b>			
Lead	<b>6E-06</b>	<b>3E-05</b>	<b>7E-05</b>
Trailing	<b>2E-06</b>	<b>8E-06</b>	<b>2E-05</b>
<b>Hose Wash</b>			
Lead	9E-07	<b>4E-06</b>	<b>1E-05</b>
Trailing	<b>5E-06</b>	<b>3E-05</b>	<b>6E-05</b>
<b>HEPA Vacuum</b>			
Lead	<b>2E-06</b>	<b>1E-05</b>	<b>6E-05</b>
Trailing	<b>2E-06</b>	<b>1E-05</b>	<b>1E-05</b>
<b>Regular Vacuum</b>	6E-07	<b>3E-06</b>	<b>7E-06</b>
<b>Post Decon Driver</b>	<b>3E-06</b>	<b>3E-05</b>	<b>8E-05</b>
<b>Fence Builder/Repair</b>	<b>1E-04</b>	<b>7E-04</b>	<b>2E-03</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 5A**  
**Summary of Child Excess Lifetime Cancer Risk Results, 12 Year Exposure Duration (Minimum Air Concentration) Using IRIS Unit Risk**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Exposure Scenario/ Receptor	One-day Per Year Exposure Cancer Risk	Reasonable Maximum Exposure Cancer Risk	High Estimate Exposure Cancer Risk
<b>Motorcyclist</b>			
Lead	4E-07	<b>5E-06</b>	<b>1E-05</b>
First Trailing	<b>4E-06</b>	<b>6E-05</b>	<b>1E-04</b>
Second Trailing	<b>3E-06</b>	<b>4E-05</b>	<b>1E-04</b>
<b>ATV Rider</b>			
Lead	9E-07	<b>1E-05</b>	<b>3E-05</b>
First Trailing	<b>6E-06</b>	<b>8E-05</b>	<b>2E-04</b>
Second Trailing	<b>4E-06</b>	<b>5E-05</b>	<b>1E-04</b>
<b>SUV Rider (Windows Open)</b>			
Lead	2E-07	<b>2E-06</b>	<b>6E-06</b>
Trailing	9E-07	<b>1E-05</b>	<b>3E-05</b>
<b>SUV Rider (Windows Closed)</b>			
Lead	6E-08	9E-07	<b>2E-06</b>
Trailing	4E-07	<b>6E-06</b>	<b>1E-05</b>
<b>Hiker</b>			
Lead	2E-08	2E-07	5E-07
Trailing	6E-08	6E-07	<b>2E-06</b>
<b>Camper</b>			
	1E-07	7E-07	<b>2E-06</b>
<b>Sleeping Camper</b>			
	1E-09	1E-08	3E-08
<b>Post Decon Riders</b>			
	1E-07	1E-06	<b>3E-06</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Reasonable maximum exposure = 5 days/year



**Table 5B**  
**Summary of Child Excess Lifetime Cancer Risk Results, 12 Year Exposure Duration (Maximum Air Concentration) Using IRIS Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Exposure Scenario/ Receptor	One-day Per Year Exposure Cancer Risk	Reasonable Maximum Exposure Cancer Risk	High Estimate Exposure Cancer Risk
<b>Motorcyclist</b>			
Lead	1E-06	1E-05	3E-05
First Trailing	<b>5E-06</b>	7E-05	2E-04
Second Trailing	<b>1E-05</b>	1E-04	3E-04
<b>ATV Rider</b>			
Lead	3E-06	4E-05	1E-04
First Trailing	6E-06	8E-05	2E-04
Second Trailing	5E-06	7E-05	2E-04
<b>SUV Rider (Windows Open)</b>			
Lead	1E-06	2E-05	4E-05
Trailing	9E-06	1E-04	3E-04
<b>SUV Rider (Windows Closed)</b>			
Lead	1E-06	2E-05	4E-05
Trailing	4E-06	5E-05	1E-04
<b>Hiker</b>			
Lead	3E-07	3E-06	7E-06
Trailing	3E-07	3E-06	8E-06
<b>Camper</b>			
	1E-05	5E-05	1E-04
<b>Sleeping Camper</b>			
	1E-09	1E-08	3E-08
<b>Post Decon Riders</b>			
	4E-07	4E-06	1E-05

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Reasonable maximum exposure = 5 days/year

**Table 5C**

**Summary of Child Excess Lifetime Cancer Risk Results, 12 Year Exposure Duration (Minimum Air Concentration) Using OEHHA Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Exposure Scenario/ Receptor	One-day Per Year Exposure Cancer Risk	Reasonable Maximum Exposure Cancer Risk	High Estimate Exposure Cancer Risk
<b>Motorcyclist</b>			
Lead	<b>3E-06</b>	<b>5E-05</b>	<b>1E-04</b>
First Trailing	<b>3E-05</b>	<b>5E-04</b>	<b>1E-03</b>
Second Trailing	<b>3E-05</b>	<b>4E-04</b>	<b>9E-04</b>
<b>ATV Rider</b>			
Lead	<b>7E-06</b>	<b>1E-04</b>	<b>2E-04</b>
First Trailing	<b>5E-05</b>	<b>7E-04</b>	<b>2E-03</b>
Second Trailing	<b>3E-05</b>	<b>4E-04</b>	<b>9E-04</b>
<b>SUV Rider (Windows Open)</b>			
Lead	1E-06	<b>2E-05</b>	<b>5E-05</b>
Trailing	<b>7E-06</b>	<b>1E-04</b>	<b>2E-04</b>
<b>SUV Rider (Windows Closed)</b>			
Lead	5E-07	<b>7E-06</b>	<b>2E-05</b>
Trailing	<b>3E-06</b>	<b>5E-05</b>	<b>1E-04</b>
<b>Hiker</b>			
Lead	2E-07	<b>2E-06</b>	<b>4E-06</b>
Trailing	5E-07	<b>5E-06</b>	<b>1E-05</b>
<b>Camper</b>			
	1E-06	<b>6E-06</b>	<b>1E-05</b>
<b>Sleeping Camper</b>			
	1E-08	8E-08	3E-07
<b>Post Decon Riders</b>			
	1E-06	<b>1E-05</b>	<b>2E-05</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Reasonable maximum exposure = 5 days/year

**Table 5D**  
**Summary of Child Excess Lifetime Cancer Risk Results, 12 Year Exposure Duration (Maximum Air Concentration) Using OEHHA Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario/ Receptor</b>	<b>One-day Per Year Exposure Cancer Risk</b>	<b>Reasonable Maximum Exposure Cancer Risk</b>	<b>High Estimate Exposure Cancer Risk</b>
<b>Motorcyclist</b>			
Lead	<b>9E-06</b>	<b>1E-04</b>	<b>3E-04</b>
First Trailing	<b>4E-05</b>	<b>6E-04</b>	<b>1E-03</b>
Second Trailing	<b>9E-05</b>	<b>1E-03</b>	<b>3E-03</b>
<b>ATV Rider</b>			
Lead	<b>2E-05</b>	<b>3E-04</b>	<b>8E-04</b>
First Trailing	<b>5E-05</b>	<b>7E-04</b>	<b>2E-03</b>
Second Trailing	<b>4E-05</b>	<b>6E-04</b>	<b>1E-03</b>
<b>SUV Rider (Windows Open)</b>			
Lead	<b>1E-05</b>	<b>1E-04</b>	<b>3E-04</b>
Trailing	<b>7E-05</b>	<b>1E-03</b>	<b>2E-03</b>
<b>SUV Rider (Windows Closed)</b>			
Lead	<b>1E-05</b>	<b>1E-04</b>	<b>3E-04</b>
Trailing	<b>3E-05</b>	<b>4E-04</b>	<b>1E-03</b>
<b>Hiker</b>			
Lead	<b>2E-06</b>	<b>2E-05</b>	<b>6E-05</b>
Trailing	<b>3E-06</b>	<b>3E-05</b>	<b>7E-05</b>
<b>Camper</b>			
	<b>8E-05</b>	<b>4E-04</b>	<b>1E-03</b>
<b>Sleeping Camper</b>			
	1E-08	8E-08	3E-07
<b>Post Decon Riders</b>			
	<b>3E-06</b>	<b>3E-05</b>	<b>8E-05</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Reasonable maximum exposure = 5 days/year

**Table 6A**  
**Summary of Adult Excess Lifetime Cancer Risk Results, 18 Year Exposure Duration (Minimum Air Concentration) Using IRIS**  
**Unit Risk**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	4E-07	<b>2E-06</b>	<b>6E-06</b>
First Trailing	<b>1E-05</b>	<b>6E-05</b>	<b>2E-04</b>
Second Trailing	<b>1E-05</b>	<b>6E-05</b>	<b>2E-04</b>
<b>ATV Rider</b>			
Lead	2E-07	8E-07	<b>2E-06</b>
Trailing	<b>1E-05</b>	<b>7E-05</b>	<b>2E-04</b>
<b>SUV Driver (Windows Open)</b>			
Lead	1E-06	<b>6E-06</b>	<b>2E-05</b>
Trailing	<b>6E-06</b>	<b>3E-05</b>	<b>9E-05</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	5E-07	<b>3E-06</b>	<b>8E-06</b>
Trailing	1E-06	<b>7E-06</b>	<b>2E-05</b>
<b>Hiker</b>			
Lead	3E-08	1E-06	<b>4E-06</b>
Trailing	3E-08	9E-07	<b>3E-06</b>
<b>Camper</b>	4E-07	<b>2E-06</b>	<b>5E-06</b>
<b>Sleeping Camper</b>	3E-08	1E-07	3E-07
<b>Post Decon Driver</b>	6E-08	6E-07	1E-06
<b>Fence Builder/Repair</b>	2E-07	1E-06	<b>3E-06</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 6B**  
**Summary of Adult Excess Lifetime Cancer Risk Results, 18 Year Exposure Duration (Maximum Air Concentration) Using**  
**IRIS Unit Risk and 30 Year Exposure Duration**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	9E-07	<b>5E-06</b>	<b>1E-05</b>
First Trailing	<b>2E-05</b>	<b>9E-05</b>	<b>3E-04</b>
Second Trailing	<b>5E-05</b>	<b>2E-04</b>	<b>7E-04</b>
<b>ATV Rider</b>			
Lead	<b>7E-06</b>	<b>4E-05</b>	<b>1E-04</b>
Trailing	<b>2E-05</b>	<b>8E-05</b>	<b>2E-04</b>
<b>SUV Driver (Windows Open)</b>			
Lead	<b>1E-05</b>	<b>5E-05</b>	<b>2E-04</b>
Trailing	<b>9E-06</b>	<b>5E-05</b>	<b>1E-04</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	<b>6E-06</b>	<b>3E-05</b>	<b>1E-04</b>
Trailing	<b>2E-05</b>	<b>9E-05</b>	<b>3E-04</b>
<b>Hiker</b>			
Lead	3E-07	<b>1E-05</b>	<b>4E-05</b>
Trailing	2E-07	<b>6E-06</b>	<b>2E-05</b>
<b>Camper</b>	<b>6E-05</b>	<b>3E-04</b>	<b>7E-04</b>
<b>Sleeping Camper</b>	3E-08	1E-07	3E-07
<b>Post Decon Driver</b>	2E-07	<b>2E-06</b>	<b>6E-06</b>
<b>Fence Builder/Repair</b>	<b>1E-05</b>	<b>9E-05</b>	<b>2E-04</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 6C**  
**Summary of Adult Excess Lifetime Cancer Risk Results, 18 Year Exposure Duration (Minimum Air Concentration) using**  
**OEHHA Unit Risk**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	<b>3E-06</b>	<b>1E-05</b>	<b>5E-05</b>
First Trailing	<b>9E-05</b>	<b>5E-04</b>	<b>1E-03</b>
Second Trailing	<b>1E-04</b>	<b>5E-04</b>	<b>2E-03</b>
<b>ATV Rider</b>			
Lead	1E-06	<b>7E-06</b>	<b>2E-05</b>
Trailing	<b>1E-04</b>	<b>6E-04</b>	<b>2E-03</b>
<b>SUV Driver (Windows Open)</b>			
Lead	<b>1E-05</b>	<b>5E-05</b>	<b>2E-04</b>
Trailing	<b>5E-05</b>	<b>2E-04</b>	<b>7E-04</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	<b>4E-06</b>	<b>2E-05</b>	<b>7E-05</b>
Trailing	<b>1E-05</b>	<b>6E-05</b>	<b>2E-04</b>
<b>Hiker</b>			
Lead	3E-07	<b>9E-06</b>	<b>3E-05</b>
Trailing	2E-07	<b>8E-06</b>	<b>3E-05</b>
<b>Camper</b>	<b>3E-06</b>	<b>2E-05</b>	<b>4E-05</b>
<b>Sleeping Camper</b>	2E-07	1E-06	<b>3E-06</b>
<b>Post Decon Driver</b>	5E-07	<b>5E-06</b>	<b>1E-05</b>
<b>Fence Builder/Repair</b>	<b>2E-06</b>	<b>1E-05</b>	<b>3E-05</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 6D**  
**Summary of Adult Excess Lifetime Cancer Risk Results, 18 Year Exposure Duration (Maximum Air Concentration) Using**  
**OEHHA Unit Risk**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Receptor	One-day Per Year Exposure	Reasonable Maximum Exposure	High Estimate Exposure
	Cancer Risk	Cancer Risk	Cancer Risk
<b>Motorcyclist</b>			
Lead	<b>8E-06</b>	<b>4E-05</b>	<b>1E-04</b>
First Trailing	<b>2E-04</b>	<b>8E-04</b>	<b>2E-03</b>
Second Trailing	<b>4E-04</b>	<b>2E-03</b>	<b>6E-03</b>
<b>ATV Rider</b>			
Lead	<b>6E-05</b>	<b>3E-04</b>	<b>9E-04</b>
Trailing	<b>1E-04</b>	<b>6E-04</b>	<b>2E-03</b>
<b>SUV Driver (Windows Open)</b>			
Lead	<b>9E-05</b>	<b>4E-04</b>	<b>1E-03</b>
Trailing	<b>8E-05</b>	<b>4E-04</b>	<b>1E-03</b>
<b>SUV Driver (Windows Closed)</b>			
Lead	<b>5E-05</b>	<b>3E-04</b>	<b>8E-04</b>
Trailing	<b>1E-04</b>	<b>7E-04</b>	<b>2E-03</b>
<b>Hiker</b>			
Lead	<b>3E-06</b>	<b>9E-05</b>	<b>3E-04</b>
Trailing	<b>2E-06</b>	<b>5E-05</b>	<b>2E-04</b>
<b>Camper</b>	<b>5E-04</b>	<b>2E-03</b>	<b>6E-03</b>
<b>Sleeping Camper</b>	2E-07	1E-06	<b>3E-06</b>
<b>Post Decon Driver</b>	<b>2E-06</b>	<b>2E-05</b>	<b>5E-05</b>
<b>Fence Builder/Repair</b>	<b>1E-04</b>	<b>7E-04</b>	<b>2E-03</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 7**  
**Carcinogenic Toxicity Values**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Constituent	Carcinogenic WOE Classification	IRIS Inhalation Carcinogenic Unit Risk [f/ml] <sup>-1</sup>	Inhalation Unit Risk Source	OEHHA Inhalation Carcinogenic Unit Risk [f/ml] <sup>-1</sup>	Inhalation Unit Risk Source
Asbestos <sup>1</sup>	A	0.23	IRIS	1.9	OEHHA

Notes:

EPA Group: A - Human carcinogen

IRIS: Integrated Risk Information System. EPA 2004.

OEHHA: Office of Environmental Health Hazard Assessment.

<sup>1</sup> The unit risk should not be used if the air concentrations exceed 4E-02 fibers/ml, since above this concentration the slope factor may differ from that stated (IRIS, USEPA, 2004). In this risk assessment the calculated Chronic Exposure Concentrations are compared to 4E-02 fibers/ml.



**Table 8A**

**Sum of Child Plus Adult Excess Lifetime Cancer Risk Results (Minimum Air Concentration) Using IRIS Unit Risk**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Exposure Area/ Receptor	One-day Per Year Exposure Cancer Risk			Reasonable Maximum Exposure (RME) Cancer Risk			High Estimate Exposure Cancer Risk		
	Child (12 yrs)	Adult (18 yrs)	Total	Child (12 yrs)	Adult (18 yrs)	Total	Child (12 yrs)	Adult (18 yrs)	Total
<b>Motorcyclist</b>									
Lead	4E-07	4E-07	8E-07	<b>5E-06</b>	<b>2E-06</b>	<b>7E-06</b>	<b>1E-05</b>	<b>6E-06</b>	<b>2E-05</b>
First Trailing	<b>4E-06</b>	<b>1E-05</b>	<b>2E-05</b>	<b>6E-05</b>	<b>6E-05</b>	<b>1E-04</b>	<b>1E-04</b>	<b>2E-04</b>	<b>3E-04</b>
Second Trailing	<b>3E-06</b>	<b>1E-05</b>	<b>2E-05</b>	<b>4E-05</b>	<b>6E-05</b>	<b>1E-04</b>	<b>1E-04</b>	<b>2E-04</b>	<b>3E-04</b>
<b>ATV Rider</b>									
Lead	9E-07	2E-07	1E-06	<b>1E-05</b>	8E-07	<b>1E-05</b>	<b>3E-05</b>	<b>2E-06</b>	<b>3E-05</b>
Trailing	<b>6E-06</b>	<b>1E-05</b>	<b>2E-05</b>	<b>8E-05</b>	<b>7E-05</b>	<b>2E-04</b>	<b>2E-04</b>	<b>2E-04</b>	<b>4E-04</b>
<b>SUV Rider (Windows Open)</b>									
Lead	2E-07	1E-06	1E-06	<b>2E-06</b>	<b>6E-06</b>	<b>8E-06</b>	<b>6E-06</b>	<b>2E-05</b>	<b>2E-05</b>
Trailing	9E-07	<b>6E-06</b>	<b>7E-06</b>	<b>1E-05</b>	<b>3E-05</b>	<b>4E-05</b>	<b>3E-05</b>	<b>9E-05</b>	<b>1E-04</b>
<b>SUV Rider (Windows Closed)</b>									
Lead	6E-08	5E-07	6E-07	9E-07	<b>3E-06</b>	<b>3E-06</b>	<b>2E-06</b>	<b>8E-06</b>	<b>1E-05</b>
Trailing	4E-07	<b>1E-06</b>	<b>2E-06</b>	<b>6E-06</b>	<b>7E-06</b>	<b>1E-05</b>	<b>1E-05</b>	<b>2E-05</b>	<b>4E-05</b>
<b>Hiker</b>									
Lead	2E-08	3E-08	5E-08	2E-07	<b>1E-06</b>	<b>1E-06</b>	5E-07	<b>4E-06</b>	<b>4E-06</b>
Trailing	6E-08	3E-08	9E-08	6E-07	9E-07	<b>2E-06</b>	<b>2E-06</b>	<b>3E-06</b>	<b>5E-06</b>
<b>Camper</b>									
Lead	1E-07	4E-07	6E-07	7E-07	<b>2E-06</b>	<b>3E-06</b>	<b>2E-06</b>	<b>5E-06</b>	<b>7E-06</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Total = Child (12 yr Exposure Duration) + Adult (18 yr Exposure Duration)

**Table 8B**

**Sum of Child Plus Adult Excess Lifetime Cancer Risk Results (Maximum Air Concentration) Using IRIS Unit Risk**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Exposure Area/ Receptor	One-day Per Year Exposure Cancer Risk			Reasonable Maximum Exposure (RME) Cancer Risk			High Estimate Exposure Cancer Risk		
	Child (12 yrs)	Adult (18 yrs)	Total	Child (12 yrs)	Adult (18 yrs)	Total	Child (12 yrs)	Adult (18 yrs)	Total
<b>Motorcyclist</b>									
Lead	<b>1E-06</b>	9E-07	<b>2E-06</b>	<b>1E-05</b>	<b>5E-06</b>	<b>2E-05</b>	<b>3E-05</b>	<b>1E-05</b>	<b>5E-05</b>
First Trailing	<b>5E-06</b>	<b>2E-05</b>	<b>2E-05</b>	<b>7E-05</b>	<b>9E-05</b>	<b>2E-04</b>	<b>2E-04</b>	<b>3E-04</b>	<b>5E-04</b>
Second Trailing	<b>1E-05</b>	<b>5E-05</b>	<b>6E-05</b>	<b>1E-04</b>	<b>2E-04</b>	<b>4E-04</b>	<b>3E-04</b>	<b>7E-04</b>	<b>1E-03</b>
<b>ATV Rider</b>									
Lead	<b>3E-06</b>	<b>7E-06</b>	<b>1E-05</b>	<b>4E-05</b>	<b>4E-05</b>	<b>8E-05</b>	<b>1E-04</b>	<b>1E-04</b>	<b>2E-04</b>
Trailing	<b>6E-06</b>	<b>2E-05</b>	<b>2E-05</b>	<b>8E-05</b>	<b>8E-05</b>	<b>2E-04</b>	<b>2E-04</b>	<b>2E-04</b>	<b>4E-04</b>
<b>SUV Rider (Windows Open)</b>									
Lead	<b>1E-06</b>	<b>1E-05</b>	<b>1E-05</b>	<b>2E-05</b>	<b>5E-05</b>	<b>7E-05</b>	<b>4E-05</b>	<b>2E-04</b>	<b>2E-04</b>
Trailing	<b>9E-06</b>	<b>9E-06</b>	<b>2E-05</b>	<b>1E-04</b>	<b>5E-05</b>	<b>2E-04</b>	<b>3E-04</b>	<b>1E-04</b>	<b>4E-04</b>
<b>SUV Rider (Windows Closed)</b>									
Lead	<b>1E-06</b>	<b>6E-06</b>	<b>7E-06</b>	<b>2E-05</b>	<b>3E-05</b>	<b>5E-05</b>	<b>4E-05</b>	<b>1E-04</b>	<b>1E-04</b>
Trailing	<b>4E-06</b>	<b>2E-05</b>	<b>2E-05</b>	<b>5E-05</b>	<b>9E-05</b>	<b>1E-04</b>	<b>1E-04</b>	<b>3E-04</b>	<b>4E-04</b>
<b>Hiker</b>									
Lead	3E-07	3E-07	6E-07	<b>3E-06</b>	<b>1E-05</b>	<b>1E-05</b>	<b>7E-06</b>	<b>4E-05</b>	<b>5E-05</b>
Trailing	3E-07	2E-07	5E-07	<b>3E-06</b>	<b>6E-06</b>	<b>1E-05</b>	<b>8E-06</b>	<b>2E-05</b>	<b>3E-05</b>
<b>Camper</b>	<b>1E-05</b>	<b>6E-05</b>	<b>7E-05</b>	<b>5E-05</b>	<b>3E-04</b>	<b>3E-04</b>	<b>1E-04</b>	<b>7E-04</b>	<b>8E-04</b>

Notes:

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

Total = Child (12 yr Exposure Duration) + Adult (18 yr Exposure Duration)

**Table 9A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist  
One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	2.62E-06	2.30E-01	6.02E-07	1.90E+00	4.97E-06
	Maximum Concentration	2.50E-02	6.60E-06	2.30E-01	1.52E-06	1.90E+00	1.25E-05
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	8.19E-05	2.30E-01	1.88E-05	1.90E+00	1.56E-04
	Maximum Concentration	5.10E-01	1.35E-04	2.30E-01	3.10E-05	1.90E+00	2.56E-04
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	9.25E-05	2.30E-01	2.13E-05	1.90E+00	1.76E-04
	Maximum Concentration	1.30E+00	3.43E-04	2.30E-01	7.90E-05	1.90E+00	6.53E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 9B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist  
Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	1.31E-05	2.30E-01	3.01E-06	1.90E+00	2.48E-05
	Maximum Concentration	2.50E-02	3.30E-05	2.30E-01	7.60E-06	1.90E+00	6.27E-05
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	4.09E-04	2.30E-01	9.42E-05	1.90E+00	7.78E-04
	Maximum Concentration	5.10E-01	6.74E-04	2.30E-01	1.55E-04	1.90E+00	1.28E-03
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	4.62E-04	2.30E-01	1.06E-04	1.90E+00	8.78E-04
Maximum Concentration	1.30E+00	1.72E-03	2.30E-01	3.95E-04	1.90E+00	3.26E-03	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 9C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	4.07E-05	2.30E-01	9.36E-06	1.90E+00	7.73E-05
	Maximum Concentration	2.50E-02	1.03E-04	2.30E-01	2.36E-05	1.90E+00	1.95E-04
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	1.27E-03	2.30E-01	2.93E-04	1.90E+00	2.42E-03
	Maximum Concentration	5.10E-01	2.10E-03	2.30E-01	4.82E-04	1.90E+00	3.98E-03
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	1.44E-03	2.30E-01	3.31E-04	1.90E+00	2.73E-03
Maximum Concentration	1.30E+00	5.34E-03	2.30E-01	1.23E-03	1.90E+00	1.02E-02	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 10A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	1.16E-06	2.30E-01	2.67E-07	1.90E+00	2.21E-06
	Maximum Concentration	2.00E-01	5.28E-05	2.30E-01	1.22E-05	1.90E+00	1.00E-04
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	1.03E-04	2.30E-01	2.37E-05	1.90E+00	1.96E-04
	Maximum Concentration	4.30E-01	1.14E-04	2.30E-01	2.61E-05	1.90E+00	2.16E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 10B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	5.81E-06	2.30E-01	1.34E-06	1.90E+00	1.10E-05
	Maximum Concentration	2.00E-01	2.64E-04	2.30E-01	6.08E-05	1.90E+00	5.02E-04
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	5.15E-04	2.30E-01	1.18E-04	1.90E+00	9.79E-04
	Maximum Concentration	4.30E-01	5.68E-04	2.30E-01	1.31E-04	1.90E+00	1.08E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 10C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	1.81E-05	2.30E-01	4.16E-06	1.90E+00	3.44E-05
	Maximum Concentration	2.00E-01	8.22E-04	2.30E-01	1.89E-04	1.90E+00	1.56E-03
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	1.60E-03	2.30E-01	3.69E-04	1.90E+00	3.05E-03
	Maximum Concentration	4.30E-01	1.77E-03	2.30E-01	4.06E-04	1.90E+00	3.36E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 11A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	8.72E-06	2.30E-01	2.01E-06	1.90E+00	1.66E-05
	Maximum Concentration	2.90E-01	7.66E-05	2.30E-01	1.76E-05	1.90E+00	1.46E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	4.23E-05	2.30E-01	9.72E-06	1.90E+00	8.03E-05
	Maximum Concentration	2.60E-01	6.87E-05	2.30E-01	1.58E-05	1.90E+00	1.31E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 11B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	4.36E-05	2.30E-01	1.00E-05	1.90E+00	8.28E-05
	Maximum Concentration	2.90E-01	3.83E-04	2.30E-01	8.81E-05	1.90E+00	7.28E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	2.11E-04	2.30E-01	4.86E-05	1.90E+00	4.02E-04
	Maximum Concentration	2.60E-01	3.43E-04	2.30E-01	7.90E-05	1.90E+00	6.53E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 11C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	1.36E-04	2.30E-01	3.12E-05	1.90E+00	2.58E-04
	Maximum Concentration	2.90E-01	1.19E-03	2.30E-01	2.74E-04	1.90E+00	2.26E-03
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	6.58E-04	2.30E-01	1.51E-04	1.90E+00	1.25E-03
	Maximum Concentration	2.60E-01	1.07E-03	2.30E-01	2.46E-04	1.90E+00	2.03E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 12A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	3.70E-06	2.30E-01	8.51E-07	1.90E+00	7.03E-06
	Maximum Concentration	1.70E-01	4.49E-05	2.30E-01	1.03E-05	1.90E+00	8.53E-05
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	1.06E-05	2.30E-01	2.43E-06	1.90E+00	2.01E-05
	Maximum Concentration	4.80E-01	1.27E-04	2.30E-01	2.92E-05	1.90E+00	2.41E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 12B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	1.85E-05	2.30E-01	4.25E-06	1.90E+00	3.51E-05
	Maximum Concentration	1.70E-01	2.25E-04	2.30E-01	5.16E-05	1.90E+00	4.27E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	5.28E-05	2.30E-01	1.22E-05	1.90E+00	1.00E-04
	Maximum Concentration	4.80E-01	6.34E-04	2.30E-01	1.46E-04	1.90E+00	1.20E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 12C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	5.75E-05	2.30E-01	1.32E-05	1.90E+00	1.09E-04
	Maximum Concentration	1.70E-01	6.99E-04	2.30E-01	1.61E-04	1.90E+00	1.33E-03
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	1.64E-04	2.30E-01	3.78E-05	1.90E+00	3.12E-04
	Maximum Concentration	4.80E-01	1.97E-03	2.30E-01	4.54E-04	1.90E+00	3.75E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 13A**  
**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker**  
**One-day Per Year Exposure**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	1
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.80E-03	2.35E-07	2.30E-01	5.40E-08	1.90E+00	4.46E-07
	Maximum Concentration	5.10E-02	2.50E-06	2.30E-01	5.74E-07	1.90E+00	4.74E-06
	<i>Trailing Hiker</i>						
	Minimum Concentration	4.20E-03	2.05E-07	2.30E-01	4.73E-08	1.90E+00	3.90E-07
	Maximum Concentration	2.80E-02	1.37E-06	2.30E-01	3.15E-07	1.90E+00	2.60E-06

Notes:  
 Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 13B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Hiker</b>						
	Minimum Concentration	4.80E-03	4.70E-06	2.30E-01	1.08E-06	1.90E+00	8.92E-06
	Maximum Concentration	5.10E-02	4.99E-05	2.30E-01	1.15E-05	1.90E+00	9.48E-05
	<b>Trailing Hiker</b>						
	Minimum Concentration	4.20E-03	4.11E-06	2.30E-01	9.45E-07	1.90E+00	7.81E-06
	Maximum Concentration	2.80E-02	2.74E-05	2.30E-01	6.30E-06	1.90E+00	5.21E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 13C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.80E-03	1.69E-05	2.30E-01	3.89E-06	1.90E+00	3.21E-05
	Maximum Concentration	5.10E-02	1.80E-04	2.30E-01	4.13E-05	1.90E+00	3.41E-04
	<i>Trailing Hiker</i>						
	Minimum Concentration	4.20E-03	1.48E-05	2.30E-01	3.40E-06	1.90E+00	2.81E-05
	Maximum Concentration	2.80E-02	9.86E-05	2.30E-01	2.27E-05	1.90E+00	1.87E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 14A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	1.76E-06	2.30E-01	4.05E-07	1.90E+00	3.35E-06
	Maximum Concentration	6.50E-01	2.54E-04	2.30E-01	5.85E-05	1.90E+00	4.83E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 14B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	8.81E-06	2.30E-01	2.03E-06	1.90E+00	1.67E-05
	Maximum Concentration	6.50E-01	1.27E-03	2.30E-01	2.93E-04	1.90E+00	2.42E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 14C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	2.11E-05	2.30E-01	4.86E-06	1.90E+00	4.02E-05
	Maximum Concentration	6.50E-01	3.05E-03	2.30E-01	7.02E-04	1.90E+00	5.80E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 15A**  
**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper**  
**One-day Per Year Exposure**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	1.14E-07	2.30E-01	2.61E-08	1.90E+00	2.16E-07
	Maximum Concentration	2.90E-04	1.14E-07	2.30E-01	2.61E-08	1.90E+00	2.16E-07

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 15B**  
**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper**  
**Reasonable Maximum Exposure (RME)**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	5.68E-07	2.30E-01	1.31E-07	1.90E+00	1.08E-06
	Maximum Concentration	2.90E-04	5.68E-07	2.30E-01	1.31E-07	1.90E+00	1.08E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 15C**  
**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper**  
**High Estimate Exposure**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	1.36E-06	2.30E-01	3.13E-07	1.90E+00	2.59E-06
	Maximum Concentration	2.90E-04	1.36E-06	2.30E-01	3.13E-07	1.90E+00	2.59E-06

Notes:  
 Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 16A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuum**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Vehicle, Lead Powerspray Wash</b>						
	Minimum Concentration	4.80E-03	7.75E-08	2.30E-01	1.78E-08	1.90E+00	1.47E-07
	Maximum Concentration	2.00E-01	3.23E-06	2.30E-01	7.43E-07	1.90E+00	6.14E-06
	<b>Vehicle, Trailing Powerspray Wash</b>						
	Minimum Concentration	5.20E-02	8.40E-07	2.30E-01	1.93E-07	1.90E+00	1.60E-06
	Maximum Concentration	5.20E-02	8.40E-07	2.30E-01	1.93E-07	1.90E+00	1.60E-06
	<b>Vehicle, Lead Hose Wash</b>						
	Minimum Concentration	2.80E-02	4.52E-07	2.30E-01	1.04E-07	1.90E+00	8.59E-07
	Maximum Concentration	2.80E-02	4.52E-07	2.30E-01	1.04E-07	1.90E+00	8.59E-07
	<b>Vehicle, Trailing Hose Wash</b>						
	Minimum Concentration	1.70E-01	2.74E-06	2.30E-01	6.31E-07	1.90E+00	5.21E-06
	Maximum Concentration	1.70E-01	2.74E-06	2.30E-01	6.31E-07	1.90E+00	5.21E-06



**Table 16A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuum**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Vehicle, Lead HEPA Vacuum</i>						
	Minimum Concentration	3.00E-02	4.84E-07	2.30E-01	1.11E-07	1.90E+00	9.20E-07
	Maximum Concentration	7.60E-02	1.23E-06	2.30E-01	2.82E-07	1.90E+00	2.33E-06
	<i>Vehicle, Trailing HEPA Vacuum</i>						
	Minimum Concentration	2.80E-02	4.52E-07	2.30E-01	1.04E-07	1.90E+00	8.59E-07
	Maximum Concentration	2.80E-02	4.52E-07	2.30E-01	1.04E-07	1.90E+00	8.59E-07
	<i>Vehicle, Regular Vacuum</i>						
	Minimum Concentration	1.40E-02	2.26E-07	2.30E-01	5.20E-08	1.90E+00	4.29E-07
	Maximum Concentration	1.90E-02	3.07E-07	2.30E-01	7.06E-08	1.90E+00	5.83E-07

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 16B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuum**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Vehicle, Lead Powerspray Wash</b>						
	Minimum Concentration	4.80E-03	3.87E-07	2.30E-01	8.91E-08	1.90E+00	7.36E-07
	Maximum Concentration	2.00E-01	1.61E-05	2.30E-01	3.71E-06	1.90E+00	3.07E-05
	<b>Vehicle, Trailing Powerspray Wash</b>						
	Minimum Concentration	5.20E-02	4.20E-06	2.30E-01	9.65E-07	1.90E+00	7.98E-06
	Maximum Concentration	5.20E-02	4.20E-06	2.30E-01	9.65E-07	1.90E+00	7.98E-06
	<b>Vehicle, Lead Hose Wash</b>						
	Minimum Concentration	2.80E-02	2.26E-06	2.30E-01	5.20E-07	1.90E+00	4.29E-06
	Maximum Concentration	2.80E-02	2.26E-06	2.30E-01	5.20E-07	1.90E+00	4.29E-06
	<b>Vehicle, Trailing Hose Wash</b>						
	Minimum Concentration	1.70E-01	1.37E-05	2.30E-01	3.16E-06	1.90E+00	2.61E-05
	Maximum Concentration	1.70E-01	1.37E-05	2.30E-01	3.16E-06	1.90E+00	2.61E-05

**Table 16B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuumer**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Vehicle, Lead HEPA Vacuum</b>						
	Minimum Concentration	3.00E-02	2.42E-06	2.30E-01	5.57E-07	1.90E+00	4.60E-06
	Maximum Concentration	7.60E-02	6.14E-06	2.30E-01	1.41E-06	1.90E+00	1.17E-05
	<b>Vehicle, Trailing HEPA Vacuum</b>						
	Minimum Concentration	2.80E-02	2.26E-06	2.30E-01	5.20E-07	1.90E+00	4.29E-06
	Maximum Concentration	2.80E-02	2.26E-06	2.30E-01	5.20E-07	1.90E+00	4.29E-06
	<b>Vehicle, Regular Vacuum</b>						
	Minimum Concentration	1.40E-02	1.13E-06	2.30E-01	2.60E-07	1.90E+00	2.15E-06
	Maximum Concentration	1.90E-02	1.53E-06	2.30E-01	3.53E-07	1.90E+00	2.91E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 16C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuum**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Vehicle, Lead Powerspray Wash</b>						
	Minimum Concentration	4.80E-03	9.30E-07	2.30E-01	2.14E-07	1.90E+00	1.77E-06
	Maximum Concentration	2.00E-01	3.87E-05	2.30E-01	8.91E-06	1.90E+00	7.36E-05
	<b>Vehicle, Trailing Powerspray Wash</b>						
	Minimum Concentration	5.20E-02	1.01E-05	2.30E-01	2.32E-06	1.90E+00	1.91E-05
	Maximum Concentration	5.20E-02	1.01E-05	2.30E-01	2.32E-06	1.90E+00	1.91E-05
	<b>Vehicle, Lead Hose Wash</b>						
	Minimum Concentration	2.80E-02	5.42E-06	2.30E-01	1.25E-06	1.90E+00	1.03E-05
	Maximum Concentration	2.80E-02	5.42E-06	2.30E-01	1.25E-06	1.90E+00	1.03E-05
	<b>Vehicle, Second Hose Wash</b>						
	Minimum Concentration	1.70E-01	3.29E-05	2.30E-01	7.58E-06	1.90E+00	6.26E-05
	Maximum Concentration	1.70E-01	3.29E-05	2.30E-01	7.58E-06	1.90E+00	6.26E-05

**Table 16C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Vehicle Washer/Vacuumer**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Vehicle Washer
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	0.33
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Vehicle, Lead HEPA Vacuum</i>						
	Minimum Concentration	3.00E-02	5.81E-06	2.30E-01	1.34E-06	1.90E+00	1.10E-05
	Maximum Concentration	7.60E-02	1.47E-05	2.30E-01	3.39E-06	1.90E+00	2.80E-05
	<i>Vehicle, Trailing HEPA Vacuum</i>						
	Minimum Concentration	2.80E-02	5.42E-06	2.30E-01	1.25E-06	1.90E+00	1.03E-05
	Maximum Concentration	2.80E-02	5.42E-06	2.30E-01	1.25E-06	1.90E+00	1.03E-05
	<i>Vehicle, Regular Vacuum</i>						
	Minimum Concentration	1.40E-02	2.71E-06	2.30E-01	6.24E-07	1.90E+00	5.15E-06
	Maximum Concentration	1.90E-02	3.68E-06	2.30E-01	8.47E-07	1.90E+00	6.99E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 17A**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	4.50E-07	2.30E-01	1.04E-07	1.90E+00	8.55E-07
	Maximum Concentration	1.80E-02	1.76E-06	2.30E-01	4.05E-07	1.90E+00	3.35E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 17B**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	4.50E-06	2.30E-01	1.04E-06	1.90E+00	8.55E-06
	Maximum Concentration	1.80E-02	1.76E-05	2.30E-01	4.05E-06	1.90E+00	3.35E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 17C**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	1.08E-05	2.30E-01	2.48E-06	1.90E+00	2.05E-05
	Maximum Concentration	1.80E-02	4.23E-05	2.30E-01	9.72E-06	1.90E+00	8.03E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 18A**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Fence Builder
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	8.41E-07	2.30E-01	1.94E-07	1.90E+00	1.60E-06
	Maximum Concentration	2.60E-01	5.09E-05	2.30E-01	1.17E-05	1.90E+00	9.67E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 18B**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Fence Builder/Repair
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	6.31E-06	2.30E-01	1.45E-06	1.90E+00	1.20E-05
	Maximum Concentration	2.60E-01	3.82E-04	2.30E-01	8.78E-05	1.90E+00	7.25E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 18C**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Fence Builder/Repair
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	1.51E-05	2.30E-01	3.48E-06	1.90E+00	2.88E-05
	Maximum Concentration	2.60E-01	9.16E-04	2.30E-01	2.11E-04	1.90E+00	1.74E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 19A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Motorcyclist (12 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Motorcyclist
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	4.50E-02	1.76E-06	2.30E-01	4.05E-07	1.90E+00	3.35E-06
	Maximum Concentration	1.20E-01	4.70E-06	2.30E-01	1.08E-06	1.90E+00	8.92E-06
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	4.60E-01	1.80E-05	2.30E-01	4.14E-06	1.90E+00	3.42E-05
	Maximum Concentration	5.90E-01	2.31E-05	2.30E-01	5.31E-06	1.90E+00	4.39E-05
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.70E-01	1.45E-05	2.30E-01	3.33E-06	1.90E+00	2.75E-05
	Maximum Concentration	1.20E+00	4.70E-05	2.30E-01	1.08E-05	1.90E+00	8.92E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 19B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Motorcyclist (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Motorcyclist
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	4.50E-02	2.38E-05	2.30E-01	5.47E-06	1.90E+00	4.52E-05
	Maximum Concentration	1.20E-01	6.34E-05	2.30E-01	1.46E-05	1.90E+00	1.20E-04
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	4.60E-01	2.43E-04	2.30E-01	5.59E-05	1.90E+00	4.62E-04
	Maximum Concentration	5.90E-01	3.12E-04	2.30E-01	7.17E-05	1.90E+00	5.92E-04
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.70E-01	1.95E-04	2.30E-01	4.50E-05	1.90E+00	3.71E-04
	Maximum Concentration	1.20E+00	6.34E-04	2.30E-01	1.46E-04	1.90E+00	1.20E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 19C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Motorcyclist (12 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Motorcyclist
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Motorcyclist</i>						
	Minimum Concentration	4.50E-02	5.71E-05	2.30E-01	1.31E-05	1.90E+00	1.08E-04
	Maximum Concentration	1.20E-01	1.52E-04	2.30E-01	3.50E-05	1.90E+00	2.89E-04
	<i>First Trailing Motorcyclist</i>						
	Minimum Concentration	4.60E-01	5.83E-04	2.30E-01	1.34E-04	1.90E+00	1.11E-03
	Maximum Concentration	5.90E-01	7.48E-04	2.30E-01	1.72E-04	1.90E+00	1.42E-03
	<i>Second Trailing Motorcyclist</i>						
	Minimum Concentration	3.70E-01	4.69E-04	2.30E-01	1.08E-04	1.90E+00	8.91E-04
	Maximum Concentration	1.20E+00	1.52E-03	2.30E-01	3.50E-04	1.90E+00	2.89E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 20A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child ATV Rider (12 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	ATV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	1.00E-01	3.91E-06	2.30E-01	9.00E-07	1.90E+00	7.44E-06
	Maximum Concentration	3.30E-01	1.29E-05	2.30E-01	2.97E-06	1.90E+00	2.45E-05
	<i>First Trailing ATV Rider</i>						
	Minimum Concentration	6.90E-01	2.70E-05	2.30E-01	6.21E-06	1.90E+00	5.13E-05
	Maximum Concentration	6.90E-01	2.70E-05	2.30E-01	6.21E-06	1.90E+00	5.13E-05
	<i>Second Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	1.53E-05	2.30E-01	3.51E-06	1.90E+00	2.90E-05
	Maximum Concentration	5.70E-01	2.23E-05	2.30E-01	5.13E-06	1.90E+00	4.24E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 20B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child ATV Rider (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	ATV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead ATV Rider</b>						
	Minimum Concentration	1.00E-01	5.28E-05	2.30E-01	1.22E-05	1.90E+00	1.00E-04
	Maximum Concentration	3.30E-01	1.74E-04	2.30E-01	4.01E-05	1.90E+00	3.31E-04
	<b>First Trailing ATV Rider</b>						
	Minimum Concentration	6.90E-01	3.65E-04	2.30E-01	8.39E-05	1.90E+00	6.93E-04
	Maximum Concentration	6.90E-01	3.65E-04	2.30E-01	8.39E-05	1.90E+00	6.93E-04
	<b>Second Trailing ATV Rider</b>						
	Minimum Concentration	3.90E-01	2.06E-04	2.30E-01	4.74E-05	1.90E+00	3.92E-04
	Maximum Concentration	5.70E-01	3.01E-04	2.30E-01	6.93E-05	1.90E+00	5.72E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 20C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child ATV Rider (12 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	ATV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead ATV Rider</b>						
	Minimum Concentration	1.00E-01	1.27E-04	2.30E-01	2.92E-05	1.90E+00	2.41E-04
	Maximum Concentration	3.30E-01	4.18E-04	2.30E-01	9.62E-05	1.90E+00	7.95E-04
	<b>First Trailing ATV Rider</b>						
	Minimum Concentration	6.90E-01	8.75E-04	2.30E-01	2.01E-04	1.90E+00	1.66E-03
	Maximum Concentration	6.90E-01	8.75E-04	2.30E-01	2.01E-04	1.90E+00	1.66E-03
	<b>Second Trailing ATV Rider</b>						
	Minimum Concentration	3.90E-01	4.95E-04	2.30E-01	1.14E-04	1.90E+00	9.40E-04
	Maximum Concentration	5.70E-01	7.23E-04	2.30E-01	1.66E-04	1.90E+00	1.37E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 21A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Open) (12 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	1.90E-02	7.44E-07	2.30E-01	1.71E-07	1.90E+00	1.41E-06
	Maximum Concentration	1.40E-01	5.48E-06	2.30E-01	1.26E-06	1.90E+00	1.04E-05
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	9.80E-02	3.84E-06	2.30E-01	8.82E-07	1.90E+00	7.29E-06
Maximum Concentration	9.80E-01	3.84E-05	2.30E-01	8.82E-06	1.90E+00	7.29E-05	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 21B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Open) (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	1.90E-02	1.00E-05	2.30E-01	2.31E-06	1.90E+00	1.91E-05
	Maximum Concentration	1.40E-01	7.40E-05	2.30E-01	1.70E-05	1.90E+00	1.41E-04
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	9.80E-02	5.18E-05	2.30E-01	1.19E-05	1.90E+00	9.84E-05
	Maximum Concentration	9.80E-01	5.18E-04	2.30E-01	1.19E-04	1.90E+00	9.84E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 21C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Open) (12 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	1.90E-02	2.41E-05	2.30E-01	5.54E-06	1.90E+00	4.58E-05
	Maximum Concentration	1.40E-01	1.78E-04	2.30E-01	4.08E-05	1.90E+00	3.37E-04
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	9.80E-02	1.24E-04	2.30E-01	2.86E-05	1.90E+00	2.36E-04
	Maximum Concentration	9.80E-01	1.24E-03	2.30E-01	2.86E-04	1.90E+00	2.36E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 22A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Closed) (12 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	7.20E-03	2.82E-07	2.30E-01	6.48E-08	1.90E+00	5.35E-07
	Maximum Concentration	1.40E-01	5.48E-06	2.30E-01	1.26E-06	1.90E+00	1.04E-05
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	4.60E-02	1.80E-06	2.30E-01	4.14E-07	1.90E+00	3.42E-06
	Maximum Concentration	4.20E-01	1.64E-05	2.30E-01	3.78E-06	1.90E+00	3.12E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 22B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Closed) (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	7.20E-03	3.80E-06	2.30E-01	8.75E-07	1.90E+00	7.23E-06
	Maximum Concentration	1.40E-01	7.40E-05	2.30E-01	1.70E-05	1.90E+00	1.41E-04
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	4.60E-02	2.43E-05	2.30E-01	5.59E-06	1.90E+00	4.62E-05
	Maximum Concentration	4.20E-01	2.22E-04	2.30E-01	5.10E-05	1.90E+00	4.22E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 22C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child SUV Rider (Windows Closed) (12 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Rider</i>						
	Minimum Concentration	7.20E-03	9.13E-06	2.30E-01	2.10E-06	1.90E+00	1.73E-05
	Maximum Concentration	1.40E-01	1.78E-04	2.30E-01	4.08E-05	1.90E+00	3.37E-04
	<i>Trailing SUV Rider</i>						
	Minimum Concentration	4.60E-02	5.83E-05	2.30E-01	1.34E-05	1.90E+00	1.11E-04
Maximum Concentration	4.20E-01	5.33E-04	2.30E-01	1.22E-04	1.90E+00	1.01E-03	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 23A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Hiker (12 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Hiker
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	1
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Hiker</b>						
	Minimum Concentration	4.90E-03	9.59E-08	2.30E-01	2.21E-08	1.90E+00	1.82E-07
	Maximum Concentration	6.50E-02	1.27E-06	2.30E-01	2.93E-07	1.90E+00	2.42E-06
	<b>Trailing Hiker</b>						
	Minimum Concentration	1.40E-02	2.74E-07	2.30E-01	6.30E-08	1.90E+00	5.21E-07
	Maximum Concentration	7.50E-02	1.47E-06	2.30E-01	3.38E-07	1.90E+00	2.79E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 23B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Hiker (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Hiker
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Hiker</b>						
	Minimum Concentration	4.90E-03	9.59E-07	2.30E-01	2.21E-07	1.90E+00	1.82E-06
	Maximum Concentration	6.50E-02	1.27E-05	2.30E-01	2.93E-06	1.90E+00	2.42E-05
	<b>Trailing Hiker</b>						
	Minimum Concentration	1.40E-02	2.74E-06	2.30E-01	6.30E-07	1.90E+00	5.21E-06
	Maximum Concentration	7.50E-02	1.47E-05	2.30E-01	3.38E-06	1.90E+00	2.79E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 23C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Hiker (12 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Hiker
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.90E-03	2.30E-06	2.30E-01	5.29E-07	1.90E+00	4.37E-06
	Maximum Concentration	6.50E-02	3.05E-05	2.30E-01	7.02E-06	1.90E+00	5.80E-05
	<i>Trailing Hiker</i>						
	Minimum Concentration	1.40E-02	6.58E-06	2.30E-01	1.51E-06	1.90E+00	1.25E-05
Maximum Concentration	7.50E-02	3.52E-05	2.30E-01	8.10E-06	1.90E+00	6.69E-05	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 24A**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Camper (12 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.10E-03	6.42E-07	2.30E-01	1.48E-07	1.90E+00	1.22E-06
	Maximum Concentration	2.80E-01	4.38E-05	2.30E-01	1.01E-05	1.90E+00	8.33E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 24B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Camper (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.10E-03	3.21E-06	2.30E-01	7.38E-07	1.90E+00	6.10E-06
	Maximum Concentration	2.80E-01	2.19E-04	2.30E-01	5.04E-05	1.90E+00	4.16E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 24C**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Camper (12 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.10E-03	7.70E-06	2.30E-01	1.77E-06	1.90E+00	1.46E-05
	Maximum Concentration	2.80E-01	5.26E-04	2.30E-01	1.21E-04	1.90E+00	9.99E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 25A**  
**Risk Calculation Worksheet - Carcinogenic Effects: Child Sleeping Camper**  
**One-day Per Year Exposure**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Sleeping Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	1
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Sleeping Camper</i>						
	Minimum Concentration	2.90E-04	5.68E-09	2.30E-01	1.31E-09	1.90E+00	1.08E-08
	Maximum Concentration	2.90E-04	5.68E-09	2.30E-01	1.31E-09	1.90E+00	1.08E-08

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 25B**

**Risk Calculation Worksheet - Carcinogenic Effects: Child Sleeping Camper**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Sleeping Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	1.5
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Sleeping Camper</i>						
	Minimum Concentration	2.90E-04	4.26E-08	2.30E-01	9.79E-09	1.90E+00	8.09E-08
	Maximum Concentration	2.90E-04	4.26E-08	2.30E-01	9.79E-09	1.90E+00	8.09E-08

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 25C**  
**Risk Calculation Worksheet - Carcinogenic Effects: Child Sleeping Camper**  
**High Estimate Exposure**  
*Human Health Risk Assessment*  
*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Sleeping Camper
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Sleeping Camper</i>						
	Minimum Concentration	2.90E-04	1.36E-07	2.30E-01	3.13E-08	1.90E+00	2.59E-07
	Maximum Concentration	2.90E-04	1.36E-07	2.30E-01	3.13E-08	1.90E+00	2.59E-07

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 26A**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Rider (12 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Post Decon Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	1.40E-02	5.48E-07	2.30E-01	1.26E-07	1.90E+00	1.04E-06
	Maximum Concentration	4.70E-02	1.84E-06	2.30E-01	4.23E-07	1.90E+00	3.50E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 26B**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Rider (12 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Post Decon Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	1.40E-02	5.48E-06	2.30E-01	1.26E-06	1.90E+00	1.04E-05
	Maximum Concentration	4.70E-02	1.84E-05	2.30E-01	4.23E-06	1.90E+00	3.50E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 26C**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Rider (12 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Post Decon Rider
	Receptor Age:	Child
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	12
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [fibers/ml]	Chronic Exposure Concentration [fibers/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	1.40E-02	1.32E-05	2.30E-01	3.02E-06	1.90E+00	2.50E-05
	Maximum Concentration	4.70E-02	4.41E-05	2.30E-01	1.02E-05	1.90E+00	8.39E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 27A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist (18 Year Exposure Duration)**

**One-day Per Year Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	1.57E-06	2.30E-01	3.61E-07	1.90E+00	2.98E-06
	Maximum Concentration	2.50E-02	3.96E-06	2.30E-01	9.11E-07	1.90E+00	7.53E-06
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	4.91E-05	2.30E-01	1.13E-05	1.90E+00	9.34E-05
	Maximum Concentration	5.10E-01	8.08E-05	2.30E-01	1.86E-05	1.90E+00	1.54E-04
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	5.55E-05	2.30E-01	1.28E-05	1.90E+00	1.05E-04
	Maximum Concentration	1.30E+00	2.06E-04	2.30E-01	4.74E-05	1.90E+00	3.92E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 27B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	7.85E-06	2.30E-01	1.80E-06	1.90E+00	1.49E-05
	Maximum Concentration	2.50E-02	1.98E-05	2.30E-01	4.56E-06	1.90E+00	3.76E-05
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	2.46E-04	2.30E-01	5.65E-05	1.90E+00	4.67E-04
	Maximum Concentration	5.10E-01	4.04E-04	2.30E-01	9.30E-05	1.90E+00	7.68E-04
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	2.77E-04	2.30E-01	6.38E-05	1.90E+00	5.27E-04
	Maximum Concentration	1.30E+00	1.03E-03	2.30E-01	2.37E-04	1.90E+00	1.96E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 27C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Motorcyclist (18 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Motorcyclist
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<b>Lead Motorcyclist</b>						
	Minimum Concentration	9.90E-03	2.44E-05	2.30E-01	5.61E-06	1.90E+00	4.64E-05
	Maximum Concentration	2.50E-02	6.16E-05	2.30E-01	1.42E-05	1.90E+00	1.17E-04
	<b>First Trailing Motorcyclist</b>						
	Minimum Concentration	3.10E-01	7.64E-04	2.30E-01	1.76E-04	1.90E+00	1.45E-03
	Maximum Concentration	5.10E-01	1.26E-03	2.30E-01	2.89E-04	1.90E+00	2.39E-03
	<b>Second Trailing Motorcyclist</b>						
	Minimum Concentration	3.50E-01	8.63E-04	2.30E-01	1.98E-04	1.90E+00	1.64E-03
Maximum Concentration	1.30E+00	3.21E-03	2.30E-01	7.37E-04	1.90E+00	6.09E-03	

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 28A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	6.97E-07	2.30E-01	1.60E-07	1.90E+00	1.33E-06
	Maximum Concentration	2.00E-01	3.17E-05	2.30E-01	7.29E-06	1.90E+00	6.02E-05
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	6.18E-05	2.30E-01	1.42E-05	1.90E+00	1.17E-04
	Maximum Concentration	4.30E-01	6.82E-05	2.30E-01	1.57E-05	1.90E+00	1.30E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 28B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	3.49E-06	2.30E-01	8.02E-07	1.90E+00	6.63E-06
	Maximum Concentration	2.00E-01	1.59E-04	2.30E-01	3.65E-05	1.90E+00	3.01E-04
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	3.09E-04	2.30E-01	7.11E-05	1.90E+00	5.87E-04
	Maximum Concentration	4.30E-01	3.41E-04	2.30E-01	7.84E-05	1.90E+00	6.48E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 28C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult ATV Rider (18 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	ATV Rider
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead ATV Rider</i>						
	Minimum Concentration	4.40E-03	1.08E-05	2.30E-01	2.50E-06	1.90E+00	2.06E-05
	Maximum Concentration	2.00E-01	4.93E-04	2.30E-01	1.13E-04	1.90E+00	9.37E-04
	<i>Trailing ATV Rider</i>						
	Minimum Concentration	3.90E-01	9.62E-04	2.30E-01	2.21E-04	1.90E+00	1.83E-03
	Maximum Concentration	4.30E-01	1.06E-03	2.30E-01	2.44E-04	1.90E+00	2.01E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 29A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open) (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	5.23E-06	2.30E-01	1.20E-06	1.90E+00	9.94E-06
	Maximum Concentration	2.90E-01	4.60E-05	2.30E-01	1.06E-05	1.90E+00	8.73E-05
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	2.54E-05	2.30E-01	5.83E-06	1.90E+00	4.82E-05
	Maximum Concentration	2.60E-01	4.12E-05	2.30E-01	9.48E-06	1.90E+00	7.83E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 29B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open) (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	2.62E-05	2.30E-01	6.02E-06	1.90E+00	4.97E-05
	Maximum Concentration	2.90E-01	2.30E-04	2.30E-01	5.29E-05	1.90E+00	4.37E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	1.27E-04	2.30E-01	2.92E-05	1.90E+00	2.41E-04
	Maximum Concentration	2.60E-01	2.06E-04	2.30E-01	4.74E-05	1.90E+00	3.92E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 29C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Open) (18 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	3.30E-02	8.14E-05	2.30E-01	1.87E-05	1.90E+00	1.55E-04
	Maximum Concentration	2.90E-01	7.15E-04	2.30E-01	1.64E-04	1.90E+00	1.36E-03
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	1.60E-01	3.95E-04	2.30E-01	9.07E-05	1.90E+00	7.50E-04
	Maximum Concentration	2.60E-01	6.41E-04	2.30E-01	1.47E-04	1.90E+00	1.22E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 30A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed) (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	2.22E-06	2.30E-01	5.10E-07	1.90E+00	4.22E-06
	Maximum Concentration	1.70E-01	2.69E-05	2.30E-01	6.20E-06	1.90E+00	5.12E-05
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	6.34E-06	2.30E-01	1.46E-06	1.90E+00	1.20E-05
	Maximum Concentration	4.80E-01	7.61E-05	2.30E-01	1.75E-05	1.90E+00	1.45E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 30B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed) (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	5.4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	1.11E-05	2.30E-01	2.55E-06	1.90E+00	2.11E-05
	Maximum Concentration	1.70E-01	1.35E-04	2.30E-01	3.10E-05	1.90E+00	2.56E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	3.17E-05	2.30E-01	7.29E-06	1.90E+00	6.02E-05
	Maximum Concentration	4.80E-01	3.80E-04	2.30E-01	8.75E-05	1.90E+00	7.23E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 30C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult SUV Driver (Windows Closed) (18 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	SUV Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	7
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead SUV Driver</i>						
	Minimum Concentration	1.40E-02	3.45E-05	2.30E-01	7.94E-06	1.90E+00	6.56E-05
	Maximum Concentration	1.70E-01	4.19E-04	2.30E-01	9.64E-05	1.90E+00	7.96E-04
	<i>Trailing SUV Driver</i>						
	Minimum Concentration	4.00E-02	9.86E-05	2.30E-01	2.27E-05	1.90E+00	1.87E-04
	Maximum Concentration	4.80E-01	1.18E-03	2.30E-01	2.72E-04	1.90E+00	2.25E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 31A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	1
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.80E-03	1.41E-07	2.30E-01	3.24E-08	1.90E+00	2.68E-07
	Maximum Concentration	5.10E-02	1.50E-06	2.30E-01	3.44E-07	1.90E+00	2.84E-06
	<i>Trailing Hiker</i>						
	Minimum Concentration	4.20E-03	1.23E-07	2.30E-01	2.84E-08	1.90E+00	2.34E-07
	Maximum Concentration	2.80E-02	8.22E-07	2.30E-01	1.89E-07	1.90E+00	1.56E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 31B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.80E-03	4.70E-06	2.30E-01	1.08E-06	1.90E+00	8.92E-06
	Maximum Concentration	5.10E-02	4.99E-05	2.30E-01	1.15E-05	1.90E+00	9.48E-05
	<i>Trailing Hiker</i>						
	Minimum Concentration	4.20E-03	4.11E-06	2.30E-01	9.45E-07	1.90E+00	7.81E-06
	Maximum Concentration	2.80E-02	2.74E-05	2.30E-01	6.30E-06	1.90E+00	5.21E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 31C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Hiker (18 Year Exposure Duration)**

**High Estimate Exposure**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Hiker
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Lead Hiker</i>						
	Minimum Concentration	4.80E-03	1.69E-05	2.30E-01	3.89E-06	1.90E+00	3.21E-05
	Maximum Concentration	5.10E-02	1.80E-04	2.30E-01	4.13E-05	1.90E+00	3.41E-04
	<i>Trailing Hiker</i>						
	Minimum Concentration	4.20E-03	1.48E-05	2.30E-01	3.40E-06	1.90E+00	2.81E-05
	Maximum Concentration	2.80E-02	9.86E-05	2.30E-01	2.27E-05	1.90E+00	1.87E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 32A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	1.76E-06	2.30E-01	4.05E-07	1.90E+00	3.35E-06
	Maximum Concentration	6.50E-01	2.54E-04	2.30E-01	5.85E-05	1.90E+00	4.83E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 32B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	8.81E-06	2.30E-01	2.03E-06	1.90E+00	1.67E-05
	Maximum Concentration	6.50E-01	1.27E-03	2.30E-01	2.93E-04	1.90E+00	2.42E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 32C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Camper (18 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	4.50E-03	2.11E-05	2.30E-01	4.86E-06	1.90E+00	4.02E-05
	Maximum Concentration	6.50E-01	3.05E-03	2.30E-01	7.02E-04	1.90E+00	5.80E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 33A**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	1.14E-07	2.30E-01	2.61E-08	1.90E+00	2.16E-07
	Maximum Concentration	2.90E-04	1.14E-07	2.30E-01	2.61E-08	1.90E+00	2.16E-07

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 33B**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	5.68E-07	2.30E-01	1.31E-07	1.90E+00	1.08E-06
	Maximum Concentration	2.90E-04	5.68E-07	2.30E-01	1.31E-07	1.90E+00	1.08E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 33C**

**Risk Calculation Worksheet - Carcinogenic Effects: Adult Sleeping Camper (18 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Recreational User
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Sleeping Camper
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	8
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	Minimum Concentration	2.90E-04	1.36E-06	2.30E-01	3.13E-07	1.90E+00	2.59E-06
	Maximum Concentration	2.90E-04	1.36E-06	2.30E-01	3.13E-07	1.90E+00	2.59E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration



**Table 34A**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver (18 Year Exposure Duration)**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	2
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	2.70E-07	2.30E-01	6.21E-08	1.90E+00	5.13E-07
	Maximum Concentration	1.80E-02	1.06E-06	2.30E-01	2.43E-07	1.90E+00	2.01E-06

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 34B**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver (18 Year Exposure Duration)**

**Reasonable Maximum Exposure (RME)**

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	2.70E-06	2.30E-01	6.21E-07	1.90E+00	5.13E-06
	Maximum Concentration	1.80E-02	1.06E-05	2.30E-01	2.43E-06	1.90E+00	2.01E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 34C**

**Risk Calculation Worksheet - Carcinogenic Effects: Post Decon Driver (18 Year Exposure Duration)**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Post Decon Driver
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	18
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Post Decon Driver</i>						
	Minimum Concentration	4.60E-03	6.48E-06	2.30E-01	1.49E-06	1.90E+00	1.23E-05
	Maximum Concentration	1.80E-02	2.54E-05	2.30E-01	5.83E-06	1.90E+00	4.82E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 35A**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**One-day Per Year Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	1-day per year
	Receptor Population:	Fence Builder/Repair
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	1
Exposure Time for inhalation (hours/day)	ET	4
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	8.41E-07	2.30E-01	1.94E-07	1.90E+00	1.60E-06
	Maximum Concentration	2.60E-01	5.09E-05	2.30E-01	1.17E-05	1.90E+00	9.67E-05

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 35B**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**Reasonable Maximum Exposure (RME)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	RME
	Receptor Population:	Fence Builder/Repair
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	5
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	6.31E-06	2.30E-01	1.45E-06	1.90E+00	1.20E-05
	Maximum Concentration	2.60E-01	3.82E-04	2.30E-01	8.78E-05	1.90E+00	7.25E-04

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 35C**

**Risk Calculation Worksheet - Carcinogenic Effects: Fence Builder/Repair**

**High Estimate Exposure**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

<b>Exposure Scenario Information</b>	Exposure Scenario:	Occupational
	Exposure Medium:	Air
	Exposure:	High Estimate Exposure
	Receptor Population:	Fence Builder/Repair
	Receptor Age:	Adult
<b>Exposure Parameter (units)</b>	<b>Variable</b>	<b>Value</b>
Exposure Frequency (days/year)	EF	12
Exposure Time for inhalation (hours/day)	ET	6
Exposure Duration (years)	ED	30
Averaging Time for carcinogens, 70 year lifetime (hours)	ATc	613,200

<b>Risk Calculations</b>							
Exposure Route	Asbestos	EPC Value [PCMe f/ml]	Chronic Exposure Concentration [PCMe f/ml]	IRIS Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk	OEHHA Unit Risk [fibers/ml] <sup>-1</sup>	Cancer Risk
Inhalation	<i>Fence Builder/Repair</i>						
	Minimum Concentration	4.30E-03	1.51E-05	2.30E-01	3.48E-06	1.90E+00	2.88E-05
	Maximum Concentration	2.60E-01	9.16E-04	2.30E-01	2.11E-04	1.90E+00	1.74E-03

Notes:

Minimum Concentration (or Maximum) = Minimum or maximum air concentration

**Table 36A**

**Combined Exposures, Adult Asbestos Cancer Risk: Motorcyclist (Minimum) Using IRIS Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 2 Years	Estimated Excess Lifetime Cancer Risk by Activity (Minimum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Motorcycling (Lead rider) <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
<b>1</b>	<b>2E-06</b>	6E-07	4E-07	3E-08	<b>3E-06</b>
<b>3</b>	<b>6E-06</b>	<b>2E-06</b>	1E-06	8E-08	<b>9E-06</b>
<b>5 (RME)</b>	<b>1E-05</b>	<b>3E-06</b>	<b>2E-06</b>	1E-07	<b>2E-05</b>
<b>9</b>	<b>2E-05</b>	<b>5E-06</b>	<b>4E-06</b>	2E-07	<b>3E-05</b>
<b>12 (High Estimate)</b>	<b>3E-05</b>	<b>9E-06</b>	<b>5E-06</b>	3E-07	<b>5E-05</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 36B****Combined Exposures, Adult Asbestos Cancer Risk: Motorcyclist (Maximum) Using IRIS Unit Risk***Human Health Risk Assessment**CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 2 Years	Estimated Excess Lifetime Cancer Risk by Activity (Maximum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Motorcycling (Lead rider) <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	2E-05	2E-06	6E-05	3E-08	8E-05
3	5E-05	5E-06	2E-04	8E-08	2E-04
5 (RME)	9E-05	8E-06	3E-04	1E-07	4E-04
9	2E-04	1E-05	5E-04	2E-07	7E-04
12 (High Estimate)	3E-04	2E-05	7E-04	3E-07	1E-03

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04



**Table 37A**

**Combined Exposures, Adult Asbestos Cancer Risk: Hiker (Minimum) Using IRIS Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 2 Years	Estimated Excess Lifetime Cancer Risk by Activity (Minimum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Hiking <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	<b>2E-06</b>	5E-08	4E-07	3E-08	<b>2E-06</b>
3	<b>6E-06</b>	2E-07	1E-06	8E-08	<b>7E-06</b>
5 (RME)	<b>1E-05</b>	1E-06	<b>2E-06</b>	1E-07	<b>1E-05</b>
9	<b>2E-05</b>	<b>2E-06</b>	<b>4E-06</b>	2E-07	<b>2E-05</b>
12 (High Estimate)	<b>3E-05</b>	<b>4E-06</b>	<b>5E-06</b>	3E-07	<b>4E-05</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 37B**

**Combined Exposures, Adult Asbestos Cancer Risk: Hiker (Maximum) Using IRIS Unit Risk**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 2 Years	Estimated Excess Lifetime Cancer Risk by Activity (Maximum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Hiking <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	2E-05	6E-07	6E-05	3E-08	8E-05
3	5E-05	2E-06	2E-04	8E-08	2E-04
5 (RME)	9E-05	1E-05	3E-04	1E-07	4E-04
9	2E-04	2E-05	5E-04	2E-07	7E-04
12 (High Estimate)	3E-04	4E-05	7E-04	3E-07	1E-03

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

**Table 38A**

**Combined Exposures, Child Asbestos Cancer Risk: Motorcyclist (Minimum Air Concentration) Using IRIS Inhalation Risk (12 Year Exposure Duration)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 12 Years	Estimated Excess Lifetime Cancer Risk by Activity (Minimum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Motorcycling (Lead rider) <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	2E-07	4E-07	1E-07	1E-09	7E-07
3	5E-07	1E-06	4E-07	4E-09	<b>2E-06</b>
<b>5 (RME)</b>	<b>2E-06</b>	<b>5E-06</b>	7E-07	1E-08	<b>9E-06</b>
9	<b>4E-06</b>	<b>1E-05</b>	1E-06	2E-08	<b>2E-05</b>
<b>12 (High Estimate)</b>	<b>6E-06</b>	<b>1E-05</b>	<b>2E-06</b>	3E-08	<b>2E-05</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

a = Values from Tables 21A, 21B, and 21C

**Table 38B**

**Combined Exposures, Child Asbestos Cancer Risk: Motorcyclist (Maximum Air Concentration) Using IRIS Unit Risk (12 Year Exposure Duration)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 12 Years	Estimated Excess Lifetime Cancer Risk by Activity (Maximum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Motorcycling (Lead rider) <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	1E-06	1E-06	<b>1E-05</b>	1E-09	<b>1E-05</b>
3	<b>4E-06</b>	<b>3E-06</b>	<b>3E-05</b>	4E-09	<b>4E-05</b>
5 (RME)	<b>2E-05</b>	<b>1E-05</b>	<b>5E-05</b>	1E-08	<b>8E-05</b>
9	<b>3E-05</b>	<b>3E-05</b>	<b>9E-05</b>	2E-08	<b>1E-04</b>
<b>12 (High Estimate)</b>	<b>4E-05</b>	<b>3E-05</b>	<b>1E-04</b>	3E-08	<b>2E-04</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

a = Values from Tables 21A, 21B, and 21C

**Table 39A**  
**Combined Exposures, Child Asbestos Cancer Risk: Hiker (Minimum Air Concentration) Using IRIS Unit Risk (12 Year Exposure Duration)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 12 Years	Estimated Excess Lifetime Cancer Risk by Activity (Minimum)				Sum of Combined Activities
	SUV Rider (Windows open) <sup>a</sup>	Hiking <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	
1	2E-07	2E-08	1E-07	1E-09	3E-07
3	5E-07	7E-08	4E-07	4E-09	1E-06
5 (RME)	1E-08	2E-07	7E-07	1E-08	1E-06
9	2E-08	4E-07	1E-06	2E-08	<b>2E-06</b>
12 (High Estimate)	3E-08	5E-07	<b>2E-06</b>	3E-08	<b>2E-06</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

a = Values from Tables 21A, 21B, and 21C

**Table 39B**

**Combined Exposures, Child Asbestos Cancer Risk: Hiker (Maximum Air Concentration) Using IRIS Unit Risk (12 Year Exposure Duration)**

*Human Health Risk Assessment*

*CCMA Asbestos Exposures (September 27 through 29, 2005)*

Number of Days/Year for 12 Years	Estimated Excess Lifetime Cancer Risk by Activity (Maximum)				Sum of Combined
	SUV Rider (Windows open) <sup>a</sup>	Hiking <sup>b</sup>	Camping <sup>c</sup>	Sleeping <sup>d</sup>	Activities
1	1E-06	3E-07	<b>1E-05</b>	1E-09	<b>1E-05</b>
3	<b>4E-06</b>	9E-07	<b>3E-05</b>	4E-09	<b>3E-05</b>
5 (RME)	<b>2E-05</b>	<b>3E-06</b>	<b>5E-05</b>	1E-08	<b>7E-05</b>
9	<b>3E-05</b>	<b>5E-06</b>	<b>9E-05</b>	2E-08	<b>1E-04</b>
<b>12 (High Estimate)</b>	<b>4E-05</b>	<b>7E-06</b>	<b>1E-04</b>	3E-08	<b>2E-04</b>

Notes:

RME = Reasonable Maximum Exposure

**Bolded results** = an excess lifetime cancer risk greater than 1E-06

**Bolded results (Shaded)** = an excess lifetime cancer risk greater than 1E-04

a = Values from Tables 21A, 21B, and 21C

Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>Motorcyclist</b>										
40109	Moto Lead	Adult	09/27/05	124	9.9E-03	2	5.0E-03	1.5E-02	1.8E-03 - 3.1E-02	(Recount Different)
	Moto Lead	Adult	09/27/05	124	9.9E-03	2	5.0E-03	1.5E-02	1.8E-03 - 3.1E-02	
40222	Moto Lead	Adult	09/28/05	160	2.0E-02	4	5.0E-03	1.5E-02	6.8E-03 - 4.6E-02	
40398	Moto Lead	Adult	09/29/05	160	2.5E-02	5	4.9E-03	1.5E-02	9.7E-03 - 5.2E-02	
40110	Moto Lead	Child	09/27/05	120	1.2E-01	27	4.6E-03	1.4E-02	8.8E-02 - 1.7E-01	
40134	Moto Lead	Child	09/27/05	120	5.4E-02	11	4.9E-03	1.5E-02	3.0E-02 - 9.0E-02	
40224	Moto Lead	Child	09/28/05	124	4.5E-02	9	5.0E-03	1.5E-02	2.3E-02 - 7.8E-02	
40400	Moto Lead	Child	09/29/05	80	4.8E-02	11	4.4E-03	1.3E-02	2.7E-02 - 8.0E-02	
40113	Moto Mid	Adult	09/27/05	128	3.1E-01	32	9.6E-03	2.9E-02	2.2E-01 - 4.1E-01	
40136	Moto Mid	Adult	09/27/05	120	5.1E-01	26	2.0E-02	5.9E-02	3.6E-01 - 7.1E-01	
40226	Moto Mid	Adult	09/28/05	120	3.1E-01	48	6.4E-03	1.9E-02	2.4E-01 - 3.9E-01	
40115	Moto Mid	Child	09/27/05	84	5.9E-01	54	1.1E-02	3.3E-02	4.6E-01 - 7.4E-01	
40140	Moto Mid	Child	09/27/05	80	5.1E-01	30	1.7E-02	5.0E-02	3.6E-01 - 6.9E-01	
40229	Moto Mid	Child	09/28/05	120	4.6E-01	39	1.2E-02	3.5E-02	3.4E-01 - 6.0E-01	
40116	Moto Tail	Adult	09/27/05	124	3.5E-01	38	9.2E-03	2.8E-02	2.6E-01 - 4.6E-01	
40231	Moto Tail	Adult	09/28/05	120	1.3E+00	47	2.7E-02	8.2E-02	9.9E-01 - 1.6E+00	
40263	Moto Tail	Adult	09/28/05	120	4.5E-01	39	1.2E-02	3.5E-02	3.4E-01 - 5.9E-01	
40401	Moto Tail	Adult	09/29/05	120	8.3E-01	38	2.2E-02	6.5E-02	6.2E-01 - 1.1E+00	
40117	Moto Tail	Child	09/27/05	120	3.7E-01	39	9.5E-03	2.9E-02	2.8E-01 - 4.9E-01	
40143	Moto Tail	Child	09/27/05	124	6.5E-01	27	2.4E-02	7.2E-02	4.6E-01 - 9.0E-01	
40233	Moto Tail	Child	09/28/05	80	1.2E+00	40	3.1E-02	9.2E-02	9.3E-01 - 1.6E+00	
40265	Moto Tail	Child	09/28/05	120	7.1E-01	39	1.8E-02	5.4E-02	5.3E-01 - 9.2E-01	
40403	Moto Tail	Child	09/29/05	120	3.9E-01	40	9.8E-03	2.9E-02	3.0E-01 - 5.1E-01	
<b>ATV Driver/Rider</b>										
40104	ATV Lead	Adult	09/27/05	164	2.0E-01	42	4.7E-03	1.4E-02	1.5E-01 - 2.5E-01	
40160	ATV Lead	Adult	09/27/05	160	5.4E-02	11	4.9E-03	1.5E-02	3.0E-02 - 9.0E-02	
40301	ATV Lead	Adult	09/28/05	160	4.4E-03	1	4.4E-03	1.3E-02	2.2E-04 - 2.1E-02	

Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>ATV Driver/Rider</b>										
40162	ATV Lead	Child	09/27/05	120	1.0E-01	21	4.9E-03	1.5E-02	7.0E-02 - 1.5E-01	
40303	ATV Lead	Child	09/28/05	120	2.5E-01	37	6.7E-03	2.0E-02	1.9E-01 - 3.3E-01	
40315	ATV Lead	Child	09/28/05	120	3.3E-01	30	1.1E-02	3.3E-02	2.4E-01 - 4.5E-01	
40357	ATV Lead	Child	09/29/05	124	3.2E-01	30	1.1E-02	3.2E-02	2.3E-01 - 4.4E-01	
40319	ATV Middle	Child	09/28/05	120	6.9E-01	28	2.5E-02	7.4E-02	4.9E-01 - 9.5E-01	
40100	ATV Tail	Adult	09/27/05	160	3.9E-01	47	8.3E-03	2.5E-02	3.0E-01 - 5.0E-01	
40321	ATV Tail	Adult	09/28/05	160	4.3E-01	18	2.4E-02	7.2E-02	2.8E-01 - 6.4E-01	
40102	ATV Tail	Child	09/27/05	100.75	5.7E-01	48	1.2E-02	3.6E-02	4.5E-01 - 7.3E-01	
40323	ATV Tail	Child	09/28/05	120	3.9E-01	17	2.3E-02	6.8E-02	2.5E-01 - 5.8E-01	
<b>SUV Driver/Rider</b>										
40095	SUV Lead Windows Open	Adult	09/27/05	126	1.5E-01	32	4.6E-03	1.4E-02	1.1E-01 - 2.0E-01	
40152	SUV Lead Windows Open	Adult	09/27/05	210	6.0E-02	12	5.0E-03	1.5E-02	3.4E-02 - 9.6E-02	
40214	SUV Lead Windows Open	Adult	09/28/05	210	3.3E-02	7	4.7E-03	1.4E-02	1.5E-02 - 6.1E-02	
40279	SUV Lead Windows Open	Adult	09/28/05	207	2.9E-01	39	7.3E-03	2.2E-02	2.1E-01 - 3.7E-01	
40347	SUV Lead Windows Open	Adult	09/29/05	210	5.6E-02	12	4.7E-03	1.4E-02	3.3E-02 - 9.2E-02	
40096	SUV Lead Windows Open	Child	09/27/05	231	1.4E-01	31	4.4E-03	1.3E-02	9.8E-02 - 1.8E-01	
40154	SUV Lead Windows Open	Child	09/27/05	210	5.0E-02	10	5.0E-03	1.5E-02	2.7E-02 - 8.4E-02	
40216	SUV Lead Windows Open	Child	09/28/05	207	1.9E-02	4	4.7E-03	1.4E-02	6.5E-03 - 4.3E-02	
40349	SUV Lead Windows Open	Child	09/29/05	216	7.0E-02	15	4.6E-03	1.4E-02	4.3E-02 - 1.1E-01	
40089	SUV Lead Windows Closed	Adult	09/27/05	70.2	1.4E-02	3	4.7E-03	1.4E-02	3.8E-03 - 3.6E-02	
40289	SUV Lead Windows Closed	Adult	09/28/05	120	1.4E-01	29	4.7E-03	1.4E-02	9.8E-02 - 1.9E-01	
40339	SUV Lead Windows Closed	Adult	09/29/05	213	1.7E-01	37	4.6E-03	1.4E-02	1.3E-01 - 2.2E-01	
40091	SUV Lead Windows Closed	Child	09/27/05	120	7.2E-03	2	3.6E-03	1.1E-02	1.3E-03 - 2.3E-02	
40290	SUV Lead Windows Closed	Child	09/28/05	204	1.1E-01	23	4.7E-03	1.4E-02	7.4E-02 - 1.5E-01	
40341	SUV Lead Windows Closed	Child	09/29/05	210	1.4E-01	28	5.0E-03	1.5E-02	1.0E-01 - 1.9E-01	
40098	SUV Tail Windows Open	Adult	09/27/05	120	2.6E-01	46	5.6E-03	1.7E-02	2.0E-01 - 3.3E-01	
40218	SUV Tail Windows Open	Adult	09/28/05	207	1.6E-01	35	4.5E-03	1.4E-02	1.2E-01 - 2.1E-01	
40099	SUV Tail Windows Open	Child	09/27/05	123	7.8E-01	57	1.4E-02	4.1E-02	6.2E-01 - 9.7E-01	
40220	SUV Tail Windows Open	Child	09/28/05	207	9.8E-02	21	4.7E-03	1.4E-02	6.6E-02 - 1.4E-01	
40287	SUV Tail Windows Open	Child	09/28/05	120	9.8E-01	36	2.7E-02	8.1E-02	7.3E-01 - 1.3E+00	



Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>SUV Driver/Rider</b>										
40092	SUV Tail Windows Closed	Adult	09/27/05	225	4.0E-02	10	4.0E-03	1.2E-02	2.2E-02 - 6.7E-02	
40148	SUV Tail Windows Closed	Adult	09/27/05	213	9.4E-02	19	5.0E-03	1.5E-02	6.2E-02 - 1.4E-01	
40292	SUV Tail Windows Closed	Adult	09/28/05	207	4.6E-02	10	4.6E-03	1.4E-02	2.5E-02 - 7.9E-02	
40343	SUV Tail Windows Closed	Adult	09/29/05	210	1.1E-01	24	4.7E-03	1.4E-02	7.8E-02 - 1.6E-01	
40387	SUV Tail Windows Closed	Adult	09/29/05	204	4.8E-01	42	1.1E-02	3.4E-02	3.7E-01 - 6.2E-01	
40094	SUV Tail Windows Closed	Child	09/27/05	126	2.2E-01	45	5.0E-03	1.5E-02	1.7E-01 - 2.9E-01	
40150	SUV Tail Windows Closed	Child	09/27/05	216	6.5E-02	13	5.0E-03	1.5E-02	3.8E-02 - 1.0E-01	
40244	SUV Tail Windows Closed	Child	09/28/05	210	4.7E-02	10	4.7E-03	1.4E-02	2.5E-02 - 7.9E-02	
40294	SUV Tail Windows Closed	Child	09/28/05	207	4.6E-02	10	4.6E-03	1.4E-02	2.5E-02 - 7.7E-02	
40345	SUV Tail Windows Closed	Child	09/29/05	213	1.5E-01	32	4.7E-03	1.4E-02	1.1E-01 - 2.0E-01	
40389	SUV Tail Windows Closed	Child	09/29/05	204	4.2E-01	40	1.0E-02	3.1E-02	3.1E-01 - 5.4E-01	
<b>Hiker</b>										
40118	Hiker 1	Adult	09/27/05	204	<4.7E-03	0	4.7E-03	1.4E-02	0.0E+00 - 1.4E-02	(Verified Analysis)
	Hiker 1	Adult	09/27/05	204	<5.0E-03	0	5.0E-03	1.5E-02	0.0E+00 - 1.5E-02	
40172	Hiker 1	Adult	09/27/05	210	4.9E-03	1	4.9E-03	1.5E-02	2.5E-04 - 2.3E-02	
40206	Hiker 1	Adult	09/28/05	207	<4.8E-03	0	4.8E-03	1.4E-02	0.0E+00 - 1.4E-02	
40271	Hiker 1	Adult	09/28/05	207	5.1E-02	11	4.6E-03	1.4E-02	2.9E-02 - 8.4E-02	
40377	Hiker 1	Adult	09/29/05	120	<4.9E-03	0	4.9E-03	1.5E-02	0.0E+00 - 1.5E-02	
40120	Hiker 1	Child	09/27/05	201	1.8E-02	4	4.6E-03	1.4E-02	6.3E-03 - 4.2E-02	
40208	Hiker 1	Child	09/28/05	207	1.4E-02	3	4.7E-03	1.4E-02	3.9E-03 - 3.7E-02	
40273	Hiker 1	Child	09/28/05	210	6.5E-02	17	3.8E-03	1.1E-02	4.2E-02 - 9.8E-02	
40378	Hiker 1	Child	09/29/05	120	4.9E-03	1	4.9E-03	1.5E-02	2.5E-04 - 2.3E-02	
40122	Hiker 2	Adult	09/27/05	210	2.8E-02	6	4.7E-03	1.4E-02	1.2E-02 - 5.6E-02	
40210	Hiker 2	Adult	09/28/05	204	2.8E-02	6	4.7E-03	1.4E-02	1.2E-02 - 5.5E-02	
40275	Hiker 2	Adult	09/28/05	210	2.5E-02	6	4.2E-03	1.3E-02	1.1E-02 - 5.0E-02	
40379	Hiker 2	Adult	09/29/05	207	4.2E-03	1	4.2E-03	1.2E-02	2.1E-04 - 2.0E-02	
40124	Hiker 2	Child	09/27/05	210	3.2E-02	7	4.5E-03	1.4E-02	1.5E-02 - 6.0E-02	
40178	Hiker 2	Child	09/27/05	210	1.4E-02	3	4.6E-03	1.4E-02	3.8E-03 - 3.6E-02	
40212	Hiker 2	Child	09/28/05	204	7.5E-02	16	4.7E-03	1.4E-02	4.7E-02 - 1.1E-01	
40381	Hiker 2	Child	09/29/05	210	2.9E-02	7	4.2E-03	1.2E-02	1.4E-02 - 5.5E-02	

Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>Camper</b>										
40198	Camper 1	Adult	09/28/05	540	8.5E-03	2	4.2E-03	1.3E-02	1.5E-03 - 2.7E-02	
40252	Camper 1	Adult	09/28/05	480	6.5E-01	43	1.5E-02	4.5E-02	5.0E-01 - 8.4E-01	
40369	Camper 1	Adult	09/29/05	480	4.1E-02	11	3.7E-03	1.1E-02	2.3E-02 - 6.8E-02	
40199	Camper 1	Child	09/28/05	540	1.7E-02	4	4.2E-03	1.3E-02	5.8E-03 - 3.9E-02	
40251	Camper 1	Child	09/28/05	480	2.8E-01	46	6.2E-03	1.8E-02	2.2E-01 - 3.6E-01	
40370	Camper 1	Child	09/29/05	480	1.9E-02	5	3.8E-03	1.1E-02	7.6E-03 - 4.0E-02	
40200	Camper 2	Adult	09/28/05	480	4.5E-03	1	4.5E-03	1.3E-02	2.3E-04 - 2.1E-02	
40254	Camper 2	Adult	09/28/05	480	4.1E-02	10	4.1E-03	1.2E-02	2.2E-02 - 7.0E-02	
40371	Camper 2	Adult	09/29/05	480	3.0E-02	7	4.3E-03	1.3E-02	1.4E-02 - 5.6E-02	
40201	Camper 2	Child	09/28/05	480	1.8E-02	4	4.5E-03	1.3E-02	6.1E-03 - 4.1E-02	
40253	Camper 2	Child	09/28/05	480	1.3E-02	3	4.4E-03	1.3E-02	3.6E-03 - 3.4E-02	(Verified Analysis)
	Camper 2	Child	09/28/05	480	1.3E-02	3	4.4E-03	1.3E-02	3.6E-03 - 3.4E-02	
40372	Camper 2	Child	09/29/05	480	4.3E-02	10	4.3E-03	1.3E-02	2.3E-02 - 7.3E-02	
40202	Camper 3	Adult	09/28/05	480	<4.6E-03	0	4.6E-03	1.4E-02	0.0E+00 - 1.4E-02	
40203	Camper 3	Child	09/28/05	480	4.6E-03	1	4.6E-03	1.4E-02	2.4E-04 - 2.2E-02	
40374	Camper 3	Child	09/29/05	480	7.3E-03	2	3.6E-03	1.1E-02	1.3E-03 - 2.3E-02	(Interlab)
	Camper 3	Child	09/29/05	480	1.1E-02	3	3.7E-03	1.1E-02	3.1E-03 - 2.9E-02	
40204	Camper 4	Adult	09/28/05	480	9.0E-03	2	4.5E-03	1.3E-02	1.6E-03 - 2.8E-02	
40375	Camper 4	Adult	09/29/05	480	3.2E-02	7	4.6E-03	1.4E-02	1.5E-02 - 6.0E-02	
40205	Camper 4	Child	09/28/05	480	3.9E-02	9	4.3E-03	1.3E-02	2.0E-02 - 6.8E-02	
40376	Camper 4	Child	09/29/05	480	<4.1E-03	0	4.1E-03	1.2E-02	0.0E+00 - 1.2E-02	
<b>Sleeping Camper</b>										
40190	Sleeper 1		09/27/05	1475.6	<2.9E-04	0	2.9E-04	8.7E-04	0.0E+00 - 8.7E-04	
40192	Sleeper 2		09/27/05	1333.5	<2.9E-04	0	2.9E-04	8.8E-04	0.0E+00 - 8.8E-04	
<b>Powerspray Wash</b>										
40185	Power Wash	Decon	09/27/05	240	<4.8E-03	0	4.8E-03	1.4E-02	0.0E+00 - 1.4E-02	
40328	Power Wash SUV Lead Open Win	Decon	09/28/05	240	2.0E-01	26	7.8E-03	2.3E-02	1.4E-01 - 2.8E-01	
40326	Power Wash SUV Tail Closed Win	Decon	09/28/05	240	5.2E-02	11	4.7E-03	1.4E-02	2.9E-02 - 8.5E-02	

Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>Hose Wash</b>										
40329	Hose SUV Lead Closed Win	Decon	09/28/05	240	1.9E-02	4	4.7E-03	1.4E-02	6.4E-03 - 4.3E-02	(Repreparation)
	Hose SUV Lead Closed Win	Decon	09/28/05	240	3.8E-02	8	4.8E-03	1.4E-02	1.9E-02 - 6.9E-02	
40325	Hose SUV Tail Open Win	Decon	09/28/05	240	1.7E-01	22	7.8E-03	2.3E-02	1.2E-01 - 2.4E-01	
<b>HEPA Vacuum</b>										
40188	Hepa Vac	Decon	09/27/05	240	3.0E-02	6	4.9E-03	1.5E-02	1.3E-02 - 5.8E-02	
40332	Hepa Vac SUV Lead Open Win	Decon	09/28/05	240	7.6E-02	16	4.8E-03	1.4E-02	4.8E-02 - 1.2E-01	
40327	Hepa Vac SUV Tail Closed Win	Decon	09/28/05	240	2.8E-02	6	4.7E-03	1.4E-02	1.2E-02 - 5.6E-02	
<b>Regular Vacuum</b>										
40189	Reg Vac	Decon	09/27/05	240	1.4E-02	3	4.7E-03	1.4E-02	3.8E-03 - 3.6E-02	
40331	Reg Vac SUV Lead Closed Win	Decon	09/28/05	240	1.9E-02	4	4.7E-03	1.4E-02	6.4E-03 - 4.3E-02	
<b>Post Decon Drivers</b>										
40565	CCMA Dan's Car	Adult	09/29/05	210	<4.9E-03	0	4.9E-03	1.5E-02	0.0E+00 - 1.5E-02	
40566	CCMA Dan's Car	Adult	09/29/05	210	<4.9E-03	0	4.9E-03	1.5E-02	0.0E+00 - 1.5E-02	
40334	CCMA to King City SUV TC	Adult	09/28/05	204	9.4E-03	2	4.7E-03	1.4E-02	1.7E-03 - 3.0E-02	TC=Tail Closed Windows
40333	CCMA to King City SUV TC	Child	09/28/05	201	1.4E-02	3	4.7E-03	1.4E-02	3.8E-03 - 3.6E-02	TC=Tail Closed Windows
40337	CCMA to King City SUV TO	Adult	09/28/05	210	4.6E-03	1	4.6E-03	1.4E-02	2.4E-04 - 2.2E-02	TO=Tail Open Windows
40336	CCMA to King City SUV TO	Child	09/28/05	204	4.7E-02	10	4.7E-03	1.4E-02	2.6E-02 - 8.0E-02	TO=Tail Open Windows
40195	Drive BLM to King City	Decon	09/27/05	193.8	1.4E-02	3	4.6E-03	1.4E-02	3.8E-03 - 3.6E-02	Wind up SUV
	Drive BLM to King City	Decon	09/27/05	193.8	1.8E-02	2	9.1E-03	2.7E-02	3.2E-03 - 5.7E-02	Wind up SUV(Verified Analysis)
<b>Fence Builder</b>										
40126	Fence Builder 1	Adult	09/27/05	210	2.8E-02	6	4.7E-03	1.4E-02	1.2E-02 - 5.5E-02	(Repreparation)
40246	Fence Builder 1	Adult	09/28/05	204	2.9E-02	6	4.8E-03	1.4E-02	1.3E-02 - 5.7E-02	
40391	Fence Builder 1	Adult	09/29/05	210	2.0E-02	4	4.9E-03	1.5E-02	6.7E-03 - 4.5E-02	
	Fence Builder 1	Adult	09/29/05	210	<5.0E-03	0	5.0E-03	1.5E-02	0.0E+00 - 1.5E-02	
40128	Fence Builder 2	Adult	09/27/05	204	2.6E-01	33	8.0E-03	2.4E-02	1.9E-01 - 3.5E-01	
40248	Fence Builder 2	Adult	09/28/05	207	2.4E-02	5	4.7E-03	1.4E-02	9.3E-03 - 5.0E-02	
40393	Fence Builder 2	Adult	09/29/05	210	3.0E-02	6	5.0E-03	1.5E-02	1.3E-02 - 6.0E-02	

Table A1

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>Fence Builder</b>										
40130	Fence Builder 3	Adult	09/27/05	210	<4.3E-03	0	4.3E-03	1.3E-02	0.0E+00 - 1.3E-02	
40250	Fence Builder 3	Adult	09/28/05	207	<4.7E-03	0	4.7E-03	1.4E-02	0.0E+00 - 1.4E-02	
40395	Fence Builder 3	Adult	09/29/05	210	4.5E-02	9	5.0E-03	1.5E-02	2.4E-02 - 7.9E-02	
<b>Raking</b>										
40235	Raking	East	09/28/05	600	4.6E-03	1	4.6E-03	1.4E-02	2.4E-04 - 2.2E-02	
40268	Raking	East	09/28/05	600	<4.4E-03	0	4.4E-03	1.3E-02	0.0E+00 - 1.3E-02	
40236	Raking	Personal	09/28/05	480	<4.6E-03	0	4.6E-03	1.4E-02	0.0E+00 - 1.4E-02	
40269	Raking	Personal	09/28/05	480	<4.5E-03	0	4.5E-03	1.4E-02	0.0E+00 - 1.4E-02	
	Raking	Personal	09/28/05	480	4.5E-03	1	4.5E-03	1.4E-02	2.3E-04 - 2.1E-02	(Verified Analysis)
40234	Raking	West	09/28/05	600	<4.4E-03	0	4.4E-03	1.3E-02	0.0E+00 - 1.3E-02	(Repreparation)
<b>Staging Area 2</b>										
40183	Staging Area 2		09/27/05	5040	5.7E-04	2	2.8E-04	8.5E-04	1.0E-04 - 1.8E-03	
40298	Staging Area 2		09/28/05	4800	2.0E-03	8	2.5E-04	7.5E-04	1.0E-03 - 3.6E-03	
	Staging Area 2		09/28/05	4800	2.0E-03	8	2.5E-04	7.5E-04	1.0E-03 - 3.6E-03	(Recount Different)
40407	Staging Area 2		09/29/05	4190	5.4E-03	18	3.0E-04	8.9E-04	3.5E-03 - 8.0E-03	
<b>Staging Area 6</b>										
40299	Staging Area 6		09/28/05	700	1.4E-03	5	2.8E-04	8.3E-04	5.5E-04 - 2.9E-03	
40408	Staging Area 6		09/29/05	900	1.8E-03	6	3.0E-04	9.0E-04	7.9E-04 - 3.6E-03	
<b>Oak Flat</b>										
40182	Oak Flat		09/27/05	4800	8.8E-04	3	2.9E-04	8.7E-04	2.4E-04 - 2.3E-03	
40300	Oak Flat		09/28/05	4680	3.3E-03	13	2.5E-04	7.6E-04	1.9E-03 - 5.2E-03	
40409	Oak Flat		09/29/05	4650	3.4E-03	11	3.1E-04	9.2E-04	1.9E-03 - 5.6E-03	
<b>Section 8</b>										
40181	Section 8		09/27/05	4800	<2.8E-04	0	2.8E-04	8.2E-04	0.0E+00 - 8.3E-04	
	Section 8		09/27/05	4800	<4.2E-04	0	4.2E-04	1.3E-03	0.0E+00 - 1.3E-03	(Verified Analysis)
40297	Section 8		09/28/05	4800	2.7E-04	1	2.7E-04	8.1E-04	1.4E-05 - 1.3E-03	
40406	Section 8		09/29/05	4800	8.7E-04	3	2.9E-04	8.7E-04	2.4E-04 - 2.3E-03	

**Table A1**

Tabulated Results for CCMA Asbestos Air Sampling on September 27 through 29, 2005

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Notes
<b>Quality Control</b>										
40197	Field Blank		09/27/05	0	NA	0	NA	NA	NA	
40338	Field Blank		09/28/05	0	NA	0	NA	NA	NA	

Notes:

ATV = All Terrain Vehicle

Hiker = Hiking Activity

Moto = Motorcycle Activity

SUV = Sports Utility Vehicle

Staging Area = Vehicle Staging Area

Ambient = Ambient Air Sample

Oak Flat = Oak Flat Campground

Lead = Lead vehicle

Middle =Middle vehicle (First Trailing Vehicle)

Tail =Last vehicle (Second Trailing Vehicle)

NA = Not Applicable

PCMe (f/ml)=f/cc (fibers/cubic centimeter)

<X.XE-0X = Less than the analytical sensitivity presented

Sensitivity (S) = Af / (k\*Ag\*V) Where:Af = the area, in square millimeters, of sampling collection filter; Ag = the area, in square millimeters, of TEM specimen grid opening;

k = the number of grid openings examined; V = the volume of air sampled, in liters

Lab Quality Control Sample Results are indicated in the Notes section in parentheses - for Risk Assessment purposes, data from the Field Samples and their respective Recount Different, Repreparation, and Interlab pairs will be averaged while the Verified Analysis results instead of their Field Sample counterpart results will be used for calculations.

Table A2

Samples with Multiple Results

Human Health Risk Assessment

CCMA Asbestos Exposures (September 27 through 29, 2005)

Sample No.	Activity/ Location	Receptor/ Modifier	Date Collected	QC Type	Volume (Liters)	PCMe(asb) (PCMe f/cc)	Number of Structures	Analysis Sensitivity	Detection Limit	90% Confidence Interval (Poisson)	Analysis Date	Rev #	Result (PCMe f/cc)	Action
40109	Moto Lead	Adult	09/27/05	RD	124	9.9E-03	2	5.0E-03	1.5E-02	1.8E-03 - 3.1E-02	03/06/06	0	9.9E-03	Average
	Moto Lead	Adult	09/27/05	Not QC	124	9.9E-03	2	5.0E-03	1.5E-02	1.8E-03 - 3.1E-02	01/30/06	1		
40118	Hiker 1	Adult	09/27/05	VA	204	<5.0E-03	0	5.0E-03	1.5E-02	0.0E+00 - 1.5E-02	04/15/06	0	<5.0E-03	USE VA
	Hiker 1	Adult	09/27/05	Not QC	204	<4.7E-03	0	4.7E-03	1.4E-02	0.0E+00 - 1.4E-02	02/07/06	1		
40181	Section 8	Adult	09/27/05	VA	4800	<4.2E-04	0	4.2E-04	1.3E-03	0.0E+00 - 1.3E-03	04/09/06	0	<4.2E-04	USE VA
	Section 8	Adult	09/27/05	Not QC	4800	<2.8E-04	0	2.8E-04	8.2E-04	0.0E+00 - 8.3E-04	02/02/06	1		
40195	Drive BLM to King City	Adult	09/27/05	VA	193.8	1.8E-02	2	9.1E-03	2.7E-02	3.2E-03 - 5.7E-02	04/15/06	0	1.8E-02	USE VA
	Drive BLM to King City	Adult	09/27/05	Not QC	193.8	1.4E-02	3	4.6E-03	1.4E-02	3.8E-03 - 3.6E-02	02/02/06	2		
40253	Camper 2	Child	09/28/05	VA	480	1.3E-02	3	4.4E-03	1.3E-02	3.6E-03 - 3.4E-02	04/16/06	0	1.3E-02	USE VA
	Camper 2	Child	09/28/05	Not QC	480	1.3E-02	3	4.4E-03	1.3E-02	3.6E-03 - 3.4E-02	02/13/06	0		
40269	Raking	Adult	09/28/05	VA	480	4.5E-03	1	4.5E-03	1.4E-02	2.3E-04 - 2.1E-02	03/15/06	0	4.5E-03	USE VA
	Raking	Adult	09/28/05	Not QC	480	<4.5E-03	0	4.5E-03	1.4E-02	0.0E+00 - 1.4E-02	02/15/06	0		
40298	Staging Area 2	Adult	09/28/05	RD	4800	2.0E-03	8	2.5E-04	7.5E-04	1.0E-03 - 3.6E-03	03/06/06	0	2.0E-03	Average
	Staging Area 2	Adult	09/28/05	Not QC	4800	2.0E-03	8	2.5E-04	7.5E-04	1.0E-03 - 3.6E-03	02/22/06	0		
40329	Hose SUV Lead Closed Win	Adult	09/28/05	RP	240	3.8E-02	8	4.8E-03	1.4E-02	1.9E-02 - 6.9E-02	03/03/06	0	2.8E-02	Average
	Hose SUV Lead Closed Win	Adult	09/28/05	Not QC	240	1.9E-02	4	4.7E-03	1.4E-02	6.4E-03 - 4.3E-02	12/16/05	0		
40374	Camper 3	Child	09/29/05	IL	480	1.1E-02	3	3.7E-03	1.1E-02	3.1E-03 - 2.9E-02	03/13/06	0	9.3E-03	Average
	Camper 3	Child	09/29/05	Not QC	480	7.3E-03	2	3.6E-03	1.1E-02	1.3E-03 - 2.3E-02	02/14/06	1		
40391	Fence Builder 1	Adult	09/29/05	RP	210	<5.0E-03	0	5.0E-03	1.5E-02	0.0E+00 - 1.5E-02	03/09/06	0	1.2E-02	Average
	Fence Builder 1	Adult	09/29/05	Not QC	210	2.0E-02	4	4.9E-03	1.5E-02	6.7E-03 - 4.5E-02	02/03/06	0		

## Notes:

Hiker = Hiking Activity

Moto = Motorcycle Activity

SUV = Sports Utility Vehicle

Lead = Lead vehicle

Tail = Last vehicle (Second Trailing Vehicle)

PCMe (f/ml)=f/cc (fibers/cubic centimeter)

&lt;X.XE-0X = Less than the analytical sensitivity presented

RD = Recount Different

VA = Verified Analysis

RP = Repreparation

IL = Interlab

Sensitivity (S) = Af / (k\*Ag\*V) Where: Af = the area, in square millimeters, of sampling collection filter; Ag = the area, in square millimeters, of TEM specimen grid opening;

k = the number of grid openings examined; V = the volume of air sampled, in liters