APPENDIX F

Air Quality Emissions Inventory

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - AVERAGE ANNUAL EMISSIONS BASED ON 25,000 TONS PER YEAR ORE PRODUCTION

Project Emissions Summary - Average Annual Emissions	Project Emissions (tons/year)						
	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Direct Project Emissions							
All Diesel Engines (stationary, portable, mobile)	84.0	9.5	90.0	3.2	3.2	0.2	14,335
On-Site Road Dust (controlled)	--	--	--	2.8	0.3	--	--
ANFO (blasting)	78.4	--	24.0	0.07	0.01	4.0	--
Fuel Storage Tanks	--	0.01	--	--	--	--	--
Material Handling	--	--	--	10.4	1.6	--	--
Annual Project Emissions (with 75% on-site road dust control)	162.4	9.5	114.0	16.5	5.1	4.2	14,335
Indirect Project Emissions							
Off-Site Road Dust (5 mile section controlled)	--	--	--	46.5	4.7	--	--
Off-Site Mobile Source Tailpipe	22.8	1.9	6.2	1.0	1.0	0.02	401
White Mesa Mill (emissions attributable to the Daneros Mine at average annual mine production)	0.4	0.1	1.4	1.2	0.6	0.1	--

Mine Equipment Combustion Emissions - Average Annual Ore Production				Emissions (lbs/hour)						
Type	Calculation Reference	Horsepower	Operation hours per year	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Surface Equipment										
Four 455 kW Electric Generators	Caterpillar	610	8760 each	13.989	1.603	13.989	0.404	0.404	0.028	2,970.2
One 140 HP Electric Generator	EPA Tier 4i	140	1,000	1.015	0.055	0.117	0.006	0.006	0.002	198.0
Portable Compressor	EPA Nonroad (2010)	375	1,000	2.149	0.331	3.638	0.124	0.124	0.004	307.4
Haul Trucks	www.dieselnet.com	300	38	10.251	0.860	2.646	0.463	0.463	0.003	122.9
Low-Profile Haul Trucks	EPA Nonroad (2010)	150	537	1.224	0.132	1.488	0.073	0.073	0.002	61.5
10-ton Dump Truck	EPA Nonroad (2010)	300	219	1.720	0.265	2.976	0.146	0.146	0.003	122.9
Motor Grader	EPA Nonroad (2010)	175	67	1.003	0.154	1.736	0.085	0.085	0.002	71.7
Water Truck	EPA Nonroad (2010)	250	117	1.433	0.220	2.480	0.083	0.083	0.003	102.5
Tanker Truck	EPA Nonroad (2010)	250	19	1.433	0.220	2.480	0.083	0.083	0.003	102.5
Front End Loaders	EPA Nonroad (2010)	70	1,040	0.571	0.062	0.802	0.046	0.046	0.001	28.7
Dozer	EPA Nonroad (2010)	150	1,040	1.224	0.132	1.488	0.073	0.073	0.002	61.5
Pick-Up Trucks	www.dieselnet.com	250	93	0.093	0.003	0.004	0.000	0.000	0.003	102.5
Underground Equipment										
Low-Profile haul trucks	EPA Nonroad (2010)	150	12,480	1.22	0.13	1.49	0.07	0.07	0.0016	61.5
3.5 cy diesel loaders	EPA Nonroad (2010)	154	7,488	1.26	0.14	1.53	0.07	0.07	0.0017	63.1
Skid steers	EPA Nonroad (2010)	80	2,496	0.65	0.07	0.92	0.05	0.05	0.001	32.8
Diesel Mantrips/Utility Vehicles	EPA Nonroad (2010)	75	11,232	0.61	0.07	0.86	0.05	0.05	0.0009	30.7
Water Truck	EPA Nonroad (2010)	250	500	1.43	0.22	2.48	0.08	0.08	0.0027	102.5
Exploration Long/Short Hole Machines	EPA Nonroad (2010)	75	2,496	0.61	0.07	0.86	0.05	0.05	0.0009	30.7
Development Drills, Jumbos	EPA Nonroad (2010)	400	1,000	3.26	0.35	3.97	0.19	0.19	0.0043	163.9
			Total Emissions (lbs/hr)	45.2	5.1	45.9	2.2	2.2	0.1	4,737
			Daily Emissions (lbs/day)	1083.7	122.0	1102.7	51.9	51.9	1.6	113,699
			Total Emissions (tons/yr)	84.0	9.5	90.0	3.2	3.2	0.2	14,335

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - AVERAGE ANNUAL EMISSIONS BASED ON 25,000 TONS PER YEAR ORE PRODUCTION

Blasting Emissions - ANFO - Average Annual Ore Production			Emissions (tons/year)				
	Calculation Reference	ANFO Usage (tons/year)	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$
	NPI, 1999; WRAP 2006	4000	78.40	24.00	4.00	0.07	0.01

Mine Material Handling Emissions - Average Annual Ore Production			lbs/hour		tons/year	
Emission Type	Emission Source Description	Calculation Reference	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Storage Pile Wind Erosion	Daneros Ore Stockpile #1	AP-42, 13.2.5	0.015	0.002	0.064	0.010
	Bullseye Ore Stockpile #2	AP-42, 13.2.5	0.022	0.003	0.096	0.014
	South Ore Stockpile #3	AP-42, 13.2.5	0.449	0.067	1.966	0.295
	Daneros Development Rock Stockpile #1	AP-42, 13.2.5	0.411	0.062	1.799	0.270
	Bullseye Development Rock Stockpile #2	AP-42, 13.2.5	0.204	0.031	0.895	0.134
	Bullseye Development Rock Stockpile #3	AP-42, 13.2.5	0.122	0.018	0.533	0.080
	South Development Rock Stockpile #4	AP-42, 13.2.5	0.919	0.138	4.026	0.604
	Daneros Topsoil Stockpile #1	AP-42, 13.2.5	0.001	0.0002	0.004	0.001
	Bullseye Topsoil Stockpile #2	AP-42, 13.2.5	0.010	0.002	0.046	0.007
	South Topsoil Stockpile #3	AP-42, 13.2.5	0.020	0.003	0.086	0.013
	South Inert Material Stockpile	AP-42, 13.2.5	0.022	0.003	0.094	0.014
Material Handling	Low Profile Haul Truck Unload	AP-42, 13.2.4	0.024	0.004	0.018	0.003
	Front-end Loader Ore Loading	AP-42, 13.2.4	0.006	0.001	0.005	0.001
	Dozer Material Handling	AP-42, 11.9	0.183	0.026	0.803	0.112
		Total Emissions	2.407	0.359	10.435	1.557

Mine Storage Tank Emissions - Average Annual Ore Production			lbs/hour	tons/year
Emission Type	Emission Source Description	Calculation Reference	VOC	VOC
Storage Tanks	Diesel Storage Tanks	AP-42, 7.1, EPA Tanks 4.0.9D	0.002	0.008

Off-Site Highway Vehicle Tailpipe Vehicles - Average Annual Ore Production				Emissions (lbs/hour)						
Type	Calculation Reference	Horsepower	Operation hours per year	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Haul Trucks	www.dieselnet.com	300	4,317	61.51	5.16	15.87	2.78	2.78	0.019	246
Motor Grader	EPA Nonroad (2010)	175	520	1.00	0.15	1.74	0.08	0.08	0.002	72
Pick-up Trucks/Vans	www.dieselnet.com	250	6,083	2.31	0.07	0.11	0.011	0.011	0.045	38
			Total Emissions (lbs/hr)	64.8	5.4	17.7	2.9	2.9	0.07	356
			Daily Emissions (lbs/day)	1555.8	129.2	425.3	69.0	69.0	1.58	8,545
			Total Emissions (tons/yr)	22.8	1.9	6.2	1.0	1.0	0.02	401

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - AVERAGE ANNUAL EMISSIONS BASED ON 25,000 TONS PER YEAR ORE PRODUCTION

Mine Site Vehicle Dust Emissions from Travelling on Unpaved Roads - Average Annual Ore Production				lbs/hour		tons/year	
Type	Calculation Reference	Horsepower	Vehicle Miles Travelled per year (VMT)	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Haul Trucks	AP-42, 13.2.2	300	563	0.96	0.10	0.16	0.02
Low-Profile Haul Trucks	AP-42, 13.2.2	150	5,367	1.14	0.11	1.31	0.13
Dump Truck	AP-42, 13.2.2	300	2,190	0.13	0.01	0.55	0.06
Pick-Up Trucks	AP-42, 13.2.2	250	3,843	0.09	0.01	0.37	0.04
Motor Grader	AP-42, 13.2.2	175	333	0.02	0.002	0.07	0.01
Water Truck	AP-42, 13.2.2	250	1,167	0.06	0.006	0.26	0.03
Tanker Truck	AP-42, 13.2.2	250	190	0.01	0.001	0.05	0.005
			Total Emissions	2.40	0.24	2.78	0.28

Highway Vehicle Dust Emissions from Off-site Unpaved Roads - Average Annual Ore Production				lbs/hour		tons/year	
Type	Calculation Reference	Horsepower	Vehicle Miles Travelled per year (VMT)	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Haul Trucks	AP-42, 13.2.2	300	9,887	120.04	12.00	20.01	2.00
Pick-Ups/Vans	AP-42, 13.2.2	250	36,089	8.12	0.81	24.99	2.50
Motor Grader	AP-42, 13.2.2	175	1,028	0.49	0.05	1.51	0.15
			Total Emissions	128.64	12.86	46.51	4.65

White Mesa Mill; from Daneros Mine Project Environmental Assessment - Average Annual Ore Production		
Pollutant	Allowable Emissions White Mesa Mill (tons/year)	Mill Emission Attributable to Daneros Ore Supply at Average Mine Life Production (tons/year)
CO	10.5	0.4
HC	4.0	0.1
NO_X	39.6	1.4
PM_{10}	34.1	1.2
$PM_{2.5}$	17.1	0.6
SO_2	2.9	0.1

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - MAXIMUM ANNUAL EMISSIONS BASED ON 72,000 TONS PER YEAR ORE PRODUCTION

Project Emissions Summary - Peak Annual Emissions	Project Emissions (tons/year)						
	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Direct Project Emissions							
All Diesel Engines (stationary, portable, mobile)	85.0	9.6	90.8	3.3	3.3	0.2	14,379
On-Site Road Dust (controlled)	--	--	--	5.5	0.6	--	--
ANFO (blasting)	78.4	--	24.0	0.07	0.01	4.0	--
Fuel Storage Tanks	--	0.01	--	--	--	--	--
Material Handling	--	--	--	10.5	1.6	--	--
Annual Project Emissions (with 75% on-site road dust control)	163.4	9.6	114.8	19.3	5.4	4.2	14,379
Indirect Project Emissions							
Off-Site Road Dust (5 mile section controlled)	--	--	--	84.1	8.4	--	--
Off-Site Mobile Source Tailpipe	64.4	5.4	16.9	2.9	2.9	0.03	900
White Mesa Mill (emissions attributable to the Daneros Mine at peak mine production)	0.7	0.3	2.8	2.4	1.2	0.2	--

Mine Equipment Combustion Emissions - Peak Annual Ore Production				Emissions (lbs/hour)						
Type	Calculation Reference	Horsepower	Operation hours per year	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Surface Equipment										
Four 455 kW Electric Generators	Caterpillar	610	8760 each	13.989	1.603	13.989	0.404	0.404	0.028	2,970.2
One 140 HP Electric Generator	EPA Tier 4i	140	1,000	1.015	0.055	0.117	0.006	0.006	0.002	198.0
Portable Compressor	EPA Nonroad (2010)	375	1,000	2.149	0.331	3.638	0.124	0.124	0.004	307.4
Haul Trucks	www.dieselnet.com	300	108	10.251	0.860	2.646	0.463	0.463	0.003	122.9
Low-Profile Haul Trucks	EPA Nonroad (2010)	150	1,546	1.224	0.132	1.488	0.073	0.073	0.002	61.5
10-ton Dump Truck	EPA Nonroad (2010)	300	219	1.720	0.265	2.976	0.146	0.146	0.003	122.9
Motor Grader	EPA Nonroad (2010)	175	67	1.003	0.154	1.736	0.085	0.085	0.002	71.7
Water Truck	EPA Nonroad (2010)	250	117	1.433	0.220	2.480	0.083	0.083	0.003	102.5
Tanker Truck	EPA Nonroad (2010)	250	19	1.433	0.220	2.480	0.083	0.083	0.003	102.5
Front End Loaders	EPA Nonroad (2010)	70	1,040	0.571	0.062	0.802	0.046	0.046	0.001	28.7
Dozer	EPA Nonroad (2010)	150	1,040	1.224	0.132	1.488	0.073	0.073	0.002	61.5
Pick-Up Trucks	www.dieselnet.com	250	268	0.093	0.003	0.004	0.000	0.000	0.003	102.5
Underground Equipment										
Low-Profile haul trucks	EPA Nonroad (2010)	150	12,480	1.22	0.13	1.49	0.07	0.07	0.0016	61.5
3.5 cy diesel loaders	EPA Nonroad (2010)	154	7,488	1.26	0.14	1.53	0.07	0.07	0.0017	63.1
Skid steers	EPA Nonroad (2010)	80	2,496	0.65	0.07	0.92	0.05	0.05	0.001	32.8
Diesel Mantrips/Utility Vehicles	EPA Nonroad (2010)	75	11,232	0.61	0.07	0.86	0.05	0.05	0.0009	30.7
Water Truck	EPA Nonroad (2010)	250	500	1.43	0.22	2.48	0.08	0.08	0.0027	102.5
Exploration Long/Short Hole Machines	EPA Nonroad (2010)	75	2,496	0.61	0.07	0.86	0.05	0.05	0.0009	30.7
Development Drills, Jumbos	EPA Nonroad (2010)	400	1,000	3.26	0.35	3.97	0.19	0.19	0.0043	163.9
			Total Emissions (lbs/hr)	45.2	5.1	45.9	2.2	2.2	0.1	4,737
			Daily Emissions (lbs/day)	1083.7	122.0	1102.7	51.9	51.9	1.6	113,699
			Total Emissions (tons/yr)	85.0	9.6	90.8	3.3	3.3	0.2	14,379

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - MAXIMUM ANNUAL EMISSIONS BASED ON 72,000 TONS PER YEAR ORE PRODUCTION

Blasting Emissions - ANFO - Peak Annual Ore Production			Emissions (tons/year)				
	Calculation Reference	ANFO Usage (tons/year)	CO	NO_X	SO_2	PM_{10}	$PM_{2.5}$
	NPI, 1999; WRAP 2006	4000	78.4	24	4	0.07	0.01

Mine Material Handling Emissions - Peak Annual Ore Production			lbs/hour		tons/year	
Emission Type	Emission Source Description	Calculation Reference	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Storage Pile Wind Erosion	Daneros Ore Stockpile #1	AP-42, 13.2.5	0.015	0.002	0.064	0.010
	Bullseye Ore Stockpile #2	AP-42, 13.2.5	0.022	0.003	0.096	0.014
	South Ore Stockpile #3	AP-42, 13.2.5	0.449	0.067	1.966	0.295
	Daneros Development Rock Stockpile #1	AP-42, 13.2.5	0.411	0.062	1.799	0.270
	Bullseye Development Rock Stockpile #2	AP-42, 13.2.5	0.204	0.031	0.895	0.134
	Bullseye Development Rock Stockpile #3	AP-42, 13.2.5	0.122	0.018	0.533	0.080
	South Development Rock Stockpile #4	AP-42, 13.2.5	0.919	0.138	4.026	0.604
	Daneros Topsoil Stockpile #1	AP-42, 13.2.5	0.001	0.0002	0.004	0.001
	Bullseye Topsoil Stockpile #2	AP-42, 13.2.5	0.010	0.002	0.046	0.007
	South Topsoil Stockpile #3	AP-42, 13.2.5	0.020	0.003	0.086	0.013
	South Inert Material Stockpile	AP-42, 13.2.5	0.022	0.003	0.094	0.014
Material Handling	Low Profile Haul Truck Unload	AP-42, 13.2.4	0.024	0.004	0.052	0.008
	Front-end Loader Ore Loading	AP-42, 13.2.4	0.006	0.001	0.013	0.002
	Dozer Material Handling	AP-42, 11.9	0.183	0.026	0.803	0.112
		Total Emissions	2.407	0.359	10.477	1.564

Mine Storage Tank Emissions - Peak Annual Ore Production			lbs/hour	tons/year
Emission Type	Emission Source Description	Calculation Reference	VOC	VOC
Storage Tanks	Diesel Storage Tanks	AP-42, 7.1, EPA Tanks 4.0.9D	0.002	0.008

Off-Site Highway Vehicle Tailpipe Vehicles - Peak Annual Ore Production				Emissions (lbs/hour)						
Type	Calculation Reference	Horsepower	Operation hours per year	CO	HC	NO_X	PM_{10}	$PM_{2.5}$	SO_2	CO_2
Haul Trucks	www.dieselnet.com	300	12,432	61.51	5.16	15.87	2.78	2.78	0.019	246
Motor Grader	EPA Nonroad (2010)	175	520	1.00	0.15	1.74	0.08	0.08	0.002	72
Pick-up Trucks/Vans	www.dieselnet.com	250	6,083	2.31	0.07	0.11	0.011	0.011	0.045	38
			Total Emissions (lbs/hr)	64.8	5.4	17.7	2.9	2.9	0.07	356
			Daily Emissions (lbs/day)	1555.8	129.2	425.3	69.0	69.0	1.58	8,545
			Total Emissions (tons/yr)	64.4	5.4	16.9	2.9	2.9	0.03	900

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - MAXIMUM ANNUAL EMISSIONS BASED ON 72,000 TONS PER YEAR ORE PRODUCTION

Mine Site Vehicle Dust Emissions from Travelling on Unpaved Roads - Peak Annual Ore Production				lbs/hour		tons/year	
Type	Calculation Reference	Horsepower	Vehicle Miles Travelled per year (VMT)	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Haul Trucks	AP-42, 13.2.2	300	1,622	0.96	0.10	0.46	0.05
Low-Profile Haul Trucks	AP-42, 13.2.2	150	15,456	3.27	0.33	3.77	0.38
Dump Truck	AP-42, 13.2.2	300	2,190	0.13	0.01	0.55	0.06
Pick-Up Trucks	AP-42, 13.2.2	250	3,843	0.09	0.01	0.37	0.04
Motor Grader	AP-42, 13.2.2	175	333	0.02	0.002	0.07	0.01
Water Truck	AP-42, 13.2.2	250	1,167	0.06	0.006	0.26	0.03
Tanker Truck	AP-42, 13.2.2	250	190	0.01	0.001	0.05	0.005
			Total Emissions	4.53	0.45	5.54	0.55

Highway Vehicle Dust Emissions from Travelling on Off-site Unpaved Roads - Peak Annual Ore Production				lbs/hour		tons/year	
Type	Calculation Reference	Horsepower	Vehicle Miles Travelled per year (VMT)	PM_{10}	$PM_{2.5}$	PM_{10}	$PM_{2.5}$
Haul Trucks	AP-42, 13.2.2	300	28,476	120.04	12.00	57.62	5.76
Pick-Ups/Vans	AP-42, 13.2.2	250	36,089	8.12	0.81	24.99	2.50
Motor Grader	AP-42, 13.2.2	175	1,028	0.49	0.05	1.51	0.15
			Total Emissions	128.64	12.86	84.12	8.41

White Mesa Mill; from Daneros Mine Project Environmental Assessment - Peak Annual Ore Production		
Pollutant	Allowable Emissions White Mesa Mill (tons/year)	Mill Emission Attributable to Daneros Ore Supply at Peak Mine Production (tons/year)
CO	10.5	0.7
HC	4.0	0.3
NO_X	39.6	2.8
PM_{10}	34.1	2.4
$PM_{2.5}$	17.1	1.2
SO_2	2.9	0.2

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - MAXIMUM ANNUAL EMISSIONS BASED ON 72,000 TONS PER YEAR ORE PRODUCTION

Air Emission Calculation References and Assumptions	
1. Mine Equipment Combustion Emissions	
	References:
	Caterpillar Diesel Generator Set Specifications. Caterpillar 2011. www.Cat-ElectricPower.com
	Control of Emissions from New and In-Use Nonroad Compression-Ignition Engines; 40 CFR Part 1039
	Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling - Compression-Ignition, U.S. Environmental Proection Agency,
	NR-009d, EPA-420-R-10-118, July 2010.
	Mandatory Greenhouse Gas Reporting; 40 CFR Part 98, Table C-1.
	Assumptions:
	Mobile and nonroad diesel equipment are a minimum of Tier 2 compliant
	Mobile and nonroad emissions are calculated using hours of operation values for mining equipment based on operational requirements.
	Operation hours assumptions are summarized in Tables A-10 and A-11.
2. Blasting Emissions	
	References:
	Emission Estimation Technique Manual for Explosives Detonation and Firing Ranges. National Pollutant Inventory. March 1999.
	WRAP Fugitive Dust Handbook. Prepared by Countess Environmental. Prepared for the Western Governor's Association. September 2006.
	Assumptions:
	4,000 tons per year ANFO usage
3. Mine Material Handling Emissions	
	References:
	Compilation of Air Pollutant Emission Factors, AP-42, Section 13.2.5. U.S. Environmental Protection Agency, November 2006.
	Compilation of Air Pollutant Emission Factors, AP-42, Section 13.2.4. U.S. Environmental Protection Agency, November 2006.
	Compilation of Air Pollutant Emission Factors, AP-42, Section 11.9. U.S. Environmental Protection Agency, October 1998.
	Assumptions:
	All storage piles are disturbed every day, thus making them subject to wind erosion
	Topsoil handling assumed to be an ongoing activity
4. Mine Storage Tank Emissions	
	Reference:
	Compilation of Air Pollutant Emission Factors, AP-42, Section 7.1. U.S. Environmental Protection Agency, November 2006, EPA Tanks 4.0.9D
5. Off-Site Highway Vehicle Tailpipe Vehicles	
	References:
	Summary of Emission Standards for mobile equipment (www.dieselnet.com/standards), accessed July 2013.
	Exhaust and Crankcase Emission Factors for Nonroad Engine Modeling - Compression-Ignition, U.S. Environmental Proection Agency,
	NR-009d, EPA-420-R-10-118, July 2010.
	Assumptions:
	Pick-up trucks/Vans (10) travel to and from the site daily between the mine and the access point to Highway 95.
	Motor grader travels 2 round trips per week along the unpaved access road.
	Haul truck travel calculated assuming 25 ton truck loads.
	Off-site highway vehicle tailpipe emissions are calculated using hours of operation values based on the expected vehicle miles travelled
	for each vehicle type. The operation hours assumptions are summarized in Tables A-12 and A-13.

ENERGY FUELS RESOURCES (USA) INC; DANEROS MINE PROJECT
PROJECT AIR EMISSIONS - MAXIMUM ANNUAL EMISSIONS BASED ON 72,000 TONS PER YEAR ORE PRODUCTION

Air Emission Calculation References and Assumptions - continued									
6. Vehicle Dust Emissions from Travelling on Unpaved Roads									
	Reference:								
	Compilation of Air Pollutant Emission Factors, AP-42, Section 13.2.2. U.S. Environmental Protection Agency, November 2006.								
	Assumptions:								
	Pick-up trucks/Vans (10) travel to and from the site daily between the mine and the access point to Highway 95.								
	Motor grader travels 2 round trips per week along the unpaved access road.								
	Haul truck travel calculated assuming 25 ton truck loads.								
	Up to 3 haul truck loads may take place per hour. For average annual production, 1,000 loads per year will be required								
	(25,000 tpy/25 tons per load), and for the peak annual production, 2,880 loads per year will be required (72,000 tpy/25 tons per load).								
	On-site unpaved roads controlled 75% with water or surfactant application.								
	Off-site unpaved access road(Radium King Road) is controlled with water or surfactant application over a 5 mile section of the road.								