DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION
Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	**Coeur d'Alene Paving, Inc.**
Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New asphalt production facility (with Permit By Rule crushing operations included).

SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	**Stack ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Point Source(s)													
See separate DEQ spreadsheet specific to HMA and supporting modeling parameter and emissions document.													
Total													

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Facility ID No.:	777-00432
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SUMMARY OF FACILITY WIDE EMISSION RATES FOR CRITERIA POLLUTANTS - FUGITIVE SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	Fugitive ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Fugitive Source(s)													
name of fugitive source1													
name of fugitive source2													
name of fugitive source3	See separate DEQ spreadsheet specific to HMA and supporting modeling parameter and emissions document.												
name of fugitive source4													
name of fugitive source5													
name of fugitive source6													
name of fugitive source7													
name of fugitive source8													
name of fugitive source9													
name of fugitive source10													
name of fugitive source11													
name of fugitive source12													
name of fugitive source13													
name of fugitive source14													
name of fugitive source15													
name of fugitive source16													
name of fugitive source17													
name of fugitive source18													
name of fugitive source19													
name of fugitive source20													
name of fugitive source21													
(insert more rows as needed)													
Total													

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Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New asphalt production facility (with Permit By Rule crushing operations included).

SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - POINT SOURCES

1.	2.	3.											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Emissions units	Stack ID	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr	lb/hr	T/yr
Point Source(s)													
See separate DEQ spreadsheet specific to HMA and supporting modeling parameter and emissions document.													
Total													

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SUMMARY OF EMISSIONS INCREASE (PROPOSED PTE - PREVIOUSLY MODELED PTE) - FUGITIVE SOURCES

1.	2.	3. Air Pollutant Maximum Change in Emissions Rate (lbs/hr or t/yr)											
		PM_{10}		SO_2		NO_X		CO		VOC		Lead	
Fugitive Source Name	**Fugitive ID**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**	**lb/hr**	**T/yr**
Fugitive Source(s)													
See separate DEQ spreadsheet specific to HMA and supporting modeling parameter and emissions document.													
Total													

CURRENT PTC APPLICATION ESTIMATES

DEQ Verification Worksheets: Hot Mix Asphalt (HMA) Drum Mix Facility Data

Facility ID/AIRS No.	777-00432	Spreadsheet Date	6/14/2008 12:00
Permit No.		/ HMA Type: Drum Mix or Batch ?	Drum Mix
		Include Silo Fill & Loadout Emissions?	Y
Facility Owner/Company Name:	Coeur d'Alene Asphalt		
Address:	2492 W. Hwy 53		
City, State, Zip:	Rathdrum, ID 83858		FACWIDE ESTIMATES
Facility Contact:	Phill Weist		
Contact Number/ e-mail:	(208) 762-0235/phillw@cdapaving.com		
Is this HMA facility subject to NSPS? Yes=1,No=0	1	Commenced Operations in:	2008
Use Short Term Source Factor on 586 ELs? Y or N	N	**Use T-RACT on 586 AACC? Y/N**	N

Hot Mix Plant AP-42 Section 11.1)	**Input (Bold Color) or Calculated Value (Black)**	**Fuel Type(s)**	**Fuel Type Toggle ("0" or "1")**
Drum Dryer Make/Model	AIMix 150 tpd 6628 drum mix	#2 Fuel Oil	0
Rated heat input capacity, MMBtu/hr	45.3	Used Oil or RFO4 Oil	0
Drum Dryer Hourly Throughput, Tons/hr	150	Natural Gas	1
Hours of operation per day	24	LPG or Propane	0
Hours of operation per year (=Throughput: Annual/Hourly)	2,000	Exit Gas Volume (acfm)	20,000
		Exit Gas Temperature (°F)	275
Max Throughput (Proposed Limit), T/yr	300,000	Stack Pressure (in Hg)	
Used Oil max sulfur content (Default is 0.5%)	0.50%	Stack Moisture Content, %	

Asphalt Tank Heater AP-42, Section 11.1 (oil or natural gas fuel), or Section 1.4 (natural gas fuel)			
Rated heat input capacity (MMBtu)	0.700	**Fuel Type(s)**	**Fuel Toggle**
Hours of operation per day	24	#2 Fuel Oil	0
Operation, days per year	200		
Max Hours of operation per year (Proposed limit)	4,800	Natural Gas	1
Exit Flow (acfm) or Velocity (fps) FPS	370	Indirect Heat or Power? Y or N	N
Exhaust exit gas temperature (°F)	650		

Tank Heater Fuel Consumption	**#2 Fuel Oil**	**Natural Gas**
Heat Input Rating (MMBtu/hr)	0.000	0.700
Fuel Heating Value, Btu/gal (oil) or Btu/scf (gas)	137,030	1,020
Heating Value Correction for Natural Gas EFs, see Note	n/a	1.000
Theoretical Max Fuel Use Rate gal/hr [oil] or scf/hr [gas]	0.00	686
Max Operational Hours per Year (Proposed Limit)	4,800	4,800

Note: AP-42 EFs for natural gas combustion (Tables 1.4-xx) are based on heat value of 1,020 Btu/scf.
EFs for other fuel heating values must be multiplied by the ratio of the specified heating value to 1,020.

CAUTION: WORKSHEET PRESUMES ONLY ONE SMALL OR ONE LARGE GENERATOR. WILL NOT INCLUDE EMISSIONS FOR TWO GENERATORS

Electrical Generator < 600 hp (447 kW) AP-42 Section 3.3 (diesel fueled)			
		Fuel Type(s)	**Fuel Toggle**
Generator Make/Model	None	#2 Fuel Oil (Diesel)	0
Generator Rated Capacity (kW)	0		
EF OPTIONS:		**Use EFs in lb/MMBtu fuel input**	
1 hp = 0.7456999 kW	0.7457	Calculated Max Fuel Use Rate, gal/hr	0.00
Avg brake-specific fuel consumption (BSFC) = 7000 Btu/hp-hr	7000	Fuel Heating Value, Btu/gal	137,030
		Calculated MMBtu/hr	0.00
		Max Operational Hours/Day	
		Max Operational Hours/Year	

Electrical Generator > 600 hp (447 kW) AP-42 Section 3.4 (diesel or dual fuel)			
		Fuel Type(s)	**Fuel Toggle**
Generator Make/Model	Caterpillar	#2 Fuel Oil (Diesel)	1
Generator Rated Capacity (kW)	725		
FUEL OPTIONS: #2 Fuel Oil (Diesel)			
Max Sulfur weight percent (w/o)	0.05	1 hp = 0.7456999 kW	0.7457
Calculated Max Fuel Use Rate, gal/hr	49.67	Avg BSFC = 7000 Btu/hp-hr	7000
Fuel Heating Value, Btu/gal	137,030		
Calculated MMBtu/hr	6.81		
Max Operational Hours per Day	12		
Max Operational Hours per Year	600		

Note: AP-42 Tables 3.3-x,3.4-x: avg diesel heating value is based on 19,300 Btu/lb with density equal 7.1 lb/gal=> Btu/gal = 137,030

Facility: Coeur d'Alene Asphalt

6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

EMISSION INVENTORY

POUNDS PER HOUR

Maximum Controlled Emissions of Any Pollutant from Drum Mix HMA Plant with Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: **150** Tons/hour **2,000** Hours/year **300,000** Tons/year HMA throughput **24** hrs/day

Maximum emission for each pollutant from any fuel-burning options selected on "Facility Data" worksheet. Fuels Selected = Natural Gas

B. Tank Heater: **0.7000** MMBtu Rat **4,800** Hours/year **24** hrs/day

Maximum emission for each pollutant for heater burning any fuel selected on "Facility Data" worksheet. Fuels Selected = Natural Gas

C. Generator: **49.665671** gal/hour **600** Hours/year Generator>600h #2 Fuel Oil **12** hrs/day

Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C Generator Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Emission Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)
PM (total)	4.95	5.22E-03	6.81E-01	1.66E-01	5.80
PM-10 (total)	3.45	5.22E-03	3.90E-01	1.57E-01	4.00
P.M.-2.5				0.00E+00	0.00
CO	19.50	5.76E-02	5.78E+00	3.79E-01	25.72
NOx	3.90	6.86E-02	2.18E+01		25.75
SO_2	0.51	4.12E-04	3.44E-02		0.54
VOC	4.80	3.77E-03	6.13E-01	6.05E-01	6.02
Lead	9.30E-05	3.43E-07			9.33E-05
HCl [e]					0.00E+00
Dioxins[e]					
2,3,7,8-TCDD					0.00E+00
Total TCDD					0.00E+00
1,2,3,7,8-PeCDD					0.00E+00
Total PeCDD					0.00E+00
1,2,3,4,7,8-HxCDD					0.00E+00
1,2,3,6,7,8-HxCDD					0.00E+00
1,2,3,7,8,9-HxCDD					0.00E+00
Total HxCDD					0.00E+00
1,2,3,4,6,7,8-Hp-CDD					0.00E+00
Total HpCDD					0.00E+00
Octa CDD					0.00E+00
Total PCDD[h]					0.00E+00
Furans[e]					
2,3,7,8-TCDF					0.00E+00
Total TCDF					0.00E+00
1,2,3,7,8-PeCDF					0.00E+00
2,3,4,7,8-PeCDF					0.00E+00
Total PeCDF					0.00E+00
1,2,3,4,7,8-HxCDF					0.00E+00
1,2,3,6,7,8-HxCDF					0.00E+00
2,3,4,6,7,8-HxCDF					0.00E+00
1,2,3,7,8,9-HxCDF					0.00E+00
Total HxCDF					0.00E+00
1,2,3,4,6,7,8-HpCDF					0.00E+00
1,2,3,4,7,8,9-HpCDF					0.00E+00
Total HpCDF					0.00E+00
Octa CDF					0.00E+00
Total PCDF[h]					0.00E+00
Total PCDD/PCDF[h]					0.00E+00
Non-PAH HAPs					
Acetaldehyde[e]			1.17E-05		1.17E-05
Acrolein[e]			5.36E-05		5.36E-05
Benzene[e]	1.34E-02	7.90E-07	3.62E-04	2.08E-04	1.39E-02
1,3-Butadiene[e]					0.00E+00
Ethylbenzene[e]	3.60E-02			2.44E-03	3.84E-02
Formaldehyde[e]	1.06E-01	2.82E-05	3.68E-05	3.01E-03	1.09E-01
Hexane[e]	1.38E-01	1.24E-03		2.76E-03	1.42E-01
Isooctane	6.00E-03			1.69E-05	6.02E-03
Methyl Ethyl Ketone[e]				1.02E-03	1.02E-03
Pentane[e]		1.78E-03			1.78E-03
Propionaldehyde[e]					0.00E+00
Quinone[e]					0.00E+00
Methyl chloroform[e]	7.20E-03				7.20E-03
Toluene[e]	2.25E-02	2.33E-06	1.91E-03	2.44E-03	2.69E-02
Xylene[e]	3.00E-02		1.31E-03	1.22E-02	4.36E-02
Total PAHs	6.42E-03	7.08E-07	3.80E-05	1.68E-03	
POM	1.88E-05	4.29E-09	2.10E-06	3.89E-05	

Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C Generator Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Emission Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)
PAH HAPs					
2-Methylnaphthalene	2.53E-03	9.02E-09		7.36E-04	3.27E-03
3-Methylchloranthrene[e]		6.77E-10			6.77E-10
Acenaphthene	4.79E-05	6.77E-10	2.18E-06	7.12E-05	1.21E-04
Acenaphthylene	2.95E-04	6.77E-10	4.30E-06	4.49E-06	3.03E-04
Anthracene	7.53E-06	9.02E-10	5.73E-07	1.95E-05	2.76E-05
Benzo(a)anthracene[e]	7.19E-06	6.77E-10	2.90E-07	7.09E-06	1.46E-05
Benzo(a)pyrene[e]	3.36E-07	4.51E-10	1.20E-07	2.69E-07	7.24E-07
Benzo(b)fluoranthene[e]	3.42E-06	6.77E-10	5.17E-07	8.87E-07	4.83E-06
Benzo(e)pyrene	3.77E-06			1.74E-06	5.50E-06
Benzo(g,h,i)perylene	1.37E-06	4.51E-10	2.59E-07	2.22E-07	1.85E-06
Benzo(k)fluoranthene[e]	1.40E-06	6.77E-10	1.02E-07	2.57E-07	1.76E-06
Chrysene[e]	6.16E-06	6.77E-10	7.13E-07	3.03E-05	3.72E-05
Dibenzo(a,h)anthracene[e]		4.51E-10	1.61E-07	4.32E-08	2.05E-07
Dichlorobenzene		4.51E-07			4.51E-07
Fluoranthene	2.09E-05	1.13E-09	1.88E-06	1.89E-05	4.17E-05
Fluorene	1.30E-04	1.05E-09	5.97E-06	1.78E-04	3.14E-04
Indeno(1,2,3-cd)pyrene[e]	2.40E-07	6.77E-10	1.93E-07	5.49E-08	4.88E-07
Naphthalene[e]	3.08E-03	2.29E-07	6.06E-95	3.04E-04	3.39E-03
Perylene	3.01E-07			5.18E-06	5.48E-06
Phenanthrene	2.60E-04	6.39E-09	1.90E-05	2.51E-04	5.30E-04
Pyrene	1.85E-05	1.88E-09	1.73E-06	5.58E-05	7.60E-05
Non-HAP Organic Compounds					
Acetone[e]				1.30E-03	1.30E-03
Benzaldehyde					0.00E+00
Butane	1.01E-01	1.44E-03			1.02E-01
Butyraldehyde					0.00E+00
Crotonaldehyde[e]					0.00E+00
Ethylene	1.05E+00			2.45E-02	1.07E+00
Heptane	1.41E+00				1.41E+00
Hexanal					0.00E+00
Isovaleraldehyde					0.00E+00
2-Methyl-1-pentene	6.00E-01				6.00E-01
2-Methyl-2-butene	8.70E-02				8.70E-02
3-Methylpentane	2.85E-02				2.85E-02
1-Pentene	3.30E-01				3.30E-01
n-Pentane	3.15E-02				3.15E-02
Valeraldehyde[e]					0.00E+00
Metals					
Antimony[e]	2.70E-05				2.70E-05
Arsenic[e]	1.92E-05	7.52E-08			1.93E-05
Barium[e]	8.70E-04	3.02E-06			8.73E-04
Beryllium[e]		4.51E-09			4.51E-09
Cadmium[e]	1.40E-05	4.14E-07			1.45E-05
Chromium[e]	8.25E-04	9.61E-07			8.26E-04
Cobalt[e]	3.90E-06	5.76E-08			3.96E-06
Copper[e]	4.65E-04	5.83E-07			4.66E-04
Hexavalent Chromium[e]	1.54E-05				1.54E-05
Manganese[e]	1.16E-03				1.16E-03
Mercury[e]	3.60E-05				3.60E-05
Molybdenum[e]		7.55E-07			7.55E-07
Nickel[e]	2.16E-03				2.16E-03
Phosphorus[e]	4.20E-03				4.20E-03
Silver[e]	7.20E-05				7.20E-05
Selenium[e]	5.25E-05				5.25E-05
Thallium[e]	6.15E-07				6.15E-07
Vanadium[e]		1.58E-06			1.58E-06
Zinc[e]	9.15E-03				9.15E-03

e) IDAPA Toxic Air Pollutant

Pollutants shown in bold text are carcinogens subject to an annual standard. Lb/hr values shown are annual averages.

Pollutants shown in blue text are emitted only when burning Used Oil, but not when burning #2 Fuel Oil or Natural Gas

Facility: Coeur d'Alene Asphalt

6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

EMISSION INVENTORY
POUNDS PER HOUR

Max Emissions of Any Pollutant from Drum Mix HMA Plant: Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: **150** Tons/hour **2,000** Hours/year **300,000** Tons/year HMA throughput **24** hrs/day
Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas

B. Tank Heater: **0.7000** MMBtu Rated **4,800** Hours/year **24** hrs/day
Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas

C. Generator: **49.6656706** gal/hour **600** Hours/year #2 Fuel Oil Generator>600hp **12** hrs/day

Pollutant	A Drum Mix Max Emission Rate for Pollutant (lb/hr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (lb/hr)	C Generator Max Emission Rate for Pollutant (lb/hr)	D Load-out & Silo Filling Emission Rate for Pollutant (lb/hr)	E TOTAL of Max Emission Rates from A, B, C & D (lb/hr)
non-PAH HAPs[e]					
Bromomethane[e]				1.49E-04	1.49E-04
2-Butanone (see Methyl Ethyl Ketone)				0.00E+00	0.00E+00
Carbon disulfide[e]				3.74E-04	3.74E-04
Chloroethane (Ethyl chloride[e])				7.44E-05	7.44E-05
Chloromethane (Methyl chloride[e])				5.14E-04	5.14E-04
Cumene				6.86E-04	6.86E-04
n-Hexane				0.00E+00	0.00E+00
Methylene chloride (Dichloromethane[e])				4.94E-06	4.94E-06
MTBE				0.00E+00	0.00E+00
Styrene[e]				1.44E-04	1.44E-04
Tetrachloroethene (Tetrachloroethylene[e])				4.80E-05	4.80E-05
1,1,1-Trichloroethane (Methyl chloroform[e])				0.00E+00	0.00E+00
Trichloroethene (Trichloroethylene[e])				0.00E+00	0.00E+00
Trichlorofluoromethane				8.11E-06	8.11E-06
m-/p-Xylene[e]				6.21E-03	6.21E-03
o-Xylene[e]				6.03E-03	6.03E-03
Phenol[e,f]				6.03E-04	6.03E-04
Non-HAP Organic Compounds					
Methane				5.16E-01	5.16E-01

e) IDAPA Toxic Air Pollutant

Facility: Coeur d'Alene Asphalt

6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

TAPs EL Screen - ALL SOURCES

586 pollutants are shown in bold/red

Max Emissions of Any Pollutant from Drum Mix HMA Plant with Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: 150 Tons/hour 2,000 Hours/year 300,000 Tons/year HMA throughput

Maximum emission for each pollutant from any fuel-burning option selected on "Facility Data" worksheet

B. Tank Heater: 0.7000 MMBtu Rated 4,800 Hours/year **D. Include all emissions from Load-out/Silo Filling?** Yes

Maximum emission for each pollutant for heater burning any fuel selected on "Facility Data" worksheet **Short Term Source Factor 586 ELs?** 1

C. Generator: 49.665671 gal/hour 600 Hours/year Small or Large Generator using Diesel Fuel

Pollutant	TOTAL of Max Emission Rates from A, B, C & D (lb/hr)	TAPs Screening Emission Limit (EL) Increment[b] (lb/hr)	TAPs Emissions Exceed EL Increment?	Modeled? Meets AAC or AACC?
HCl[e]	0.000	0.05	No	
Dioxins[e]		Toxic Equivalency Factor[c]	Adjusted Emission Rate (lb/hr)	
2,3,7,8-TCDD	0.00E+00	1.0	0.00E+00	
Total TCDD	0.00E+00	n/a		
1,2,3,7,8-PeCDD	0.00E+00	0.5	0.00E+00	
Total PeCDD	0.00E+00	n/a		
1,2,3,4,7,8-HxCDD	0.00E+00	0.1	0.00E+00	
1,2,3,6,7,8-HxCDD	0.00E+00	0.1	0.00E+00	
1,2,3,7,8,9-HxCDD	0.00E+00	0.1	0.00E+00	
Total HxCDD	0.00E+00	n/a		
1,2,3,4,6,7,8-Hp-CDD	0.00E+00	0.01	0.00E+00	
Total HpCDD	0.00E+00	n/a		
Octa CDD	0.00E+00	0.0001	0.00E+00	
Total PCDD[h]	0.00E+00	n/a		
Furans[e]				
2,3,7,8-TCDF	0.00E+00	0.1	0.00E+00	
Total TCDF	0.00E+00	n/a		
1,2,3,7,8-PeCDF	0.00E+00	0.05	0.00E+00	
2,3,4,7,8-PeCDF	0.00E+00	0.5	0.00E+00	
Total PeCDF	0.00E+00	n/a		
1,2,3,4,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
1,2,3,6,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
2,3,4,6,7,8-HxCDF	0.00E+00	0.1	0.00E+00	
1,2,3,7,8,9-HxCDF	0.00E+00	0.1	0.00E+00	
Total HxCDF	0.00E+00	n/a		
1,2,3,4,6,7,8-HpCDF	0.00E+00	0.01	0.00E+00	
1,2,3,4,7,8,9-HpCDF	0.00E+00	0.01	0.00E+00	
Total HpCDF	0.00E+00	n/a		
Octa CDF	0.00E+00	0.0001	0.00E+00	
Total PCDF[h]	0.00E+00	n/a		
Total PCDD/PCDF[h]	0.00E+00	n/a		
TOTAL Dioxin/Furans[c]	Adjusted lb/hr 0.00E+00	TAPs EL for 2,3,7,8 TCDD 1.50E-10	Exceeds TAPs EL? No	Modeled?
Non-PAH HAPs				
Acetaldehyde[e]	1.17E-05	3.00E-03	No	
Acrolein[e]	5.36E-05	0.017	No	
Benzene[e]	1.39E-02	8.00E-04	Exceeds	Y
1,3-Butadiene[e]				
Ethylbenzene[e]	3.84E-02	29	No	
Formaldehyde[e]	1.09E-01	5.10E-04	Exceeds	Y
Hexane[e]	1.42E-01	12	No	
Isooctane	6.02E-03			
Methyl Ethyl Ketone[e]	1.02E-03	39.3	No	
Pentane[e]	1.78E-03	118	No	
Propionaldehyde[e]	0.00E+00	0.0287	No	
Quinone[e]	0.00E+00	0.027	No	
Methyl chloroform[e]	7.20E-03	127	No	
Toluene[e]	2.69E-02	25	No	
Xylene[e]	4.36E-02	29	No	
TOTAL PAH HAPs (lb/hr) =	8.14E-03	9.10E-05	Exceeds	Y

Pollutant	TOTAL of Max Emission Rates from A, B, C & D (lb/hr)	TAPs Screening Emission Limit (EL) Increment[b] (lb/hr)	TAPs Emissions Exceed EL Increment?	Modeled? Meets AAC or AACC?
PAH HAPs				
2-Methylnaphthalene	3.27E-03			
3-Methylchloranthrene[e]	6.77E-10	2.50E-06	No	
Acenaphthene	1.21E-04			
Acenaphthylene	3.03E-04			
Anthracene	2.76E-05			
Benzo(a)anthracene	1.46E-05			see POM
Benzo(a)pyrene[e]	7.24E-07	2.00E-06	No	see POM
Benzo(b)fluoranthene	4.83E-06			see POM
Benzo(e)pyrene	5.50E-06			
Benzo(g,h,i)perylene	1.85E-06			
Benzo(k)fluoranthene	1.76E-06			see POM
Chrysene	3.72E-05			see POM
Dibenzo(a,h)anthracene	2.05E-07			see POM
Dichlorobenzene	4.51E-07			
Fluoranthene	4.17E-05			
Fluorene	3.14E-04			
Indeno(1,2,3-cd)pyrene	4.88E-07			see POM
Naphthalene[e]	3.39E-03	3.33	No	
Perylene	5.48E-06			
Phenanthrene	5.30E-04			
Pyrene	7.60E-05			
PolycyclicOrganicMatter[d,e]	5.97E-05	2.00E-06	Exceeds	Yes
Non-HAP Organic Compounds				
Acetone[e]	1.30E-03	119	No	
Benzaldehyde	0.00E+00			
Butane	1.02E-01			
Butyraldehyde	0.00E+00			
Crotonaldehyde[e]	0.00E+00	0.38	No	
Ethylene	1.07E+00			
Heptane	1.41E+00	109	No	
Hexanal	0.00E+00			
Isovaleraldehyde	0.00E+00			
2-Methyl-1-pentene	6.00E-01			
2-Methyl-2-butene	8.70E-02			
3-Methylpentane	2.85E-02			
1-Pentene	3.30E-01			
n-Pentane[e]	3.15E-02	118	No	
Valeraldehyde (n-Valeraldehyde[e])	0.00E+00	11.7	No	
Metals				
Antimony[e]	2.70E-05	0.033	No	
Arsenic[e]	1.93E-05	1.50E-06	Exceeds	Yes
Barium[e]	8.73E-04	0.033	No	
Beryllium[e]	4.51E-09	2.80E-05	No	
Cadmium[e]	1.45E-05	3.70E-06	Exceeds	Yes
Chromium[e]	8.26E-04	0.033	No	
Cobalt[e]	3.96E-06	0.0033	No	
Copper[e]	4.66E-04	0.013	No	
Hexavalent Chromium[e]	1.54E-05	5.60E-07	Exceeds	Yes
Manganese[e]	1.16E-03	0.067	No	
Mercury[e]	3.60E-05	0.003	No	
Molybdenum[e]	7.55E-07	0.333	No	
Nickel[e]	2.16E-03	2.70E-05	Exceeds	Yes
Phosphorus[e]	4.20E-03	0.007	No	
Silver[e]	7.20E-05	0.007	No	
Selenium[e]	5.25E-05	0.013	No	
Thallium[e]	6.15E-07	0.007	No	
Vanadium[e]	1.58E-06	0.003	No	
Zinc[e]	9.15E-03	0.667	No	

a) Reserved.

b) Toxic Air Pollutants, IDAPA 58.01.01.585 and .586, levels in effect as of January 27, 2006

c) Interim Procedures for Estimating Risks Associated with Exposures to Mixtures of Chlorinated Dibenzo-*p*-dioxins and Dibenzofurans (CDDs and CDFs, 1989 update, EPA/625/3-89/016, March 1989 (Source: Mike Dubois, IDEQ State Office, April 2005)
Plus 1,2,3,7,8 PeCDD,OCDD & OCDF TEFs, Van den Berg, et al, 1998, Environmental Health Perspectives 106, 775. accessed at
n/a = not available. IDAPA 58.01.01.586, TAPs Carcinogenic Increments: Total of adjusted emission rates are treated as a single TAP (2,3,7,8 TCDD)

d) IDAPA 58.01.01.586, Polycyclic Organic Matter: Emissions of PAHs shown in bold shall be considered together as one TAP equivalent in potency to benzo(a)pyrene.

e) IDAPA Toxic Air Pollutant, 58.01.01.585 or .586

Pollutants shown in bold text are carcinogens subject to an annual standard. These lb/hr values are annual averages.

Pollutants shown in blue text are emitted only when burning Used Oil, but not when burning #2 Fuel Oil or Natural Gas

Facility: Coeur d'Alene Asphalt

6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

TAPs EL Screen - ALL SOURCES

Maximum Emissions of Any Pollutant from Drum Mix HMA Plant with Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: **150** Tons/hour **2,000** Hours/year **300,000** Tons/year HMA throughput

Maximum emission for each pollutant from any fuel-burning option selected in "Facility Data" worksheet.

B. Tank Heater: **0.7000** MMBtu Rated **4,800** Hours/year **D. Include all emissions from Load-out/Silo/Storage? Yes**

Maximum emission for each pollutant for heater burning any fuel selected in "Facility Data" worksheet.

C. Generator: 49.6656706 gal/hour 0 Hours/year Small or Large Generator using Diesel Fuel

Pollutant	TOTAL of Max Emission Rates from A, B, C & D (lb/hr)	TAPs Screening Emission Limit (EL) Increment[b] (lb/hr)	TAPs Emissions Exceed EL Increment?	Modeled?
non-PAH HAPs[e]				
Bromomethane (Methyl bromide[e])	1.49E-04	1.27	No	
2-Butanone (see Methyl Ethyl Ketone)				
Carbon disulfide[e]	3.74E-04	2	No	
Chloroethane (Ethyl chloride[e])	7.44E-05	176	No	
Chloromethane (Methyl chloride[e])	5.14E-04	6.867	No	
Cumene[e]	6.86E-04	16.3	No	
n-Hexane[e] (see Hexane[e])				
Methylene chloride (Dichloromethane[e])	4.94E-06	1.60E-03	No	
MTBE	0.00E+00			
Styrene[e]	1.44E-04	6.67	No	
Tetrachloroethene (Tetrachloroethylene[e])	4.80E-05	1.30E-02	No	
1,1,1-Trichloroethane (see Methyl chloroform[e])				
Trichloroethene (Trichloroethylene[e])	0.00E+00	17.93	No	
Trichlorofluoromethane	8.11E-06			
m-/p-Xylene[e] (added into Xylene[e])				
o-Xylene[e] (added into Xylene[e])				
Phenol[e,f]	6.03E-04	1.27	No	
Non-HAP Organic Compounds				
Methane	5.16E-01			

a) For HMA facilities subject to NSPS (40 CFR 60, Subpart I), PTE includes fugitive emissions of PM from load-out, silo filling & storage tank operations.

e) IDAPA Toxic Air Pollutant, 58.01.01.585 or .586

Facility: Coeur d'Alene Asphalt

6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

EMISSION INVENTORY

TONS PER YEAR

Maximum Controlled Emissions of Any Pollutant from Drum Mix HMA Plant with Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: 150 Tons/hour 2,000 Hours/year 300,000 Tons/year HMA throughput 24 hrs/day

Maximum emission for each pollutant from any fuel-burning options selected on "Facility Data" worksheet. Fuels Selected = Natural Gas

B. Tank Heater: 0.7000 MMBtu Rat 4,600 Hours/year 24 hrs/day

Maximum emission for each pollutant for heater burning any fuel selected on "Facility Data" worksheet. Fuels Selected = Natural Gas

C. Generator: 49.66567 gal/hour 600 Hours/year Generator>600hp #2 Fuel Oil 12 hrs/day

Pollutant	A Drum Mix Max Emission Rate for Pollutant (T/yr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (T/yr)	C Generator Max Emission Rate for Pollutant (T/yr)	D Load-out, Silo Filling, & Tank Storage Emission Rate for Pollutant (T/yr)	E TOTAL of Max Emission Rates from A, B, & C (T/yr) Exclude Fugitives from D
PM (total)	4.95	1.25E-02	2.04E-01	1.66E-01	5.17
PM-10 (total)	3.45	1.25E-02	1.17E-01	1.57E-01	3.58
P.M.-2.5					
CO	19.50	1.38E-01	1.74E+00	3.79E-01	21.37
NOx	3.90	1.65E-01	6.53E+00		10.60
SO_2	0.51	9.88E-04	1.03E-02		0.52
VOC	4.80	9.06E-03	1.84E-01	6.05E-01	4.99
Lead	0.00	8.24E-07			9.38E-05
HCl [e]					0.00E+00
Dioxins[e]					
2,3,7,8-TCDD					0.00E+00
Total TCDD					0.00E+00
1,2,3,7,8-PeCDD					0.00E+00
Total PeCDD					0.00E+00
1,2,3,4,7,8-HxCDD					0.00E+00
1,2,3,6,7,8-HxCDD					0.00E+00
1,2,3,7,8,9-HxCDD					0.00E+00
Total HxCDD					0.00E+00
1,2,3,4,6,7,8-Hp-CDD					0.00E+00
Total HpCDD					0.00E+00
Octa CDD					0.00E+00
Total PCDD[n]					0.00E+00
Furans[e]					
2,3,7,8-TCDF					0.00E+00
Total TCDF					0.00E+00
1,2,3,7,8-PeCDF					0.00E+00
2,3,4,7,8-PeCDF					0.00E+00
Total PeCDF					0.00E+00
1,2,3,4,7,8-HxCDF					0.00E+00
1,2,3,6,7,8-HxCDF					0.00E+00
2,3,4,6,7,8-HxCDF					0.00E+00
1,2,3,7,8,9-HxCDF					0.00E+00
Total HxCDF					0.00E+00
1,2,3,4,6,7,8-HpCDF					0.00E+00
1,2,3,4,7,8,9-HpCDF					0.00E+00
Total HpCDF					0.00E+00
Octa CDF					0.00E+00
Total PCDF[n]					0.00E+00
Total PCDD/PCDF[n]					0.00E+00
Non-PAH HAPs					
Acetaldehyde[e]			5.15E-05		5.15E-05
Acrolein[e]			1.61E-05		1.61E-05
Benzene[e]	5.85E-02	3.46E-06	1.58E-03	9.09E-04	6.01E-02
1,3-Butadiene[e]					0.00E+00
Ethylbenzene[e]	3.60E-02			2.44E-03	3.60E-02
Formaldehyde[e]	4.65E-01	1.24E-04	1.61E-04	1.32E-02	4.65E-01
Hexane[e]	1.38E-01	2.96E-03		2.76E-03	1.41E-01
Isooctane	6.00E-03			1.69E-05	6.00E-03
Methyl Ethyl Ketone[e]				1.02E-03	0.00E+00
Pentane[e]		4.28E-03			4.28E-03
Propionaldehyde[e]					0.00E+00
Quinone[e]					0.00E+00
Methyl chloroform[e]	7.20E-03				7.20E-03
Toluene[e]	2.25E-02	5.60E-06	5.74E-04	2.44E-03	2.31E-02
Xylene[e]	3.00E-02		3.94E-04	1.22E-02	3.04E-02
TOTAL Federal HAPs (T/yr)=					**8.28E-01**

Pollutant	A Drum Mix Max Emission Rate for Pollutant (T/yr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (T/yr)	C Generator Max Emission Rate for Pollutant (T/yr)	D Load-out, Silo Filling, & Tank Storage Emission Rate for Pollutant (T/yr)	E TOTAL of Max Emission Rates from A, B, & C (T/yr) Exclude Fugitives from D
PAH HAPs					
2-Methylnaphthalene	1.11E-02	3.95E-08	0.00E+00	3.22E-03	1.11E-02
3-Methylchloranthrene[e]	0.00E+00	2.96E-09	0.00E+00		2.96E-09
Acenaphthene	2.10E-04	2.96E-09	9.56E-06	3.12E-04	2.20E-04
Acenaphthylene	1.29E-03	2.96E-09	1.88E-05	1.97E-05	1.31E-03
Anthracene	3.30E-05	3.95E-09	2.51E-06	8.53E-05	3.55E-05
Benzo(a)anthracene[e]	3.15E-05	2.96E-09	1.27E-06	3.10E-05	3.28E-05
Benzo(a)pyrene[e]	1.47E-06	1.98E-09	5.25E-07	1.18E-06	2.00E-06
Benzo(b)fluoranthene[e]	1.50E-05	2.96E-09	2.27E-06	3.89E-06	1.73E-05
Benzo(e)pyrene	1.65E-05	0.00E+00	0.00E+00	7.61E-06	1.65E-05
Benzo(g,h,i)perylene	6.00E-06	1.98E-09	1.14E-06	9.72E-07	7.14E-06
Benzo(k)fluoranthene[e]	6.15E-06	2.96E-09	4.45E-07	1.13E-06	6.60E-06
Chrysene[e]	2.70E-05	2.96E-09	3.12E-06	1.33E-04	3.01E-05
Dibenzo(a,h)anthracene[e]	0.00E+00	1.98E-09	7.06E-07	1.89E-07	7.08E-07
Dichlorobenzene	0.00E+00	1.98E-06	0.00E+00		1.98E-06
Fluoranthene	9.15E-05	4.94E-09	8.23E-06	8.27E-05	9.97E-05
Fluorene	5.70E-04	4.61E-09	2.61E-05	7.78E-04	5.96E-04
Indeno(1,2,3-cd)pyrene[e]	1.05E-06	2.96E-09	8.45E-07	2.40E-07	1.90E-06
Naphthalene[e]	1.35E-02	1.00E-06	2.65E-94	1.33E-03	1.35E-02
Perylene	1.32E-06	0.00E+00	0.00E+00	2.27E-05	1.32E-06
Phenanthrene	1.14E-03	2.80E-08	8.33E-05	1.10E-03	1.22E-03
Pyrene	8.10E-05	8.24E-09	7.57E-06	2.44E-04	8.86E-05
Non-HAP Organic Compounds					
Acetone[e]				1.30E-03	0.00E+00
Benzaldehyde					0.00E+00
Butane	1.01E-01	3.46E-03			1.04E-01
Butyraldehyde					0.00E+00
Crotonaldehyde[e]					0.00E+00
Ethylene	1.05E+00			2.45E-02	1.05E+00
Heptane	1.41E+00				1.41E+00
Hexanal					0.00E+00
Isovaleraldehyde					0.00E+00
2-Methyl-1-pentene	6.00E-01				6.00E-01
2-Methyl-2-butene	8.70E-02				8.70E-02
3-Methylpentane	2.85E-02				2.85E-02
1-Pentene	3.30E-01				3.30E-01
n-Pentane[e]	3.15E-02				3.15E-02
Valeraldehyde[e]					0.00E+00
Metals					
Antimony[e]	2.70E-05				2.70E-05
Arsenic[e]	8.40E-05	3.29E-07			8.43E-05
Barium[e]	8.70E-04	7.25E-06			8.77E-04
Beryllium[e]		1.98E-08			1.98E-08
Cadmium[e]	6.15E-05	1.81E-06			6.33E-05
Chromium[e]	8.25E-04	2.31E-06			8.27E-04
Cobalt[e]	3.90E-06	1.38E-07			4.04E-06
Copper[e]	4.65E-04	1.40E-06			4.66E-04
Hexavalent Chromium[e]	6.75E-05				6.75E-05
Manganese[e]	1.16E-03				1.16E-03
Mercury[e]	3.60E-05				3.60E-05
Molybdenum[e]		1.81E-06			1.81E-06
Nickel[e]	9.45E-03				9.45E-03
Phosphorus[e]	4.20E-03				4.20E-03
Silver[e]	7.20E-05				7.20E-05
Selenium[e]	5.25E-05				5.25E-05
Thallium[e]	6.15E-07				6.15E-07
Vanadium[e]		3.79E-06			3.79E-06
Zinc[e]	9.15E-03				9.15E-03

e) IDAPA Toxic Air Pollutant

Max Emissions of Any Pollutant from Drum Mix HMA Plant: Fabric Filter, Tank Heater, Generator, Load-out/Silo/Asphalt Storage

A. Drum Mix Plant: 150 Tons/hour 2,000 Hours/year 300,000 Tons/year HMA throughput 24 hrs/day
Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas

B. Tank Heater: 0.7000 MMBtu Rated 4,800 Hours/year 24 hrs/day
Maximum emission for each pollutant from any fuel-burning option selected. Fuels Selected = Natural Gas

C. Generator: 49.6666706 gal/hour 600 Hours/year #2 Fuel Oil Generator>600hp 12 hrs/day

Pollutant	A Drum Mix Max Emission Rate for Pollutant (T/yr)	B Asphalt Tank Heater Max Emission Rate for Pollutant (T/yr)	C Generator Max Emission Rate for Pollutant (T/yr)	D Load-out, Silo Filling, & Tank Storage Emission Rate for Pollutant (T/yr)	E TOTAL of Max Emission Rates from A, B, & C (T/yr) Exclude Fugitives from D
non-PAH HAPs[g]					
Bromomethane[e]				1.49E-04	0.00E+00
2-Butanone (see Methyl Ethyl Ketone)					0.00E+00
Carbon disulfide[e]				3.74E-04	0.00E+00
Chloroethane (Ethyl chloride[e])				7.44E-05	0.00E+00
Chloromethane (Methyl chloride[e])				5.14E-04	0.00E+00
Cumene				6.86E-04	0.00E+00
n-Hexane				0.00E+00	0.00E+00
Methylene chloride (Dichloromethane[e])				4.94E-06	0.00E+00
MTBE					0.00E+00
Styrene[e]				1.44E-04	0.00E+00
Tetrachloroethene (Tetrachloroethylene[e])				4.80E-05	0.00E+00
1,1,1-Trichloroethane (Methyl chloroform[e])				0.00E+00	0.00E+00
Trichloroethene (Trichloroethylene[e])				0.00E+00	0.00E+00
Trichlorofluoromethane				8.11E-06	0.00E+00
m-/p-Xylene[e]				6.21E-03	0.00E+00
o-Xylene[e]				6.03E-03	0.00E+00
Phenol[e,f]				6.03E-04	0.00E+00
Non-HAP Organic Compounds					
Methane				5.16E-01	0.00E+00
POM	8.22E-05	1.88E-08	9.18E-06	1.70E-04	9.14E-05

e) IDAPA Toxic Air Pollutant

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/ Facility ID:** **/ 777-00432**

Natural Gas Fired Drum Mix Asphalt Plant With Fabric Filter AP-42 Section 11.1

Fuel Type Toggle =	1	
Maximum Hourly Throughput	150	Tons/hr
Annual Hours Operating	2,000	hrs/yr
Max Annual Throughput	300,000	Tons/yr (Proposed Throughput Limit)

Pollutant	Emission Factor[a] (lb/ton)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM (total)[b]	0.033	4.95	4.95	1.13
PM-10 (total)[b]	0.023	3.45	3.45	0.79
P.M.-2.5 [b1]	*0.0029*			
CO [c]	0.13	19.5	19.5	
NOx [c]	0.026	3.9	3.9	0.89
SO_2 [c]	0.0034	0.51	0.51	0.12
VOC [d]	0.032	4.8	4.8	
Lead	6.20E-07	9.30E-05	9.30E-05	
HCl [d,e]	No Data			
Dioxins[e]				
-- No EFs for Natural Gas Fuel --				
Furans[e]				
-- No EFs for Natural Gas Fuel --				
Non-PAH HAPs[f]				
Acetaldehyde[e]				
Acrolein[e]				
Benzene[e]	3.90E-04	5.85E-02	5.85E-02	0.0134
1,3-Butadiene[e]				
Ethylbenzene[e]	2.40E-04	3.60E-02	3.60E-02	
Formaldehyde[e]	3.10E-03	4.65E-01	4.65E-01	0.1062
Hexane[e]	9.20E-04	1.38E-01	1.38E-01	
Isooctane	4.00E-05	6.00E-03	6.00E-03	
Methyl Ethyl Ketone[e]				
Pentane[e]				
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]	4.80E-05	7.20E-03	7.20E-03	
Toluene[e]	1.50E-04	2.25E-02	2.25E-02	
Xylene[e]	2.00E-04	3.00E-02	3.00E-02	
Total PAHs				6.42E-03
POM				1.88E-05

Pollutant	Emission Factor[a] (lb/ton)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs[f]				
2-Methylnaphthalene	7.40E-05	1.11E-02	1.11E-02	2.53E-03
3-Methylchloranthrene[e]				
Acenaphthene	1.40E-06	2.10E-04	2.10E-04	4.79E-05
Acenaphthylene	8.60E-06	1.29E-03	1.29E-03	2.95E-04
Anthracene	2.20E-07	3.30E-05	3.30E-05	7.53E-06
Benzo(a)anthracene	2.10E-07	3.15E-05	3.15E-05	7.19E-06
Benzo(a)pyrene[e]	9.80E-09	1.47E-06	1.47E-06	3.36E-07
Benzo(b)fluoranthene	1.00E-07	1.50E-05	1.50E-05	3.42E-06
Benzo(e)pyrene	1.10E-07	1.65E-05	1.65E-05	3.77E-06
Benzo(g,h,I)perylene	4.00E-08	6.00E-06	6.00E-06	1.37E-06
Benzo(k)fluoranthene	4.10E-08	6.15E-06	6.15E-06	1.40E-06
Chrysene	1.80E-07	2.70E-05	2.70E-05	6.16E-06
Dibenzo(a,h)anthracene				
Dichlorobenzene				
Fluoranthene	6.10E-07	9.15E-05	9.15E-05	2.09E-05
Fluorene	3.80E-06	5.70E-04	5.70E-04	1.30E-04
Indeno(1,2,3-cd)pyrene	7.00E-09	1.05E-06	1.05E-06	2.40E-07
Naphthalene[e]	9.00E-05	1.35E-02	1.35E-02	3.08E-03
Perylene	8.80E-09	1.32E-06	1.32E-06	3.01E-07
Phenanthrene	7.60E-06	1.14E-03	1.14E-03	2.60E-04
Pyrene	5.40E-07	8.10E-05	8.10E-05	1.85E-05
Non-HAPs Organic Compounds[f]				
Acetone[e]				
Benzaldehyde				
Butane	6.70E-04	1.01E-01	1.01E-01	
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene	7.00E-03	1.05E+00	1.05E+00	
Heptane	9.40E-03	1.41E+00	1.41E+00	
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene	4.00E-03	6.00E-01	6.00E-01	
2-Methyl-2-butene	5.80E-04	8.70E-02	8.70E-02	
3-Methylpentane	1.90E-04	2.85E-02	2.85E-02	
1-Pentene	2.20E-03	3.30E-01	3.30E-01	
n-Pentane	2.10E-04	3.15E-02	3.15E-02	
Valeraldehyde				
Metals[g]				
Antimony[e]	1.80E-07	2.70E-05	2.70E-05	
Arsenic[e]	5.60E-07	8.40E-05	8.40E-05	1.92E-05
Barium[e]	5.80E-06	8.70E-04	8.70E-04	
Beryllium[e]				
Cadmium[e]	4.10E-07	6.15E-05	6.15E-05	1.40E-05
Chromium[e]	5.50E-06	8.25E-04	8.25E-04	
Cobalt[e]	2.60E-08	3.90E-06	3.90E-06	
Copper[e]	3.10E-06	4.65E-04	4.65E-04	
Hexavalent Chromium[e]	4.50E-07	6.75E-05	6.75E-05	1.54E-05
Manganese[e]	7.70E-06	1.16E-03	1.16E-03	
Mercury[e]	2.40E-07	3.60E-05	3.60E-05	
Molybdenum[e]				
Nickel[e]	6.30E-05	9.45E-03	9.45E-03	2.16E-03
Phosphorus[e]	2.80E-05	4.20E-03	4.20E-03	
Silver[e]	4.80E-07	7.20E-05	7.20E-05	
Selenium[e]	3.50E-07	5.25E-05	5.25E-05	
Thallium[e]	4.10E-09	6.15E-07	6.15E-07	
Vanadium[e]				
Zinc[e]	6.10E-05	9.15E-03	9.15E-03	

a) Emission factors are from AP-42 11.1, Hot Mix Asphalt Plants, 3/04
b) AP-42, Table 11.1-3, Particulate Matter Emission Factors for Drum Mix Hot Asphalt Plants, 3/04, with fabric filter
b1) AP-42, Table 11.1-4, Summary of Particle Size Distribution for Drum Mix Dryers **(Emission Rating Factor E - "Poor")**
c) AP-42, Table 11.1-7, Emission Factors for CO. CO2, NOx, and SO2 from Drum Mix Hot Asphalt Plants, 3/04
d) AP-42, Table 11.1-8, Emission Factors for TOC, Methane, VOC, and HCl from Drum Mix Hot Asphalt Plants, 3/04
e) IDAPA Toxic Air Pollutant
f) AP-42, Table 11.1-10, Emission Factors for Organic Pollutant Emissions from Drum Mix Hot Asphalt Plants, 3/04
g) AP-42, Table 11.1-12, Emission Factors for Metal Emissions from Drum Mix Hot Mix Asphalt Plants, 3/04

Pollutants shown in bold text are carcinogens subject to an annual standard.

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/Facility ID:** **/ 777-00432** **0.000169**

Asphalt Tank Heater - Natural Gas Fired, Estimated Emissions Using AP42 Section 11.1 (Hot Mix Asphalt Plants)

Fuel Type Toggle = 1
Fuel Consumption Rate 686 scf/hr
Proposed Max Hrs Operating 4,800 hrs/yr

Note: CO EF per AP-42 Table 1.4.1 for natural gas combustion in boilers is 84 lb/MMscf, a factor of 10 higher than the factor shown in Table 11.1-13

Pollutant	Emission Factor[a] (lb/scf)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM (total)				
PM-10 (total)				
P.M.-2.5				
CO [c]	8.90E-06	6.11E-03	1.47E-02	3.35E-03
NOx				
SO_2				
VOC				
Lead				
HCl [e]				
Dioxins[e]				
-- No EFs for Natural Gas Fuel --				
Furans[e]				
-- No EFs for Natural Gas Fuel --				
Non-PAH HAPs				
Acetaldehyde[e]				
Acrolein[e]				
Benzene[e]				
1,3-Butadiene[e]				
Ethylbenzene[e]				
Formaldehyde[c,e]	2.60E-08	1.78E-05	4.28E-05	9.78E-06
Hexane[e]				
Isooctane				
Methyl Ethyl Ketone[e]				
Pentane[e]				
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]				
Toluene[e]				
Xylene[e]				

Pollutant	Emission Factor[a] (lb/scf)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs				
2-Methylnaphthalene				
3-Methylchloranthrene[e]				
Acenaphthene				
Acenaphthylene				
Anthracene				
Benzo(a)anthracene				
Benzo(a)pyrene[e]				
Benzo(b)fluoranthene				
Benzo(e)pyrene				
Benzo(g,h,i)perylene				
Benzo(k)fluoranthene				
Chrysene				
Dibenzo(a,h)anthracene				
Dichlorobenzene				
Fluoranthene				
Fluorene				
Indeno(1,2,3-cd)pyrene				
Naphthalene[e]				
Perylene				
Phenanthrene				
Pyrene				
Non-HAPs Organic Compounds				
Acetone[e]				
Benzaldehyde				
Butane				
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene				
Heptane				
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene				
2-Methyl-2-butene				
3-Methylpentane				
1-Pentene				
n-Pentane				
Valeraldehyde				
Metals				
Antimony[e]				
Arsenic[e]				
Barium[e]				
Beryllium[e]				
Cadmium[e]				
Chromium[e]				
Cobalt[e]				
Copper[e]				
Hexavalent Chromium[e]				
Manganese[e]				
Mercury[e]				
Molybdenum[e]				
Nickel[e]				
Phosphorus[e]				
Silver[e]				
Selenium[e]				
Thallium[e]				
Vanadium[e]				
Zinc[e]				

a) Emission factors are from AP-42
b) (reserved)
c) AP-42, Table 11.1-13, Emission Factors for Hot Mix Asphalt Hot Oil Systems, 3/04
d) (reserved)
e) IDAPA Toxic Air Pollutant

Pollutants shown in bold text are carcinogens subject to an annual standard.

DO NOT USE - Emissions to be based on AP-42 1.4 for CO and Formaldehyde, instead, to be more conservative.

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/Facility ID:** **/ 777-00432**

Asphalt Tank Heater - Natural Gas Fired, Estimated Emissions Using AP42 Section 1.4 (Natural Gas Combustion)

Fuel Type Toggle = 1
Fuel Consumption Rate 686 scf/hr
Proposed Max Hrs Operating 4,800 hrs/yr

Note: CO EF per AP-42 Table 1.4.1 for natural gas combustion in boilers is 84 lb/MMscf, a factor of 10 higher than the factor shown in Table 11.1-13

Heating Value Correction: 1.000 applied to Emissions (lb/hr, T/yr) calculations

Pollutant	Emission Factor[a] (lb/MMscf)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM (total)[c]	7.6	5.22E-03	1.25E-02	2.86E-03
PM-10 (total)[c]	7.6	5.22E-03	1.25E-02	2.86E-03
P.M.-2.5				
CO[b]	8.40E+01	5.76E-02	1.38E-01	
NOx[b]	100	6.86E-02	1.65E-01	3.76E-02
SO_2[c]	0.6	4.12E-04	9.88E-04	2.26E-04
VOC[c]	5.5	3.77E-03	9.06E-03	
Lead[c]	5.00E-04	3.43E-07	8.24E-07	
HCl[e]				
Dioxins[e]				
-- No EFs for Natural Gas Fuel --				
Furans[e]				
-- No EFs for Natural Gas Fuel --				
Non-PAH HAPs[f]				
Acetaldehyde[e]				
Acrolein[e]				
Benzene[c1, e]	2.10E-03	1.44E-06	3.46E-06	7.90E-07
1,3-Butadiene[e]				
Ethylbenzene[e]				
Formaldehyde[e]	7.50E-02	5.15E-05	1.24E-04	2.82E-05
Hexane[e]	1.80E+00	1.24E-03	2.96E-03	
Isooctane				
Methyl Ethyl Ketone[e]				
Pentane[c1, e]	2.60E+00	1.78E-03	4.28E-03	
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]				
Toluene[c1, e]	3.40E-03	2.33E-06	5.60E-06	
Xylene[e]				
Total PAHs				7.08E-07
POM				4.29E-09

Pollutant	Emission Factor[a] (lb/MMscf)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs[f]				
2-Methylnaphthalene[c1]	2.40E-05	1.65E-08	3.95E-08	9.02E-09
3-Methylchloranthrene[c1, e]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Acenaphthene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Acenaphthylene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Anthracene[c1]	2.40E-06	1.65E-09	3.95E-09	9.02E-10
Benzo(a)anthracene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Benzo(a)pyrene[c1, e]	1.20E-06	8.24E-10	1.98E-09	4.51E-10
Benzo(b)fluoranthenec[1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Benzo(e)pyrene				
Benzo(g,h,I)perylene[c1]	1.20E-06	8.24E-10	1.98E-09	4.51E-10
Benzo(k)fluoranthene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Chrysene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Dibenzo(a,h)anthracene[c1]	1.20E-06	8.24E-10	1.98E-09	4.51E-10
Dichlorobenzene[c1]	1.20E-03	8.24E-07	1.98E-06	4.51E-07
Fluoranthene[c1]	3.00E-06	2.06E-09	4.94E-09	1.13E-09
Fluorene[c1]	2.80E-06	1.92E-09	4.61E-09	1.05E-09
Indeno(1,2,3-cd)pyrene[c1]	1.80E-06	1.24E-09	2.96E-09	6.77E-10
Naphthalene[c1, e]	6.10E-04	4.19E-07	1.00E-06	2.29E-07
Perylene				
Phenanthrene[c1]	1.70E-05	1.17E-08	2.80E-08	6.39E-09
Pyrene[c1]	5.00E-06	3.43E-09	8.24E-09	1.88E-09
Non-HAPs Organic Compounds[f]				
Acetone[e]				
Benzaldehyde				
Butane[c1]	2.10E+00	1.44E-03	3.46E-03	
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene				
Heptane				
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene				
2-Methyl-2-butene				
3-Methylpentane				
1-Pentene				
n-Pentane				
Valeraldehyde				
Metals[g]				
Antimony[e]				
Arsenic[d,e]	2.00E-04	1.37E-07	3.29E-07	7.52E-08
Barium[d,e]	4.40E-03	3.02E-06	7.25E-06	
Beryllium[e]	1.20E-05	8.24E-09	1.98E-08	4.51E-09
Cadmium[d,e]	1.10E-03	7.55E-07	1.81E-06	4.14E-07
Chromium[d,e]	1.40E-03	9.61E-07	2.31E-06	
Cobalt[d,e]	8.40E-05	5.76E-08	1.38E-07	
Copper[d,e]	8.50E-04	5.83E-07	1.40E-06	
Hexavalent Chromium[e]				
Manganese[d,e]				
Mercury[d,e]				
Molybdenum[d,e]	1.10E-03	7.55E-07	1.81E-06	
Nickel[d,e]				
Phosphorus[e]				
Silver[e]				
Selenium[d,e]				
Thallium[e]				
Vanadium[d,e]	2.30E-03	1.58E-06	3.79E-06	
Zinc[d,e]				

a) Emission factors are from AP-42
b) AP-42, Table 1.4-1, Emission Factors for NOx and CO from Natural Gas Combustion, 7/98
c) AP-42, Table 1.4-2, Emission Factors for Criteria Pollutants and Greenhouse Gases from Natural Gas Combustion, 7/98
c1) AP-42, Table 1.4-3, Emission Factors for Speciated Organic Compounds from Natural Gas Combustion, 7/98
d) AP-42, Table 1.4-4, Emission Factors for Metals from Natural Gas Combustion, 7/98
e) IDAPA Toxic Air Pollutant

Pollutants shown in bold text are carcinogens subject to an annual standard.

Facility: Coeur d'Alene Asphalt
6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

Electrical Generator > 600 hp (447 kW) AP-42 Section 3.4 (diesel fueled, uncontrolled)

Fuel Type Toggle = 1
Fuel Consumption Rate 49.67 gal/hr Max Sulfur % = 0.05
Fuel Heating Value 137,030 Btu/gal
Calculated MMBtu/hr 6.8057 MMBtu/hr
Proposed Max Hrs Operating 600 hrs/yr 12 hrs/day

Nonroad Diesel Sulfur Content
0.50% S pre-2007 0.05% Sulfur after June 2007

Pollutant	Emission Factor[a] (lb/MMBtu)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM [b]	0.1	0.681	2.04E-01	4.66E-02
PM-10 (total) [d]	0.0573	0.390	1.17E-01	2.67E-02
P.M.-2.5		0.000		
CO [b]	0.85	5.785	1.74E+00	
NOx[b]	3.2	21.778	6.53E+00	1.49E+00
SO_2 [b] (total SOx presumed SO2)	0.051	0.034	1.03E-02	2.35E-03
VOC [b] (total TOC--> VOCs)	0.09	0.613	1.84E-01	
Lead				
HCl [e]				
Dioxins[e]				
2,3,7,8-TCDD				
Total TCDD				
1,2,3,7,8-PeCDD				
Total PeCDD				
1,2,3,4,7,8-HxCDD[c]				
1,2,3,6,7,8-HxCDD				
1,2,3,7,8,9-HxCDD[c]				
Total HxCDD				
1,2,3,4,6,7,8-Hp-CDD[c]				
Total HpCDD[c]				
Octa CDD[c]				
Total PCDD[c]				
Furans[e]				
2,3,7,8-TCDF				
Total TCDF[c]				
1,2,3,7,8-PeCDF				
2,3,4,7,8-PeCDF				
Total PeCDF[c]				
1,2,3,4,7,8-HxCDF				
1,2,3,6,7,8-HxCDF				
2,3,4,6,7,8-HxCDF				
1,2,3,7,8,9-HxCDF				
Total HxCDF[c]				
1,2,3,4,6,7,8-HpCDF				
1,2,3,4,7,8,9-HpCDF				
Total HpCDF[c]				
Octa CDF[c]				
Total PCDF[c]				
Total PCDD/PCDF[c]				
Non-PAH HAPs				
Acetaldehyde[c]	2.52E-05	0.000	5.15E-05	1.17E-05
Acrolein[c]	7.88E-06	0.000	1.61E-05	
Benzene[c,e]	7.76E-04	0.005	1.58E-03	3.62E-04
1,3-Butadiene[c,e]				
Ethylbenzene[e]				
Formaldehyde[c,e]	7.89E-05	0.001	1.61E-04	3.68E-05
Hexane[e]				
Isooctane				
Methyl Ethyl Ketone[e]				
Pentane[e]				
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]				
Toluene[c,e]	2.81E-04	0.002	5.74E-04	
Xylene[c,e]	1.93E-04	0.001	3.94E-04	
Total PAHs				3.80E-05
POM				2.10E-06

Pollutant	Emission Factor[a] (lb/MMBtu)	Emissions (lb/hr)	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs				
2-Methylnaphthalene				
3-Methylchloranthrene[e]				
Acenaphthene[c1]	4.68E-06	3.19E-05	9.56E-06	2.18E-06
Acenaphthylene[c1]	9.23E-06	6.28E-05	1.88E-05	4.30E-06
Anthracene[c1]	1.23E-06	8.37E-06	2.51E-06	5.73E-07
Benzo(a)anthracene[c1]	6.22E-07	4.23E-06	1.27E-06	2.90E-07
Benzo(a)pyrene[c1,e]	2.57E-07	1.75E-06	5.25E-07	1.20E-07
Benzo(b)fluoranthene[c1]	1.11E-06	7.55E-06	2.27E-06	5.17E-07
Benzo(e)pyrene				
Benzo(g,h,I)perylene[c1]	5.56E-07	3.78E-06	1.14E-06	2.59E-07
Benzo(k)fluoranthene[c1]	2.18E-07	1.48E-06	4.45E-07	1.02E-07
Chrysene[c1]	1.53E-06	1.04E-05	3.12E-06	7.13E-07
Dibenzo(a,h)anthracene[c1]	3.46E-07	2.35E-06	7.06E-07	1.61E-07
Dichlorobenzene				
Fluoranthene[c1]	4.03E-06	2.74E-05	8.23E-06	1.88E-06
Fluorene[c1]	1.28E-05	8.71E-05	2.61E-05	5.97E-06
Indeno(1,2,3-cd)pyrene[c1]	4.14E-07	2.82E-06	8.45E-07	1.93E-07
Naphthalene[c1,e]	1.30E-94	8.85E-94	2.65E-94	6.06E-95
Perylene				
Phenanthrene[c1]	4.08E-05	2.78E-04	8.33E-05	1.90E-05
Pyrene[c1]	3.71E-06	2.52E-05	7.57E-06	1.73E-06
Non-HAP Organic Compounds				
Acetone[e]				
Benzaldehyde				
Butane				
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene				
Heptane				
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene				
2-Methyl-2-butene				
3-Methylpentane				
1-Pentene				
n-Pentane				
Valeraldehyde				
Metals				
Antimony[e]				
Arsenic[e]				
Barium[e]				
Beryllium[e]				
Cadmium[e]				
Chromium[e]				
Cobalt[e]				
Copper[e]				
Hexavalent Chromium[e]				
Manganese[e]				
Mercury[e]				
Molybdenum[e]				
Nickel[e]				
Phosphorus[e]				
Silver[e]				
Selenium[e]				
Thallium[e]				
Vanadium[e]				
Zinc[e]				

a) Emission factors are from AP-42
b) AP-42, Table 3.4-1, Gaseous Emission Factors for Large Stationary Diesel and All Stationary Dual Fuel Engines, 10/96
c) AP-42, Table 3.4-3, Speciated Organic Compound Emission Factors for Large Uncontrolled Stationary Diesel Engines, Emission Factor Rating E, 10/96
c1) AP-42, Table 3.4-4, PAH Emission Factors for Large Uncontrolled Stationary Diesel Engines, Emission Factor Rating E, 10/96
d) AP-42, Table 3.4-2, Particulate and Particle-Sizing Emission Factors for Large Uncontrolled Stationary Diesel Engines, Emission Factor Rating E, 10/96
e) IDAPA Toxic Air Pollutant

Pollutants shown in bold text are carcinogens subject to an annual standard.

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/Facility ID:** **/ 777-00432**

Load-out Operations AP-42 Section 11.1

Emissions Toggle = 1
Hourly Throughput 150 T/hr
Annual Hours Operating 2,000 hrs/yr
Max Annual Throughput 300,000 Tons/yr (Proposed HMA Throughput Limit)

Pollutant	Emission Factor[a] Loadout (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM (total)[b]	5.22E-04	0.078	0.078	0.018
PM-10 (total)[b]	5.22E-04	0.078	0.078	0.018
P.M.-2.5[b]				
CO[b]	1.35E-03	0.202	0.202	
NOx				
SO_2				
VOC[d,g]	3.91E-03	0.586	0.586	
Lead				
HCl[d,e]	No Data			
Dioxins[e]				
2,3,7,8-TCDD				
Total TCDD				
1,2,3,7,8-PeCDD				
Total PeCDD				
1,2,3,4,7,8-HxCDD				
1,2,3,6,7,8-HxCDD				
1,2,3,7,8,9-HxCDD				
Total HxCDD				
1,2,3,4,6,7,8-Hp-CDD				
Total HpCDD				
Octa CDD				
Total PCDD[h]				
Furans[e]				
2,3,7,8-TCDF				
Total TCDF				
1,2,3,7,8-PeCDF				
2,3,4,7,8-PeCDF				
Total PeCDF				
1,2,3,4,7,8-HxCDF				
1,2,3,6,7,8-HxCDF				
2,3,4,6,7,8-HxCDF				
1,2,3,7,8,9-HxCDF				
Total HxCDF				
1,2,3,4,6,7,8-HpCDF				
1,2,3,4,7,8,9-HpCDF				
Total HpCDF				
Octa CDF				
Total PCDF[h]				
Total PCDD/PCDF[h]				
Non-PAH HAPs				
Acetaldehyde[e]				
Acrolein[e]				
Benzene[e]	2.16E-06	3.24E-04	3.24E-04	7.41E-05
1,3-Butadiene[e]				
Ethylbenzene[e]	1.16E-05	1.75E-03	1.75E-03	
Formaldehyde[e]	3.66E-06	5.49E-04	5.49E-04	1.25E-04
Hexane[e]	6.24E-06	9.36E-04	9.36E-04	
Isooctane	7.49E-08	1.12E-05	1.12E-05	
Methyl Ethyl Ketone[e]	2.04E-06	3.06E-04	3.06E-04	
Pentane[e]				
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]		0.00E+00	0.00E+00	
Toluene[e]	8.73E-06	1.31E-03	1.31E-03	
Xylene[e]	5.03E-05	7.55E-03	7.55E-03	
Total PAHs				6.93E-04
POM				1.58E-05

Pollutant	Emission Factor[a] Loadout (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs[f]				
2-Methylnaphthalene	8.11E-06	1.22E-03	1.22E-03	2.78E-04
3-Methylchloranthrene[e]				
Acenaphthene	8.86E-07	1.33E-04	1.33E-04	3.04E-05
Acenaphthylene	9.55E-08	1.43E-05	1.43E-05	3.27E-06
Anthracene	2.39E-07	3.58E-05	3.58E-05	8.17E-06
Benzo(a)anthracene	6.48E-08	9.72E-06	9.72E-06	2.22E-06
Benzo(a)pyrene[e]	7.84E-09	1.18E-06	1.18E-06	2.69E-07
Benzo(b)fluoranthene	2.59E-08	3.89E-06	3.89E-06	8.87E-07
Benzo(e)pyrene	2.66E-08	3.99E-06	3.99E-06	9.11E-07
Benzo(g,h,i)perylene	6.48E-09	9.72E-07	9.72E-07	2.22E-07
Benzo(k)fluoranthene	7.50E-09	1.13E-06	1.13E-06	2.57E-07
Chrysene	3.51E-07	5.27E-05	5.27E-05	1.20E-05
Dibenzo(a,h)anthracene	1.26E-09	1.89E-07	1.89E-07	4.32E-08
Dichlorobenzene				
Fluoranthene	1.70E-07	2.56E-05	2.56E-05	5.84E-06
Fluorene	2.63E-06	3.94E-04	3.94E-04	8.99E-05
Indeno(1,2,3-cd)pyrene	1.60E-09	2.40E-07	2.40E-07	5.49E-08
Naphthalene[e]	4.26E-06	6.39E-04	6.39E-04	1.46E-04
Perylene	7.50E-08	1.13E-05	1.13E-05	2.57E-06
Phenanthrene	2.76E-06	4.14E-04	4.14E-04	9.46E-05
Pyrene	5.11E-07	7.67E-05	7.67E-05	1.75E-05
Non-HAP Organic Compounds				
Acetone[e]	1.95E-06	2.92E-04	2.92E-04	6.67E-05
Benzaldehyde				
Butane				
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene	2.95E-05	4.43E-03	4.43E-03	1.01E-03
Heptane				
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene				
2-Methyl-2-butene				
3-Methylpentane				
1-Pentene				
n-Pentane				
Valeraldehyde				
Metals				
Antimony[e]				
Arsenic[e]				
Barium[e]				
Beryllium[e]				
Cadmium[e]				
Chromium[e]				
Cobalt[e]				
Copper[e]				
Hexavalent Chromium[e]				
Manganese[e]				
Mercury[e]				
Molybdenum[e]				
Nickel[e]				
Phosphorus[e]				
Silver[e]				
Selenium[e]				
Thallium[e]				
Vanadium[e]				
Zinc[e]				

a) Emission factors are from AP-42 11.1, Hot Mix Asphalt Plants, 3/04
b) AP-42, Table 11.1-14, Predictive Emission Factor Equations for Load-Out and Silo Filling Operations, 3/04 Defaults: (-V) = 0.5 T (°F) = 325

		LOADOUT	SILO FILL
Total PM EF = $0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)} + 0.000332+0.00105(-V)e^{((0.0251)(T+}$	=	5.219E-04	5.859E-04 (split addends)
Organic PM EF = $0.00141(-V)e^{((0.0251)(T+460)-20.43)} + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$	=	3.409E-04	2.539E-04 (split addends)
TOC PM EF = $0.0172(-V)e^{((0.0251)(T+460)-20.43)} + 0.0504(-V)e^{((0.0251)(T+460)-20.43)}$	=	4.159E-03	1.219E-02 (split addends)
CO PM EF = $0.00558(-V)e^{((0.0251)(T+460)-20.43)} + 0.00488(-V)e^{((0.0251)(T+460)-20.43)}$	=	1.349E-03	1.180E-03 (split addends)

e) IDAPA Toxic Air Pollutant
f) AP-42, Table 11.1-15, Speciation Profiles for Load-out, Silo Filling, & Asphalt Storage--Organic Particulate-Based Compounds, 3/04 (EF=Spec% * Organic PM EF)
g) AP-42, Table 11.1-16, Speciation Profiles for Load-out, Silo Filling, &Asphalt Storage--Organic Volatile-Based Compounds, 3/04, (EF=Spec% * TOC PM EF)

Pollutants shown in bold text are carcinogens subject to an annual standard.

Pollutants shown in blue text are organic volatile-based compounds, EF = Spec% x TOC PM EF.

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/Facility ID: /** **777-00432**

Load-out Operations AP-42 Section 11.1, Page 2

Fuel Type Toggle =	0	
Hourly Throughput	150	T/hr
Annual Hours Operating	2,000	hrs/yr
Max Annual Throughput	300,000	Tons/yr (Proposed HMA Throughput Limit)

Pollutant	Emission Factor[a] Loadout (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
non-PAH HAPs[g]				
Bromomethane[e]	3.99E-07	5.99E-05	5.99E-05	
2-Butanone (see Methyl Ethyl Ketone)				
Carbon disulfide[e]	5.41E-07	8.11E-05	8.11E-05	
Chloroethane (Ethyl chloride[e])	8.73E-09	1.31E-06	1.31E-06	
Chloromethane (Methyl chloride[e])	6.24E-07	9.36E-05	9.36E-05	
Cumene[e]	4.57E-06	6.86E-04	6.86E-04	
n-Hexane (see Hexane[e])				
Methylene chloride (Dichloromethane[e])	0.00E+00	0.00E+00	0.00E+00	
MTBE	0.00E+00	0.00E+00	0.00E+00	
Styrene[e]	3.04E-07	4.55E-05	4.55E-05	
Tetrachloroethene (Tetrachloroethylene[e])	3.20E-07	4.80E-05	4.80E-05	
1,1,1-Trichloroethane (Methyl chloroform[e])	0.00E+00	0.00E+00	0.00E+00	
Trichloroethene (Trichloroethylene[e])	0.00E+00	0.00E+00	0.00E+00	
Trichlorofluoromethane	5.41E-08	8.11E-06	8.11E-06	
m-/p-Xylene[e] (added into Xylene[e])	1.71E-05	2.56E-03	2.56E-03	
o-Xylene[e] (added into Xylene[e])	3.33E-05	4.99E-03	4.99E-03	
Phenol[e,f]	4.02E-06	6.03E-04	6.03E-04	
Non-HAP Organic Compounds				
Methane	2.70E-04	4.05E-02	4.05E-02	

Pollutants shown in blue text are organic volatile-based compounds, EF = Spec% x TOC PM EF.

Facility: Coeur d'Alene Asphalt
6/14/2008 12:00 **Permit/Facility ID:** / 777-00432

Silo Filling Operations AP-42 Section 11.1

Emissions Toggle = 1
Hourly Throughput 150 T/hr
Annual Hours Operating 2,000 hrs/yr
Max Annual Throughput 300,000 Tons/yr (Proposed HMA Throughput Limit)

Pollutant	Emission Factor[a] Silo Fill (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PM (total)[b]	5.86E-04	0.088	0.088	0.020
PM-10 (total)[b]	5.22E-04	0.078	0.078	0.018
P.M.-2.5[b]				
CO[b]	1.18E-03	0.177	0.177	
NOx				
SO_2				
VOC[d,g]	1.22E-04	1.83E-02	0.0183	
Lead				
HCl[d,e]	No Data			
Dioxins[e]				
2,3,7,8-TCDD				
Total TCDD				
1,2,3,7,8-PeCDD				
Total PeCDD				
1,2,3,4,7,8-HxCDD				
1,2,3,6,7,8-HxCDD				
1,2,3,7,8,9-HxCDD				
Total HxCDD				
1,2,3,4,6,7,8-Hp-CDD				
Total HpCDD				
Octa CDD				
Total PCDD[h]				
Furans[e]				
2,3,7,8-TCDF				
Total TCDF				
1,2,3,7,8-PeCDF				
2,3,4,7,8-PeCDF				
Total PeCDF				
1,2,3,4,7,8-HxCDF				
1,2,3,6,7,8-HxCDF				
2,3,4,6,7,8-HxCDF				
1,2,3,7,8,9-HxCDF				
Total HxCDF				
1,2,3,4,6,7,8-HpCDF				
1,2,3,4,7,8,9-HpCDF				
Total HpCDF				
Octa CDF				
Total PCDF[h]				
Total PCDD/PCDF[h]				
Non-PAH HAPs				
Acetaldehyde[e]				
Acrolein[e]				
Benzene[e]	3.90E-06	5.85E-04	0.0006	0.0001
1,3-Butadiene[e]				
Ethylbenzene[e]	4.63E-06	6.95E-04	0.0007	
Formaldehyde[e]	8.41E-05	1.26E-02	0.0126	0.0029
Hexane[e]	1.22E-05	1.83E-03	0.0018	
Isooctane	3.78E-08	5.67E-06	0.0000	
Methyl Ethyl Ketone[e]	4.75E-06	7.13E-04	0.0007	
Pentane[e]				
Propionaldehyde[e]				
Quinone[e]				
Methyl chloroform[e]		0.00E+00	0.0000	
Toluene[e]	7.56E-06	1.13E-03	0.0011	
Xylene[e]	3.13E-05	4.70E-03	0.0047	
Total PAHs				9.92E-04
POM				2.31E-05

Pollutant	Emission Factor[a] Silo Fill (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
PAH HAPs[f]				
2-Methylnaphthalene	1.34E-05	2.01E-03	2.01E-03	4.58E-04
3-Methylchloranthrene[e]				
Acenaphthene	1.19E-06	1.79E-04	1.79E-04	4.09E-05
Acenaphthylene	3.55E-08	5.33E-06	5.33E-06	1.22E-06
Anthracene	3.30E-07	4.95E-05	4.95E-05	1.13E-05
Benzo(a)anthracene	1.42E-07	2.13E-05	2.13E-05	4.87E-06
Benzo(a)pyrene[e]	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo(b)fluoranthene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo(e)pyrene	2.41E-08	3.62E-06	3.62E-06	8.26E-07
Benzo(g,h,I)perylene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Benzo(k)fluoranthene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chrysene	5.33E-07	8.00E-05	8.00E-05	1.83E-05
Dibenzo(a,h)anthracene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Dichlorobenzene				
Fluoranthene	3.81E-07	5.71E-05	5.71E-05	1.30E-05
Fluorene	2.56E-06	3.85E-04	3.85E-04	8.78E-05
Indeno(1,2,3-cd)pyrene	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Naphthalene[e]	4.62E-06	6.93E-04	6.93E-04	1.58E-04
Perylene	7.62E-08	1.14E-05	1.14E-05	2.61E-06
Phenanthrene	4.57E-06	6.86E-04	6.86E-04	1.57E-04
Pyrene	1.12E-06	1.68E-04	1.68E-04	3.83E-05
Non-HAP Organic Compounds				
Acetone[e]	6.70E-06	1.01E-03	0.0010	
Benzaldehyde				
Butane				
Butyraldehyde				
Crotonaldehyde[e]				
Ethylene	1.34E-04	2.01E-02	0.0201	
Heptane				
Hexanal				
Isovaleraldehyde				
2-Methyl-1-pentene				
2-Methyl-2-butene				
3-Methylpentane				
1-Pentene				
n-Pentane				
Valeraldehyde				
Metals				
Antimony[e]				
Arsenic[e]				
Barium[e]				
Beryllium[e]				
Cadmium[e]				
Chromium[e]				
Cobalt[e]				
Copper[e]				
Hexavalent Chromium[e]				
Manganese[e]				
Mercury[e]				
Molybdenum[e]				
Nickel[e]				
Phosphorus[e]				
Silver[e]				
Selenium[e]				
Thallium[e]				
Vanadium[e]				
Zinc[e]				

a) Emission factors are from AP-42 11.1, Hot Mix Asphalt Plants, 3/04
b) AP-42, Table 11.1-14, Predictive Emission Factor Equations for Load-Out and Silo Filling Operations, 3/04 Defaults: (-V) = 0.5 T (°F) = 325

		LOADOUT	SILO FILL	
Total PM EF = $0.000181+0.00141(-V)e^{((0.0251)(T+460)-20.43)} + 0.000332+0.00105(-V)e^{((0.0251)(T+}$	=	5.219E-04	5.859E-04	(split addends)
Organic PM EF = $0.00141(-V)e^{((0.0251)(T+460)-20.43)} + 0.00105(-V)e^{((0.0251)(T+460)-20.43)}$	=	3.409E-04	2.539E-04	(split addends)
TOC PM EF = $0.0172(-V)e^{((0.0251)(T+460)-20.43)} + 0.0504(-V)e^{((0.0251)(T+460)-20.43)}$	=	4.159E-03	1.219E-02	(split addends)
CO PM EF = $0.00558(-V)e^{((0.0251)(T+460)-20.43)} + 0.00488(-V)e^{((0.0251)(T+460)-20.43)}$	=	1.349E-03	1.180E-03	(split addends)

e) IDAPA Toxic Air Pollutant
f) AP-42, Table 11.1-15, Speciation Profiles for Load-out, Silo Filling, & Asphalt Storage--Organic Particulate-Based Compounds, 3/04 (EF=Spec% * Organic PM EF)
g) AP-42, Table 11.1-16, Speciation Profiles for Load-out, Silo Filling, &Asphalt Storage--Organic Volatile-Based Compounds, 3/04, (EF=Spec% * TOC PM EF)

Pollutants shown in bold text are carcinogens subject to an annual standard. These lb/hr values are annual averages.

Pollutants shown in blue text are organic volatile-based compounds, EF = Spec% x TOC PM EF.

Facility: **Coeur d'Alene Asphalt**
6/14/2008 12:00 **Permit/Facility ID: /** **777-00432**

Silo Filling Operations AP-42 Section 11.1, Page 2

Fuel Type Toggle =	0	
Hourly Throughput	150	T/hr
Annual Hours Operating	2,000	hrs/yr
Max Annual Throughput	0	Tons/yr Theoretical Max HMA at Max Hours
Max Annual Throughput	300,000	Tons/yr (Proposed HMA Throughput Limit)

Pollutant	Emission Factor[a] Silo Fill (lb/ton)	Emissions (lb/hr) 1-hr Average	Emissions (T/yr)	Emissions (lb/hr) Annual Average
non-PAH HAPs[g]				
Bromomethane[e]	5.97E-07	8.96E-05	0.0001	
2-Butanone (see Methyl Ethyl Ketone)				
Carbon disulfide[e]	1.95E-06	2.92E-04	0.0003	
Chloroethane (Ethyl chloride[e])	4.87E-07	7.31E-05	0.0001	
Chloromethane (Methyl chloride[e])	2.80E-06	4.20E-04	0.0004	
Cumene[e]	0.00E+00	0.00E+00	0.0000	
n-Hexane (see Hexane[e])				
Methylene chloride (Dichloromethane[e])	3.29E-08	4.94E-06	0.0000	
MTBE	0.00E+00	0.00E+00	0.0000	
Styrene[e]	6.58E-07	9.87E-05	0.0001	
Tetrachloroethene (Tetrachloroethylene[e])	0.00E+00	0.00E+00	0.0000	
1,1,1-Trichloroethane (Methyl chloroform[e])	0.00E+00	0.00E+00	0.0000	
Trichloroethene (Trichloroethylene[e])	0.00E+00	0.00E+00	0.0000	
Trichlorofluoromethane	0.00E+00	0.00E+00	0.0000	
m-/p-Xylene[e] (added into Xylene[e])	2.44E-05	3.66E-03	0.0037	
o-Xylene[e] (added into Xylene[e])	6.95E-06	1.04E-03	0.0010	
Phenol[e,f]	0.00E+00	0.00E+00	0.0000	
Non-HAP Organic Compounds				
Methane	3.17E-03	4.75E-01	0.4753	

Pollutants shown in blue text are organic volatile-based compounds, EF = Spec% x TOC PM EF.

Facility:	**Coeur d'Alene Asphalt**	
6/14/2008 12:00	**Permit/Facility ID:**	**/ 777-00432**

HMA Aggregate Handling

Tons of Aggregate Handled per Hour: **141**
(94% of the hourly tonnage of asphalt produced)

Hours Aggregate Handling per Year: **2000**

Emission Factor for 10 mph (lb/ton handled):	0.003272	AP-42 13.2.4	k =	**0.35**	for PM10
PM10 Emissions (unadjusted):	0.461377	lb/hr	M =	**1.77**	percent moisture
PM10 Emissions (unadjusted):	0.46	tpy	U =	**10**	mph base case

Moderate Control Efficiency:	**75%**	**DEQ allowance**
Aggressive Control Efficiency:	**95%**	**wet spray**

Material Handling Low Control (MATHNDLO)	0.115344	lb/hr
Material Handling High Control (MATHNDHI)	0.023069	lb/hr

Median Wind Speeds

Category 1	1.72 mph
Category 2	5.18 mph
Category 3	9.20 mph
Category 4	14.95 mph
Category 5	21.28 mph
Category 6	27.74 mph

Wind Speed	Scalar	**MATHNDLO**	**MATHNDHI**	
Category 1	0.101441	0.011701	0.002340	lb/hr
Category 2	0.425262	0.049051	0.009810	lb/hr
Category 3	0.897329	0.103502	0.020700	lb/hr
Category 4	1.686790	0.194561	0.038912	lb/hr
Category 5	2.669259	0.307883	0.061577	lb/hr
Category 6	3.767610	0.434572	0.086914	lb/hr

Facility:	**Coeur d'Alene Asphalt**	
6/14/2008 12:00	**Permit/Facility ID:**	**/ 777-00432**

HMA Conveying, Screening, and Truck Unloading

Tons of Aggregate Handled per Hour: **141** Hours Aggregate Handling per Year: **2000**
(94% of the hourly tonnage of asphalt produced)

Source	PM10 Emission Rate	Unit	TPY	# of Units	Total Emissons (tpy)
Conveyors	0.00649	lb/hr	0.006486	2	0.013
Screening	0.10434	lb/hr	0.10434	1	0.104
Truck Unloading	0.01410	lb/hr	0.0141	1	0.014

Source: AP-42 11.19.2 for controlled PM10 emissions

Facility:	**Coeur d'Alene Asphalt**	
6/14/2008 12:00	**Permit/Facility ID:**	**/ 777-00432**

Crushing Operations Aggregate Handling

Tons of Aggregate Handled per Hour:	**750**	Hours Aggregate Handling per Year:	**600**		
		Hours Aggregate Handling per Day:	**12**		
Emission Factor for 10 mph(lb/ton handled):	0.003272	AP-42 13.2.4	k =	**0.35**	for PM10
PM10 Emissions (at 10mph):	1.227065	lb/hr	M =	**1.77**	percent moisture
PM10 Emissions (at 10 mph):	0.74	tpy	U =	**10**	mph base case

Aggressive Control Efficiency:	**95%**	**wet spray**
Crusher Operations Aggregate Handling	0.061353	lb/hr controlled
Crusher Operations Aggregate Handling	0.036812	tpy controlled

Median Wind Speeds	
Category 1	1.72 mph
Category 2	5.18 mph
Category 3	9.20 mph
Category 4	14.95 mph
Category 5	21.28 mph
Category 6	27.74 mph

Wind Speed	Scalar	CR_AGG	
Category 1	0.101441	0.006224	lb/hr
Category 2	0.425262	0.026091	lb/hr
Category 3	0.897329	0.055054	lb/hr
Category 4	1.686790	0.103490	lb/hr
Category 5	2.669259	0.163768	lb/hr
Category 6	3.767610	0.231155	lb/hr

Facility:	**Coeur d'Alene Asphalt**	
6/14/2008 12:00	**Permit/Facility ID:**	**/ 777-00432**

Crushing Operations Conveying, Screening, Truck Unloading

Tons of Aggregate Handled per Hour: **750**

Hours Aggregate Handling per Year: **600**

Hours Aggregate Handling per Day: **12**

Source	PM10 Emission Rate	Unit	TPY	# of Units	Total Emissions (tpy)
Conveyors	0.03450	lb/hr	0.01035	4	0.0414
Screening	0.555	lb/hr	0.1665	2	0.333
Truck Unloading	0.01200	lb/hr	0.0036	1	0.0036

Source: AP-42 11.19.2 for controlled PM10 emissions

Facility:	**Coeur d'Alene Asphalt**	
6/14/2008 12:00	**Permit/Facility ID:**	**/ 777-00432**

Crushing Operations

Tons of Aggregate Handled per Hour:		Hours Aggregate Handling per Year:	**600**
Crushers	**750**	Hours Aggregate Handling per Day:	**12**
Roller Crusher	**200**		

Crusher	Crusher Type	PM10 Emission Rate	Unit	TPY	# of Units	Total Emissions (tpy)
Cedarapids Jaw	Primary	0	lb/hr	0	1	0
Nordberg Jaw	Primary	0	lb/hr	0	1	0
Cedarapids Cone	Secondary	0	lb/hr	0	1	0
Cedarapids Cone	Tertiary	0.405	lb/hr	0.122	1	0.122
Pioneer Rolls	Tertiary	0.108	lb/hr	0.032	1	0.032

Source: AP-42 11.19.2 for controlled PM10 emissions

SITE
MAP
(SEE HARD
COPY)

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 6/16/2008

Company Name:	Coeur d'Alene Paving, Inc.
Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New Asphalt Production Facility (with Permit By Rule crushing operations included).

SUMMARY OF AIR IMPACT ANALYSIS RESULTS - CRITERIA POLLUTANTS

		1.		2.	3.	4.		5.
Criteria Pollutants	**Averaging Period**	**Significant Impact Analysis Results (µg/m3)**	**Significant Contribution Level (µg/m3)**	**Full Impact Analysis Results (µg/m3)**	**Background Concentration (µg/m3)**	**Total Ambient Impact (µg/m3)**	**NAAQS (µg/m3)**	**Percent of NAAQS**
PM_{10}	24-hour							
	Annual							
SO_2	3-hr							
	24-hr		**See separate spreadsheet for Form MI1.**					
	Annual							
NO_2	Annual							
CO	1-hr							
	8-hr							

Modeling Information - Impact Analysis **Form MI1**

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Coeur d'Alene Paving - Rathdrum HMA Plant

6/16/2008

Company Name:	Coeur d'Alene Paving, Inc.
Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New asphalt production facility (with Permit By Rule crushing operations included).

SUMMARY OF AIR IMPACT ANALYSIS RESULTS

Spokane Met Data

Criteria Pollutants	Averaging Period	Full Impact Analysis Results (µg/m3)		Total Impact* (µg/m3)	Background Concentration (µg/m3)	Total Ambient Impact (µg/m3)	NAAQS (µg/m3)	Percent of NAAQS (Project vs NAAQS)
		HMA	Crushing					HMA + Crushing
PM_{10}	24-hour	25.28	35.65	36.00	73	109.0	150	24%
	Period	6.88	5.10	9.18	26	35.2	50	18%
SO_2	3-hr	3.33	0.85	3.39	34	37.4	1300	0%
	24-hr	2.10	0.51	2.18	26	28.2	365	1%
	Period	0.25	0.06	0.27	8	8.3	80	0%
NO_2	Period	0.52	2.67	2.87	17	19.9	100	3%
CO	1-hr	141.57	165.85	166.04	3,600	3,766.0	40000	0%
	8-hr	116.04	129.45	129.70	2,300	2,429.7	10000	1%

Toxic Air Pollutants	Averaging Period	Full Impact Analysis Results (µg/m3)	AACC	Percent of AACC (Project vs AACC)
Hexavalent Chromium	Period	0.00001	0.000083	12%
Total PAHs	Period	0.01250	0.014	89%
POM	Period	0.00027	0.0003	90%
Nickel	Period	0.00105	0.0042	25%
Formaldehyde	Period	0.05889	0.077	76%
Cadmium	Period	0.00001	0.00056	2%
Benzene	Period	0.00697	0.12	6%
Arsenic	Period	0.00001	0.00023	4%

	DEQ AIR QUALITY PROGRAM 1410 N. Hilton, Boise, ID 83706 For assistance, call the **Air Permit Hotline - 1-877-5PERMIT**	**PERMIT TO CONSTRUCT APPLICATION** Revision 3 6/16/2008

Company Name:	Coeur d'Alene Paving, Inc.
Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New Asphalt Production Facility (with Permit By Rule crushing operations included).

POINT SOURCE STACK PARAMETERS

1.	2.	3a.	3b.	4.	5.	6.	7.	8.	9.	10.
Emissions units	**Stack ID**	**UTM* Easting (m)**	**UTM* Northing (m)**	**Base Elevation (m)**	**Stack Height (m)**	**Modeled Diameter (m)**	**Stack Exit Temperature (K)**	**Stack Exit Flowrate (acfm)**	**Stack Exit Velocity (m/s)**	**Stack orientation (e.g., horizontal, rain cap)**
Point Source(s)										
HMA Drum Dryer with Baghouse	DRYER	-3.0	-7.6	718.70	11.08	0.79	408.00	24,867.00	23.90	Vertical (unobstructed)
HMA Hot Oil Tank	HOTOIL	-11.3	-21.3	718.70	3.57	0.20	616.00	370.00	2.47	Vertical (unobstructed)
Crushing Ops Diesel Generator	DIESLGEN	-24.4	-106.7	718.70	4.27	0.20	884.00	4,061.00	60.30	Vertical (unobstructed)

* UTMs provided are relative to (0,0) being near the proposed location of the dryer stack.

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline - 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
4/5/2007

Please see instructions on page 2 before filling out the form.

Company Name:	Coeur d'Alene Paving, Inc.
Facility Name:	Rathdrum Plant
Facility ID No.:	777-00432
Brief Project Description:	New Asphalt Production Facility (with Permit By Rule crushing operations included).

BUILDING AND STRUCTURE INFORMATION

1.	2.	3.	4.	5.	6.	7.
Building ID Number	**Length (ft)**	**Width (ft)**	**Base Elevation (m)**	**Building Height (m)**	**Number of Tiers**	**Description/Comments**
BLGD1	108.00	75.00	718.70	7.62	1	Included but more than 5L from point sources.
OIL_TANK	35.00	10.50	718.70	3.35	1	Not typically included in dispersion analyses.
CNTRLHSE	16.00	10.00	718.70	6.10	1	Included but more than 5L from point sources.

Federal Requirements Applicability **Form FRA**

DEQ AIR QUALITY PROGRAM
1410 N. Hilton, Boise, ID 83706
For assistance, call the
Air Permit Hotline – 1-877-5PERMIT

PERMIT TO CONSTRUCT APPLICATION

Revision 3
03/26/07

Please see instructions on page 2 before filling out the form.

IDENTIFICATION		
Company Name: Coeur d'Alene Paving, Inc.	Facility Name: Rathdrum plant	Facility ID No: 777-00432
Brief Project Description: New asphalt production facility		

APPLICABILITY DETERMINATION		
1. Will this project be subject to 1990 CAA Section 112(g)? (Case-by-Case MACT)	☒ NO	☐ YES* * If YES, applicant must submit an application for a case-by-case MACT determination [IAC 567 22-1(3)"b" (8)]
2. Will this project be subject to a New Source Performance Standard? (40 CFR part 60)	☐ NO	☒ YES* *If YES, please identify sub-part: I
3. Will this project be subject to a MACT (Maximum Achievable Control Technology) regulation? (40 CFR part 63) THIS ONLY APPLIES IF THE PROJECT EMITS A HAZARDOUS AIR POLLUTANT	☒ NO	☐ YES* *If YES, please identify sub-part: ____
4. Will this project be subject to a NESHAP (National Emission Standards for Hazardous Air Pollutants) regulation? (40 CFR part 61)	☒ NO	☐ YES* *If YES, please identify sub-part: ____
5. Will this project be subject to PSD (Prevention of Significant Deterioration)? (40 CFR section 52.21)	☒ NO	☐ YES
6. Was netting done for this project to avoid PSD?	☒ NO	☐ YES* *If YES, please attach netting calculations

IF YOU ARE UNSURE HOW TO ANSWER ANY OF THESE QUESTIONS, CALL THE AIR PERMIT HOTLINE AT 1-877-5PERMIT

SECTION II.4

Permit to Construct Application Fee

COEUR D'ALENE PAVING, INC 120 E. ANTON AVE. COEUR D'ALENE, ID 83815

14941

1/15/2008

Idaho Department of Environmental Quality

Date	Type	Reference	Original Amt.	Balance Due	Discount	Payment
1/15/2008	Bill		1,000.00	1,000.00		1,000.00
				Check Amount		1,000.00

Sent
4-04-08

Bank CDA Checking

1,000.00

SECTION II.5

Notice of Informational Meeting

AFFIDAVIT OF PUBLICATION

STATE OF IDAHO,
County of Kootenai, } SS.

Molly Stern being first duly sworn upon oath deposes and says:

1. I am now and at all times hereinafter mentioned was a citizen of the United States, resident of the State of Idaho, over the age of twenty-one years and not a party of the above entitled action.

2. I am now and at all times hereinafter mentioned was the printer (principal clerk) of the "Coeur d'Alene Press," a newspaper printed and published daily except Sunday in Coeur d'Alene, Kootenai County, Idaho, and having a general circulation in said county.

3. The legal notice

of which the annexed is a printed copy, was published in the regular Thursday issue of said newspaper for 3 consecutive weeks commencing on the 24 day of May 2008, and ending on the 5 day of June 2008, and such publication was made as often during said period as said daily newspaper was regularly issued.

4. That said newspaper has been continuously and uninterruptedly published in said Kootenai County, during a period of more than seventy-eight consecutive weeks immediately prior to the first publication of said notice Molly Stern

On this 5 day of June in the year of 2008, before me, a Notary Public, personally appeared Molly Stern, known or identified to me to be the person whose name subscribed to the within instrument, and being by me first duly sworn, declared that the statements therein are true, and acknowledged to me that he executed the same.

Regina Mason
Notary Public for the State of Idaho,
residing at Coeur d'Alene, Idaho.

MY COMMISSION EXPIRES 6/18/09

REGINA MASON NOTARY PUBLIC STATE OF IDAHO

NOTICE OF PUBLIC HEARING
FOR NEW ASPHALT PLANT-
PLEASE TAKE NOTICE THAT, Coeur d' Alene Paving, Inc. will conduct an informal hearing on June 5, 2008 at 5:00 p.m. at Rathdrum Lions Club, 16114 Meyer Road, Rathdrum, Idaho, the purpose of which is to discuss the new asphalt plant on 30 acres zoned mining near Rathdrum, Idaho.
All citizens are invited to attend the public hearing and be heard on the new asphalt plant. The applicant is satisfying DEQ'a requirement per IDAPA 58.01.01.213. Assistance for persons with disabilities will be provided upon 24 hour notice prior to the public hearing.
Craig Cozad, President
Legal 2845
May 24, 29, 30, 31, 2008
June 2, 3, 4, 5, 2008

SECTION II.6

Process Descriptions

Process Description for ALMix 6628 Asphalt Plant

Parallel Flow Drum Mix Plants

This process is a continuous mixing type process, using proportioning cold feed controls for the process materials. The major difference between this process and the batch process is that the dryer is used not only to dry the material but also to mix the heated and dried aggregates with the liquid asphalt cement. Aggregate, which has been proportioned by size gradations, is introduced to the drum at the burner end. As the drum rotates, the aggregates, as well as the combustion products, move toward the other end of the drum in parallel. Liquid asphalt cement flow is controlled by a variable flow pump electronically linked to the new (virgin) aggregate and weigh scales. The asphalt cement is introduced in the mixing zone midway down the drum in a lower temperature zone, along with any particulate matter (PM) from collectors. The mixture is discharged at the end of the drum and is conveyed to either a surge bin or HMA storage silos, where it is loaded into transport trucks. The exhaust gases also exit the end of the drum and pass on to the collection system. Parallel flow drum mixers have an advantage, in that mixing in the discharge end of the drum captures a substantial portion of the aggregate dust, therefore lowering the load on the downstream PM collection equipment. For this reason, most parallel flow drum mixers are followed only by primary collection equipment (Baghouse BH1). This ALMix 6628 plant is natural gas-fired and is on line power to reduce potential emissions.

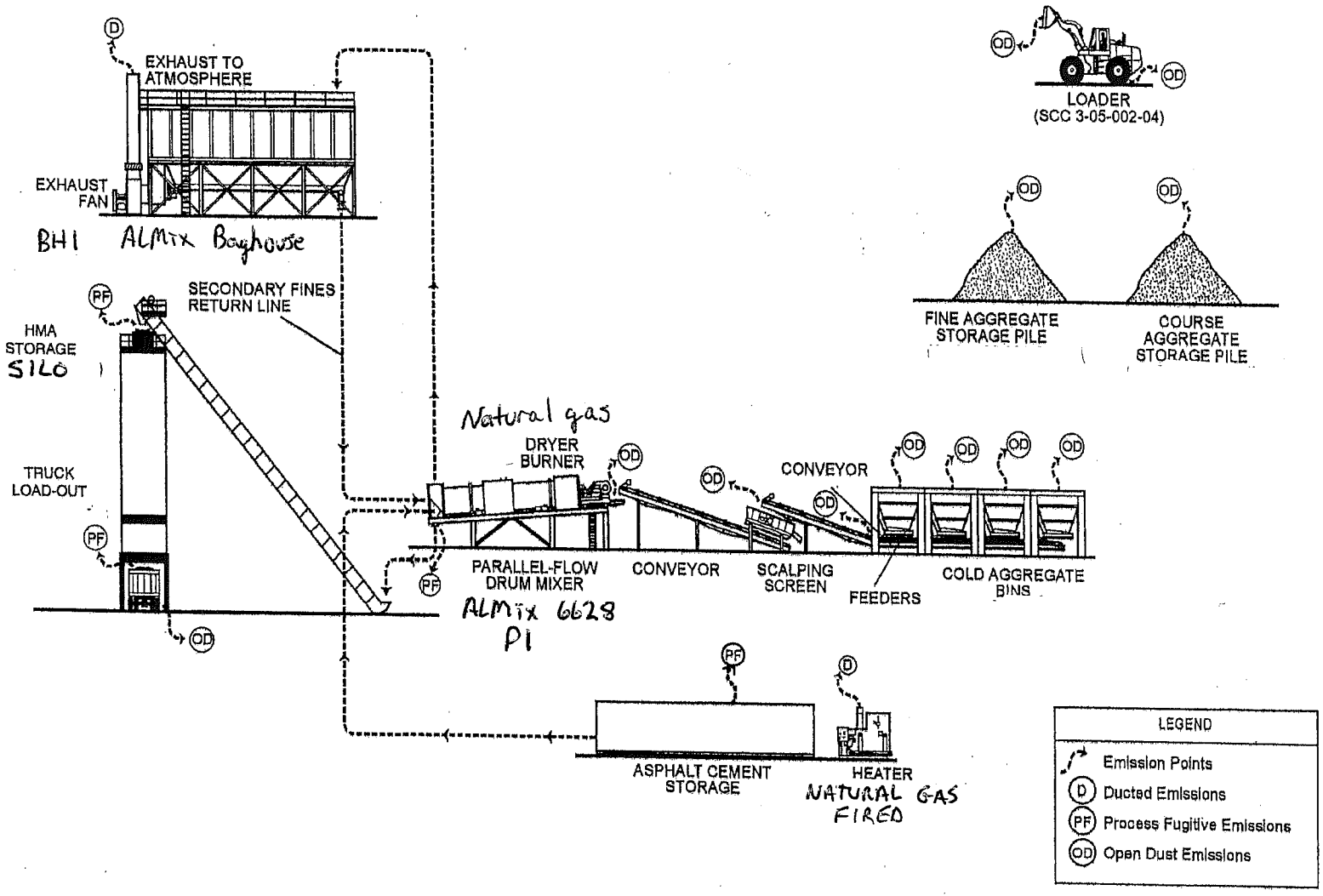
Process Description for Wood's Temporary Crusher

Crushed Stone Processing

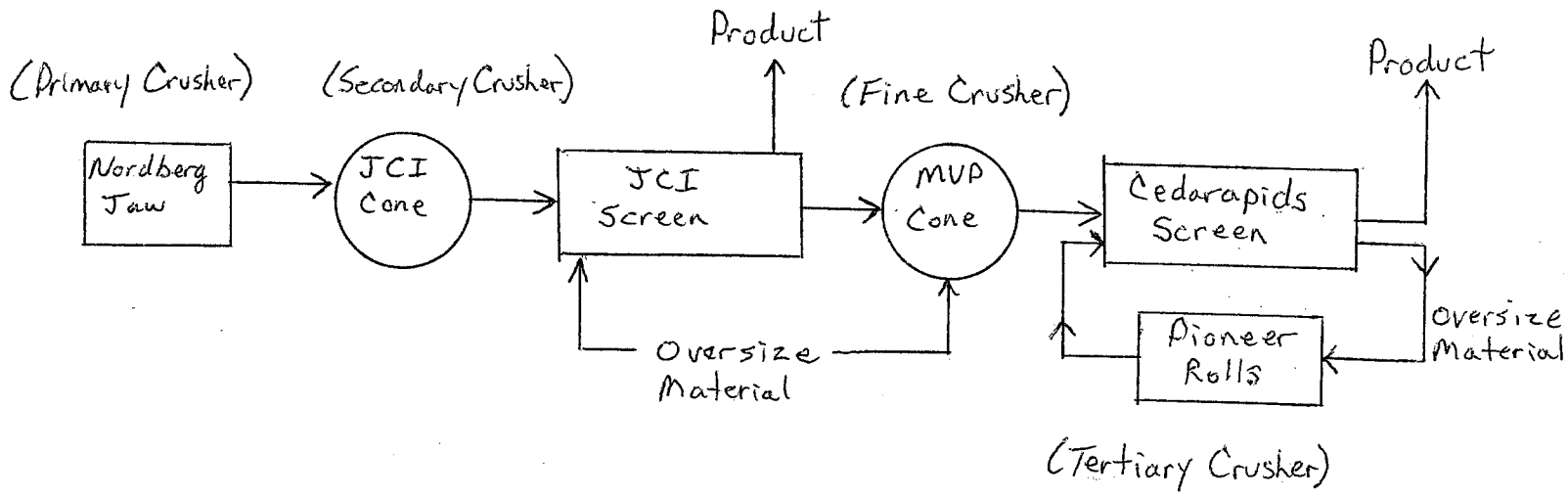
Rock type processed by the crusher in our pit is alluvial granite. Crusher plant is a closed-loop system to properly size aggregates for the intended use of the product. Rock is fed to the primary crusher (Nordberg Jaw) by loader from the established pit wall. Processing operations includes crushing, screening, size classification, material handling and storage operations. All of these processes can be sources of PM and PM-10 emissions if uncontrolled. Crusher employs water spray system on all emissions points to keep down fugitive dust. Large boulders are separated from finer rocks that do not require primary crushing by the loader and do not require processing. thus reducing the load to the primary crusher. After the jaw crusher, normally 6 inch material is sent by conveyor to the secondary crusher (JCI cone). After the JCI, cone material transfers by conveyor to the JCI screen where product can either be separated to stockpile or will travel by conveyor to the fine crusher (MVP cone). Primary and secondary crushers are usually used for initial reduction. The secondary crusher product, normally 3 inches in diameter continues by conveyor to the fine crusher (MVP cone). Undersize material is discharged onto belt conveyors under the Jaw and cones and usually is conveyed to a stockpile for temporary storage and sold as coarse aggregates. After material leaves the MVP cone it is conveyed to the Cedarapids screen for sizing. Any oversize from the screen will travel by conveyor to the tertiary crusher (Pioneer rolls) for additional processing prior to returning to the Cedarapids screen and any material that meets specifications will be conveyed to the stockpile for future use. This closed loop system ensures that material will be sized and stockpiled without spending unnecessary time in the crusher, which can add to PM and PM-10 emissions.

SECTION II.7

Equipment List



Coeur d'Alene Paving's process flow diagram for parallel-flow drum mix asphalt plants (source classification codes in parentheses).[3]



Process Flow Diagram for Temporary Crusher at Coeur d'Alene Paving's Rathdrum Pit

See Forms HMAP, EU-0, EU-1, and EU-2