



August 8, 2023

Mr. John Petronella  
Regional Permit Administrator  
NYS Department of Environmental Conservation  
Division of Permits, Region 3  
21 South Putt Corners Road  
New Patlz, NY 12561

**SENT VIA EMAIL**

**Re: Air State Facility Permit Renewal Application  
RCA Asphalt, LLC – Mount Vernon Plant  
Mount Vernon, Westchester County  
NYSDEC Permit ID: 3550800133  
JMT Job No. 14-S0107N-002**

Dear Mr. Petronella:

On behalf of RCA Asphalt, LLC (RCA), JMT of New York, Inc. (JMT) is pleased to provide the attached application to renew the Air State Facility (ASF) Permit referenced above. The attached application materials are being submitted per the Department's request contained in the May 11, 2023 Air State Facility Renewal letter.

Included with this application are:

- Air State Facility Renewal Application (Attachment I),
- Facility Emissions Inventory (Attachment II),
- Facility Plot Plan (Attachment III),
- Model inputs for a 6 NYCRR Part 212 Process Operations AERSCREEN Analysis (Attachment IV).
- AERSCREEN Results Inventory Worksheets (Attachment V)

Enclosed calculations demonstrate that a continued hot mix asphalt (HMA) production cap of 475,000 tons per year (TPY) while firing natural gas and 365,000 TPY while firing No. 2, 4, and 6 fuel oil will effectively cap all criteria pollutants below major source thresholds. The burner in the rotary aggregate dryer fires natural gas and maintains the capability to fire No. 2 fuel oil in the event of interruption of natural gas service. All other facility equipment is powered by utility supplied line-power electric.

Consistent with regulatory requirements, a 6 NYCRR 212 AERSCREEN analysis was completed. An AERSCREEN model was completed for the baghouse stack, silo fill, and loadout operations. Model inputs for the AERSCREEN analysis are included in Attachment V and are as reported by RCA personnel and/or from manufacturer specifications. The distance to ambient air for dispersion was determined through the Facility Plot Plan, included in Attachment IV.

Calculations converting the unitized AERSCREEN model results to fence line short term and annual impacts have been completed through use of a worksheet developed by NYSDEC Region 5 Division of Air Staff and have been submitted electronically with this submittal.

If you have any questions regarding this renewal application, please feel free to contact me at 518-782-0882 or [dstraw@jmt.com](mailto:dstraw@jmt.com).

Sincerely,

JMT of New York, Inc.



David T. Straw, G.I.T.  
Associate

Attachments

cc w/ att.: D. Kahlstorf, DEC  
D. Escarpeta, DEC  
A. Casterella, RCA  
C. Luccarelli, RCA  
E. Davidson, JMT  
A. Carroll, JMT

**ATTACHMENT I**  
**AIR STATE FACILITY RENEWAL APPLICATION**

DEC ID: 3550800133

Application ID: 355080013300005

Renewal Number: 1

Facility: RCA ASPHALT

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### Section I - Certification Permit Application Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information I believe the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Responsible Official	<i>CHARLES J. LUCCARELLI</i>	Title	<i>MANAGING MEMBER</i>
Signature	<i>Charles J. Luccarelli</i>	Date	<i>8-7-23</i>

### Professional Engineer Certification

I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments as they pertain to the practice of engineering.

I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Professional Engineer	NYS License No.
Signature	Date

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### Section II - Identification Information

Permit Type:	Air State Facility ( ASF )
	RENEWAL
General Permit Title:	
<input type="checkbox"/> Application involves construction of new facility	<input type="checkbox"/> Application involves construction of new emission unit(s)

### Owner / Firm

Name	RCA ASPHALT LLC				
Street	7 EDISON AVE				
City	MOUNT VERNON	State	NY	Country	USA
				Zip	10550
Owner Classification	Corporation/Partnership			Taxpayer Id	134031958

### Facility

Name	RCA ASPHALT				
Address	7 EDISON AVE				
City	MT VERNON	Zip	10550		

### Owner / Firm Contact Information

Name	CHARLES LUCCARELLI	Phone No.	9146993370				
Affiliation	OWNER	Fax No.					
Title	MANAGING MEMBER						
Street	7 EDISON AVE						
City	MOUNT VERNON	State	NY	Country	USA	Zip	10550
E-mail	expresscharlie@aol.com						

### Facility Contact Information

Name	CHARLES LUCCARELLI	Phone No.	9146993370				
Affiliation	OWNER	Fax No.					
Title	MANAGING MEMBER						
Street	7 EDISON AVE						
City	MOUNT VERNON	State	NY	Country	USA	Zip	10550
E-mail	expresscharlie@aol.com						

### Project Description

Application for renewal of Air State Facility.

DEC ID: 3550800133  
Facility: RCA ASPHALT

Application ID: 355080013300005

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### Section III - Facility Information Classification

INDUSTRIAL

#### SIC Codes

2951

#### NAICS Codes

3241

### Facility Description

THE FACILITY PRODUCES HOT MIX ASPHALT THROUGH A BATCH MIX PLANT FOR USE IN LOCAL AND REGIONAL INFRASTRUCTURE PROJECTS. SITE OPERATIONS ALSO INCLUDE THE PROCESSING OF MILLINGS INTO RECYCLED ASPHALT PRODUCTS (RAP), WHICH REDUCES THE QUANTITY OF VIRGIN MINED STONE REQUIRED.

### Compliance Statements (Title V Only)

I certify that as of the date of this application the facility is in compliance with all applicable requirements  YES  NO

If one or more emission units at the facility are not in compliance with all applicable requirements at the time of signing this application ( the 'NO' box must be checked), the noncomplying units must be identified in the "Compliance Plan" block of section IV of this form along with the compliance plan information required. For all emission units at this facility that are operating in compliance with all applicable requirements complete the following:

- This facility will continue to be operated and maintained in such manner as to assure compliance for the duration of the permit, except those units referenced in the compliance plan portion of Section IV of this application.
- For all emission units, subject to any applicable requirements that will become effective during the term of the permit, this facility will meet all such requirements on a timely basis.
- Compliance certification reports will be submitted at least once a year. Each report will certify compliance status with respect to each requirement, and the method used to determine status.

### Facility State Only Requirements

Title	Type	Part	Sub Part	Section	Sub Division	Parag	Sub Parag	Clause	Sub Clause	Item
6	NYCRR	201	5							
	ECL	19	0301							

### Facility Emissions Summary

Cas No.	Contaminant Name	PTE		Actual	
		(lbs/yr)	(tons/yr)	(lbs/yr)	(tons/yr)
000630-08-0	CARBON MONOXIDE	1,482,367	741.18	190,131	95
0NY210-00-0	OXIDES OF NITROGEN	93,049	46.52	12,184	6.09
0NY075-00-0	PARTICULATES				
0NY075-00-5	PM-10	103,309	51.65	13,799	6.90
007446-09-5	SULFUR DIOXIDE	17,048	8.52	2,187	1.09
0NY100-00-0	TOTAL HAP	28,705	14.35	3,680	1.84
0NY998-00-0	VOC	30,409	15.20	3.47	1.73E-3

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### Section IV - Emission Unit Information

#### Emission Unit Description

Emission Unit	U00HMP
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Hot Mix Asphalt (HMA) batch plant exhausting to a cyclone dust collector and fabric baghouse with associated storage areas, feed bins, storage silos and liquid asphalt heaters. Batch plant can be fired with either natural gas, distillate fuel or residual fuel oil.

#### Building

Building	Building Name	Length	Width	Orient.
HTMIXPLANT	HOT MIX BATCH PLANT			

#### Emission Point

Emission Unit	U00HMP	Emission Pt.	00009			
Ground Elev (ft)	Height (ft)	Height Above Structure (ft)	Inside Diameter (in)	Exit Temp (°F)	Cross Section	
					Length (in)	Width (in)
100	40.5	17	46"	250	<del>49</del>	<del>33</del>
					DELETE	
Exit Velocity (FPS)	Exit Flow (ACFM)	NYTM (E) (KM)	NYTM (N) (KM)	Building	Distance to Property Line (ft)	Date of Removal
75	74900	599.022	4527.245		25.23	

#### Emission Source / Control

Emission Unit	U00HMP	Emission Source	BAGH1			
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.		
K	01/19/1996	05/19/1996		Astec		
Design Capacity		Units Code		Desc		
Control Type	Code	016	Desc	FABRIC FILTER		
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

Emission Unit	U00HMP	Emission Source	BURN1			
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.		
C	01/19/1996	05/19/1996		Hauk		
Design Capacity	120	Units Code	25	Desc	million Btu per hour	
Control Type	Code		Desc			
Waste Feed	Code		Desc			
Waste Type	Code		Desc			

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### Section IV - Emission Unit Information

#### Process Information

<b>Emission Unit</b>	U00HMP	<b>Process</b>	P01		
<b>Source Classification Code (SCC)</b>	<b>Total Thruput</b>			<b>Thruput Quantity Units</b>	
	<b>Quantity / Hr</b>	<b>Quantity / Yr</b>	<b>Code</b>	<b>Description</b>	
30500251	423	475000	0367	TONS	
<input type="checkbox"/> Confidential		<b>Operating Schedule</b>		<b>Building</b>	<b>Floor / Location</b>
<input type="checkbox"/> Operating At Maximum Capacity		<b>Hrs / Day</b>	<b>Days / Yr</b>		
		8	140	HTMIXPLANT	OUTDOORS

#### Description

Hot mix asphalt batch plant fired with natural gas. Particulate emissions are controlled with a cyclone dust collector and baghouse fabric filter. Operates on line power.

<b>Emission Point Identifier(s)</b>
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<b>Emission Source / Control Identifier(s)</b>
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BAGH1    BURN1

<b>Emission Unit</b>	U00HMP	<b>Process</b>	P02		
<b>Source Classification Code (SCC)</b>	<b>Total Thruput</b>			<b>Thruput Quantity Units</b>	
	<b>Quantity / Hr</b>	<b>Quantity / Yr</b>	<b>Code</b>	<b>Description</b>	
30500252	423	365000	0367	TONS	
<input type="checkbox"/> Confidential		<b>Operating Schedule</b>		<b>Building</b>	<b>Floor / Location</b>
<input type="checkbox"/> Operating At Maximum Capacity		<b>Hrs / Day</b>	<b>Days / Yr</b>		
		8	108	HTMIXPLANT	Outdoors

#### Description

Hot mix asphalt batch plant fired with #2 fuel oil. Particulate emissions are controlled with a cyclone dust collector and baghouse fabric filter. Operates on line power.

<b>Emission Point Identifier(s)</b>
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<b>Emission Source / Control Identifier(s)</b>
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BAGH1    BURN1

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### Section IV - Emission Unit Information

#### Process Information

<b>Emission Unit</b>	U00HMP	<b>Process</b>	P03							
<b>Source Classification Code (SCC)</b>	<b>Total Thruput</b>			<b>Thruput Quantity Units</b>						
	<b>Quantity / Hr</b>	<b>Quantity / Yr</b>	<b>Code</b>	<b>Description</b>						
30500251	423	365000	0367	TONS						
<input type="checkbox"/> Confidential		<b>Operating Schedule</b>		<b>Building</b>		<b>Floor / Location</b>				
<input type="checkbox"/> Operating At Maximum Capacity		<b>Hrs / Day</b>	<b>Days / Yr</b>							
		8	140	HTMIXPLANT		OUTDOORS				

#### Description

Hot mix asphalt batch plant with dryer fired with #4 or #6 residual fuel oil. Particulate emissions are controlled with a cyclone dust collector and baghouse filter. Operates on line electrical power.

<b>Emission Point Identifier(s)</b>
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00009

<b>Emission Source / Control Identifier(s)</b>
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BAGH1 BURN1

#### Emission Unit Applicable Federal Requirements

<b>Emission Unit</b>	U-00HMP	<b>Emission Point</b>	00009	<b>Process</b>		<b>Emission Source</b>				
<b>Title</b>	<b>Type</b>	<b>Part</b>	<b>Sub Part</b>	<b>Section</b>	<b>Sub Division</b>	<b>Parag</b>	<b>Sub Parag</b>	<b>Clause</b>	<b>Sub Clause</b>	<b>Item</b>
40	CFR	60	I	92						
40	CFR	60	I	92	a	2				

#### Process Emissions Summary

<b>Emission Unit</b>	U-00HMP	<b>Process</b>	P01							
<b>CAS No.</b>	<b>Contaminant Name</b>			<b>% of Thruput</b>	<b>% of Capture</b>	<b>% of Control</b>	<b>ERP (lb/hr)</b>	<b>ERP How Determined</b>		
000630-08-0	CARBON MONOXIDE						169.2	03		
<b>PTE</b>			<b>Standard Units</b>	<b>PTE How Determined</b>	<b>Actual</b>					
<b>(lb/hr)</b>	<b>(lb/yr)</b>	<b>(standard units)</b>			<b>(lb/hr)</b>	<b>(lb/yr)</b>				
169.2	1,482,192			03	169.2	190,000				

<b>Emission Unit</b>	U-00HMP	<b>Process</b>	P01							
<b>CAS No.</b>	<b>Contaminant Name</b>			<b>% of Thruput</b>	<b>% of Capture</b>	<b>% of Control</b>	<b>ERP (lb/hr)</b>	<b>ERP How Determined</b>		
0NY210-00-0	OXIDES OF NITROGEN						10.58	03		
<b>PTE</b>			<b>Standard Units</b>	<b>PTE How Determined</b>	<b>Actual</b>					
<b>(lb/hr)</b>	<b>(lb/yr)</b>	<b>(standard units)</b>			<b>(lb/hr)</b>	<b>(lb/yr)</b>				
10.58	92,637			03	10.58	11,875				

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Process Emissions Summary

Emission Unit	U-00HMP	Process	P01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-0	PARTICULATES					100	1,904	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	12,825		

Emission Unit	U-00HMP	Process	P01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-5	PM-10					100	1,904	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	12,825		

Emission Unit	U-00HMP	Process	P01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
007446-09-5	SULFUR DIOXIDE						1.95	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
1.95	17,045			03	1.95	2,185		

Emission Unit	U-00HMP	Process	P01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY100-00-0	TOTAL HAP						3.28	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
3.28	28705.14			03	3.28	3679.67		

DELETE

Emission Unit	U-00HMP	Process	P01					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY998-00-0	VOC						3.47	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
3.47	30,385			03	3.47	3,895		

Emission Unit	U-00HMP	Process	P02					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
000630-08-0	CARBON MONOXIDE						169.2	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
169.2	1,482,192			03	169.2	146,000		

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Process Emissions Summary

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY210-00-0	OXIDES OF NITROGEN						50.76	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
50.76	444,658			03	50.76	43,800		

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY075-00-0	PARTICULATES					100	5710	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	9,855		

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY075-00-5	PM-10					100	1,904	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	9,855		

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
007446-09-5	SULFUR DIOXIDE						37.22	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
37.22	326,082			03	37.22	32,120		

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY100-00-0	TOTAL HAP					<del>47</del>	3.66	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
3.66	326,082			03	3.66	32,098.18		

Emission Unit	U-00HMP	Process	P02				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY998-00-0	VOC						3.47	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
3.47	30,385			03	3.47	2,993		

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Process Emissions Summary

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
000630-08-0	CARBON MONOXIDE						169.2	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
169.2	1,482,192			03	169.2	146,000		

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY210-00-0	OXIDES OF NITROGEN						50.76	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
50.76	444,658			03	50.76	43,800		

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-0	PARTICULATES					100	1,904	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	9,855		

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-5	PM-10					100	5710	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
11.42	100,048			03	11.42	9,855		

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
007446-09-5	SULFUR DIOXIDE						37.22	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
37.22	326,082			03	37.22	32,120		

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY100-00-0	TOTAL HAP					<del>47</del>	3.38	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
3.38	29,602.93			03	3.38	2,915.97		

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### Section IV - Emission Unit Information

#### Process Emissions Summary

Emission Unit	U-00HMP	Process	P03				ERP (lb/hr)	ERP How Determined
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control		
0NY998-00-0	VOC						15.23	03
PTE		Standard Units	PTE How Determined	Actual				
(lb/hr)	(lb/yr)			(standard units)	(lb/hr)	(lb/yr)		
15.23	133,397		03	15.23	13,140			

#### Emission Unit Emissions Summary

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
000630-08-0	CARBON MONOXIDE			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
1482192	169.2	1,482,192	169.2	190,000

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
0NY210-00-0	OXIDES OF NITROGEN			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
92,637	10.58	92,637	10.58	11,875

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
0NY075-00-0	PARTICULATES			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
16,674,660	11.42	100,048	11.42	12,825

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
0NY075-00-5	PM-10			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
16,674,660	11.42	100,048	11.42	12,825

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
007446-09-5	SULFUR DIOXIDE			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
17,045	1.95	17,045	1.95	2,185

Emission Unit	U-00HMP			
CAS No.	Contaminant Name			
0NY100-00-0	TOTAL HAP			
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)
28,705.14	3.28	28,705.14	3.28	3,679.67

DEC ID: 3550800133

Application ID: 355080013300005

Renewal Number: 1

Facility: RCA ASPHALT

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### Section IV - Emission Unit Information

#### Emission Unit Emissions Summary

Emission Unit	U-00HMP								
CAS No.	0NY998-00-0	Contaminant Name							
ERP (lb/yr)	30,385	PTE (lb/hr)	3.47	PTE (lb/yr)	30,385	Actual (lb/hr)	3.47	Actual (lb/yr)	3,895

DEC ID: 3550800133  
Facility: RCA ASPHALT

Application ID: 355080013300005

Renewal Number: 1

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### Section IV - Emission Unit Information

#### Emission Unit Description

<b>Emission Unit</b>	U00RAP
----------------------	--------

Recycled Asphalt Pavement (RAP) processing operation consisting of Telesmith crusher, one RAP screen and associated conveyors. Emissions consist of a relatively minor level of fugitive particulates. Runs on utility supplied line power.

#### Building

Building	Building Name	Length	Width	Orient.
RAPPLANT	RAP PROCESSING PLANT			

#### Emission Source / Control

Emission Unit	U00RAP	Emission Source	CNVYR	Manufacturer's Name/Model No.	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I				coneyors	
<b>Design Capacity</b>	120	<b>Units Code</b>	9	<b>Desc</b>	tons per hour
<b>Control Type</b>	<b>Code</b>		<b>Desc</b>		
<b>Waste Feed</b>	<b>Code</b>		<b>Desc</b>		
<b>Waste Type</b>	<b>Code</b>		<b>Desc</b>		

Emission Unit	U00RAP	Emission Source	CRSH1	Manufacturer's Name/Model No.	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	01/19/1999	05/19/1999	10/17/2002	TELESMITH	
<b>Design Capacity</b>	120	<b>Units Code</b>	9	<b>Desc</b>	tons per hour
<b>Control Type</b>	<b>Code</b>		<b>Desc</b>		
<b>Waste Feed</b>	<b>Code</b>		<b>Desc</b>	DELETE; SEE CONTINUATION SHEET FOR REPLACEMENT EQUIPMENT	
<b>Waste Type</b>	<b>Code</b>		<b>Desc</b>		

Emission Unit	U00RAP	Emission Source	SCRN1	Manufacturer's Name/Model No.	
Source Type	Date of Construction	Date of Operation	Date of Removal	Manufacturer's Name/Model No.	
I	01/19/1999	05/19/1999	04/15/2008	Deystir	
<b>Design Capacity</b>	120	<b>Units Code</b>	9	<b>Desc</b>	tons per hour
<b>Control Type</b>	<b>Code</b>		<b>Desc</b>	DELETE; SEE CONTINUATION SHEET FOR REPLACEMENT EQUIPMENT	
<b>Waste Feed</b>	<b>Code</b>		<b>Desc</b>		
<b>Waste Type</b>	<b>Code</b>		<b>Desc</b>		

DEC ID: 3550800133  
Facility: RCA ASPHALT

Application ID: 355080013300005

Renewal Number: 1

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### Section IV - Emission Unit Information

#### Process Information

Emission Unit	U00RAP	Process	P04		
Source Classification Code (SCC)	Total Thruput		Thruput Quantity Units		
	Quantity / Hr	Quantity / Yr	Code	Description	
30500203	230	592,250	0367	TONS	
<input type="checkbox"/> Confidential	Operating Schedule		Building	Floor / Location	
<input type="checkbox"/> Operating At Maximum Capacity	Hrs / Day	Days / Yr			
	8	260	RAPPLANT	Outdoors	

#### Description

This process comprises the crushing and screening of recycled asphalt pavement for subsequent recycling by combining with virgin raw materials in hot mix asphalt batch plant. The process generates minor fugitive particulate emissions. Operates on line power.

Emission Point Identifier(s)
------------------------------

Emission Source / Control Identifier(s)
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CNVYR	<del>CRSH1</del>	<del>SCRN1</del>
	CRSH2	SCRN2

#### Process Emissions Summary

Emission Unit	U-00RAP	Process	P04					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-0	PARTICULATES						3.90	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
0.37	3,228			03	0.37	957		

Emission Unit	U-00RAP	Process	P04					
CAS No.	Contaminant Name			% of Thruput	% of Capture	% of Control	ERP (lb/hr)	ERP How Determined
0NY075-00-5	PM-10						3.90	03
PTE			Standard Units	PTE How Determined	Actual			
(lb/hr)	(lb/yr)	(standard units)			(lb/hr)	(lb/yr)		
0.37	3,228			03	0.37	949		

#### Emission Unit Emissions Summary

Emission Unit	U-00RAP				
CAS No.	Contaminant Name				
0NY075-00-5	PM-10				
ERP (lb/yr)	PTE (lb/hr)	PTE (lb/yr)	Actual (lb/hr)	Actual (lb/yr)	
3.90	0.37	3,228	0.37	949	

DEC ID: 3550800133

Application ID: 355080013300005

Renewal Number: 1

Facility: RCA ASPHALT

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### Supporting Documentation

- Aerial Photo ( \_\_ / \_\_ / \_\_\_\_ )
- Air Quality Model ( \_\_ / \_\_ / \_\_\_\_ )
- Air State Facility Permit ( \_\_ / \_\_ / \_\_\_\_ )
- Air Title V Facility Permit ( \_\_ / \_\_ / \_\_\_\_ )
- Alternative Fuel Monitoring Schedule ( \_\_ / \_\_ / \_\_\_\_ )
- Ambient Air Monitoring Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Analysis of Contemporaneous Emission Increase/Decrease ( \_\_ / \_\_ / \_\_\_\_ )
- Article 11, Title 5 Permit for Interference with Fish & Wildlife ( \_\_ / \_\_ / \_\_\_\_ )
- Authorized Agent Letter ( \_\_ / \_\_ / \_\_\_\_ )
- BACT Demonstration ( \_\_ / \_\_ / \_\_\_\_ )
- Baseline Period Demonstration ( \_\_ / \_\_ / \_\_\_\_ )
- Beneficial Use Determination (BUD) ( \_\_ / \_\_ / \_\_\_\_ )
- Blasting Chart - Ground Vibration Limits ( \_\_ / \_\_ / \_\_\_\_ )
- Building Identification Table ( \_\_ / \_\_ / \_\_\_\_ )
- Calculations ( \_\_ / \_\_ / \_\_\_\_ )
- Capping Letter/Package ( \_\_ / \_\_ / \_\_\_\_ )
- Certificate of Capacity (Resource Recovery Facility) ( \_\_ / \_\_ / \_\_\_\_ )
- CLCPA analysis ( \_\_ / \_\_ / \_\_\_\_ )
- Compliance Assurance Monitoring Plan (CAM) ( \_\_ / \_\_ / \_\_\_\_ )
- Confidentiality Justification ( \_\_ / \_\_ / \_\_\_\_ )
- Construction and Demolition Debris Tracking Document ( \_\_ / \_\_ / \_\_\_\_ )
- Construction Detail Drawings ( \_\_ / \_\_ / \_\_\_\_ )
- Continuous Emissions Monitoring Plans/QA/QC ( \_\_ / \_\_ / \_\_\_\_ )
- Control Equipment Layout ( \_\_ / \_\_ / \_\_\_\_ )
- Custom Schedule for Fuel Nitrogen and Sulfur Monitoring ( \_\_ / \_\_ / \_\_\_\_ )
- Dispersion modeling ( \_\_ / \_\_ / \_\_\_\_ )
- Drawings/Blueprints ( \_\_ / \_\_ / \_\_\_\_ )
- Elevations/Sections ( \_\_ / \_\_ / \_\_\_\_ )
- Emission Inventory Report ( \_\_ / \_\_ / \_\_\_\_ )
- Emission Survey ( \_\_ / \_\_ / \_\_\_\_ )
- Emission Unit Summary ( \_\_ / \_\_ / \_\_\_\_ )
- EPA Memo Re: Technical Infeasibility of Monitoring Nitrogen in Fuel ( \_\_ / \_\_ / \_\_\_\_ )
- Episode Action Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Equipment Manufacturers Information ( \_\_ / \_\_ / \_\_\_\_ )
- ERC Quantification ( \_\_ / \_\_ / \_\_\_\_ )
- Exemption Related Document ( \_\_ / \_\_ / \_\_\_\_ )
- Existing Certificates to Operate and/or Permits to Construct ( \_\_ / \_\_ / \_\_\_\_ )
- Existing Consent Order ( \_\_ / \_\_ / \_\_\_\_ )
- Existing Methane Migration & Recovery Well Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Existing Permit Figures ( \_\_ / \_\_ / \_\_\_\_ )
- Facility Location Map ( \_\_ / \_\_ / \_\_\_\_ )
- Facility-Wide Operating Permit Submittal Schedule ( \_\_ / \_\_ / \_\_\_\_ )
- Fugitive Dust Control Plan ( \_\_ / \_\_ / \_\_\_\_ )
- General Flow Diagram ( \_\_ / \_\_ / \_\_\_\_ )
- Generating Plant Site & Section Sheet ( \_\_ / \_\_ / \_\_\_\_ )

DEC ID: 3550800133

Application ID: 355080013300005

Renewal Number: 1

Facility: RCA ASPHALT

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### Supporting Documentation

- LAER Demonstration ( \_\_ / \_\_ / \_\_\_\_ )
- Letter of Intent to Commence Work ( \_\_ / \_\_ / \_\_\_\_ )
- List of Exempt Activities (form attached) ( \_\_ / \_\_ / \_\_\_\_ )
- MACT Demonstration ( \_\_ / \_\_ / \_\_\_\_ )
- Methods Used To Determine Compliance (form attached) ( \_\_ / \_\_ / \_\_\_\_ )
- Miscellaneous Attachments - Not Otherwise Specified ( \_\_ / \_\_ / \_\_\_\_ )
- Miscellaneous Correspondence ( \_\_ / \_\_ / \_\_\_\_ )
- Mitigation Planting Plan ( \_\_ / \_\_ / \_\_\_\_ )
- MSDS Information Sheets ( \_\_ / \_\_ / \_\_\_\_ )
- Non-CEM: Custom Monitoring, Recordkeeping and/or Reporting Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Notice Covenant ( \_\_ / \_\_ / \_\_\_\_ )
- Notice of Intent to Commence Work ( \_\_ / \_\_ / \_\_\_\_ )
- NOx RACT Compliance Plan ( \_\_ / \_\_ / \_\_\_\_ )
- NOx RACT Operating Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Opacity Compliance Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Operational Flexibility: Desc of Alternative Operating Scenarios and Protocols ( \_\_ / \_\_ / \_\_\_\_ )
- P.E. Certification (form attached) ( \_\_ / \_\_ / \_\_\_\_ )
- Permit Sign ( \_\_ / \_\_ / \_\_\_\_ )
- Pesticide Treatment Area Map ( \_\_ / \_\_ / \_\_\_\_ )
- Photograph(s) ( \_\_ / \_\_ / \_\_\_\_ )
- Plot Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Process Flow Diagram(s) ( \_\_ / \_\_ / \_\_\_\_ )
- Process Material Specification Data ( \_\_ / \_\_ / \_\_\_\_ )
- Process Operation Log Sheet(s) ( \_\_ / \_\_ / \_\_\_\_ )
- Project Location Map ( \_\_ / \_\_ / \_\_\_\_ )
- PSD Permit Correlation Tables ( \_\_ / \_\_ / \_\_\_\_ )
- RACT Demonstration ( \_\_ / \_\_ / \_\_\_\_ )
- Regulatory Analysis Summary ( \_\_ / \_\_ / \_\_\_\_ )
- Results of SEQR Review ( \_\_ / \_\_ / \_\_\_\_ )
- Seed Mixture Recommendations ( \_\_ / \_\_ / \_\_\_\_ )
- Short Environmental Assessment Form ( \_\_ / \_\_ / \_\_\_\_ )
- Site Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Solid Waste Annual Report Form ( \_\_ / \_\_ / \_\_\_\_ )
- SPDES Permit ( \_\_ / \_\_ / \_\_\_\_ )
- Stack Test Protocols/Reports ( \_\_ / \_\_ / \_\_\_\_ )
- Title IV Acid Rain Permit Application ( \_\_ / \_\_ / \_\_\_\_ )
- Transfer Form ( \_\_ / \_\_ / \_\_\_\_ )
- VOC RACT Compliance Plan ( \_\_ / \_\_ / \_\_\_\_ )
- Wood Waste Specifications ( \_\_ / \_\_ / \_\_\_\_ )
- WQC - Basis for Conditions ( \_\_ / \_\_ / \_\_\_\_ )

**CONTINUATION SHEET**

New York State Department of Environmental Conservation  
Air Permit Application Form



Department of Environmental Conservation

DEC ID											
3	-	5	5	0	8	-	0	0	1	3	3

Section IV - Emission Unit Information

Emission Source/Control (continuation)										
Emission Unit		U - 0 0 R A P								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
CRSH2	I	2015	2015				TELESMITH 5252			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
230	9	TONS PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
SCRN2	I	2015	2015				TELEX SIMPLICITY 2520			
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
230	I	TONS PER HOUR								
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		
Emission Source		Date of Construction	Date of Operation	Date of Removal	Control Type		Manufacturer's Name/Model No.			
ID	Type				Code	Description				
Design Capacity	Design Capacity Units				Waste Feed		Waste Type			
	Code	Description			Code	Description	Code	Description		

## **ATTACHMENT II**

### **FACILITY EMISSIONS INVENTORY**

**RCA Asphalt  
Mount Vernon, NY Plant  
Facility Emissions Summary  
Criteria Pollutants and Total HAPs**

<b>Facility Total Estimated Actual Annual Emissions*</b>	<b>lb/yr</b>	<b>TPY</b>
<b>NOx:</b>	12,184	6.09
<b>SO<sub>2</sub>:</b>	2,187	1.09
<b>CO:</b>	190,131	95
<b>VOC:</b>	3.47	1.73E-03
<b>Lead:</b>	4.23E-01	2.11E-04
<b>PM<sub>10</sub>:</b>	13,799	6.90
<b>total HAP</b>	3,680	1.84

<b>Facility Total Estimated PTE Annual Emissions*</b>	<b>lb/yr</b>	<b>TPY</b>
<b>NOx:</b>	93,049	46.52
<b>SO<sub>2</sub>:</b>	17,048	8.52
<b>CO:</b>	1,482,367	741.18
<b>VOC:</b>	30,409	15.20
<b>Lead:</b>	3.3	1.65E-03
<b>PM<sub>10</sub>:</b>	103,309	51.65
<b>total HAP</b>	28,705	14.35

\*Note: The Facility's principal fuel source for the dryer burner is natural gas. Estimated Facility actual and PTE emissions are reflective of emissions from the batch plant when firing natural gas as well as PM10 from the RAP plant

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
Criteria Pollutants  
Estimated Actual Emissions**

**I. Fuel: Nat. Gas (Process: P01)**  
**Annual Production, ton/yr:** 475,000  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 1,123

Operating hours and annual production figures are for calculation purposes only and are not to be considered permit limits.

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**Natural Gas Emission**

Factors <sup>1</sup>		lb/hr	lb/yr	TPY
NOx, lb/ton	0.025	10.58	11,875	5.94
SO <sub>2</sub> , lb/ton	0.0046	1.95	2,185	1.09
CO, lb/ton	0.40	169.20	190,000	95.00
VOC, lb/ton	0.0082	3.47	3,895	1.95
Lead, lb/ton	8.9E-07	3.8E-04	4.2E-01	2.1E-04
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	12,825	6.41

**II. Fuel: No. 2 Fuel Oil (Process: P02)**  
**Annual Production, ton/yr:** 365,000  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 863

Operating hours and annual production figures are for calculation purposes only and are not to be considered permit limits.

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**No. 2 Oil Emission**

Factors		lb/hr	lb/yr	TPY
NOx, lb/ton	0.120	50.76	43,800	21.90
SO <sub>2</sub> , lb/ton	0.0880	37.22	32,120	16.06
CO, lb/ton	0.40	169.20	146,000	73.00
VOC, lb/ton	0.0082	3.47	2,993	1.50
Lead, lb/ton	8.9E-07	3.76E-04	3.E-01	1.62E-04
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	9,855	4.93

1. AP-42 11.1, "Hot Mix Asphalt Plants" 12/04, Tables 11.1-1, 5, 6, & 11 (Batch Mix Plant)

**III. Fuel: No. 4 & 6 Fuel Oil (Process: P03)**  
**Annual Production, ton/yr:** 365,000  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 863

Operating hours and annual production figures are for calculation purposes only and are not to be considered permit limits.

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**No. 4 & 6 Oil Emission**

Factors		lb/hr	lb/yr	TPY
NOx, lb/ton	0.120	50.76	43,800	21.90
SO <sub>2</sub> , lb/ton	0.0880	37.22	32,120	16.06
CO, lb/ton	0.40	169.20	146,000	73.00
VOC, lb/ton	0.0360	15.23	13,140	6.57
Lead, lb/ton	8.9E-07	3.76E-04	3.E-01	1.62E-04
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	9,855	4.93

1. AP-42 11.1, "Hot Mix Asphalt Plants" 12/04, Tables 11.1-1, 5, 6, & 11 (Batch Mix Plant)

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
Criteria Pollutants  
Estimated PTE Emissions**

**I. Fuel: Nat. Gas (Process: P01)**  
**Annual Production, ton/yr:** 3,705,480  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 8,760

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**Natural Gas Emission**

Factors <sup>1</sup>		lb/hr	lb/yr	TPY
NOx, lb/ton	0.025	10.58	92,637	46.32
SO <sub>2</sub> , lb/ton	0.0046	1.95	17,045	8.52
CO, lb/ton	0.40	169.20	1,482,192	741.10
VOC, lb/ton	0.0082	3.47	30,385	15.19
Lead, lb/ton	8.9E-07	3.8E-04	3.3E+00	1.6E-03
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	100,048	50.02

**II. Fuel: No. 2 Fuel Oil (Process: P02)**  
**Annual Production, ton/yr:** 3,705,480  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 8,760

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**No. 2 Oil Emission**

Factors		lb/hr	lb/yr	TPY
NOx, lb/ton	0.120	50.76	444,658	222.33
SO <sub>2</sub> , lb/ton	0.0880	37.22	326,082	163.04
CO, lb/ton	0.40	169.20	1,482,192	741.10
VOC, lb/ton	0.0082	3.47	30,385	15.19
Lead, lb/ton	8.9E-07	3.76E-04	3	1.65E-03
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	100,048	50.02

**III. Fuel: No. 4 & 6 Fuel Oil (Process: P03)**  
**Annual Production, ton/yr:** 3,705,480  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 8,760

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009 Emission Source/Control: BAG1, BURN1

**No. 4 & 6 Oil Emission**

Factors		lb/hr	lb/yr	TPY
NOx, lb/ton	0.120	50.76	444,658	222.33
SO <sub>2</sub> , lb/ton	0.0880	37.22	326,082	163.04
CO, lb/ton	0.40	169.20	1,482,192	741.10
VOC, lb/ton	0.0360	15.23	133,397	66.70
Lead, lb/ton	8.9E-07	3.76E-04	3	1.65E-03
PM <sub>10</sub> (fabric filter), lb/ton	0.027	11.42	100,048	50.02

1. AP-42 11.1, "Hot Mix Asphalt Plants" 12/04, Tables 11.1-1, 5, 6, & 11 (Batch Mix Plant)

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
Criteria Pollutants  
Estimated ERP Emissions**

Note: For all pollutants except PM, ERP=PTE

<b>I.</b>	<b>Fuel:</b>	<b>Nat. Gas</b>	(Process: P01)
	<b>Annual Production, ton/yr:</b>	3,705,480	
	<b>Typical Production Rate, tons/hr:</b>	423	
	<b>Assumed Operating Hours per Year:</b>	8,760	

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009                      Emission Source: BURN1

<b>Natural Gas Emission</b>					
<b>Factors <sup>1</sup></b>		<b>lb/hr</b>	<b>lb/yr</b>	<b>TPY</b>	
NOx, lb/ton	0.025	10.58	92,637	46.32	
SO <sub>2</sub> , lb/ton	0.0046	1.95	17,045	8.52	
CO, lb/ton	0.40	169.20	1,482,192	741.10	
VOC, lb/ton	0.0082	3.47	30,385	15.19	
Lead, lb/ton	8.9E-07	3.8E-04	3.3E+00	1.6E-03	
PM <sub>10</sub> (uncontrolled), lb/ton	4.5	1,904	16,674,660	8,337	

<b>II.</b>	<b>Fuel:</b>	<b>No. 2 Fuel Oil</b>	(Process: P02)
	<b>Annual Production, ton/yr:</b>	3,705,480	
	<b>Typical Production Rate, tons/hr:</b>	423	
	<b>Assumed Operating Hours per Year:</b>	8,760	

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009                      Emission Source: BURN1

<b>No. 2 Oil Emission</b>					
<b>Factors</b>		<b>lb/hr</b>	<b>lb/yr</b>	<b>TPY</b>	
NOx, lb/ton	0.120	50.76	444,658	222.33	
SO <sub>2</sub> , lb/ton	0.0880	37.22	326,082	163.04	
CO, lb/ton	0.40	169.20	1,482,192	741.10	
VOC, lb/ton	0.0082	3.47	30,385	15.19	
Lead, lb/ton	8.9E-07	3.76E-04	3	1.65E-03	
PM <sub>10</sub> (uncontrolled), lb/ton	4.5	1,904	16,674,660	8,337	

<b>III.</b>	<b>Fuel:</b>	<b>No. 4 &amp; 6 Fuel Oil</b>	(Process: P03)
	<b>Annual Production, ton/yr:</b>	3,705,480	
	<b>Typical Production Rate, tons/hr:</b>	423	
	<b>Assumed Operating Hours per Year:</b>	8,760	

Operating hours and emissions are for demonstrative purposes only

Emission Point: 00009                      Emission Source: BURN1

<b>No. 4 &amp; 6 Oil Emission</b>					
<b>Factors</b>		<b>lb/hr</b>	<b>lb/yr</b>	<b>TPY</b>	
NOx, lb/ton	0.120	50.76	444,658	222.33	
SO <sub>2</sub> , lb/ton	0.0880	37.22	326,082	163.04	
CO, lb/ton	0.40	169.20	1,482,192	741.10	
VOC, lb/ton	0.0360	15.23	133,397	66.70	
Lead, lb/ton	8.9E-07	3.76E-04	3	1.65E-03	
PM <sub>10</sub> (uncontrolled), lb/ton	4.5	1,904	16,674,660	8,337	

1. AP-42 11.1, "Hot Mix Asphalt Plants" 12/04, Tables 11.1-1, 5, 6, & 11 (Batch Mix Plant)

**RCA Asphalt  
Mount Vernon, NY Plant  
Exempt Liquid Asphalt Heater  
Criteria Pollutants  
Estimated Actual, PTE, and ERP Emissions**

**Note: Exempt per 6 NYCRR 201-3.2 (c) (1) (i)**

**I. Natural Gas - Estimated Actual Emissions**

Heat Rating, BTU/hr	500,000	Operating Season, months:	9 approximate
Nat. Gas, BTU/scf	1,000	Operating Season, days:	274
Nat. Gas, scf/hr	500	Operating Season, hrs:	6,570 * (heat req'd 24 hr/day)
Operating (Heating) Hrs/yr	6,570		
Nat. Gas, mmscf/yr	3.29		

Contaminant	lb/mmscf <sup>1</sup>	Emissions Per Unit		
		(lb/hr)	(lb/yr)	(tpy)
NOx	94	0.0470	308.79	0.15
PM	7.6	0.0038	24.97	0.01
PM10	7.6	0.0038	24.97	0.01
SO2	0.6	0.0003	1.97	0.00
CO	40	0.0200	131.40	0.07
VOC	5.5	0.0028	18.07	0.01

**II. Natural Gas - Estimated PTE/ERP Emissions**

Heat Rating, BTU/hr	500,000	Operating Season, months:	12 approximate
Nat. Gas, BTU/scf	1,000	Operating Season, days:	365
Nat. Gas, scf/hr	500	Operating Season, hrs:	8,760 * (heat req'd 24 hr/day)
Operating (Heating) Hrs/yr	8,760		
Nat. Gas, mmscf/yr	4.38		

Contaminant	lb/mmscf <sup>1</sup>	Emissions Per Unit		
		(lb/hr)	(lb/yr)	(tpy)
NOx	94	0.0470	411.72	0.21
PM	7.6	0.0038	33.29	0.02
PM10	7.6	0.0038	33.29	0.02
SO2	0.6	0.0003	2.63	0.00
CO	40	0.0200	175.20	0.09
VOC	5.5	0.0028	24.09	0.01

**III. No. 2 Fuel Oil- Estimated Actual Emissions**

Heat Rating, BTU/hr	500,000	Operating Season, months:	9 approximate
#2 Oil, BTU/gal.	137,000	Operating Season, days:	274
#2 Oil, gal/hr	3.65	Operating Season, hrs:	6,570 * (heat req'd 24 hr/day)
Operating (Heating) Hrs/yr	6,570		
#2 Oil, gal/yr	23,978		
#2 Oil Sulfur Content, %	0.0015 ULSD (ultra low sulfur diesel)		

Contaminant	(lb/10 <sup>3</sup> gal) <sup>2</sup>	(lb/hr)	(lb/yr)	(tpy)
PM	2.00	0.0073	47.96	0.02
PM10	2.00	0.0073	47.96	0.02
SO2	0.21	0.0008	5.11	0.00
CO	5.00	0.0182	119.89	0.06
VOC	0.34	0.0012	8.15	0.00

**IV. No. 2 Fuel Oil- Estimated PTE/ERP Emissions**

Heat Rating, BTU/hr	500,000	Operating Season, months:	12 approximate
#2 Oil, BTU/gal.	137,000	Operating Season, days:	365
#2 Oil, gal/hr	3.65	Operating Season, hrs:	8,760 * (heat req'd 24 hr/day)
Operating (Heating) Hrs/yr	8,760		
#2 Oil, gal/yr	31,971		
#2 Oil Sulfur Content, %	0.0015 ULSD (ultra low sulfur diesel)		

Contaminant	(lb/10 <sup>3</sup> gal) <sup>2</sup>	(lb/hr)	(lb/yr)	(tpy)
PM	2.00	0.0073	63.94	0.03
PM10	2.00	0.0073	63.94	0.03
SO2	0.21	0.0008	6.81	0.00
CO	5.00	0.0182	159.85	0.08
VOC	0.34	0.0012	10.87	0.01

\* All calculations on this page are overly conservative.

<sup>1</sup>USEPA AP-42 Chapter 1.1, Natural Gas Combustion, Tables 1.4-1 & 1.4-2.

<sup>2</sup>USEPA AP-42 Chapter 1.3, Fuel Oil Combustion, Tables 1.3-1 & 1.3-3.

**RCA Asphalt  
Mount Vernon, NY Plant  
RAP (U-00RAP)  
Criteria Pollutants  
Estimated Actual Emissions**

**I. Process Line Operating Parameters**

Capacity, ton/hr                      230  
Hours/year                              2,575 Assumed maximum  
Yearly Production, tpy              592,250 Conservatively high  
(Equipment powered by utility supplied electricity)

**II. Process Emissions (PO4)                      PM<sub>10</sub>/PM<sub>2.5</sub> \***

\* AP-42 Chapter 11.19.2, *Crushed Stone Processing and Pulverized Mineral Processing*, August 2004. PM<sub>10</sub> calculations assumed as an upper limit for these sources for PM<sub>2.5</sub>.

	Emission #	Emission Source	% Plant <sup>1</sup> Thruput	Estimated Process Emissions			
				AP-42 EF controlled lb/ton	Actual lb/hr	Actual lb/yr	Actual tpy
Primary Crusher	1	CRSH2	100	0.00054	0.1242	320	0.16
Primary & Sec Screens	1	SCRN2	100	0.00074	0.1702	438	0.22
Conveyor Drop Points*	7	CNVYR	100	0.000046	0.0741	191	0.10
		<b>Totals</b>			0.3685	949	0.47

<sup>1</sup>All equipment is conservatively assumed to receive 100% of plant thruput

\*Conveyor drop points estimated to be 7 or less

**RCA Asphalt  
Mount Vernon, NY Plant  
RAP (U-00RAP)  
Criteria Pollutants  
Estimated PTE Emissions**

**I. Process Line Operating Parameters**

Capacity, ton/hr                      230  
Hours/year                              8,760 Assumed maximum  
Yearly Production, tpy              2,014,800 Conservatively high  
(Equipment powered by utility supplied electricity)

**II. Process Emissions (P04)**                      PM<sub>10</sub>/PM<sub>2.5</sub> \*

\* AP-42 Chapter 11.19.2, *Crushed Stone Processing and Pulverized Mineral Processing*, August 2004. PM<sub>10</sub> calculations assumed as an upper limit for these sources for PM<sub>2.5</sub>.

	Emission #	Emission Source	% Plant <sup>1</sup> Thruput	Estimated Process Emissions			
				AP-42 EF controlled lb/ton	Actual lb/hr	Actual lb/yr	Actual tpy
Primary Crusher	1	CRSH2	100	0.00054	0.1242	1,088	0.54
Primary & Sec Screens	1	SCRN2	100	0.00074	0.1702	1,491	0.75
Conveyor Drop Points*	7	CNVYR	100	0.000046	0.0741	649	0.32
			<b>Totals</b>		0.3685	3,228	1.61

<sup>1</sup>All equipment is conservatively assumed to receive 100% of plant thruput

\*Conveyor drop points estimated to be 7 or less



**RCA Asphalt**  
**Mount Vernon, NY Plant**  
**Batch Mix Plant (U-00HMP)**  
**HAPs**  
**Estimated Actual Emissions**  
**Natural Gas**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

Fuel: Natural Gas

Annual Production, ton/yr: 475,000

Typical Production Rate, tons/hr: 423

Assumed Operating Hours per Year: 1,123

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.52E+02	7.60E-02
Quinone	2.70E-04	1.14E-01	1.28E+02	6.41E-02
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	4.51E-05	2.26E-08
Chromium (VI)	4.80E-08	2.03E-05	2.28E-02	1.14E-05
Benzene	2.80E-04	1.184E-01	1.33E+02	6.65E-02
Ethylbenzene	2.20E-03	9.306E-01	1.05E+03	5.23E-01
Formaldehyde	7.40E-04	3.130E-01	3.52E+02	1.76E-01
Toluene	1.00E-03	4.230E-01	4.75E+02	2.38E-01
Xylene	2.70E-03	1.142E+00	1.28E+03	6.41E-01
2-Methylnaphthalene	7.10E-05	3.003E-02	3.37E+01	1.69E-02
Acenaphthene	9.00E-07	3.807E-04	4.28E-01	2.14E-04
Acenaphthylene	5.80E-07	2.453E-04	2.76E-01	1.38E-04
Anthracene	2.10E-07	8.883E-05	9.98E-02	4.99E-05
Benzo(a)anthracene	4.60E-09	1.946E-06	2.19E-03	1.09E-06
Benzo(a)pyrene	3.10E-10	1.311E-07	1.47E-04	7.36E-08
Benzo(b)fluoranthene	9.40E-09	3.976E-06	4.47E-03	2.23E-06
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	2.38E-04	1.19E-07
Benzo(k)fluoranthene	1.30E-08	5.499E-06	6.18E-03	3.09E-06
Chrysene	3.80E-09	1.607E-06	1.81E-03	9.03E-07
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	4.51E-05	2.26E-08
Fluoranthene	1.60E-07	6.768E-05	7.60E-02	3.80E-05
Fluorene	1.60E-06	6.768E-04	7.60E-01	3.80E-04
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.43E-04	7.13E-08
Naphthalene	3.60E-05	1.523E-02	1.71E+01	8.55E-03
Phenanthrene	2.60E-06	1.100E-03	1.24E+00	6.18E-04
Pyrene	6.20E-08	2.623E-05	2.95E-02	1.47E-05
Arsenic	4.60E-07	1.946E-04	2.19E-01	1.09E-04
Beryllium	1.50E-07	6.345E-05	7.13E-02	3.56E-05
Cadium	6.10E-07	2.580E-04	2.90E-01	1.45E-04
Chromium	5.70E-07	2.411E-04	2.71E-01	1.35E-04
total PAHs	1.10E-04	4.653E-02	5.23E+01	2.61E-02
Lead	8.90E-07	3.765E-04	4.23E-01	2.11E-04
Manganese	6.90E-06	2.919E-03	3.28E+00	1.64E-03
Mercury	4.10E-07	1.734E-04	1.95E-01	9.74E-05
Nickel	3.00E-06	1.269E-03	1.43E+00	7.13E-04
Selenium	4.90E-07	2.073E-04	2.33E-01	1.16E-04
<b>total HAPS</b>	<b>7.75E-03</b>	<b>3.28</b>	<b>3679.67</b>	<b>1.840</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
HAPs  
Estimated PTE Emissions  
Natural Gas**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

Fuel: Natural Gas

Annual Production, ton/yr: 3,705,480

Typical Production Rate, tons/hr: 423

Assumed Operating Hours per Year: 8,760

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.19E+03	5.93E-01
Quinone	2.70E-04	1.14E-01	1.00E+03	5.00E-01
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	3.52E-04	1.76E-07
Chromium (VI)	4.80E-08	2.03E-05	1.78E-01	8.89E-05
Benzene	2.80E-04	1.184E-01	1.04E+03	5.19E-01
Ethylbenzene	2.20E-03	9.306E-01	8.15E+03	4.08E+00
Formaldehyde	7.40E-04	3.130E-01	2.74E+03	1.37E+00
Toluene	1.00E-03	4.230E-01	3.71E+03	1.85E+00
Xylene	2.70E-03	1.142E+00	1.00E+04	5.00E+00
2-Methylnaphthalene	7.10E-05	3.003E-02	2.63E+02	1.32E-01
Acenaphthene	9.00E-07	3.807E-04	3.33E+00	1.67E-03
Acenaphthylene	5.80E-07	2.453E-04	2.15E+00	1.07E-03
Anthracene	2.10E-07	8.883E-05	7.78E-01	3.89E-04
Benzo(a)anthracene	4.60E-09	1.946E-06	1.70E-02	8.52E-06
Benzo(a)pyrene	3.10E-10	1.311E-07	1.15E-03	5.74E-07
Benzo(b)fluoranthene	9.40E-09	3.976E-06	3.48E-02	1.74E-05
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	1.85E-03	9.26E-07
Benzo(k)fluoranthene	1.30E-08	5.499E-06	4.82E-02	2.41E-05
Chrysene	3.80E-09	1.607E-06	1.41E-02	7.04E-06
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	3.52E-04	1.76E-07
Fluoranthene	1.60E-07	6.768E-05	5.93E-01	2.96E-04
Fluorene	1.60E-06	6.768E-04	5.93E+00	2.96E-03
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.11E-03	5.56E-07
Naphthalene	3.60E-05	1.523E-02	1.33E+02	6.67E-02
Phenanthrene	2.60E-06	1.100E-03	9.63E+00	4.82E-03
Pyrene	6.20E-08	2.623E-05	2.30E-01	1.15E-04
Arsenic	4.60E-07	1.946E-04	1.70E+00	8.52E-04
Beryllium	1.50E-07	6.345E-05	5.56E-01	2.78E-04
Cadium	6.10E-07	2.580E-04	2.26E+00	1.13E-03
Chromium	5.70E-07	2.411E-04	2.11E+00	1.06E-03
total PAHs	1.10E-04	4.653E-02	4.08E+02	2.04E-01
Lead	8.90E-07	3.765E-04	3.30E+00	1.65E-03
Manganese	6.90E-06	2.919E-03	2.56E+01	1.28E-02
Mercury	4.10E-07	1.734E-04	1.52E+00	7.60E-04
Nickel	3.00E-06	1.269E-03	1.11E+01	5.56E-03
Selenium	4.90E-07	2.073E-04	1.82E+00	9.08E-04
<b>total HAPS</b>	<b>7.75E-03</b>	<b>3.28</b>	<b>28705.14</b>	<b>14.353</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**RCA Asphalt**  
**Mount Vernon, NY Plant**  
**Batch Mix Plant (U-00HMP)**  
**HAPs**  
**Estimated Actual Emissions**  
**No. 2 Fuel Oil**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

Fuel: No. 2 Fuel Oil

Annual Production, ton/yr: 365,000

Typical Production Rate, tons/hr: 423

Assumed Operating Hours per Year: 863

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.17E+02	5.84E-02
Quinone	2.70E-04	1.14E-01	9.86E+01	4.93E-02
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	3.47E-05	1.73E-08
Chromium (VI)	4.80E-08	2.03E-05	1.75E-02	8.76E-06
Benzene	2.80E-04	1.184E-01	1.02E+02	5.11E-02
Ethylbenzene	2.20E-03	9.306E-01	8.03E+02	4.02E-01
Formaldehyde	7.40E-04	3.130E-01	2.70E+02	1.35E-01
Toluene	1.00E-03	4.230E-01	3.65E+02	1.83E-01
Xylene	2.70E-03	1.142E+00	9.86E+02	4.93E-01
2-Methylnaphthalene	7.10E-05	3.003E-02	2.59E+01	1.30E-02
Acenaphthene	9.00E-07	3.807E-04	3.29E-01	1.64E-04
Acenaphthylene	5.80E-07	2.453E-04	2.12E-01	1.06E-04
Anthracene	2.10E-07	8.883E-05	7.67E-02	3.83E-05
Benzo(a)anthracene	4.60E-09	1.946E-06	1.68E-03	8.40E-07
Benzo(a)pyrene	3.10E-10	1.311E-07	1.13E-04	5.66E-08
Benzo(b)fluoranthene	9.40E-09	3.976E-06	3.43E-03	1.72E-06
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	1.83E-04	9.13E-08
Benzo(k)fluoranthene	1.30E-08	5.499E-06	4.75E-03	2.37E-06
Chrysene	3.80E-09	1.607E-06	1.39E-03	6.94E-07
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	3.47E-05	1.73E-08
Fluoranthene	1.60E-07	6.768E-05	5.84E-02	2.92E-05
Fluorene	1.60E-06	6.768E-04	5.84E-01	2.92E-04
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.10E-04	5.48E-08
Naphthalene	3.60E-05	1.523E-02	1.31E+01	6.57E-03
Phenanthrene	2.60E-06	1.100E-03	9.49E-01	4.75E-04
Pyrene	6.20E-08	2.623E-05	2.26E-02	1.13E-05
Arsenic	4.60E-07	1.946E-04	1.68E-01	8.40E-05
Beryllium	1.50E-07	6.345E-05	5.48E-02	2.74E-05
Cadium	6.10E-07	2.580E-04	2.23E-01	1.11E-04
Chromium	5.70E-07	2.411E-04	2.08E-01	1.04E-04
total PAHs	1.10E-04	4.653E-02	4.02E+01	2.01E-02
Lead	8.90E-07	3.765E-04	3.25E-01	1.62E-04
Manganese	6.90E-06	2.919E-03	2.52E+00	1.26E-03
Mercury	4.10E-07	1.734E-04	1.50E-01	7.48E-05
Nickel	3.00E-06	1.269E-03	1.10E+00	5.48E-04
Selenium	4.90E-07	2.073E-04	1.79E-01	8.94E-05
<b>total HAPS</b>	<b>7.75E-03</b>	<b>3.28</b>	<b>2827.54</b>	<b>1.414</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
HAPs  
Estimated PTE Emissions  
No. 2 Fuel Oil**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

Fuel: No. 2 Fuel Oil

Annual Production, ton/yr: 3,705,480

Typical Production Rate, tons/hr: 423

Assumed Operating Hours per Year: 8,760

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.19E+03	5.93E-01
Quinone	2.70E-04	1.14E-01	1.00E+03	5.00E-01
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	3.52E-04	1.76E-07
Chromium (VI)	4.80E-08	2.03E-05	1.78E-01	8.89E-05
Benzene	2.80E-04	1.184E-01	1.04E+03	5.19E-01
Ethylbenzene	2.20E-03	9.306E-01	8.15E+03	4.08E+00
Formaldehyde	7.40E-04	3.130E-01	2.74E+03	1.37E+00
Toluene	1.00E-03	4.230E-01	3.71E+03	1.85E+00
Xylene	2.70E-03	1.142E+00	1.00E+04	5.00E+00
2-Methylnaphthalene	7.10E-05	3.003E-02	2.63E+02	1.32E-01
Acenaphthene	9.00E-07	3.807E-04	3.33E+00	1.67E-03
Acenaphthylene	5.80E-07	2.453E-04	2.15E+00	1.07E-03
Anthracene	2.10E-07	8.883E-05	7.78E-01	3.89E-04
Benzo(a)anthracene	4.60E-09	1.946E-06	1.70E-02	8.52E-06
Benzo(a)pyrene	3.10E-10	1.311E-07	1.15E-03	5.74E-07
Benzo(b)fluoranthene	9.40E-09	3.976E-06	3.48E-02	1.74E-05
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	1.85E-03	9.26E-07
Benzo(k)fluoranthene	1.30E-08	5.499E-06	4.82E-02	2.41E-05
Chrysene	3.80E-09	1.607E-06	1.41E-02	7.04E-06
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	3.52E-04	1.76E-07
Fluoranthene	1.60E-07	6.768E-05	5.93E-01	2.96E-04
Fluorene	1.60E-06	6.768E-04	5.93E+00	2.96E-03
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.11E-03	5.56E-07
Naphthalene	3.60E-05	1.523E-02	1.33E+02	6.67E-02
Phenanthrene	2.60E-06	1.100E-03	9.63E+00	4.82E-03
Pyrene	6.20E-08	2.623E-05	2.30E-01	1.15E-04
Arsenic	4.60E-07	1.946E-04	1.70E+00	8.52E-04
Beryllium	1.50E-07	6.345E-05	5.56E-01	2.78E-04
Cadium	6.10E-07	2.580E-04	2.26E+00	1.13E-03
Chromium	5.70E-07	2.411E-04	2.11E+00	1.06E-03
total PAHs	1.10E-04	4.653E-02	4.08E+02	2.04E-01
Lead	8.90E-07	3.765E-04	3.30E+00	1.65E-03
Manganese	6.90E-06	2.919E-03	2.56E+01	1.28E-02
Mercury	4.10E-07	1.734E-04	1.52E+00	7.60E-04
Nickel	3.00E-06	1.269E-03	1.11E+01	5.56E-03
Selenium	4.90E-07	2.073E-04	1.82E+00	9.08E-04
<b>total HAPS</b>	<b>7.75E-03</b>	<b>3.28</b>	<b>28705.14</b>	<b>14.353</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
HAPs  
Estimated Actual Emissions  
No. 4 6 Fuel Oil**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

**Fuel:** No. 4 & 6 Fuel Oil

**Annual Production, ton/yr:** 365,000

**Typical Production Rate, tons/hr:** 423

**Assumed Operating Hours per Year:** 863

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.17E+02	5.84E-02
Quinone	2.70E-04	1.14E-01	9.86E+01	4.93E-02
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	3.47E-05	1.73E-08
Chromium (VI)	4.80E-08	2.03E-05	1.75E-02	8.76E-06
Benzene	2.80E-04	1.184E-01	1.02E+02	5.11E-02
Ethylbenzene	2.20E-03	9.306E-01	8.03E+02	4.02E-01
Formaldehyde	7.40E-04	3.130E-01	2.70E+02	1.35E-01
Toluene	1.00E-03	4.230E-01	3.65E+02	1.83E-01
Xylene	2.70E-03	1.142E+00	9.86E+02	4.93E-01
2-Methylnaphthalene	7.10E-05	3.003E-02	2.59E+01	1.30E-02
Acenaphthene	9.00E-07	3.807E-04	3.29E-01	1.64E-04
Acenaphthylene	5.80E-07	2.453E-04	2.12E-01	1.06E-04
Anthracene	2.10E-07	8.883E-05	7.67E-02	3.83E-05
Benzo(a)anthracene	4.60E-09	1.946E-06	1.68E-03	8.40E-07
Benzo(a)pyrene	3.10E-10	1.311E-07	1.13E-04	5.66E-08
Benzo(b)fluoranthene	9.40E-09	3.976E-06	3.43E-03	1.72E-06
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	1.83E-04	9.13E-08
Benzo(k)fluoranthene	1.30E-08	5.499E-06	4.75E-03	2.37E-06
Chrysene	3.80E-09	1.607E-06	1.39E-03	6.94E-07
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	3.47E-05	1.73E-08
Fluoranthene	2.40E-05	1.015E-02	8.76E+00	4.38E-03
Fluorene	1.60E-06	6.768E-04	5.84E-01	2.92E-04
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.10E-04	5.48E-08
Naphthalene	3.60E-05	1.523E-02	1.31E+01	6.57E-03
Phenanthrene	3.70E-05	1.565E-02	1.35E+01	6.75E-03
Pyrene	5.50E-05	2.327E-02	2.01E+01	1.00E-02
Arsenic	4.60E-07	1.946E-04	1.68E-01	8.40E-05
Beryllium	1.50E-07	6.345E-05	5.48E-02	2.74E-05
Cadium	6.10E-07	2.580E-04	2.23E-01	1.11E-04
Chromium	5.70E-07	2.411E-04	2.08E-01	1.04E-04
total PAHs	2.30E-04	9.729E-02	8.40E+01	4.20E-02
Lead	1.00E-05	4.230E-03	3.65E+00	1.83E-03
Manganese	6.90E-06	2.919E-03	2.52E+00	1.26E-03
Mercury	4.10E-07	1.734E-04	1.50E-01	7.48E-05
Nickel	3.00E-06	1.269E-03	1.10E+00	5.48E-04
Selenium	4.90E-07	2.073E-04	1.79E-01	8.94E-05
<b>total HAPS</b>	<b>7.99E-03</b>	<b>3.38</b>	<b>2915.97</b>	<b>1.458</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**RCA Asphalt  
Mount Vernon, NY Plant  
Batch Mix Plant (U-00HMP)  
HAPs  
Estimated PTE Emissions  
No. 4 6 Fuel Oil**

Emission Point: 00009

Emission Source/Control: BAG1, BURN2

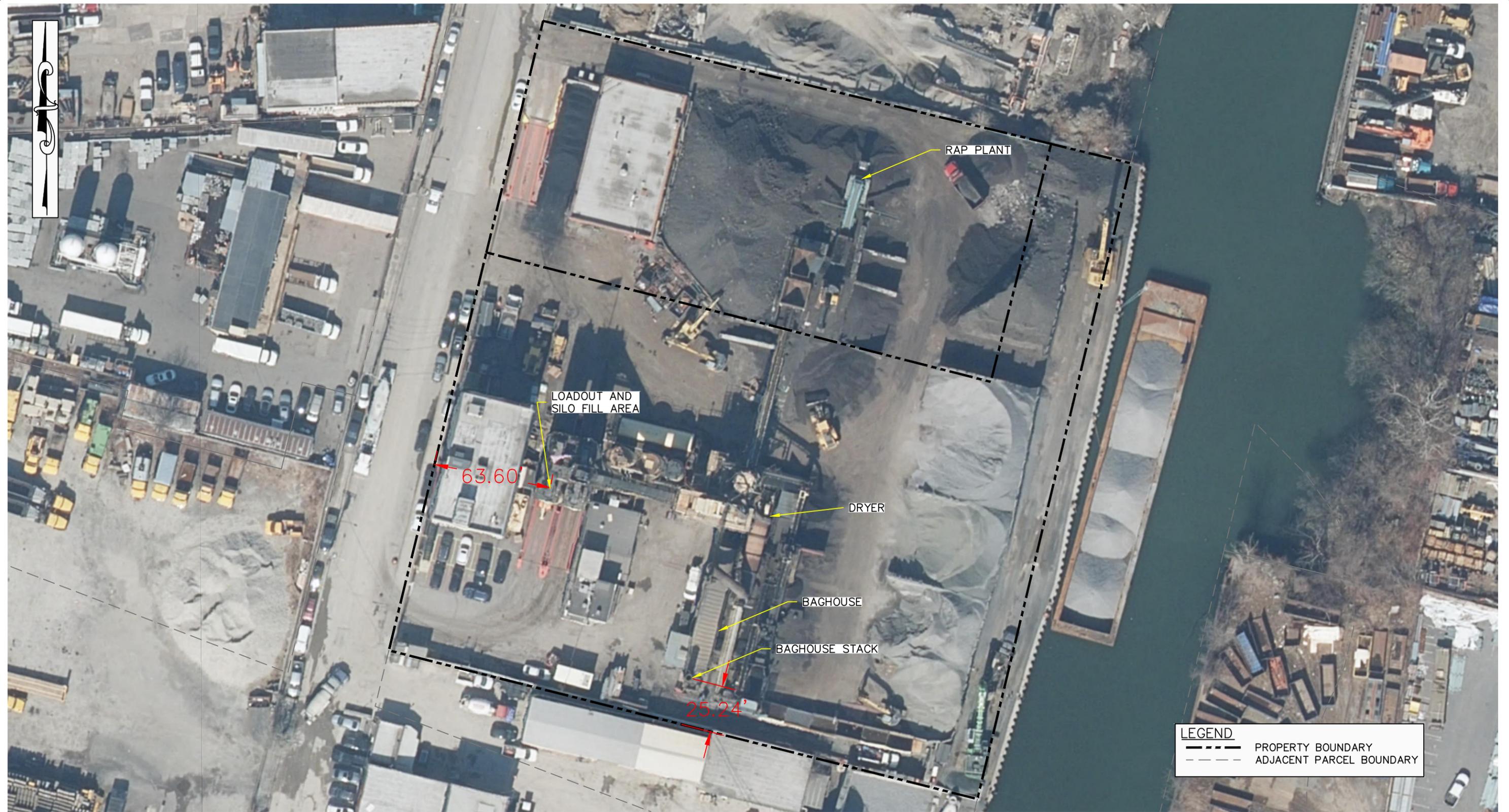
Fuel: No. 4 & 6 Fuel Oil

**Annual Production, ton/yr:** 3,705,480  
**Typical Production Rate, tons/hr:** 423  
**Assumed Operating Hours per Year:** 8,760

HAPs	EF <sup>1</sup> lb/ton	Emissions lb/hr	Emissions lb/yr	Emissions tpy
Acetaldehyde	3.20E-04	1.35E-01	1.19E+03	5.93E-01
Quinone	2.70E-04	1.14E-01	1.00E+03	5.00E-01
Dibenz(a,h)anthracene	9.50E-11	4.02E-08	3.52E-04	1.76E-07
Chromium (VI)	4.80E-08	2.03E-05	1.78E-01	8.89E-05
Benzene	2.80E-04	1.184E-01	1.04E+03	5.19E-01
Ethylbenzene	2.20E-03	9.306E-01	8.15E+03	4.08E+00
Formaldehyde	7.40E-04	3.130E-01	2.74E+03	1.37E+00
Toluene	1.00E-03	4.230E-01	3.71E+03	1.85E+00
Xylene	2.70E-03	1.142E+00	1.00E+04	5.00E+00
2-Methylnaphthalene	7.10E-05	3.003E-02	2.63E+02	1.32E-01
Acenaphthene	9.00E-07	3.807E-04	3.33E+00	1.67E-03
Acenaphthylene	5.80E-07	2.453E-04	2.15E+00	1.07E-03
Anthracene	2.10E-07	8.883E-05	7.78E-01	3.89E-04
Benzo(a)anthracene	4.60E-09	1.946E-06	1.70E-02	8.52E-06
Benzo(a)pyrene	3.10E-10	1.311E-07	1.15E-03	5.74E-07
Benzo(b)fluoranthene	9.40E-09	3.976E-06	3.48E-02	1.74E-05
Benzo(g,h,i)perylene	5.00E-10	2.115E-07	1.85E-03	9.26E-07
Benzo(k)fluoranthene	1.30E-08	5.499E-06	4.82E-02	2.41E-05
Chrysene	3.80E-09	1.607E-06	1.41E-02	7.04E-06
Dibenz(a,h)anthracenec	9.50E-11	4.019E-08	3.52E-04	1.76E-07
Fluoranthene	2.40E-05	1.015E-02	8.89E+01	4.45E-02
Fluorene	1.60E-06	6.768E-04	5.93E+00	2.96E-03
Indeno(1,2,3-cd)pyrene	3.00E-10	1.269E-07	1.11E-03	5.56E-07
Naphthalene	3.60E-05	1.523E-02	1.33E+02	6.67E-02
Phenanthrene	3.70E-05	1.565E-02	1.37E+02	6.86E-02
Pyrene	5.50E-05	2.327E-02	2.04E+02	1.02E-01
Arsenic	4.60E-07	1.946E-04	1.70E+00	8.52E-04
Beryllium	1.50E-07	6.345E-05	5.56E-01	2.78E-04
Cadium	6.10E-07	2.580E-04	2.26E+00	1.13E-03
Chromium	5.70E-07	2.411E-04	2.11E+00	1.06E-03
total PAHs	2.30E-04	9.729E-02	8.52E+02	4.26E-01
Lead	1.00E-05	4.230E-03	3.71E+01	1.85E-02
Manganese	6.90E-06	2.919E-03	2.56E+01	1.28E-02
Mercury	4.10E-07	1.734E-04	1.52E+00	7.60E-04
Nickel	3.00E-06	1.269E-03	1.11E+01	5.56E-03
Selenium	4.90E-07	2.073E-04	1.82E+00	9.08E-04
<b>total HAPS</b>	<b>7.99E-03</b>	<b>3.38</b>	<b>29602.93</b>	<b>14.801</b>

<sup>1</sup>Emissions Per AP-42 Chapter 11.1 Hot Mix Asphalt Plants-Table 11.1-9

**ATTACHMENT III**  
**FACILITY PLOT PLAN**



- NOTES:  
 1) ORTHOIMAGERY FROM NYS CLEARING HOUSE  
 2) ALL BOUNDARIES APROXIMATE WHERE SHOWN

 19 British American Blvd., Latham, New York 12110 P: (518) 782-0882 F: (518) 782-0973 www.jmt.com		FACILITY PLOT PLAN <b>RCA ASPHALT, LLC</b> MOUNT VERNON PLANT	
		CITY OF MOUNT VERNON	WESTCHESTER CO., NY
PROJ. No.: 14107002	DATE: 08/04/2023	SCALE: 1"=300'	DWG. NO. 14107001A   FIGURE 1

**ATTACHMENT IV**  
**MODEL INPUTS FOR A 6 NYCRR PART 212 PROCESS OPERATIONS AERSCEEN**  
**ANALYSIS**

## **BAGHOUSE**

TITLE: RCA\_BAGHOUSE

\*\*\*\*\* STACK PARAMETERS \*\*\*\*\*

SOURCE EMISSION RATE: 0.1260 g/s 1.000 lb/hr  
 STACK HEIGHT: 12.34 meters 40.50 feet  
 STACK INNER DIAMETER: 1.168 meters 46.00 inches  
 PLUME EXIT TEMPERATURE: 394.3 K 250.0 Deg F  
 PLUME EXIT VELOCITY: 22.860 m/s 75.00 ft/s  
 STACK AIR FLOW RATE: 51935 ACFM  
 RURAL OR URBAN: URBAN  
 POPULATION: 72581

INITIAL PROBE DISTANCE = 5000. meters 16404. feet

\*\*\*\*\* BUILDING DOWNWASH PARAMETERS \*\*\*\*\*

BUILDING HEIGHT: 7.1 meters 23.4 feet  
 MAX BUILDING DIMENSION: 13.7 meters 45.0 feet  
 MIN BUILDING DIMENSION: 3.4 meters 11.0 feet  
 BUILDING ORIENTATION TO NORTH: 14. degrees  
 STACK DIRECTION FROM CENTER: 199. degrees  
 STACK DISTANCE FROM CENTER: 8.1 meters 26.5 feet

\*\*\*\*\* FLOW SECTOR ANALYSIS \*\*\*\*\*

25 meter receptor spacing: 8. meters - 5000. meters

FLOW SECTOR	BUILD WIDTH	BUILD LENGTH	XBADJ	YBADJ	MAX 1-HR CONC	DIST (m)	TEMPORAL PERIOD
10*	4.31	13.92	1.02	-1.26	5.210	75.0	WIN
20	4.77	14.00	1.08	0.14	5.210	75.0	WIN
30	7.01	14.12	0.87	1.54	5.210	75.0	WIN
40	9.03	13.81	0.64	2.90	5.210	75.0	WIN

50	10.78	13.08	0.39	4.16	5.210	75.0	WIN
60	12.20	11.95	0.12	5.30	5.210	75.0	WIN
70	13.25	10.46	-0.14	6.28	5.210	75.0	WIN
80	13.90	8.65	-0.41	7.07	5.210	75.0	WIN
90	14.12	6.58	-0.66	7.64	5.210	75.0	WIN
100	13.92	4.31	-0.89	7.98	5.210	75.0	WIN
110	14.00	4.77	-2.53	8.08	5.210	75.0	WIN
120	14.12	7.01	-5.05	7.93	5.210	75.0	WIN
130	13.81	9.03	-7.41	7.54	5.210	75.0	WIN
140	13.08	10.78	-9.55	6.93	5.210	75.0	WIN
150	11.95	12.20	-11.40	6.10	5.210	75.0	WIN
160	10.46	13.25	-12.90	5.08	5.210	75.0	WIN
170	8.65	13.90	-14.01	3.92	5.210	75.0	WIN
180	6.58	14.12	-14.70	2.63	5.210	75.0	WIN
190	4.31	13.92	-14.94	1.26	5.210	75.0	WIN
200	4.77	14.00	-15.08	-0.14	5.210	75.0	WIN
210	7.01	14.12	-14.99	-1.54	5.210	75.0	WIN
220	9.03	13.81	-14.45	-2.90	5.210	75.0	WIN
230	10.78	13.08	-13.46	-4.16	5.210	75.0	WIN
240	12.20	11.95	-12.07	-5.30	5.210	75.0	WIN
250	13.25	10.46	-10.31	-6.28	5.210	75.0	WIN
260	13.90	8.65	-8.24	-7.07	5.210	75.0	WIN
270	14.12	6.58	-5.92	-7.64	5.210	75.0	WIN
280	13.92	4.31	-3.42	-7.98	5.210	75.0	WIN
290	14.00	4.77	-2.24	-8.08	5.210	75.0	WIN
300	14.12	7.01	-1.96	-7.93	5.210	75.0	WIN
310	13.81	9.03	-1.62	-7.54	5.210	75.0	WIN
320	13.08	10.78	-1.23	-6.93	5.210	75.0	WIN
330	11.95	12.20	-0.80	-6.10	5.210	75.0	WIN
340	10.46	13.25	-0.34	-5.08	5.210	75.0	WIN
350	8.65	13.90	0.12	-3.92	5.210	75.0	WIN
360	6.58	14.12	0.58	-2.63	5.210	75.0	WIN

\* = worst case flow sector

-----  
 \*\*\*\*\* MAKEMET METEOROLOGY PARAMETERS \*\*\*\*\*  
 -----

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban

DOMINANT CLIMATE TYPE: Average Moisture

DOMINANT SEASON: Winter  
 ALBEDO: 0.35  
 BOWEN RATIO: 1.50  
 ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U\*) ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR  
 ---  
 10 03 23 23 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-64.00	1.206	-9.000	0.020	-999.	3046.	2617.5	1.000	1.50	0.35	7.00

HT	REF TA	HT
10.0	310.9	2.0

WIND SPEED AT STACK HEIGHT (non-downwash): 7.6 m/s  
 STACK-TIP DOWNWASH ADJUSTED STACK HEIGHT: 12.3 meters  
 ESTIMATED FINAL PLUME RISE (non-downwash): 4.3 meters  
 ESTIMATED FINAL PLUME HEIGHT (non-downwash): 16.7 meters

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR  
 ---  
 10 02 11 23 12

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
297.13	0.196	1.800	0.020	602.	200.	-2.0	1.000	1.00	0.14	0.50

HT	REF TA	HT
10.0	249.8	2.0

WIND SPEED AT STACK HEIGHT (non-downwash): 0.5 m/s  
 STACK-TIP DOWNWASH ADJUSTED STACK HEIGHT: 12.3 meters  
 ESTIMATED FINAL PLUME RISE (non-downwash): 302.2 meters  
 ESTIMATED FINAL PLUME HEIGHT (non-downwash): 314.6 meters

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 \*\*\*\*\* AERSCREEN AUTOMATED DISTANCES \*\*\*\*\*  
 OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE  
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DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
7.69	0.2526	2525.00	0.2508
25.00	2.028	2550.00	0.2501
50.00	4.600	2575.00	0.2494
75.00	5.210	2600.00	0.2487
100.00	4.334	2625.00	0.2480
125.00	3.973	2650.00	0.2473
150.00	3.467	2675.00	0.2466
175.00	2.957	2700.00	0.2459
200.00	2.614	2725.00	0.2451
225.00	2.418	2750.00	0.2444
250.00	2.213	2775.00	0.2437
275.00	2.017	2800.00	0.2429
300.00	1.836	2825.00	0.2421
325.00	1.673	2850.00	0.2414
350.00	1.528	2875.00	0.2406
375.00	1.400	2900.00	0.2398
400.00	1.286	2925.00	0.2391
425.00	1.185	2950.00	0.2383
450.00	1.095	2975.00	0.2375
475.00	1.015	3000.00	0.2367
500.00	0.9435	3025.00	0.2360
525.00	0.8795	3050.00	0.2352
550.00	0.8219	3075.00	0.2344
575.00	0.7784	3100.00	0.2336
600.00	0.7401	3125.00	0.2328
625.00	0.7043	3150.00	0.2320
650.00	0.6710	3175.00	0.2312
675.00	0.6398	3200.00	0.2304
700.00	0.6108	3225.00	0.2297
725.00	0.5836	3250.00	0.2289
750.00	0.5582	3275.00	0.2281
775.00	0.5345	3300.00	0.2273
800.00	0.5122	3325.00	0.2265
825.00	0.4914	3350.00	0.2257
850.00	0.4718	3375.00	0.2250
875.00	0.4534	3400.00	0.2242
900.00	0.4361	3425.00	0.2234
925.00	0.4198	3450.00	0.2226

950.00	0.4044	3475.00	0.2219
975.00	0.3899	3500.00	0.2211
1000.00	0.3770	3525.00	0.2203
1025.00	0.3727	3550.00	0.2196
1050.00	0.3683	3575.00	0.2188
1075.00	0.3639	3600.00	0.2180
1100.00	0.3594	3625.00	0.2173
1125.00	0.3548	3650.00	0.2165
1150.00	0.3502	3675.00	0.2158
1175.00	0.3457	3700.00	0.2150
1200.00	0.3411	3725.00	0.2143
1225.00	0.3365	3750.00	0.2135
1250.00	0.3320	3775.00	0.2128
1275.00	0.3275	3800.00	0.2120
1300.00	0.3230	3825.00	0.2113
1325.00	0.3186	3850.00	0.2106
1350.00	0.3142	3875.00	0.2099
1375.00	0.3099	3900.00	0.2091
1400.00	0.3057	3925.00	0.2084
1425.00	0.3015	3950.00	0.2077
1450.00	0.2973	3975.00	0.2070
1475.00	0.2933	4000.00	0.2063
1500.00	0.2893	4025.00	0.2056
1525.00	0.2853	4050.00	0.2049
1550.00	0.2814	4075.00	0.2042
1575.00	0.2776	4100.00	0.2035
1600.00	0.2739	4125.00	0.2028
1625.00	0.2702	4150.00	0.2021
1650.00	0.2666	4175.00	0.2014
1675.00	0.2631	4200.00	0.2007
1700.00	0.2596	4225.00	0.2000
1725.00	0.2572	4250.00	0.1994
1750.00	0.2578	4275.00	0.1987
1775.00	0.2583	4300.00	0.1980
1800.00	0.2587	4325.00	0.1974
1825.00	0.2591	4350.00	0.1967
1850.00	0.2593	4375.00	0.1960
1875.00	0.2596	4400.00	0.1954
1900.00	0.2597	4425.00	0.1947
1925.00	0.2598	4450.00	0.1941
1950.00	0.2599	4475.00	0.1934
1975.00	0.2598	4500.00	0.1928
2000.00	0.2598	4525.00	0.1922
2025.00	0.2597	4550.00	0.1915
2050.00	0.2595	4575.00	0.1909
2075.00	0.2593	4600.00	0.1903
2100.00	0.2591	4625.00	0.1897
2125.00	0.2588	4650.00	0.1890
2150.00	0.2585	4675.00	0.1884
2175.00	0.2582	4700.00	0.1878

2200.00	0.2578	4725.00	0.1872
2225.00	0.2574	4750.00	0.1866
2250.00	0.2570	4775.00	0.1860
2275.00	0.2565	4800.00	0.1854
2300.00	0.2560	4825.00	0.1848
2325.00	0.2555	4850.00	0.1842
2350.00	0.2550	4875.00	0.1836
2375.00	0.2544	4900.00	0.1830
2400.00	0.2539	4925.00	0.1825
2425.00	0.2533	4950.00	0.1819
2450.00	0.2527	4975.00	0.1813
2475.00	0.2520	5000.00	0.1807
2500.00	0.2514		

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 \*\*\*\*\* AERSCREEN MAXIMUM IMPACT SUMMARY \*\*\*\*\*  
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CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	5.257	5.257	4.731	3.154	0.5257
DISTANCE FROM SOURCE	70.00 meters directed toward 10 degrees				
IMPACT AT THE AMBIENT BOUNDARY	0.2526	0.2526	0.2274	0.1516	0.2526E-01
DISTANCE FROM SOURCE	7.69 meters directed toward 10 degrees				

**SILO FILL**

TITLE: RCASILOFILL

\*\*\*\*\* VOLUME PARAMETERS \*\*\*\*\*

SOURCE EMISSION RATE:	0.1260 g/s	1.000 lb/hr
VOLUME HEIGHT:	18.14 meters	59.50 feet
INITIAL LATERAL DIMENSION:	0.73 meters	2.40 feet
INITIAL VERTICAL DIMENSION:	0.61 meters	2.00 feet
RURAL OR URBAN:	URBAN	
POPULATION:	72581	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

\*\*\*\*\* BUILDING DOWNWASH PARAMETERS \*\*\*\*\*

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

\*\*\*\*\* PROBE ANALYSIS \*\*\*\*\*

25 meter receptor spacing: 19. meters - 5000. meters

Zo SECTOR	ROUGHNESS LENGTH	1-HR CONC (ug/m3)	DIST (m)	TEMPORAL PERIOD
1*	1.000	72.02	19.4	SUM

\* = worst case flow sector

\*\*\*\*\* MAKEMET METEOROLOGY PARAMETERS \*\*\*\*\*

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban  
DOMINANT CLIMATE TYPE: Average Moisture  
DOMINANT SEASON: Summer

ALBEDO: 0.16  
BOWEN RATIO: 2.00  
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U\*) ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR  
-- -- -- -- --  
10 01 18 18 12

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
155.92	0.179	1.200	0.020	340.	174.	-2.8	1.000	2.00	0.16	0.50		

HT	REF	TA	HT
10.0	249.8	2.0	

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR  
-- -- -- -- --  
10 01 18 18 12

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O	LEN	Z0	BOWEN	ALBEDO	REF	WS
155.92	0.179	1.200	0.020	340.	174.	-2.8	1.000	2.00	0.16	0.50		

HT	REF	TA	HT
10.0	249.8	2.0	

\*\*\*\*\* AERSCREEN AUTOMATED DISTANCES \*\*\*\*\*  
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

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DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
19.39	72.02	2525.00	0.5280
25.00	56.37	2550.00	0.5239
50.00	54.84	2575.00	0.5200
75.00	34.48	2600.00	0.5161
100.00	23.50	2625.00	0.5123
125.00	16.65	2650.00	0.5085
150.00	12.41	2675.00	0.5048
175.00	9.686	2700.00	0.5012
200.00	7.800	2725.00	0.4976
225.00	6.438	2750.00	0.4941
250.00	5.424	2775.00	0.4907
275.00	4.650	2800.00	0.4873
300.00	4.041	2825.00	0.4839
325.00	3.552	2850.00	0.4806
350.00	3.154	2875.00	0.4773
375.00	2.829	2900.00	0.4741
400.00	2.556	2925.00	0.4710
425.00	2.333	2950.00	0.4679
450.00	2.183	2975.00	0.4648
475.00	2.056	3000.00	0.4618
500.00	1.948	3025.00	0.4588
525.00	1.854	3050.00	0.4559
550.00	1.773	3075.00	0.4530
575.00	1.702	3100.00	0.4501
600.00	1.640	3125.00	0.4473
625.00	1.584	3150.00	0.4446
650.00	1.534	3175.00	0.4418
675.00	1.488	3200.00	0.4391
700.00	1.447	3225.00	0.4365
725.00	1.403	3250.00	0.4338
750.00	1.363	3275.00	0.4313
775.00	1.326	3300.00	0.4287
800.00	1.292	3325.00	0.4262
825.00	1.261	3350.00	0.4237
850.00	1.231	3375.00	0.4212
875.00	1.203	3400.00	0.4188
900.00	1.176	3425.00	0.4164
925.00	1.151	3450.00	0.4140
950.00	1.127	3475.00	0.4117
975.00	1.105	3500.00	0.4094
1000.00	1.083	3525.00	0.4071
1025.00	1.062	3550.00	0.4049
1050.00	1.042	3575.00	0.4027

1075.00	1.023	3600.00	0.4005
1100.00	1.005	3625.00	0.3983
1125.00	0.9877	3650.00	0.3961
1150.00	0.9709	3675.00	0.3940
1175.00	0.9548	3700.00	0.3919
1200.00	0.9393	3725.00	0.3899
1225.00	0.9243	3750.00	0.3878
1250.00	0.9099	3775.00	0.3858
1275.00	0.8960	3800.00	0.3838
1300.00	0.8826	3825.00	0.3818
1325.00	0.8697	3850.00	0.3799
1350.00	0.8571	3875.00	0.3779
1375.00	0.8450	3900.00	0.3760
1400.00	0.8333	3925.00	0.3741
1425.00	0.8219	3950.00	0.3723
1450.00	0.8109	3975.00	0.3704
1475.00	0.8003	4000.00	0.3686
1500.00	0.7899	4025.00	0.3668
1525.00	0.7799	4050.00	0.3650
1550.00	0.7701	4075.00	0.3632
1575.00	0.7606	4100.00	0.3615
1600.00	0.7514	4125.00	0.3597
1625.00	0.7425	4150.00	0.3580
1650.00	0.7337	4175.00	0.3563
1675.00	0.7253	4200.00	0.3547
1700.00	0.7170	4225.00	0.3530
1725.00	0.7089	4250.00	0.3513
1750.00	0.7011	4275.00	0.3497
1775.00	0.6934	4300.00	0.3481
1800.00	0.6860	4325.00	0.3465
1825.00	0.6787	4350.00	0.3449
1850.00	0.6716	4375.00	0.3434
1875.00	0.6647	4400.00	0.3418
1900.00	0.6579	4425.00	0.3403
1925.00	0.6513	4450.00	0.3388
1950.00	0.6448	4475.00	0.3372
1975.00	0.6385	4500.00	0.3358
2000.00	0.6323	4525.00	0.3343
2025.00	0.6263	4550.00	0.3328
2050.00	0.6204	4575.00	0.3314
2075.00	0.6146	4600.00	0.3299
2100.00	0.6089	4625.00	0.3285
2125.00	0.6034	4650.00	0.3271
2150.00	0.5979	4675.00	0.3257
2175.00	0.5926	4700.00	0.3243
2200.00	0.5874	4725.00	0.3230
2225.00	0.5823	4750.00	0.3216
2250.00	0.5773	4775.00	0.3203
2275.00	0.5724	4800.00	0.3189
2300.00	0.5675	4825.00	0.3176

2325.00	0.5628	4850.00	0.3163
2350.00	0.5582	4875.00	0.3150
2375.00	0.5536	4900.00	0.3137
2400.00	0.5491	4925.00	0.3124
2425.00	0.5448	4950.00	0.3112
2450.00	0.5404	4975.00	0.3099
2475.00	0.5362	5000.00	0.3087
2500.00	0.5321		

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 \*\*\*\*\* AERSCREEN MAXIMUM IMPACT SUMMARY \*\*\*\*\*  
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CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	72.02	72.02	64.82	43.21	7.202
DISTANCE FROM SOURCE	19.39 meters				
IMPACT AT THE AMBIENT BOUNDARY	72.02	72.02	64.82	43.21	7.202
DISTANCE FROM SOURCE	19.39 meters				

## LOADOUT

TITLE: RCALOADOUT

\*\*\*\*\* VOLUME PARAMETERS \*\*\*\*\*

SOURCE EMISSION RATE:	0.1260 g/s	1.000 lb/hr
VOLUME HEIGHT:	2.13 meters	7.00 feet
INITIAL LATERAL DIMENSION:	6.10 meters	20.00 feet
INITIAL VERTICAL DIMENSION:	4.27 meters	14.00 feet
RURAL OR URBAN:	URBAN	
POPULATION:	72581	
INITIAL PROBE DISTANCE =	5000. meters	16404. feet

\*\*\*\*\* BUILDING DOWNWASH PARAMETERS \*\*\*\*\*

BUILDING DOWNWASH NOT USED FOR NON-POINT SOURCES

\*\*\*\*\* PROBE ANALYSIS \*\*\*\*\*

25 meter receptor spacing: 19. meters - 5000. meters

Zo SECTOR	ROUGHNESS LENGTH	1-HR CONC (ug/m3)	DIST (m)	TEMPORAL PERIOD
1*	1.000	311.9	19.4	WIN

\* = worst case flow sector

\*\*\*\*\* MAKEMET METEOROLOGY PARAMETERS \*\*\*\*\*

MIN/MAX TEMPERATURE: 249.8 / 310.9 (K)

MINIMUM WIND SPEED: 0.5 m/s

ANEMOMETER HEIGHT: 10.000 meters

SURFACE CHARACTERISTICS INPUT: AERMET SEASONAL TABLES

DOMINANT SURFACE PROFILE: Urban  
DOMINANT CLIMATE TYPE: Average Moisture  
DOMINANT SEASON: Winter

ALBEDO: 0.35  
BOWEN RATIO: 1.50  
ROUGHNESS LENGTH: 1.000 (meters)

SURFACE FRICTION VELOCITY (U\*) ADJUSTED

METEOROLOGY CONDITIONS USED TO PREDICT OVERALL MAXIMUM IMPACT

YR MO DY JDY HR  
-- -- -- -- --  
10 01 04 4 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-6.12	0.111	-9.000	0.020	-999.	85.	21.3	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.9	2.0

METEOROLOGY CONDITIONS USED TO PREDICT AMBIENT BOUNDARY IMPACT

YR MO DY JDY HR  
-- -- -- -- --  
10 01 04 4 01

H0	U*	W*	DT/DZ	ZICNV	ZIMCH	M-O LEN	Z0	BOWEN	ALBEDO	REF WS
-6.12	0.111	-9.000	0.020	-999.	85.	21.3	1.000	1.50	0.35	0.50

HT	REF TA	HT
10.0	310.9	2.0

\*\*\*\*\* AERSCREEN AUTOMATED DISTANCES \*\*\*\*\*  
OVERALL MAXIMUM CONCENTRATIONS BY DISTANCE

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DIST (m)	MAXIMUM 1-HR CONC (ug/m3)	DIST (m)	MAXIMUM 1-HR CONC (ug/m3)
19.39	311.9	2525.00	0.9603
25.00	205.0	2550.00	0.9533
50.00	62.89	2575.00	0.9463
75.00	31.31	2600.00	0.9395
100.00	19.11	2625.00	0.9327
125.00	13.05	2650.00	0.9261
150.00	10.18	2675.00	0.9196
175.00	9.236	2700.00	0.9132
200.00	8.217	2725.00	0.9068
225.00	7.251	2750.00	0.9006
250.00	6.420	2775.00	0.8945
275.00	5.725	2800.00	0.8885
300.00	5.183	2825.00	0.8825
325.00	4.755	2850.00	0.8767
350.00	4.398	2875.00	0.8709
375.00	4.097	2900.00	0.8652
400.00	3.842	2925.00	0.8596
425.00	3.626	2950.00	0.8541
450.00	3.442	2975.00	0.8487
475.00	3.284	3000.00	0.8433
500.00	3.148	3025.00	0.8380
525.00	3.028	3050.00	0.8328
550.00	2.923	3075.00	0.8277
575.00	2.830	3100.00	0.8226
600.00	2.746	3125.00	0.8176
625.00	2.670	3150.00	0.8127
650.00	2.600	3175.00	0.8078
675.00	2.537	3200.00	0.8030
700.00	2.477	3225.00	0.7982
725.00	2.411	3250.00	0.7936
750.00	2.350	3275.00	0.7889
775.00	2.293	3300.00	0.7844
800.00	2.240	3325.00	0.7799
825.00	2.190	3350.00	0.7754
850.00	2.142	3375.00	0.7711
875.00	2.098	3400.00	0.7667
900.00	2.055	3425.00	0.7624
925.00	2.014	3450.00	0.7582
950.00	1.976	3475.00	0.7540
975.00	1.939	3500.00	0.7499
1000.00	1.903	3525.00	0.7458
1025.00	1.869	3550.00	0.7418
1050.00	1.837	3575.00	0.7378

1075.00	1.805	3600.00	0.7339
1100.00	1.775	3625.00	0.7300
1125.00	1.746	3650.00	0.7262
1150.00	1.718	3675.00	0.7224
1175.00	1.691	3700.00	0.7186
1200.00	1.666	3725.00	0.7149
1225.00	1.641	3750.00	0.7112
1250.00	1.616	3775.00	0.7076
1275.00	1.593	3800.00	0.7040
1300.00	1.571	3825.00	0.7005
1325.00	1.549	3850.00	0.6970
1350.00	1.528	3875.00	0.6935
1375.00	1.507	3900.00	0.6901
1400.00	1.487	3925.00	0.6867
1425.00	1.468	3950.00	0.6833
1450.00	1.450	3975.00	0.6800
1475.00	1.431	4000.00	0.6767
1500.00	1.414	4025.00	0.6735
1525.00	1.397	4050.00	0.6702
1550.00	1.380	4075.00	0.6671
1575.00	1.364	4100.00	0.6639
1600.00	1.348	4125.00	0.6608
1625.00	1.333	4150.00	0.6577
1650.00	1.318	4175.00	0.6546
1675.00	1.303	4200.00	0.6516
1700.00	1.289	4225.00	0.6486
1725.00	1.275	4250.00	0.6456
1750.00	1.262	4275.00	0.6427
1775.00	1.249	4300.00	0.6398
1800.00	1.236	4325.00	0.6369
1825.00	1.223	4350.00	0.6341
1850.00	1.211	4375.00	0.6312
1875.00	1.199	4400.00	0.6284
1900.00	1.187	4425.00	0.6257
1925.00	1.176	4450.00	0.6229
1950.00	1.165	4475.00	0.6202
1975.00	1.154	4500.00	0.6175
2000.00	1.143	4525.00	0.6149
2025.00	1.132	4550.00	0.6122
2050.00	1.122	4575.00	0.6096
2075.00	1.112	4600.00	0.6070
2100.00	1.102	4625.00	0.6044
2125.00	1.092	4650.00	0.6019
2150.00	1.083	4675.00	0.5994
2175.00	1.074	4700.00	0.5969
2200.00	1.065	4725.00	0.5944
2225.00	1.056	4750.00	0.5919
2250.00	1.047	4775.00	0.5895
2275.00	1.038	4800.00	0.5871
2300.00	1.030	4825.00	0.5847

2325.00	1.022	4850.00	0.5823
2350.00	1.013	4875.00	0.5800
2375.00	1.005	4900.00	0.5776
2400.00	0.9976	4925.00	0.5753
2425.00	0.9899	4950.00	0.5730
2450.00	0.9823	4975.00	0.5708
2475.00	0.9749	5000.00	0.5685
2500.00	0.9675		

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 \*\*\*\*\* AERSCREEN MAXIMUM IMPACT SUMMARY \*\*\*\*\*  
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CALCULATION PROCEDURE	MAXIMUM 1-HOUR CONC (ug/m3)	SCALED 3-HOUR CONC (ug/m3)	SCALED 8-HOUR CONC (ug/m3)	SCALED 24-HOUR CONC (ug/m3)	SCALED ANNUAL CONC (ug/m3)
FLAT TERRAIN	311.9	311.9	280.7	187.2	31.19
DISTANCE FROM SOURCE	19.39 meters				
IMPACT AT THE AMBIENT BOUNDARY	311.9	311.9	280.7	187.2	31.19
DISTANCE FROM SOURCE	19.39 meters				

**ATTACHMENT V**  
**AERSCREEN RESULTS INVENTORY WORKSHEETS**  
**(SUBMITTED ELECTRONICALLY)**