Early Morn. Tuesday February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 1
Date of Observation	02/5/2013
Start Time	0024
Stop Time	338 [illegible]
Distance from observer (ft)	200'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
Description of plume:	
continuous? fugitive? intermittent?	cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@0020
Weather:	
ambient temperature (F)	29°
relative humidity	66%
wind direction	N
wind speed	2-4mph
barometric pressure	29.97 inHg
rain? fog? snow? haze?	clear/light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 1 Runs 1-8

sec	0	15	30	45	sec	0	15	30	45
min	Run 1 Time: 0024				min	Run 5 Time: 0208			
1	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 2 Time: 0050					Run 6 Time: 0234			
1	5	5	5	5	1	0	0	0	0
2	5	5	5	5	2	0	0	0	0
3	5	5	5	5	3	0	0	0	0
4	5	5	5	5	4	0	0	0	0
5	5	5	5	5	5	0	0	0	0
6	5	5	5	5	6	0	0	0	0
6-minute Average:	5				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 3 Time: 0116					Run 7 Time: 306			
1	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 4 Time: 0142					Run 8 Time: 0332			
1	0	0	0	0	1	0	0	0	0
2	0	0	0	0	2	0	0	0	0
3	0	0	0	0	3	0	0	0	0
4	0	0	0	0	4	0	0	0	0
5	0	0	0	0	5	0	0	0	0
6	0	0	0	0	6	0	0	0	0
6-minute Average:	0				6-minute Average:	0			
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Tues. Early Morning February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 1
Date of Observation	02/5/2013
Start Time	358
Stop Time	548
Distance from observer (ft)	200'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
Description of plume:	
continuous? fugitive? intermittent?	Cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 cubic lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 358
Weather:	
ambient temperature (F)	28°
relative humidity	86 %
wind direction	calm
wind speed	calm
barometric pressure	29.95 inHg
rain? fog? snow? haze?	light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	WhiteHow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 1 Runs 9-13

sec	0	15	30	45
min	Run 9	Time:	358	
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 13	Time:	542	
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				

	Run 10	Time:	424	
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

	Run 11	Time:	450	
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

	Run 12	Time:	516	
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Pg. 1 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	705
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	TOP Edge
target?	
describe background to plume	CONTAINERS
unique features of plume or stack	
Weather:	
ambient temperature (F)	28°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	SNOW
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	VCOONTZ
Observer affiliation	AVOGADRO/DA

Run Number(s) and Description

sec	0	15	30	45	sec	0	15	30	45
min	Run 1 Time: 705				min	Run 5 Time: 820			
1	15	15	20	20	1	10	5	10	5
2	20	20	15	20	2	5	5	5	10
3	20	20	20	20	3	10	10	5	10
4	20	20	20	20	4	10	10	10	5
5	20	20	20	20	5	5	5	5	5
6	20	20	20	20	6	5	10	10	10
6-minute Average:			19.4		6-minute Average:			7.5	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			10		Sun Angle (degrees):			0	
	Run 2 Time: 720					Run 6 Time: 840			
1	15	15	15	15	1	10	10	10	10
2	15	15	15	15	2	10	10	5	5
3	15	15	15	10	3	5	5	5	10
4	15	15	15	15	4	10	5	5	5
5	15	15	15	15	5	5	5	10	5
6	15	15	15	15	6	5	5	5	5
6-minute Average:			14.8		6-minute Average:			6.9	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			10		Sun Angle (degrees):			5	
	Run 3 Time: 740					Run 7 Time: 900			
1	15	20	20	15	1	10	10	10	10
2	15	15	15	15	2	5	5	5	10
3	15	20	20	15	3	5	10	10	5
4	15	15	15	10	4	5	10	5	5
5	10	15	15	15	5	5	5	5	10
6	15	15	20	15	6	5	5	5	5
6-minute Average:			15.6		6-minute Average:			6.5	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			5		Sun Angle (degrees):			5	
	Run 4 Time: 800					Run 8 Time: 920			
1	15	15	15	10	1	10	10	5	10
2	10	10	15	10	2	10	5	5	5
3	15	15	15	15	3	10	10	5	5
4	15	15	15	15	4	5	10	5	5
5	15	15	15	15	5	5	5	5	5
6	10	10	15	15	6	10	10	10	5
6-minute Average:			13.8		6-minute Average:			7.1	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			0		Sun Angle (degrees):			10	

Range of opacity readings:
low 5 high 20

Number of readings above 10 % were 87

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Pg. 2 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	940
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	33 °F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	overcast
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	KOOMTZ
Observer affiliation	AVOGADRO/DAI

Run Number(s) and Description

sec	0	15	30	45
min	Run 9 Time:		940	
1	10	5	10	5
2	5	5	5	5
3	10	5	5	5
4	10	10	5	10
5	10	5	5	10
6	10	10	5	5
6-minute Average:			7.1	
Source Conditions:				
Sun Angle (degrees):			10	

sec	0	15	30	45
min	Run 10 Time:		1000	
1	5	5	5	5
2	10	5	5	5
3	5	5	5	5
4	10	5	5	5
5	5	5	5	10
6	5	10	10	5
6-minute Average:			6.0	
Source Conditions:				
Sun Angle (degrees):			10	

sec	0	15	30	45
min	Run 11 Time:		1020	
1	15	15	15	15
2	15	20	20	15
3	15	15	15	15
4	15	15	15	15
5	20	20	20	15
6	15	20	15	20
6-minute Average:			16.5	
Source Conditions:				
Sun Angle (degrees):			15	

sec	0	15	30	45
min	Run 12 Time:		1040	
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	10	5
6	5	5	5	5
6-minute Average:			5.2	
Source Conditions:				
Sun Angle (degrees):			15	

sec	0	15	30	45
min	Run 13 Time:		1100	
1	10	15	15	10
2	10	5	5	10
3	10	10	5	10
4	5	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:			9.6	
Source Conditions:				
Sun Angle (degrees):			20	

sec	0	15	30	45
min	Run 14 Time:		1120	
1	15	15	10	10
2	10	10	15	10
3	10	10	10	10
4	10	10	10	10
5	5	5	10	5
6	5	5	10	10
6-minute Average:			9.6	
Source Conditions:				
Sun Angle (degrees):			20	

sec	0	15	30	45
min	Run 15 Time:		1140	
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	15	15	15	15
6	15	15	15	15
6-minute Average:			11.7	
Source Conditions:				
Sun Angle (degrees):			20	

sec	0	15	30	45
min	Run 16 Time:		1200	
1	10	10	10	5
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	5
6	10	10	10	10
6-minute Average:			9.6	
Source Conditions:				
Sun Angle (degrees):			20	

Range of opacity readings:

low 5 high 20

Number of readings above 10 % were 37

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Run Number(s) and Description

 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	1220
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	32°F
relative humidity	
wind direction	W SW
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	OVERCAST AND SNOW
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. MCCARDY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

sec	0	15	30	45
min	Run 17 Time:	1220		
1	15	15	15	15
2	20	20	15	20
3	20	20	20	20
4	20	20	20	20
5	15	15	15	20
6	20	20	20	20
6-minute Average:		18.3		
Source Conditions:				
Sun Angle (degrees):		50		
	Run 18 Time:	1240		
1	20	20	15	20
2	10	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:		15.6		
Source Conditions:				
Sun Angle (degrees):		50		
	Run 19 Time:	1300		
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:		20.0		
Source Conditions:				
Sun Angle (degrees):		45		
	Run 20 Time:	1320		
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:		20.0		
Source Conditions:				
Sun Angle (degrees):		45		

sec	0	15	30	45
min	Run 21 Time:	1340		
1	20	20	20	20
2	20	15	15	20
3	15	20	20	15
4	20	20	20	20
5	15	15	15	15
6	15	20	20	20
6-minute Average:		18.1		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 22 Time:	1400		
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:		20.0		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 23 Time:	1420		
1	20	20	20	20
2	20	20	20	20
3	15	20	20	20
4	15	20	20	20
5	25	25	25	20
6	20	20	20	20
6-minute Average:		20.2		
Source Conditions:				
Sun Angle (degrees):		20		
	Run 24 Time:	1440		
1	15	15	20	20
2	20	20	20	20
3	15	15	15	15
4	20	20	15	15
5	15	20	20	20
6	20	20	20	20
6-minute Average:		18.1		
Source Conditions:				
Sun Angle (degrees):		20		

Range of opacity readings:

low 10 high 25

Number of readings above 10 % were 192

Observer's Signature

UNIT 1

Visible Emissions Evaluation

Run Number(s) and Description Pg. 4 2-5-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	1500
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27x8
Description of plume:	
continuous? fugitive? intermittent?	CONT
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	OVERCAST SNOW
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	VEONTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 25 Time: 1500			
1	20	20	20	20
2	20	20	20	15
3	20	20	15	15
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	19.4			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 26 Time: 1520			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	15
6	20	20	20	20
6-minute Average:	19.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 27 Time: 1540			
1	15	15	15	15
2	15	15	15	15
3	15	10	15	15
4	15	15	15	10
5	15	15	15	15
6	15	15	15	10
6-minute Average:	14.6			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 28 Time: 1600			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 29 Time: 1620			
1	20	20	15	15
2	20	20	20	20
3	15	15	15	15
4	20	15	20	20
5	20	20	20	20
6	20	15	15	20
6-minute Average:	18.1			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 30 Time: 1640			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 31 Time: 1700			
1	20	20	20	20
2	15	15	20	20
3	20	20	20	20
4	20	15	15	15
5	15	15	20	20
6	20	20	20	15
6-minute Average:	18.3			
Source Conditions:				
Sun Angle (degrees):	5			
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 15 10 high 20

Number of readings above 10 % were 16%

Observer's Signature

Visible Emissions Evaluation

Tues. Night February 5th, 2013

Run Number(s) and Description: ACB1 Runs 1-8

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 1
Date of Observation	02/5/2013
Start Time	1934
Stop Time	2242
Distance from observer (ft)	150'
Direction from observer	SE
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
Description of plume:	
continuous? fugitive? intermittent?	cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read 1-3	corex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@1930
Weather:	
ambient temperature (F)	30°
relative humidity	86%
wind direction	calm
wind speed	calm
barometric pressure	29.93 inHg
rain? fog? snow? haze?	light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	WhitHow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 1 Time: 1934			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average: 10				
Source Conditions: heating up box				
Sun Angle (degrees):				
	Run 2 Time: 2000			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2026			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 2052			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2118			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 2144			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2210			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 2236			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Tues. Night February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 1
Date of Observation	02/5/2013
Start Time	2302
Stop Time	2400
Distance from observer (ft)	150'
Direction from observer	SE
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	27'x9'
Description of plume:	
continuous? fugitive? intermittent?	cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 2300
Weather:	
ambient temperature (F)	31°
relative humidity	85%
wind direction	calm
wind speed	calm
barometric pressure	29.93 inHg
rain? fog? snow? haze?	light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

note spike due to dirty fuel

jpw

Run Number(s) and Description

ACB 1 Runs ~~[illegible]~~ 9-11 jpw

sec	0	15	30	45	sec	0	15	30	45
min	Run 9	Time: 2302			min	Run	Time:		
1	10	10	10	10	1				
2	10	10	10	10	2				
3	10	10	10	10	3				
4	10	10	10	10	4				
5	15	15	15	15	5				
6	15	15	15	15	6				
6-minute Average:	11.7				6-minute Average:				
Source Conditions:	dirty fuel				Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 10	Time: 2328				Run	Time:		
1	20	20	20	20	1				
2	20	20	20	20	2				
3	20	20	20	20	3				
4	15	15	15	15	4				
5	15	15	15	15	5				
6	10	10	10	10	6				
6-minute Average:	16.7				6-minute Average:				
Source Conditions:	dirty fuel				Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 11	Time: 2354				Run	Time:		
1	0	0	0	0	1				
2	0	0	0	0	2				
3	0	0	0	0	3				
4	0	0	0	0	4				
5	0	0	0	0	5				
6	0	0	0	0	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run	Time:				Run	Time:		
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
6-minute Average:					6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				

Range of opacity readings: low 0 high 20

Number of readings above 10 % were 28

[signature]

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Tuesday
Early Morning February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 2
Date of Observation	02/5/2013
Start Time	0024
Stop Time	0338
Distance from observer (ft)	200'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
Description of plume:	
continuous? fugitive? intermittent?	Cont.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	Sky
describe background to plume	Sky
unique features of plume or stack	—
	@0020
Weather:	
ambient temperature (F)	29°
relative humidity	66%
wind direction	N
wind speed	2-4mph
barometric pressure	29.97 in Hg
rain? fog? snow? haze?	clear/light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	WhiTHow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 1-8

sec	0	15	30	45
min	Run 1 Time: 0024			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0050			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0116			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0142			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 0208			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 0234			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: [illegible]306			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 732			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

Observer's Signature

Tues. Early Morn. February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 2
Date of Observation	02/5/2013
Start Time	358
Stop Time	548
Distance from observer (ft)	200'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'
Description of plume:	
continuous? fugitive? intermittent?	cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 358
Weather:	
ambient temperature (F)	28°
relative humidity	86%
wind direction	calm
wind speed	calm
barometric pressure	29.95 in Hg
rain? fog? snow? haze?	light snow
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 9-13

sec	0	15	30	45
min	Run 9 Time: 358			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	6	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 10 Time: 424			
1	0	0	0	0
2	6	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 11 Time: 450			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run 12 Time: 516			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 13 Time: 542			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Run Number(s) and Description

Pg. 1 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	705
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	TOP Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	28°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	SNOW THEN OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK J. REARDY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

sec	0	15	30	45
min	Run 1 Time: 705			
1	5	5	5	5
2	5	5	5	0
3	0	0	0	5
4	0	0	0	5
5	5	5	0	0
6	0	0	0	0
6-minute Average:			2.1	
Source Conditions:				
Sun Angle (degrees):			10	

sec	0	15	30	45
min	Run 2 Time: 720			
1	0	5	5	5
2	0	0	5	0
3	0	0	0	0
4	5	0	0	0
5	0	0	0	0
6	0	5	0	0
6-minute Average:			1.3	
Source Conditions:				
Sun Angle (degrees):			10	

sec	0	15	30	45
min	Run 3 Time: 740			
1	0	0	0	5
2	5	0	0	0
3	5	5	0	0
4	0	0	0	0
5	0	0	0	0
6	5	5	0	0
6-minute Average:			1.3	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	Run 4 Time: 800			
1	5	5	5	10
2	10	10	10	10
3	10	5	5	10
4	10	10	10	5
5	5	5	5	10
6	10	5	10	10
6-minute Average:			7.9	
Source Conditions:				
Sun Angle (degrees):			0	

sec	0	15	30	45
min	Run 5 Time: 820			
1	0	0	0	0
2	0	0	5	0
3	5	0	0	0
4	5	5	0	5
5	5	0	0	0
6	0	0	0	0
6-minute Average:			1.3	
Source Conditions:				
Sun Angle (degrees):			0	

sec	0	15	30	45
min	Run 6 Time: 840			
1	10	5	5	5
2	10	10	10	10
3	10	5	5	5
4	10	5	5	5
5	10	5	5	5
6	5	5	10	5
6-minute Average:			6.9	
Source Conditions:				
Sun Angle (degrees):			~~10~~ 5	

sec	0	15	30	45
min	Run 7 Time: 900			
1	10	10	10	10
2	10	5	5	10
3	10	10	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			6.9	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	Run 8 Time: 920			
1	0	0	5	0
2	0	0	0	0
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			2.5	
Source Conditions:				
Sun Angle (degrees):			10	

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Mark J. Reardy

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 2-5-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	940
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	32°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

sec	0	15	30	45
min	Run 9 Time:	940		
1	15	15	15	15
2	15	10	15	15
3	20	15	15	15
4	15	15	10	10
5	5	5	5	10
6	5	5	5	5
6-minute Average:	11.5			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 10 Time:	1000		
1	5	5	5	5
2	5	5	5	5
3	5	5	10	10
4	10	5	5	5
5	5	5	5	10
6	5	5	5	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 11 Time:	1020		
1	0	0	10	10
2	10	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 12 Time:	1040		
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	10	10	5	5
5	5	10	10	5
6	10	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	15			

sec	0	15	30	45
min	Run 13 Time:	1100		
1	5	5	5	10
2	10	10	5	10
3	10	10	10	10
4	10	10	5	5
5	10	10	10	10
6	10	10	10	5
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 14 Time:	1120		
1	5	5	5	5
2	5	5	5	5
3	5	5	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 15 Time:	1140		
1	5	5	5	5
2	5	5	5	10
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	10	10	15	10
6-minute Average:	6.3			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 16 Time:	1200		
1	10	10	5	5
2	10	10	5	10
3	10	10	10	10
4	5	10	10	5
5	10	10	5	5
6	10	10	10	10
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	20			

Range of opacity readings:

low 0 high 15 20

Number of readings above 10 % were 14

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 2

Run Number(s) and Description Pg. 3 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	1220
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT
color	WHITE
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top Edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	32°F
relative humidity	
wind direction	SW
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. MURPHY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO / DA

sec	0	15	30	45
min	Run 17 Time: 1220			
1	15	15	15	15
2	15	15	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	15	15
6	20	20	20	20
6-minute Average:	18.3			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 18 Time: 1240			
1	20	20	20	20
2	15	15	15	15
3	15	20	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	16.0			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 19 Time: 1300			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	45			
	Run 20 Time: 1320			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	45			

sec	0	15	30	45
min	Run 21 Time: 1340			
1	20	20	20	20
2	20	20	15	20
3	20	20	15	15
4	15	15	20	20
5	20	20	20	20
6	20	15	15	20
6-minute Average:	18.5			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 22 Time: 1400			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 23 Time: 1420			
1	15	20	20	20
2	15	15	20	15
3	20	20	20	20
4	20	20	20	20
5	15	15	20	15
6	20	20	20	20
6-minute Average:	18.5			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 24 Time: 1440			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	20			

Range of opacity readings: low 15 high 20

Number of readings above 10 % were 192

Observer's Signature

UNIT 2

Pg. 4 2-5-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-5-13
Start Time	1500
Stop Time	
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	30°F
relative humidity	
wind direction	W
wind speed	0-5
barometric pressure	29.85
rain? fog? snow? haze?	OVERCAST SNOW
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. STEADY
Observer certification date	10-22-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/DA

Run Number(s) and Description

sec	0	15	30	45
min	Run 25 Time: 1500			
1	20	20	20	15
2	15	20	20	20
3	20	20	20	20
4	20	20	20	20
5	15	15	20	20
6	20	20	20	20
6-minute Average:	19.2			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 26 Time: 1520			
1	20	20	20	25
2	20	20	20	20
3	15	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 27 Time: 1540			
1	20	20	20	15
2	20	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 28 Time: 1600			
1	20	20	20	20
2	20	20	20	20
3	20	20	20	20
4	20	20	20	20
5	20	20	20	20
6	20	20	20	20
6-minute Average:	20.0			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 29 Time: 1620			
1	15	15	15	15
2	15	15	15	~~15~~ 15
3	15	15	20	20
4	20	20	20	15
5	15	20	20	20
6	20	20	20	20
6-minute Average:	17.5			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 30 Time: 1640			
1	15	15	15	15
2	15	15	15	15
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	15.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 31 Time: 1700			
1	15	15	15	15
2	15	15	15	15
3	10	10	10	10
4	10	10	10	15
5	15	10	15	10
6	10	15	15	15
6-minute Average:	12.9			
Source Conditions:				
Sun Angle (degrees):	5			
	Run Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings:
low 10 high 25

Number of readings above 10 % were 158

Observer's Signature

Tues. Night February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 2
Date of Observation	02/5/2013
Start Time	1934
Stop Time	2242
Distance from observer (ft)	150'
Direction from observer	SE
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20' x 8'

Description of plume:

continuous? fugitive? intermittent?	Cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	Sky
describe background to plume	Sky
unique features of plume or stack	—
	@ 1930

Weather:

ambient temperature (F)	30°
relative humidity	86%
wind direction	calm
wind speed	calm
barometric pressure	29.93 in Hg
rain? fog? snow? haze?	light snow

Glasses worn:

corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Wikiow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 1-8

sec	0	15	30	45
min	Run 1 Time: 1934			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions: heating up				
Sun Angle (degrees): 60°				
	Run 2 Time: 2000			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 2026			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 2052			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2118			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 2144			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2210			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 2236			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION. Easton Pa

Tues, Night February 5th, 2013

Visible Emissions Evaluation

Facility Name	ECC Floyd Bennett Field
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	Debris Removal
Control Equipment / Emission Source	ACB 2
Date of Observation	02/5/2013
Start Time	2302
Stop Time	2400
Distance from observer (ft)	150'
Direction from observer	SE
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	20'x 8'

Description of plume:

continuous? fugitive? intermittent?	Cont.
color	white
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@2300

Weather:

ambient temperature (F)	31°
relative humidity	85%
wind direction	calm
wind speed	calm
barometric pressure	29.93 in Hg
rain? fog? snow? haze?	Light snow

Glasses worn:

corrective? (Y/N)	yes
sunglasses? (Y/N)	—

Observer's name	Joshua Wagner
Observer certification date	Night 12/20/2012
Certifying agency	Whitlow
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 9-11

sec	0	15	30	45
min	Run 9	Time: 2302		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 10	Time: 2328		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 11	Time: 2354		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run	Time:		
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 0

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa