Early Monday Morn, February 11th, 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	02/11/2013
Start Time	0034
Stop Time	342
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	every lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 0030

Weather:

ambient temperature (F)	36°
relative humidity	75%
wind direction	calm
wind speed	calm
barometric pressure	30.33 inHg
rain? fog? snow? haze?	clear

Glasses worn:

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

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

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

sec	0	15	30	45
Run 1 Time: 0034				
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: 0100				
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: 0126				
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: 0152				
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
Run 5 Time: 218				
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: 244				
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: 310				
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: 336				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Early Monday Morn, February 11th, 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	02/11/2013
Start Time	402
Stop Time	542
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 exit lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 400
Weather:	
ambient temperature (F)	37°
relative humidity	72%
wind direction	calm
wind speed	calm
barometric pressure	30.27 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

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

sec / min	0	15	30	45
Run 9 Time: 402				
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 10 Time: 428				
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 11 Time: 454				
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 12 Time: 520				
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	5	5	5	5
6	5	5	5	5
6-minute Average: 8.3				
Source Conditions:				
Sun Angle (degrees):				

sec / min	0	15	30	45
Run 13 Time: 536				
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 10

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Run Number(s) and Description

Pg. 1 2-11-13

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	2-11-13
Start Time	0700
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)	38°F
relative humidity	90%
wind direction	NW
wind speed	0-5-10
barometric pressure	
rain? fog? snow? haze?	RAIN
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 1 Time: 700			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	10	5
6	5	5	5	5
6-minute Average:	9.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 2 Time: 720			
1	10	10	5	5
2	10	5	5	5
3	5	5	5	5
4	5	5	5	10
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 3 Time: 740			
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:	5.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 4 Time: 800			
1	5	5	5	5
2	5	5	10	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):	10			

sec	0	15	30	45
min	Run 5 Time: 820			
1	10	10	10	10
2	10	10	10	10
3	15	15	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	13.3			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 6 Time: 840			
1	10	10	10	15
2	5	5	10	10
3	10	10	10	10
4	5	10	10	10
5	15	10	10	10
6	10	10	10	10
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 7 Time: 900			
1	5	5	5	5
2	10	10	5	5
3	5	5	5	5
4	5	5	10	5
5	5	5	5	5
6	5	10	5	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 8 Time: 920			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	5	5	10	10
5	10	5	5	10
6	10	10	10	10
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	20			

Range of opacity readings: low 5 high 15

Number of readings above 10 % were 13

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

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	2-11-13
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)	40°F
relative humidity	
wind direction	TO NNE - Variable
wind speed	0-5 ~~5-10~~
barometric pressure	
rain? fog? snow? haze?	RAIN / [illegible]
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

UNIT 1

Run Number(s) and Description

Pg. 2 2-11-13

sec	0	15	30	45
min	Run 9 Time: 940			
1	15	15	15	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	5	5	10
6	10	10	5	10
6-minute Average:	10.0			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 10 Time: 1000			
1	10	10	10	10
2	10	5	10	10
3	10	5	5	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	9.4			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 11 Time: 1020			
1	10	5	10	10
2	10	10	10	5
3	10	5	5	10
4	10	10	10	10
5	10	5	10	10
6	5	5	10	10
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 12 Time: 1040			
1	5	5	5	5
2	5	5	5	10
3	10	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	10	10
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	25			

sec	0	15	30	45
min	Run 13 Time: 1100			
1	10	10	10	10
2	5	10	10	5
3	5	5	5	10
4	5	10	10	10
5	5	5	10	10
6	5	5	5	5
6-minute Average:	7.5			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 14 Time: 1120			
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:	5.0			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 15 Time: 1140			
1	5	5	10	10
2	10	10	10	10
3	10	15	15	10
4	10	10	5	5
5	5	10	10	10
6	10	5	5	5
6-minute Average:	8.8			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 16 Time: 1200			
1	5	5	5	5
2	5	5	5	5
3	5	10	10	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	30			

Range of opacity readings:

low 5 high 15

Number of readings above 10 % were 5

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

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	2-11-13
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)	42°F
relative humidity	
wind direction	TO NE -> Variable
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	RAIN FOG @ 1300
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 / DA

UNIT 1

Run Number(s) and Description Pg. 3 2-11-13

sec / min	0	15	30	45
Run 17 Time: 1220				
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: 5.0				
Source Conditions:				
Sun Angle (degrees): 60				
Run 18 Time: 1240				
1	10	10	10	5
2	5	10	10	10
3	5	10	10	10
4	10	10	5	5
5	10	10	10	10
6	10	10	10	10
6-minute Average: 9.0				
Source Conditions:				
Sun Angle (degrees): 60				
Run 19 Time: 1300				
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	10	10	5	5
6	5	5	5	5
6-minute Average: 5.4				
Source Conditions:				
Sun Angle (degrees): 60				
Run 20 Time: 1320				
1	10	5	5	5
2	5	5	10	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5.4				
Source Conditions:				
Sun Angle (degrees): 55				

sec / min	0	15	30	45
Run 21 Time: 1340				
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: 0.0				
Source Conditions:				
Sun Angle (degrees): 55				
Run 22 Time: 1400				
1	5	5	5	10
2	5	5	5	5
3	5	5	5	5
4	10	10	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5.6				
Source Conditions:				
Sun Angle (degrees): 50				
Run 23 Time: 1420				
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: 0.0				
Source Conditions:				
Sun Angle (degrees): 50				
Run 24 Time: 1440				
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: 5.0				
Source Conditions:				
Sun Angle (degrees): 50				

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

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	2-11-13
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)	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)	40°F
relative humidity	
wind direction	Calm
wind speed	Calm
barometric pressure	
rain? fog? snow? haze?	Fog
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. READY
Observer certification date	10-27-12
Certifying agency	KOONTZ
Observer affiliation	AVOGADRO/DA

UNIT 1

Run Number(s) and Description

Pg. 4 2-11-13

sec	0	15	30	45
min	Run 25 Time: 1500			
1	10	5	0	0
2	5	5	10	5
3	5	10	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:		5.4		
Source Conditions:	~~ASH REMOVAL~~			
Sun Angle (degrees):		40		
	Run 26 Time: 1520			
1	5	0	0	0
2	5	0	0	5
3	5	5	0	0
4	0	0	0	0
5	0	5	5	5
6	5	5	5	5
6-minute Average:		2.5		
Source Conditions:				
Sun Angle (degrees):		40		
	Run 27 Time: 1540			
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:		5.0		
Source Conditions:				
Sun Angle (degrees):		30		
	Run 28 Time: 1600			
1	10	10	10	10
2	5	10	10	10
3	5	5	5	10
4	10	10	10	10
5	5	5	5	10
6	10	5	5	5
6-minute Average:		7.9		
Source Conditions:				
Sun Angle (degrees):		30		

sec	0	15	30	45
min	Run 29 Time: 1620			
1	5	10	10	5
2	10	10	10	5
3	5	5	10	10
4	10	5	5	10
5	5	5	5	5
6	10	10	5	5
6-minute Average:		7.3		
Source Conditions:				
Sun Angle (degrees):		20		
	Run 30 Time: 1640			
1	10	10	10	10
2	10	5	5	5
3	10	10	10	10
4	10	10	10	10
5	10	10	5	10
6	10	10	10	10
6-minute Average:		9.2		
Source Conditions:				
Sun Angle (degrees):		15		
	Run 31 Time: 1700			
1	10	10	10	10
2	10	10	10	10
3	10	5	5	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:		9.6		
Source Conditions:				
Sun Angle (degrees):		15		
	Run 32 Time: 1720			
1				
2				
3		NA		
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings:

low ~~0~~ high 10

Number of readings above 10 % were ~~0~~

Mark Ready

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Monday Night, February 11th, 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	02/11/2013
Start Time	1854
Stop Time	2202
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 every lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 1850
Weather:	
ambient temperature (F)	45°
relative humidity	93 %
wind direction	S
wind speed	7-9 mph
barometric pressure	29.72 inHg
rain? fog? snow? haze?	fog
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
Run 1 Time: 1854				
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 2 Time: 1920				
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: 1946				
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: 2012				
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
Run 5 Time: 2038				
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: 2104				
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:				
Source Conditions:				
Sun Angle (degrees):				
Run 7 Time: 2130				
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: 2156				
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

Monday Night, February 11th, 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	02/11/2013
Start Time	2222
Stop Time	2346
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 cable lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@ 2220
Weather:	
ambient temperature (F)	45°
relative humidity	93 %
wind direction	S
wind speed	7-10 mph
barometric pressure	29.72 inHg
rain? fog? snow? haze?	clear
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 9-12

sec	0	15	30	45	sec	0	15	30	45
min	Run 9 Time: 2222				min	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 10 Time: 2243					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 11 Time: 2314					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 12 Time: 2340					Run	Time:		
1	0	0	0	0	1				
2	0	5	5	5	2				
3	5	5	5	5	3				
4	5	5	5	5	4				
5	5	5	5	5	5				
6	5	5	5	5	6				
6-minute Average: 4.0					6-minute Average:				
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

Early Monday Morn, February 11th, 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	02/11/2013
Start Time	0034
Stop Time	342
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	—
	@ 0030
Weather:	
ambient temperature (F)	36°
relative humidity	75%
wind direction	calm
wind speed	calm
barometric pressure	30.33 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

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

sec	0	15	30	45
Run 1 Time: 0034				
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: 0100				
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: 0126				
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: 0152				
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
Run 5 Time: 218				
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: 244				
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: 310				
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: 336				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Early Monday Morn, February 11th, 2013

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

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	02/11/2013
Start Time	402
Stop Time	542
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	—
	@ 400
Weather:	
ambient temperature (F)	37°
relative humidity	72%
wind direction	calm
wind speed	calm
barometric pressure	30.27 inHg
rain? fog? snow? haze?	clear
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.

sec	0	15	30	45
min	Run 9 Time: 402			
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 10 Time: 428			
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 11 Time: 445			
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 12 Time: 520			
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: 536			
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 5

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Run Number(s) and Description

Pg. 1 2-11-13

Visible Emissions Evaluation

Facility Name	FBF ECC
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-11-13
Start Time	0700
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20x8
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)	38°F
relative humidity	90%
wind direction	NW
wind speed	05-10
barometric pressure	
rain? fog? snow? haze?	RAIN
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 1 Time: 700			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	10	10	5	10
6	5	5	5	5
6-minute Average:	9.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 2 Time: 720			
1	5	5	5	5
2	10	10	10	10
3	10	10	10	10
4	10	10	10	15
5	10	10	10	10
6	10	10	10	5
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 3 Time: 740			
1	10	10	10	10
2	15	15	10	10
3	10	10	10	10
4	15	10	10	10
5	5	5	10	5
6	5	5	5	5
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 4 Time: 800			
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	5	10	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 5 Time: 820			
1	15	10	10	15
2	15	10	10	10
3	10	10	15	15
4	15	15	15	15
5	15	15	15	15
6	15	15	15	15
6-minute Average:	13.5			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 6 Time: 840			
1	5	5	5	5
2	5	5	5	5
3	5	10	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 7 Time: 900			
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:	5.0			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 8 Time: 920			
1	10	10	10	10
2	10	10	10	10
3	10	10	5	5
4	5	10	10	10
5	5	5	5	10
6	10	5	5	5
6-minute Average:	8.1			
Source Conditions:				
Sun Angle (degrees):	20			

Range of opacity readings: low 5 high 15

Number of readings above 10 % were 21

Mark T. Ready

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

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	9/10
Start Time	2-11-13
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)	40°F
relative humidity	
wind direction	TO: NNE - Variable
wind speed	0-5 ~~5-10~~
barometric pressure	
rain? fog? snow? haze?	RAIN
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK V. READY
Observer certification date	10-22-12
Certifying agency	VOONTZ
Observer affiliation	AVOGADRO/DA

UNIT 2

Run Number(s) and Description

Pg. 2 2-11-13

sec	0	15	30	45
min	Run 9 Time: 940			
1	15	15	15	10
2	10	10	10	10
3	10	10	10	10
4	10	10	10	10
5	15	10	5	5
6	5	5	10	5
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 10 Time: 1000			
1	5	10	10	5
2	10	10	10	5
3	5	5	5	5
4	5	5	10	5
5	5	10	10	5
6	5	5	5	5
6-minute Average:	6.7			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 11 Time: 1020			
1	5	5	5	10
2	10	10	10	10
3	5	5	10	10
4	5	10	10	5
5	10	10	10	5
6	5	5	10	10
6-minute Average:	7.9			
Source Conditions:				
Sun Angle (degrees):	25			
	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	5	5
6	10	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	25			

sec	0	15	30	45
min	Run 13 Time: 1100			
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	5	5	5	5
6-minute Average:	5.2			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 14 Time: 1120			
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:	5.0			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 15 Time: 1140			
1	5	5	5	5
2	5	0	0	0
3	5	5	5	5
4	5	5	5	0
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 16 Time: 1200			
1	10	10	10	10
2	10	5	10	10
3	10	10	10	10
4	10	10	10	10
5	5	5	5	10
6	10	10	5	5
6-minute Average:	8.8			
Source Conditions:				
Sun Angle (degrees):	30			

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 4

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

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	2-11-13
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)	42°F
relative humidity	
wind direction	TO NE → Variable
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	RAIN FOG @ 1300
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

UNIT 2

Run Number(s) and Description

Pg. 3 2-11-13

sec	0	15	30	45	sec	0	15	30	45
min	Run 17 Time: 1220				min	Run 21 Time: 1340			
1	5	5	5	5	1	10	5	10	10
2	5	5	5	5	2	5	5	10	10
3	5	5	5	5	3	10	5	10	5
4	5	5	5	5	4	5	5	5	5
5	5	5	5	5	5	5	5	5	5
6	5	5	5	5	6	5	5	5	5
6-minute Average:			5.0		6-minute Average:			6.5	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			60		Sun Angle (degrees):			55	
	Run 18 Time: 1240					Run 22 Time: 1400			
1	5	5	10	10	1	5	5	0	5
2	5	5	5	5	2	0	0	0	5
3	5	5	5	5	3	0	0	0	0
4	10	10	10	5	4	0	5	5	5
5	5	5	5	5	5	0	0	0	5
6	10	5	5	10	6	5	5	5	5
6-minute Average:			6.5		6-minute Average:			2.5	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			60		Sun Angle (degrees):			50	
	Run 19 Time: 1300					Run 23 Time: 1420			
1	10	10	10	10	1	0	0	0	0
2	10	5	10	10	2	0	0	0	0
3	10	10	10	10	3	0	0	0	0
4	5	5	10	10	4	0	0	0	0
5	10	5	5	5	5	0	0	0	0
6	5	5	5	5	6	0	0	0	0
6-minute Average:			8.1		6-minute Average:			0.0	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			60		Sun Angle (degrees):			50	
	Run 20 Time: 1320					Run 24 Time: 1440			
1	10	10	10	10	1	5	5	5	5
2	10	10	10	10	2	5	5	5	5
3	10	10	10	10	3	5	5	5	5
4	10	10	10	5	4	5	5	5	5
5	10	5	5	5	5	5	5	5	5
6	5	5	5	5	6	5	5	5	5
6-minute Average:			8.3		6-minute Average:			5.0	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			55		Sun Angle (degrees):			50	

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	2-11-13
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)	20x8
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)	40°F
relative humidity	
wind direction	Calm
wind speed	Calm
barometric pressure	
rain? fog? snow? haze?	Fog
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

UNIT 2

Run Number(s) and Description

Pg. 4 2-11-13

sec	0	15	30	45
min	Run 25 Time: 1500			
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:	0.0			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 26 Time: 1520			
1	0	0	0	5
2	5	5	5	5
3	5	5	0	0
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.0			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 27 Time: 1540			
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:	5.0			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 28 Time: 1600			
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:	0.0			
Source Conditions:				
Sun Angle (degrees):	30			

sec	0	15	30	45
min	Run 29 Time: 1620			
1	5	10	5	10
2	5	10	10	10
3	10	5	5	10
4	10	5	10	5
5	5	10	10	10
6	5	5	5	5
6-minute Average:	7.5			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 30 Time: 1640			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	5
4	5	5	5	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 31 Time: 1700			
1	0	0	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	0	0
5	5	5	0	0
6	0	5	5	5
6-minute Average:	3.5			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 32 Time: 1720			
1				
2				
3		NA		
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Monday Night, February 11th, 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	02/11/2013
Start Time	1854
Stop Time	2202
Distance from observer (ft)	2001
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	—
	@1850
Weather:	
ambient temperature (F)	45°
relative humidity	93 %
wind direction	South
wind speed	7-9 mph
barometric pressure	29.72 inHg
rain? fog? snow? haze?	fog
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 1-8

sec	0	15	30	45
min	Run 1	Time: 1854		
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: 1920		
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: 1946		
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: 2012		
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: 2038		
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: 2104		
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: 2130		
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: 2156		
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

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Monday Night, February 11th, 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	02/11/2013
Start Time	2222
Stop Time	2346
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	—
	@ 2222
Weather:	
ambient temperature (F)	45°
relative humidity	93%
wind direction	S
wind speed	7-10mph
barometric pressure	29.72 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

Run Number(s) and Description: ACB 2 Runs 9-12

sec	0	15	30	45	sec	0	15	30	45
min	Run 9 Time: 2222				min	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 10 Time: 2348					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 11 Time: 2334					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 12 Time: 2340					Run	Time:		
1	0	0	0	0	1				
2	5	5	5	5	2				
3	5	5	5	5	3				
4	5	5	5	5	4				
5	5	5	5	5	5				
6	5	5	5	5	6				
6-minute Average: 4.2					6-minute Average:				
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