ACB-1

1/13/13

Run Number(s) and Description 1-8

Pg 3

Visible Emissions Evaluation

AMEC

Facility Name

~~AVOGADRO~~ Project No. 6459013005

Location (city, state) Brooklyn NY

Type of Facility Nat'l Park

Control Equipment / Emission Source ACB-1

Date of Observation 1/13/13

Start Time 0007

Stop Time 0315

Distance from observer (ft) ~300'

Direction from observer See 3 mm cell

Stack height (fr. observer's elev.) (ft) 8'

Stack Diameter (in) 27' x 9

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 ~20' ↑
- target? sky
- describe background to plume sky
- unique features of plume or stack

Weather:

- ambient temperature (F) 43°
- relative humidity 100%
- wind direction variable
- wind speed 0-2
- barometric pressure 30.16"
- rain? fog? snow? haze? Fog

Glasses worn:

- corrective? (Y/N) N
- sunglasses? (Y/N)

Observer's name	Robert Bush
Observer certification date	1/6/13
Certifying agency	Whitlow
Observer affiliation	AMEC

ACB-1

sec	0	15	30	45
min	Run 1 Time: 0007			
1	0	0	0	0
2	0	0	0	0
329°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:	Capacity			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 0151			
1	0	0	0	0
2	0	0	0	0
71°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:	Capacity			
Sun Angle (degrees):				

	Run 2 Time: 0033			
1	0	0	0	0
2	0	0	0	0
21°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:	Capacity			
Sun Angle (degrees):				

	Run 6 Time: 0217			
1	0	0	0	0
2	0	0	0	0
71°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:	Capacity			
Sun Angle (degrees):				

	Run 3 Time: 0059			
1	5	5	5	5
2	5	5	5	5
71°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:	Capacity			
Sun Angle (degrees):				

	Run 7 Time: 0243			
1	10	10	15	20
2	15	15	20	20
71°3	20	15	15	15
4	10	15	15	15
5	20	20	20	15
6	15	20	15	15
6-minute Average:	16.0%			
Source Conditions:	Capacity			
Sun Angle (degrees):				

	Run 4 Time: 0125			
1	10	10	10	10
2	10	10	5	10
21°3	10	5	5	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.7%			
Source Conditions:	Capacity			
Sun Angle (degrees):				

	Run 8 Time: 0309			
1	5	5	10	10
2	10	10	10	10
71°3	10	5	5	10
4	15	15	10	10
5	10	15	20	20
6	15	15	20	20
6-minute Average:	11.9%			
Source Conditions:	Capacity			
Sun Angle (degrees):				

Range of opacity readings:

low 0 high 20

Number of readings above 10 % were 31

Observer's Signature

~~AVOGADRO~~ ENVIRONMENTAL CORPORATION, Easton Pa

AM. EC

ACB-1

1/13/13

Visible Emissions Evaluation

Run Number(s) and Description: ACB-1

9-14

Pg 4

AMEC

Facility Name	FCC Floyd Bennet Field
~~AVOGADRO~~ Project No.	6480131006
Location (city, state)	Brooklyn, NY
Type of Facility	Nat'l Park
Control Equipment / Emission Source	ACB-1
Date of Observation	1/13/13
Start Time	0321
Stop Time	
Distance from observer (ft)	~250'
Direction from observer	See 3 min call
Stack height (fr. observer's elev.) (ft)	8'
Stack Diameter (in)	27' x 9'
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	~20'
target?	Sky
describe background to plume	Sky
unique features of plume or stack	
Weather:	
ambient temperature (F)	43°
relative humidity	100%
wind direction	ESE
wind speed	0-2 mph
barometric pressure	30.15"
rain? fog? snow? haze?	Light fog
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	

Observer's name	Robert Bush
Observer certification date	1/6/13
Certifying agency	Whitlow
Observer affiliation	AMEC

sec	0	15	30	45
min	Run 9 Time: 0321			
1	15	15	15	15
2	10	15	10	15
7l°3	10	10	10	10
4	10	10	5	10
5	5	10	15	15
6	15	10	10	10
6-minute Average:	11.5%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

sec	0	15	30	45
min	Run 13 Time: 0503			
1	5	5	5	5
2	5	5	5	5
7l°3	10	10	5	10
4	5	10	15	15
5	20	25	20	20
6	25	20	15	15
6-minute Average:	16.7%			
Source Conditions:	Capacity			
Sun Angle (degrees):				

	Run 10 Time: 0347			
1	5	5	5	5
2	5	5	5	5
7l°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:	Capacity			
Sun Angle (degrees):	—			

	Run 14 Time: 0531			
1	15	20	20	20
2	15	15	20	20
7l°3	15	20	25	25
4	15	20	15	20
5	20	15	20	15
6	15	15	15	15
6-minute Average:	17.9%			
Source Conditions:	Capacity			
Sun Angle (degrees):				

	Run 11 Time: 0413			
1	5	5	5	5
2	5	5	5	5
7l°3	5	5	5	5
4	5	5	5	5
5	5	5	5	10
6	10	10	5	10
6-minute Average:	5.8%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

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

	Run 12 Time: 0439			
1	5	5	5	5
2	5	5	5	5
7l°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:	Capacity			
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 25

Number of readings above 10 % were 41

Observer's Signature

~~AVOGADRO~~ ENVIRONMENTAL CORPORATION, Easton Pa

AMEC

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	1-13-13
Start Time	720
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)	45°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.45
rain? fog? snow? haze?	OVERCAST FOG 1/4 mile V.
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

Run Number(s) and Description: UNIT 1 Pg. 1 1-13-13

sec	0	15	30	45
min	Run 1 Time: 0720			
1	5	5	5	5
2	10	5	5	5
3	5	5	5	5
4	5	10	10	10
5	10	15	15	10
6	10	10	5	5
6-minute Average:	7.5			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 2 Time: 740			
1	0	10	0	10
2	5	5	10	5
3	15	10	5	5
4	5	5	5	5
5	5	10	10	5
6	5	5	10	5
6-minute Average:	6.5			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 3 Time: 800			
1	5	5	10	5
2	10	15	5	15
3	5	15	5	5
4	5	10	5	5
5	5	5	10	5
6	10	5	5	5
6-minute Average:	7.3			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 4 Time: 820			
1	5	5	5	0
2	0	5	5	5
3	5	5	10	5
4	5	5	5	5
5	10	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 5 Time: 840			
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):	5			
	Run 6 Time: 900			
1	10	10	10	10
2	5	5	5	5
3	10	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	6.0			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 7 Time: 920			
1	10	5	5	5
2	0	5	5	5
3	5	5	5	5
4	0	5	5	5
5	5	5	5	5
6	0	5	5	5
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 8 Time: 940			
1	10	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	0	0	0	0
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	5			

Range of opacity readings:
low 0 high 15

Number of readings above 10 % were 5

Observers Signature

UNIT 1

Pg. 2 1-13-13

Visible Emissions Evaluation

Facility Name	ECC EBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-13-13
Start Time	1000
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW // 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)	47°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.95
rain? fog? snow? haze?	OVERCAST Fog 1/2 mile V.
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

Run Number(s) and Description

sec	0	15	30	45
min.	Run 9 Time: 1000			
1	5	0	0	5
2	5	0	0	0
3	0	0	5	0
4	0	0	5	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 10 Time: 1020			
1	0	5	5	0
2	0	5	0	0
3	5	0	0	0
4	5	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 11 Time: 1040			
1	5	5	5	5
2	0	0	0	0
3	0	0	0	5
4	5	5	5	0
5	5	5	0	0
6	0	0	0	0
6-minute Average:	2.1			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 12 Time: 1100			
1	0	0	0	0
2	5	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):	20			

sec	0	15	30	45
min.	Run 13 Time: 1120			
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):	25			
	Run 14 Time: 1140			
1	0	0	0	0
2	0	0	0	0
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 15 Time: 1200			
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 16 Time: 1220			
1	5	5	5	5
2	5	5	5	10
3	5	5	5	5
4	5	10	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):	55			

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

UNIT 1
Run Number(s) and Description

 1-13-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACI3
Date of Observation	1-13-13
Start Time	1240
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)	45-50°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.45
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 1 Time: 1240			
1	5	5	10	10
2	5	5	5	5
3	10	10	5	5
4	5	5	5	5
5	10	10	5	5
6	10	10	10	10
6-minute Average:			7.1	
Source Conditions:				
Sun Angle (degrees):			55	
min	Run 2 Time: 1400			
1	5	5	5	5
2	0	5	5	0
3	15	10	5	5
4	15	15	5	0
5	0	0	15	15
6	15	10	15	15
6-minute Average:			7.7	
Source Conditions:				
Sun Angle (degrees):			40	
min	Run 3 Time: 1500			
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	
min	Run 4 Time: 1520			
1	5	0	0	5
2	5	5	5	0
3	0	0	0	5
4	5	5	5	5
5	5	0	0	0
6	0	0	5	5
6-minute Average:			2.7	
Source Conditions:				
Sun Angle (degrees):			50	
min	Run 5 Time: 1540			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	10	10	5	5
5	10	10	10	5
6	5	10	10	5
6-minute Average:			6.5	
Source Conditions:				
Sun Angle (degrees):			45	

sec	0	15	30	45
min	Run 1 Time: 1600			
1	5	5	5	5
2	0	5	5	0
3	15	10	5	5
4	15	15	5	0
5	0	0	15	15
6	15	10	15	15
6-minute Average:			7.7	
Source Conditions:				
Sun Angle (degrees):			40	
min	Run 2 Time: 1620			
1	5	5	0	0
2	0	0	0	0
3	0	5	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:			0.6	
Source Conditions:				
Sun Angle (degrees):			40	
min	Run 3 Time: 1640			
1	0	5	10	5
2	10	10	15	15
3	5	15	10	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			7.1	
Source Conditions:				
Sun Angle (degrees):			35	
min	Run 4 Time: 1700			
1	5	5	5	5
2	10	10	5	5
3	5	5	5	5
4	5	5	5	0
5	5	5	10	5
6	5	5	5	5
6-minute Average:			5.4	
Source Conditions:				
Sun Angle (degrees):			35	

Range of opacity readings:
low 0 high 15

Number of readings above 10 % were 11

Mark Ready
Observer's Signature

Visible Emissions Evaluation

UNIT 1
Run Number(s) and Description

 1-13-13

Facility Name	ECC FBF
AVOGADRO Project No.	12 999191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-13-13
Start Time	1520
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)	45°F
relative humidity	80%
wind direction	N
wind speed	0-5
barometric pressure	29.45
rain? fog? snow? haze?	Overcast
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 25 Time: 1520			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	0
4	0	5	5	5
5	0	5	5	5
6	0	0	5	0
6-minute Average:	3.8			
Source Conditions:				
Sun Angle (degrees):	25			

sec	0	15	30	45
min	Run 29 Time: 1700			
1	5	0	0	5
2	0	0	0	5
3	5	0	5	0
4	5	5	5	0
5	5	0	0	0
6	5	5	5	5
6-minute Average:	2.7			
Source Conditions:				
Sun Angle (degrees):	10			

	Run 26 Time: 1540			
1	0	0	0	0
2	5	5	5	5
3	5	0	0	0
4	0	0	0	5
5	5	0	5	0
6	0	0	5	0
6-minute Average:	1.9			
Source Conditions:				
Sun Angle (degrees):	25			

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

	Run 27 Time: 1600			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	0	5	5	0
6	5	5	0	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	25			

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

	Run 28 Time: 1640			
1	10	10	5	10
2	10	5	5	10
3	10	10	15	10
4	15	10	15	10
5	10	10	10	5
6	5	10	5	5
6-minute Average:	9.2			
Source Conditions:				
Sun Angle (degrees):	20			

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

Range of opacity readings:
low 0 high 15

Number of readings above 10 % were 3

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Sunday Night, January 13th, 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	01/13/2013
Start Time	1900
Stop Time	2313
Distance from observer (ft)	100'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	91
Stack Diameter (in)	27'x91
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	—
Weather:	@1900
ambient temperature (F)	47°
relative humidity	96%
wind direction	calm
wind speed	calm
barometric pressure	30.05 in Hg
rain? fog? snow? haze?	fog/mist
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
min	Run 1 Time: 1900			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2149			
1	5			
2				
3	0			
4				
5				
6				
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 2 Time: 2017			
1	5			
2				
3				
4				
5	0			
6				
6-minute Average:				
~~Source Conditions:~~	delayed, safety			
~~Sun Angle (degrees):~~	Meeting			

sec	0	15	30	45
min	Run 6 Time: 2215			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 3 Time: 2043			
1	0			
2				
3				
4		0	5	
5	0			
6				
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 7 Time: [illegible]2241			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 4 Time: 2115			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 8 Time: 2307			
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Sunday Night, January 13th, 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	01/13/2013
Start Time	2333
Stop Time	2339
Distance from observer (ft)	100'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	91'
Stack Diameter (in)	27' x 91'

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	—

Weather:

ambient temperature (F)	46°
relative humidity	100%
wind direction	calm
wind speed	calm
barometric pressure	30.03 in Hg
rain? fog? snow? haze?	fog/mist

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 Run 9

sec	0	15	30	45
min	Run 9	Time: 2333		
1	5	5	5	5
2	20	15	10	10
3	5	5	5	5
4	5	5	5	5
5	5	5	5	—
6	10	10	10	5
6-minute Average:	7.1			
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):				

	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):				

	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 5 high 20

Number of readings above 10 % were 2

Observer's Signature

ACB-2 1/13/13

ACB-2 Pg 3

Visible Emissions Evaluation

Run Number(s) and Description 1-8

AMEC

Facility Name	ECC/Floyd Bennet Fld.
AVOGADRO Project No.	648018100S
Location (city, state)	Brooklyn, NY
Type of Facility	Nat'l Park
Control Equipment / Emission Source	ACB-2
Date of Observation	1/13/13
Start Time	0007
Stop Time	0345
Distance from observer (ft)	~300'
Direction from observer	See 3 min col
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	~20' ↑
target?	sky
describe background to plume	sky
unique features of plume or stack	
Weather:	
ambient temperature (F)	43°
relative humidity	100%
wind direction	variable
wind speed	0-2
barometric pressure	30.16"
rain? fog? snow? haze?	fog
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	

Observer's name	Robert Bush
Observer certification date	1/6/13
Certifying agency	Whittlow
Observer affiliation	AMEC

sec	0	15	30	45
min	Run 1	Time: 0007		
1	10	10	10	10
2	10	5	5	5
329°3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	7.3%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

sec	0	15	30	45
min	Run 5	Time: 0151		
1	5	0	0	5
2	5	5	5	5
21°3	10	10	10	10
4	10	10	10	10
5	10	10	5	5
6	10	10	5	10
6-minute Average:	7.3%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

	Run 2	Time: 0033		
1	5	5	5	5
2	5	5	5	5
71°3	5	5	5	5
4	5	5	5	5
5	0	0	5	5
6	0	0	0	0
6-minute Average:	3.8%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

	Run 6	Time: 0217		
1	0	0	0	0
2	0	0	0	0
71°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:	Capacity			
Sun Angle (degrees):	—			

	Run 3	Time: 0059		
1	0	0	0	0
2	0	0	0	0
71°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:	Capacity			
Sun Angle (degrees):	—			

	Run 7	Time: 0243		
1	10	15	15	15
2	15	10	10	10
71°3	10	10	10	15
4	10	10	10	15
5	10	15	10	15
6	15	10	10	10
6-minute Average:	11.9%			
Source Conditions:				
Sun Angle (degrees):				

	Run 4	Time: 0125		
1	5	5	5	10
2	10	10	10	10
71°3	10	10	10	10
4	10	10	5	5
5	5	10	10	10
6	5	5	5	5
6-minute Average:	7.9%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

	Run 8	Time: 0309		
1	15	20	20	15
2	15	20	20	15
71°3	15	20	20	20
4	15	15	20	20
5	15	15	20	15
6	20	15	15	15
6-minute Average:	17.3%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

Range of opacity readings:
low 0 high 20

Number of readings above 10 % were 33

Observer's Signature

ACB-2

Visible Emissions Evaluation

AMEC

Facility Name ECC/Floyd Bennet Fld
~~AVOGADRO~~ Project No. 648013L006
Location (city, state) Brooklyn NY
Type of Facility
Control Equipment / Emission Source ACB-2

Date of Observation 1/13/13
Start Time 0321
Stop Time

Distance from observer (ft) ~250'
Direction from observer See 3 min call
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 ~20' ↑
- target? sky
- describe background to plume sky
- unique features of plume or stack

Weather:
- ambient temperature (F) 43° F
- relative humidity 100%
- wind direction ESE ~~0-2~~ RVB
- wind speed 0-2
- barometric pressure 30.15"
- rain? fog? snow? haze? light fog

Glasses worn:
- corrective? (Y/N) N
- sunglasses? (Y/N)

Observer's name	Robert Bush
Observer certification date	1/6/13
Certifying agency	Whitlow
Observer affiliation	AMEC

1/13/13
Run Number(s) and Description ACB-2

9-14 Pg 4

sec	0	15	30	45
min	Run 9 Time: 0321			
1	10	10	10	10
2	15	15	10	15
7103	15	15	10	10
4	10	10	10	5
5	10	10	10	10
6	5	10	5	10
6-minute Average:	10.4%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

sec	0	15	30	45
min	Run 13 Time: 0505			
1	5	5	5	5
2	5	5	5	5
7103	5	5	5	5
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

	Run 10 Time: 0347			
1	10	5	5	5
2	5	10	10	10
7103	10	5	5	5
4	5	5	5	5
5	5	5	5	5
6	10	5	5	5
6-minute Average:	6.25%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

	Run 14 Time: 0531			
1	5	5	5	5
2	5	5	5	5
7103	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:	Capacity			
Sun Angle (degrees):	—			

	Run 11 Time: 0413			
1	5	5	5	5
2	0	0	0	5
7103	5	5	0	5
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.7%			
Source Conditions:	Capacity			
Sun Angle (degrees):	—			

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

	Run 12 Time: 0439			
1	5	5	5	5
2	5	5	5	5
7103	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 Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings:
low 0 high 15

Number of readings above 10 % were 5

Observer's Signature

~~AVOGADRO ENVIRONMENTAL CORPORATION~~, Easton Pa

AMEC

UNIT 2

Run Number(s) and Description

 1-13-~~13~~

Visible Emissions Evaluation

Facility Name	ECC FBE
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-13-13
Start Time	720
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)	45°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.45
rain? fog? snow? haze?	OVERCAST FOG 1/4 mile v.
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: 0720			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	0
6	0	5	0	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 2 Time: 740			
1	5	5	5	5
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:	0.8			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 3 Time: 800			
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):	5			
	Run 4 Time: 820			
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):	5			

sec	0	15	30	45
min	Run 5 Time: 840			
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):	5			
	Run 6 Time: 900			
1	10	10	10	10
2	0	0	0	0
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.9			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 7 Time: 9[illegible]20			
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):	5			
	Run 8 Time: 940			
1	10	10	10	5
2	5	5	5	10
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	0	0	0	0
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	5			

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Pg. 2 1-13-13

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	1-13-13
Start Time	1000
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)	47°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.45
rain? fog? snow? haze?	OVERCAST Fog. 1/2 mile V.
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

Run Number(s) and Description

sec	0	15	30	45
min	Run 1 Time: 1000			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	5	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	15			
	Run Time:			
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):	15			
	Run 3 Time: 1040			
1	0	5	5	5
2	5	5	5	10
3	5	5	5	5
4	10	10	5	5
5	5	5	5	5
6	10	5	10	5
6-minute Average:	5.8			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 4 Time: 1100			
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):	20			

sec	0	15	30	45
min	Run 5 Time: 1120			
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):	25			
	Run 6 Time: 1140			
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):	25			
	Run 7 Time: 1220			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	60			
	Run 8 Time: 1220			
1	0	0	0	0
2	0	0	0	0
3	0	5	0	0
4	0	5	0	0
5	0	10	0	0
6	0	0	0	0
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	55			

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

UNIT 2

Run Number(s) and Description

 1-13-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9991
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-13-13
Start Time	1240
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)	45 50°F
relative humidity	90%
wind direction	N
wind speed	0-5
barometric pressure	29.45
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	EPA
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 1 Time: 1240			
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):	55			
	Run 6 Time: 1300			
1	20	20	15	15
2	15	20	15	15
3	15	15	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	9.8			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 11 Time: 1320			
1	5	10	10	5
2	5	5	10	10
3	10	5	5	5
4	5	5	5	5
5	10	10	10	10
6	10	5	5	10
6-minute Average:	7.3			
Source Conditions:				
Sun Angle (degrees):	50			
	Run 20 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			
Source Conditions:				
Sun Angle (degrees):	45			

sec	0	15	30	45
min	Run 2 Time: 1400			
1	5	5	5	0
2	0	5	0	5
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):	40			
	Run 7 Time: 1320			
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):	40			
	Run 12 Time: 1340			
1	10	5	0	5
2	5	0	0	0
3	5	5	0	10
4	10	5	5	5
5	5	5	5	10
6	5	5	5	5
6-minute Average:	4.8			
Source Conditions:				
Sun Angle (degrees):	35			
	Run 21 Time: 1500			
1	0	0	0	0
2	5	0	5	0
3	5	0	0	0
4	0	5	0	0
5	0	0	0	0
6	0	0	5	5
6-minute Average:	1.3			
Source Conditions:				
Sun Angle (degrees):	35			

Range of opacity readings:

low 0 high 20

Number of readings above 10 % were 10

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 2

Pg. 4 1-13-13

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	1-13-13
Start Time	1520
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)	45°F
relative humidity	80%
wind direction	N
wind speed	0-5
barometric pressure	29.45
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

Run Number(s) and Description

sec	0	15	30	45
min	Run 25 Time: 1520			
1	5	5	5	5
2	15	5	5	10
3	10	0	10	0
4	0	10	15	15
5	10	10	5	10
6	5	10	15	10
6-minute Average:	7.9			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 26 Time: 1540			
1	5	5	5	5
2	5	0	0	0
3	0	0	0	5
4	0	5	0	5
5	5	0	0	0
6	0	5	5	0
6-minute Average:	2.3			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 27 Time: 1600			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	0	0
6	0	5	5	0
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 28 Time: 1620			
1	0	0	0	5
2	0	0	0	0
3	0	0	0	0
4	0	0	0	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):	20			

sec	0	15	30	45
min	Run 29 Time: 1700			
1	5	5	5	5
2	0	0	5	0
3	5	5	5	5
4	5	5	5	5
5	0	0	5	0
6	0	5	5	5
6-minute Average:	3.5			
Source Conditions:				
Sun Angle (degrees):	10			
	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 15

Number of readings above 10 % were 4

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton PA

Sunday Night, January 13th, 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	01/13/2013
Start Time	1900
Stop Time	2313
Distance from observer (ft)	100'
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	—
Weather:	@1900
ambient temperature (F)	47°
relative humidity	96%
wind direction	calm
wind speed	calm
barometric pressure	30.05 in Hg
rain? fog? snow? haze?	fog/mist
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 Environmental

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

sec	0	15	30	45
Run 1 Time: 1900				
min 1	5			
2				
3				
4				
5				
6				
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				
Run 2 Time: 2017				
1	0			
2				
3				
4				
5				
6				
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
Run 3 Time: 2043				
1	5	5	5	5
2	5			
3				
4				
5	0	0	5	5
6	0	0	5	0
6-minute Average: 4.0				
Source Conditions:				
Sun Angle (degrees):				
Run 4 Time: 2115				
1	5			
2				
3				
4				
5				
6				
6-minute Average: 5				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
Run 5 Time: 2149				
min 1	5			
2				
3	0			
4				
5				
6				
6-minute Average: 1.7				
Source Conditions:				
Sun Angle (degrees):				
Run 6 Time: 2215				
1	0			
2				
3				
4				
5				
6				
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
Run 7 Time: 2241				
1	0			
2				
3				
4				
5				
6				
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
Run 8 Time: 2307				
1	0			
2				
3				
4				
5				
6				
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

Sunday Night, January 13th, 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	01/13/2013
Start Time	2333
Stop Time	2339
Distance from observer (ft)	100'
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	—

Weather:

ambient temperature (F)	46°
relative humidity	100%
wind direction	Calm
wind speed	Calm
barometric pressure	30.03 in Hg
rain? fog? snow? haze?	Fog/mist

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 Run 9

sec	0	15	30	45
min	Run 9	Time: 2333		
1	0			
2				
3				
4				
5				
6				

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):

	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):

	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