Saturday Early Morn, January 19th 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	01/19/2013
Start Time	0010
Stop Time	0348
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 cont. lengths
target?	Sky
describe background to plume	Sky
unique features of plume or stack	—
Weather:	@0010
ambient temperature (F)	31°
relative humidity	47%
wind direction	N
wind speed	<5 mph
barometric pressure	30.43 in Hg
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	Wh: How
Observer affiliation	Avogadro Env.

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

sec	0	15	30	45
min	Run 1 Time: 0010			
1	0	0	0	0
2	0	0	0	0
3	0	0	5	0
4	0	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0054			
54 1	5	0	0	0
5 2	5	0	0	0
6 3	0	5	0	0
7 4	5	5	5	5
8 5	0	5	5	0
9 6	5	5	0	5
6-minute Average: 2.5				
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0130			
1	0	0	0	0
2	0	0	5	0
3	0	5	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0156			
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: 0222			
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: 0250			
1	0	0	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: 0.2				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 0316			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	0	0	0	0
6	0	0	0	0
6-minute Average: 3.3				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 0342			
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

Art. Early Morn., January 19th 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	01/19/2013
Start Time	0408
Stop Time	0536
Distance from observer (ft)	200'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
Stack Diameter (in)	87" 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 1-3	varied lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—

Weather:

	0408
ambient temperature (F)	33°
relative humidity	53%
wind direction	N
wind speed	25 mph
barometric pressure	30.37 in
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	Whitman
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 1 Runs 9-12

sec	0	15	30	45
min	Run 9	Time: 0408		
1	0	0	0	0
2	0	5	0	0
3	0	0	0	0
4	0	0	0	5
5	0	0	0	0
6	0	0	0	05
6-minute Average:	0.6			
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: 0434		
4	1	0	0	0	0
5	2	0	0	0	0
6	3	0	0	0	0
7	4	0	0	0	6
8	5	0	5	5	0
	6	0	0	0	0
6-minute Average:		0.4			
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: 0500		
1	0	0	0	0
2	5	0	0	0
3	0	0	0	0
4	5	0	0	0
5	0	5	0	0
6	0	0	5	0
6-minute Average:	0.8			
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 12	Time: 0530		
1	0	0	0	0
2	0	0	0	0
3	0	0	5	0
4	5	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average:	0.8			
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 5

Number of readings above 10 % were 0

Observer's Signature

UNIT 1

Pg. 1 1-19-13

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	1-19-13
Start Time	0720
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)	30°F
relative humidity	50%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	Ptly Cldy
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK TI READY
Observer certification date	10-22-12
Certifying agency	KOOHTE
Observer affiliation	AVOGADRO / DA

Run Number(s) and Description

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	0	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.5			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 2 Time: 740			
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	5	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	10			
	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):	10			
	Run 4 Time: 820			
1	0	0	5	0
2	0	5	5	0
3	5	0	0	0
4	0	5	5	5
5	5	5	5	5
6	5	5	0	0
6-minute Average:	2.7			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 5 Time: 840			
1	0	0	5	5
2	5	5	5	5
3	5	5	5	5
4	0	0	5	5
5	0	0	5	5
6	5	0	0	0
6-minute Average:	3.1			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 6 Time: 900			
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 7 Time: 920			
1	5	5	0	0
2	5	5	0	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	0
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 8 Time: 940			
1	5	5	5	5
2	5	5	5	5
3	5	10	5	10
4	5	5	5	5
5	5	10	5	5
6	5	5	5	5
6-minute Average:	5.6			
Source Conditions:				
Sun Angle (degrees):	0			

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 1

Run Number(s) and Description

 1-19-13

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	1-19-13
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)	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	40%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	CLEAR
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: 1000			
1	5	5	0	0
2	5	5	5	5
3	5	5	5	5
4	5	5	5	0
5	0	0	5	5
6	0	5	5	5
6-minute Average: 3.8				
Source Conditions:				
Sun Angle (degrees): 5				
	Run 10 Time: 1020			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	5
4	0	0	5	0
5	0	0	5	0
6	0	0	0	0
6-minute Average: 0.8				
Source Conditions:				
Sun Angle (degrees): 5				
	Run 11 Time: 1040			
1	5	5	5	0
2	0	0	0	0
3	0	0	5	5
4	0	0	5	0
5	0	0	0	5
6	0	5	5	0
6-minute Average: 1.9				
Source Conditions:				
Sun Angle (degrees): 10				
	Run 12 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): 15				

sec	0	15	30	45
min	Run 13 Time: 1120			
1	10	10	5	5
2	5	5	10	5
3	10	10	5	0
4	5	10	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 6.0				
Source Conditions:				
Sun Angle (degrees): 25				
	Run 14 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): 30				
	Run 15 Time: 1200 *			
1	20	15	15	15
2	15	15	15	15
3	10	10	10	10
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 9.0				
Source Conditions:				
Sun Angle (degrees): 20				
	Run 16 Time: 1220			
1	10	5	5	0
2	5	5	5	10
3	5	5	5	5
4	5	5	10	10
5	5	5	5	5
6	5	5	5	5
6-minute Average: 5.6				
Source Conditions:				
Sun Angle (degrees): 20				

Range of opacity readings: low 0 high 20

Number of readings above 10 % were 8

Observer's Signature

* NEW LOCATION : @ 1200
DIRECTION - NE
DISTANCE - 150'

UNIT 1

Run Number(s) and Description

 1-19-13

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	1-19-13
Start Time	1240
Stop Time	
Distance from observer (ft)	150'
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)	45°F
relative humidity	30%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	CLEAR → PTly Cldy
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 1	Run 17	Time:	1240	
1	15	10	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:			5.6	
Source Conditions:				
Sun Angle (degrees):			20	

sec	0	15	30	45
min	Run 2	Time:	1400	
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	10	0	0
5	0	0	0	0
6	5	0	5	0
6-minute Average:			0.8	
Source Conditions:				
Sun Angle (degrees):			10	

Run 18	Time:	1300		
1	5	5	0	5
2	5	5	0	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			4.6	
Source Conditions:				
Sun Angle (degrees):			20	

Run 22	Time:	1420		
1	5	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	5	5
6-minute Average:			0.6	
Source Conditions:				
Sun Angle (degrees):			10	

Run 19	Time:	1320		
1	5	5	5	10
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:			5.2	
Source Conditions:				
Sun Angle (degrees):			15	

Run 23	Time:	1440		
1	0	0	0	0
2	0	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:			4.0	
Source Conditions:				
Sun Angle (degrees):			0	

Run 20	Time:	1340		
1	5	5	0	0
2	0	0	0	5
3	5	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):			15	

Run 24	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	
Source Conditions:				
Sun Angle (degrees):			0	

Range of opacity readings:

low 0 high 15

Number of readings above 10 % were 1

Observer's Signature

Visible Emissions Evaluation

UNIT 1
Run Number(s) and Description

 1-19-13

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	1-19-13
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)	52°F
relative humidity	30%
wind direction	NE
wind speed	10-15
barometric pressure	
rain? fog? snow? haze?	PTly cldy
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 25 Time: 1520			
1	5	0	0	0
2	0	5	0	5
3	0	0	0	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	3.3			
Source Conditions:				
Sun Angle (degrees):	0			

sec	0	15	30	45
min	Run 29 Time: 1640			
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):	10			

	Run 26 Time: 1540			
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):	0			

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

	Run 27 Time: 1600			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	5
6	0	0	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):	5			

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

	Run 28 Time: 1620			
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):	5			

	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

Saturday, Night, Jan, 19th 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	01/19/2013
Start Time	1920
Stop Time	2300
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	—
Weather:	@1920
ambient temperature (F)	45°
relative humidity	60%
wind direction	N
wind speed	2-5 mph
barometric pressure	30.05 in Hg
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: ACB1 Runs 1-8

sec	0	15	30	45
min	Run 1 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 2 Time: 1946			
6 1	10	10	10	10
7 2	10	15	15	15
8 3	15	15	15	15
9 4	15	15	15	15
0 5	10	15	10	10
1 6	10	10	10	10
6-minute Average: 12.5				
Source Conditions: adding fuel				
Sun Angle (degrees):				
	Run 3 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):				
	Run 4 Time: 2038 2045			
5 1	5	5	5	5
6 2	5	5	5	5
7 3	5	5	5	5
8 4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 2.5				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2111			
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: 2137			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	5	0	0	0
6	0	0	0	0
6-minute Average: 0.2				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2203 2208			
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: 2254			
1	0	0	5	0
2	5	5	0	5
3	5	5	0	5
4	5	5	5	5
5	5	5	5	5
6	0	5	5	5
6-minute Average: 3.8				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 12

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Act. Night, Jan. 19th 2013

Run Number(s) and Description: ACB1 Runs 9-10

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	01/19/2013
Start Time	2320
Stop Time	2352
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	—

Weather: @2320

ambient temperature (F)	44°
relative humidity	55%
wind direction	N
wind speed	2-5mph
barometric pressure	29.99in
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	WiHow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 9 Time: 2320			
0 1	0	0	0	0
2	0	0	0	0
2 3	0	0	0	0
4	0	0	0	0
4 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):				

	Run 10 Time: 2346			
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):				

	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

Visible Emissions Evaluation

Saturday Early Morn, January 19th, 2013

Run Number(s) and Description: ACB 2 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 2
Date of Observation	01/19/2013
Start Time	0010
Stop Time	0348
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	—
Weather:	@ 0010
ambient temperature (F)	31°
relative humidity	47%
wind direction	N
wind speed	25 mph
barometric pressure	30.43 in Hg
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 1 Time: 0010			
1	0	0	0	0
2	5	0	0	0
3	0	0	0	0
4	0	0	0	5
5	0	0	0	0
6	5	0	0	0
6-minute Average:	0.6			
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0054			
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: 0130			
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: 0156			
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	6	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 222			
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:			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	5	0	0	0
5	0	0	0	0
6	0	0	5	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 0316			
16 1	5	5	5	5
17 2	5	5	5	5
18 3	5	5	5	5
19 4	5	5	5	5
20 5	10	10	5	5
21 6	5	5	5	5
6-minute Average:	5.4			
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 0342			
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

Aft. Early Morn., January 14th, 2013

Visible Emissions Evaluation

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

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	1/19/2013
Start Time	0408
Stop Time	0538
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	—
	@0408
Weather:	
ambient temperature (F)	33°
relative humidity	53%
wind direction	N
wind speed	<5mph
barometric pressure	30.37 in
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: 0408**			
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):				
min	**Run 10 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:				
Source Conditions:				
Sun Angle (degrees):				
min	**Run 11 Time: 0500**			
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):				
min	**Run 12 Time: 0530**			
1	0	0	0	0
2	5	5	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	5	0	0
6-minute Average:	0.8			
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):				
min	**Run Time:**			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
min	**Run Time:**			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				
min	**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

Pg. 1 1-19-13

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	1-19-13
Start Time	0720
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)	30°F
relative humidity	50%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	PTLY CLDY

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 1 Time: 0720			
1	0	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	0	0	0
5	5	5	5	0
6	0	5	0	0
6-minute Average:	3.3			
Source Conditions:				
Sun Angle (degrees):	10			

sec	0	15	30	45
min	Run 5 Time: 840			
1	0	0	0	0
2	5	0	0	5
3	5	5	0	5
4	0	0	0	5
5	0	0	5	5
6	5	5	5	0
6-minute Average:	2.3			
Source Conditions:				
Sun Angle (degrees):	5			

	Run 2 Time: 740			
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):	10			

	Run 6 Time: 900			
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 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):	~~10~~ 10			

	Run 7 Time: 920			
1	0	0	0	5
2	5	5	5	5
3	0	0	5	0
4	0	0	0	0
5	5	5	0	0
6	0	0	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	0			

	Run 4 Time: 820			
1	10	5	10	5
2	10	5	5	5
3	10	10	5	10
4	10	5	10	10
5	10	10	5	5
6	5	10	5	5
6-minute Average:	7.5			
Source Conditions:				
Sun Angle (degrees):	10			

	Run 8 Time: 940			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	0	0
5	5	5	0	0
6	0	0	5	5
6-minute Average:	3.8			
Source Conditions:				
Sun Angle (degrees):	0			

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 2

Run Number(s) and Description

 1-19-13

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	1-19-13
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)	40°F
relative humidity	40%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	CLEAR
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: 1000			
1	0	0	0	0
2	5	0	0	0
3	0	0	0	0
4	0	0	0	5
5	5	5	5	5
6	0	5	5	5
6-minute Average:	1.2			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 10 Time: 1020			
1	0	5	5	5
2	5	5	0	0
3	0	0	5	5
4	0	0	0	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 11 Time: 1040			
1	5	5	0	5
2	0	0	0	5
3	0	0	5	5
4	0	0	0	5
5	0	0	0	0
6	0	5	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 12 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):	15			

sec	0	15	30	45
min	Run 13 Time: 1120			
1	5	5	5	5
2	0	5	5	5
3	5	5	5	0
4	0	5	5	0
5	0	5	0	0
6	0	0	5	0
6-minute Average:	2.9			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 14 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):	30			
	Run 15 Time: 1200 *			
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			
	Run 16 Time: 1220			
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			

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

* NEW LOCATION @ 1200

DIRECTION - NE

DISTANCE - 150'

UNIT 2

Run Number(s) and Description

 1-19-13

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	1-19-13
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°F
relative humidity	30%
wind direction	NE
wind speed	10-20
barometric pressure	
rain? fog? snow? haze?	CLEAR
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 17 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):	20			
	Run 18 Time: 1300			
1	0	0	0	0
2	0	0	5	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):	20			
	Run 19 Time: 1320			
1	5	5	0	5
2	5	5	5	5
3	0	10	5	0
4	5	5	5	5
5	5	0	5	0
6	0	0	0	0
6-minute Average:	5.3			
Source Conditions:				
Sun Angle (degrees):	15			
	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):	15			

sec	0	15	30	45
min	Run 21 Time: 1400			
1	0	0	5	5
2	5	5	5	5
3	5	5	5	0
4	5	5	5	5
5	5	5	5	5
6	0	0	5	0
6-minute Average:	4.0			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 22 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			
Source Conditions:				
Sun Angle (degrees):	10			
	Run 23 Time: 1440			
1	0	0	0	0
2	0	5	0	5
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	5	5
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):	0			
	Run 24 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			
Source Conditions:				
Sun Angle (degrees):	0			

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Pg. 4 1-19-13

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	1-19-13
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)	52°F
relative humidity	30%
wind direction	NE
wind speed	10-15
barometric pressure	
rain? fog? snow? haze?	PTly Cldy
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

Run Number(s) and Description

sec	0	15	30	45
min	Run 25 Time: 1520			
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):	0			
	Run 26 Time: 1540			
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):	0			
	Run 27 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			
Source Conditions:				
Sun Angle (degrees):	5			
	Run 28 Time: 1620			
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 29 Time: 1640			
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):	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 0

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Ant. Night. Jan. 19th 2013

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

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	01/19/2013
Start Time	1920
Stop Time	2300
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	—
Weather:	@1920
ambient temperature (F)	45°
relative humidity	60%
wind direction	N
wind speed	2-5 mph
barometric pressure	30.05 in
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 1 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 2 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 3 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):				
(2045)	Run 4 Time: 0000 2045			
5 1	10	10	15	10
6 2	15	10	15	10
7 3	10	10	10	10
8 4	10	10	10	10
9 5	5	5	5	10
0 6	10	5	5	5
6-minute Average: 9.4				
Source Conditions: stoking				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 211			
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: 2137			
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: 2203			
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 8 Time: 2254			
1	0	0	0	0
5 2	0	0	0	0
3	0	0	0	0
7 4	0	0	0	0
5	0	5	5	5
9 6	0	0	0	0
6-minute Average: 0.6				
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

Art. Night, Jan. 19th, 2013

Run Number(s) and Description

ACB 2 Runs 9-10

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	01/19/2013
Start Time	2320
Stop Time	2352
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	—
Weather:	@2320
ambient temperature (F)	44°
relative humidity	55%
wind direction	N
wind speed	2-5 mph
barometric pressure	29.99 in
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	WhiteHow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 9 Time: 2320			
1	0	0	5	0
2	5	5	5	5
3	5	5	5	0
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 4.8				
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: 2346			
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 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa