Wedn. Early Morn. January 9th 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	ACBs
Date of Observation	01/09/2013
Start Time	0020
Stop Time	0146
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
Stack Diameter (in)	27'x9', 20'x8'
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 egress lengths
target?	Sky
describe background to plume	"
unique features of plume or stack	—
	@ 0020
Weather:	
ambient temperature (F)	36°
relative humidity	81%
wind direction	E
wind speed	0-3 mph
barometric pressure	30.40 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: Runs 1-4

Units 1 & 2

sec	0	15	30	45
min	Run 1 Time: 0020			
1	5	0	5	0
2	5	5	0	5
3	0	0	5	5
4	5	5	5	0
5	5	0	5	5
6	5	0	5	5
6-minute Average:	3.3			
Source Conditions:	ACB1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 3 Time: 0112			
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:	ACB1			
Sun Angle (degrees):				

	0	15	30	45
Run 1 Time: 0020				
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:	ACB2			
Sun Angle (degrees):				

	0	15	30	45
Run 3 Time: 0112				
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:	ACB2			
Sun Angle (degrees):				

	0	15	30	45
Run 2 Time: 0046				
1	0	0	0	5
2	0	0	0	0
3	5	0	0	0
4	0	5	0	0
5	0	0	0	5
6	0	0	0	0
6-minute Average:	0.8			
Source Conditions:	ACB1			
Sun Angle (degrees):				

	0	15	30	45
Run 4 Time: 0140				
1	0	0	0	0
2	5	5	5	5
3	0	5	5	0
4	5	5	0	5
5	0	5	5	0
6	5	0	5	0
6-minute Average:	3.7			
Source Conditions:	ACB1			
Sun Angle (degrees):				

	0	15	30	45
Run 2 Time: 0046				
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:	ACB2			
Sun Angle (degrees):				

	0	15	30	45
Run 4 Time: 0140				
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:	ACB2			
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

Wedn. Early Morn, January 9th, 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	ACBs
Date of Observation	01/09/2013
Start Time	0210
Stop Time	0336
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
Stack Diameter (in)	27'x9', 20'x8
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	"
unique features of plume or stack	—
Weather:	@210
ambient temperature (F)	35°
relative humidity	84%
wind direction	calm
wind speed	calm
barometric pressure	30.39 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: Runs 5-8

Units 1 & 2

sec	0	15	30	45
min	Run 5 Time: 210			
1	0	0	0	5
2	0	0	0	0
3	0	5	0	0
4	0	0	0	0
5	0	0	5	0
6	0	0	0	5
6-minute Average: 0.8				
Source Conditions: ACB 1				
Sun Angle (degrees):				
	Run 5 Time: 210			
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: ACB 2				
Sun Angle (degrees):				
	Run 6 Time: 236			
1	5	5	0	0
2	0	0	5	5
3	0	0	0	5
4	0	0	0	10
5	5	5	0	0
6	0	0	0	0
6-minute Average: 1.9				
Source Conditions: ACB 1				
Sun Angle (degrees):				
	Run 6 Time: 236			
1	0	0	0	0
2	0	0	0	0
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 7 Time: 302			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 1				
Sun Angle (degrees):				
	Run 7 Time: 302			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				
	Run 8 Time: 330			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 1				
Sun Angle (degrees):				
	Run 8 Time: 330			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Wedn. Early Morning, January 9th, 2013 Runs 9-12 Units 1 & 2

Run Number(s) and Description

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	ACBs
Date of Observation	01/09/2013
Start Time	0400
Stop Time	0530
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
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	"
unique features of plume or stack	—
	@ 400
Weather:	
ambient temperature (F)	35°
relative humidity	88%
wind direction	Calm
wind speed	0-3
barometric pressure	30.38 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	WhitHow
Observer affiliation	Avogadro Env.

sec	0	15	30	45
min	Run 9 Time: 0400			
1	5			
2	5			
3	5			
4	5			
5	5			
6	5			
6-minute Average:	5			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 11 Time: 0458			
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

	Run 9 Time: 0400			
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

	Run 11 Time: 0458			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

	Run 10 Time: 0430			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

	Run 12 Time: 0524			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

	Run 10 Time: 0430			
1	0			
2	0			
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

	Run 12 Time: 0524			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

Range of opacity readings:

low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

UNIT 1

Run Number(s) and Description

Pg. 1 1-9-13

Visible Emissions Evaluation

Facility Name	ECC PBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brookelyn WV
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-9-13
Start Time	720
Stop Time	945
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42

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)	36°F
relative humidity	35%
wind direction	Calm
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	Clear

Glasses worn:

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

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

sec	0	15	30	45
min	Run 1 Time: 720			
1	0	0	0	0
2	0	0	0	0
3	0	0	0	5
4	0	5	5	5
5	5	5	0	5
6	5	0	5	5
6-minute Average: 2.1				
Source Conditions: Cool Down				
Sun Angle (degrees): ~~SW~~ 10				
	Run 2 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: Cool Down				
Sun Angle (degrees): ~~SSW~~ 10				
	Run 3 Time: 800			
1	15	15	15	15
2	15	15	10	15
3	15	10	10	10
4	10	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 9.4				
Source Conditions: Cool Down				
Sun Angle (degrees): ~~SSW~~ 10				
	Run 4 Time: 820			
1	10	10	10	10
2	5	5	5	5
3	5	10	5	5
4	5	10	5	5
5	5	5	5	5
6	10	5	5	5
6-minute Average: 6.5				
Source Conditions: Cool Down				
Sun Angle (degrees): 5				

sec	0	15	30	45
min	Run 5 Time: 840			
1	5	5	5	5
2	5	5	5	0
3	5	5	5	5
4	5	5	5	5
5	0	5	5	5
6	5	10	5	5
6-minute Average: 4.8				
Source Conditions: Cool Down				
Sun Angle (degrees): 5				
	Run 6 Time: 900			
1	0	0	5	5
2	5	0	5	5
3	5	5	5	5
4	5	0	0	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 4.0				
Source Conditions: Cool Down				
Sun Angle (degrees): 5				
	Run 7 Time: 920			
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: Cool down				
Sun Angle (degrees): 5				
	Run 8 Time: 940			
1	5	5	5	0
2	0	0	5	5
3	0	5	5	5
4	0	0	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 3.8				
Source Conditions: Cool Down				
Sun Angle (degrees): 5				

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 8

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Run Number(s) and Description

 1-9-13

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	1-9-13
Start Time	1000
Stop Time	1225
Distance from observer (ft)	100'/150'
Direction from observer	½ NW / ½ NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.42

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	40%
wind direction	calm
wind speed	calm
barometric pressure	30.00
rain? fog? snow? haze?	overcast

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 9 Time: 1000			
1	0	5	5	5
2	5	0	5	5
3	5	5	5	5
4	5	5	5	0
5	0	0	0	0
6	5	5	0	0
6-minute Average:	3.1			
Source Conditions:	Cool Down			
Sun Angle (degrees):	0			

sec	0	15	30	45
min	Run 10 Time: 1020			
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:	Cool Down			
Sun Angle (degrees):	0			

sec	0	15	30	45
min	Run 11 Time: 1040			
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:	Cool Down			
Sun Angle (degrees):	5			

sec	0	15	30	45
min	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:	Cool Down			
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 13 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:	Cool Down			
Sun Angle (degrees):	50			

sec	0	15	30	45
min	Run 14 Time: 1140			
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:	Cool Down			
Sun Angle (degrees):	50			

sec	0	15	30	45
min	Run 15 Time: 1200			
1	0	10	20	5
2	10	10	40	10
3	5	10	5	5
4	5	5	5	5
5	5	5	5	0
6	0	0	0	5
6-minute Average:	7.1			
Source Conditions:	Cool Down			
Sun Angle (degrees):	45			

sec	0	15	30	45
min	Run 16 Time: 1220			
1	0	0	5	5
2	5	5	5	5
3	5	5	5	5
4	15	50	30	25
5	15	10	50	20
6	5	5	5	5
6-minute Average:	11.9			
Source Conditions:	Cool Down			
Sun Angle (degrees):	45			

Range of opacity readings: low 0 high 50

Number of readings above 10 % were 9

Observer's Signature

UNIT 1

Run Number(s) and Description

 1-9-13

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	1-9-13
Start Time	1240
Stop Time	1505
Distance from observer (ft)	150'
Direction from observer	NNW NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 x 8.92

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)	49°F
relative humidity	35%
wind direction	N
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	overcast

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	10	10	20	80
2	10	100	15	50
3	80	100	50	75
4	10	30	10	100
5	40	10	80	10
6	10	60	20	100
6-minute Average:	45.4			
Source Conditions:	Ash removal			
Sun Angle (degrees):	40			
	Run 18 Time: 1300			
1	30	100	40	30
2	0	100	20	50
3	10	20	60	40
4	50	5	100	50
5	100	5	100	10
6	30	100	30	40
6-minute Average:	46.7			
Source Conditions:	Ash removal			
Sun Angle (degrees):	40			
	Run 19 Time: 1340			
1	0	0	0	0
2	5	5	5	5
3	5	5	5	0
4	5	5	5	5
5	40	40	15	5
6	45	20	5	5
6-minute Average:	9.6			
Source Conditions:	Ash Removal			
Sun Angle (degrees):	35			
	Run 20 Time: 1340			
1	10	10	15	5
2	10	10	20	15
3	15	15	15	10
4	15	15	15	15
5	20	20	15	15
6	15	15	15	15
6-minute Average:	14.2			
Source Conditions:	START UP			
Sun Angle (degrees):	35			

sec	0	15	30	45
min	Run 21 Time: 1400			
1	25	30	20	20
2	20	20	25	20
3	25	30	20	25
4	20	20	25	30
5	30	20	25	30
6	35	30	30	20
6-minute Average:	25.2			
Source Conditions:	START UP			
Sun Angle (degrees):	35			
	Run 22 Time: 1420			
1	25	20	25	30
2	25	20	25	20
3	20	20	25	25
4	30	25	20	25
5	25	25	20	25
6	30	30	25	35
6-minute Average:	24.8			
Source Conditions:	START UP			
Sun Angle (degrees):	30			
	Run 23 Time: 1440			
1	30	30	25	20
2	35	15	20	40
3	25	20	20	15
4	15	15	25	30
5	20	15	15	15
6	20	20	15	15
6-minute Average:	21.5			
Source Conditions:				
Sun Angle (degrees):	30			
	Run 24 Time: 1500			
1	10	10	5	5
2	20	5	15	5
3	5	15	5	10
4	10	5	5	15
5	15	5	10	10
6	5	15	10	10
6-minute Average:	9.4			
Source Conditions:				
Sun Angle (degrees):	30			

Range of opacity readings:

low ~~0~~ 35 high 100

Number of readings above ~~10~~ 10 % were 29

Observer's Signature

UNIT 1

Run Number(s) and Description Pg. 4 1-9-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, MI
Type of Facility	
Control Equipment / Emission Source	ACR
Date of Observation	1-9-13
Start Time	1520
Stop Time	1625
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	27.17 48.42
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)	49°F
relative humidity	35%
wind direction	Calm
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MATTHEW T. REGAN
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	10	15	5	0
3	10	10	10	5
4	5	0	5	15
5	10	5	5	5
6	5	15	5	5
6-minute Average:	6.9			
Source Conditions:				
Sun Angle (degrees):	25			
	Run 26 Time: 1540			
1	0	0	0	0
2	0	5	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:	0.4			
Source Conditions:				
Sun Angle (degrees):	15			
	Run 27 Time: 1600			
1	0	0	0	0
2	5	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:	0.6			
Source Conditions:				
Sun Angle (degrees):	15			
	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):	15			

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):				

Range of opacity readings:

low 0 high 10 15

Number of readings above 10 % were 3

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Wedn. Night, January 9th 2013

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

Unit 2, Unit 1 = offline

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
Date of Observation	01/09/2013
Start Time	1900
Stop Time	2208
Distance from observer (ft)	300'
Direction from observer	NNW
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	"
unique features of plume or stack	—
Weather:	@ 1900
ambient temperature (F)	48°
relative humidity	65%
wind direction	E
wind speed	
barometric pressure	30.19 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 Environmental

sec	0	15	30	45
Run 1 Time: 1900				
min 1	5	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	—	—	—	—
6	—	—	—	—
6-minute Average: 5				
Source Conditions: lim. cap. ACB 2				
Sun Angle (degrees):				
Run 2 Time: 1926				
1	5	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	—	—	—	—
6	—	—	—	—
6-minute Average: 5				
Source Conditions: "				
Sun Angle (degrees):				
Run 3 Time: 1952				
1	5	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	—	—	—	—
6	—	—	—	—
6-minute Average: 5				
Source Conditions: "				
Sun Angle (degrees):				
Run 4 Time: 2018				
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
Run 5 Time: 2044				
min 1	0	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	—	—	—	—
6	—	—	—	—
6-minute Average: 0				
Source Conditions: "				
Sun Angle (degrees):				
Run 6 Time: 2110				
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: "				
Sun Angle (degrees):				
Run 7 Time: 2136				
1	0	—	—	—
2	—	—	—	—
3	—	—	—	—
4	—	—	—	—
5	—	—	—	—
6	—	—	—	—
6-minute Average: 0				
Source Conditions: "				
Sun Angle (degrees):				
Run 8 Time: 2202				
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

Wedn. Night, January 9th, 2013

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

Unit 2, Unit 1 = off

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
Date of Observation	01/09/2013
Start Time	2228
Stop Time	2352
Distance from observer (ft)	300'
Direction from observer	NNW
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	"
unique features of plume or stack	—
	@ 2230
Weather:	
ambient temperature (F)	47°
relative humidity	58%
wind direction	E
wind speed	10-15 mph
barometric pressure	30.22
rain? fog? snow? haze?	
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	sec	0	15	30	45
min	Run 9 Time: 2228				min	Run ___ Time:			
1	0	—	—	—	1				
2	—	—	—	—	2				
3	—	—	—	—	3				
4	—	—	—	—	4				
5	—	—	—	—	5				
6	—	—	—	—	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:	ACB 2				Source Conditions:				
~~Sun Angle (degrees):~~	(lim. cap.)				Sun Angle (degrees):				
	Run 10 Time: 2254					Run ___ Time:			
1	0	—	—	—	1				
2	—	—	—	—	2				
3	—	—	—	—	3				
4	0	5	5	0	4				
5	0	5	5	0	5				
6	5	5	0	0	6				
6-minute Average:	1.0				6-minute Average:				
Source Conditions:	ACB 2				Source Conditions:				
~~Sun Angle (degrees):~~	"				Sun Angle (degrees):				
	Run 11 Time: 2320					Run ___ Time:			
1	0	—	—	—	1				
2	—	—	—	—	2				
3	—	—	—	—	3				
4	—	—	—	—	4				
5	—	—	—	—	5				
6	—	—	—	—	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:	ACB 2				Source Conditions:				
~~Sun Angle (degrees):~~	"				Sun Angle (degrees):				
	Run 12 Time: 2346					Run ___ Time:			
1	0	—	—	—	1				
2	0	—	—	—	2				
3	0	—	—	—	3				
4	0	—	—	—	4				
5	0	—	—	—	5				
6	0	—	—	—	6				
6-minute Average:	0				6-minute Average:				
Source Conditions:	ACB 2				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

Visible Emissions Evaluation

Wedn. Early Morn. January 9th 2013

Run Number(s) and Description: Runs 1-4

Units 1 & 2

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	ACBs
Date of Observation	01/09/2013
Start Time	0020
Stop Time	0146
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
Stack Diameter (in)	27'x9', 20'x8'
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	#
unique features of plume or stack	—
	@ 0020
Weather:	
ambient temperature (F)	36°
relative humidity	81%
wind direction	E
wind speed	0-3 mph
barometric pressure	30.40 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: 0020			
1	5	0	5	0
2	5	5	0	5
3	0	0	5	5
4	5	5	5	0
5	5	0	5	5
6	5	0	5	5
6-minute Average: 3.3				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 1 Time: 0020			
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: ACB2				
Sun Angle (degrees):				
	Run 2 Time: 0046			
1	0	0	0	5
2	0	0	0	0
3	5	0	0	0
4	0	5	0	0
5	0	0	0	5
6	0	0	0	0
6-minute Average: 0.8				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 2 Time: 0046			
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: ACB2				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 3 Time: 0112			
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: ACB1				
Sun Angle (degrees):				
	Run 3 Time: 0112			
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: ACB2				
Sun Angle (degrees):				
	Run 4 Time: 0140			
1	0	0	0	0
2	5	5	5	5
3	0	5	5	0
4	5	5	0	5
5	0	5	5	0
6	5	0	5	0
6-minute Average: 2.7				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 4 Time: 0140			
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: ACB2				
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

Wedn. Early Morn, January 9th, 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	ACBs
Date of Observation	01/09/2013
Start Time	0210
Stop Time	0330
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
Stack Diameter (in)	27'x9', 20'x8
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 exex lengths
target?	sky
describe background to plume	#
unique features of plume or stack	—
Weather:	@210
ambient temperature (F)	35°
relative humidity	84%
wind direction	calm
wind speed	calm
barometric pressure	30.39 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: Runs 5-8, Units 1 & 2

sec	0	15	30	45
min	Run 5 Time: 210			
1	0	0	0	5
2	0	0	0	0
3	0	5	0	0
4	0	0	0	0
5	0	0	5	0
6	0	0	0	5
6-minute Average: 0.8				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 5 Time: 210			
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: ACB 2				
Sun Angle (degrees):				
	Run 6 Time: 236			
1	5	5	0	0
2	0	0	5	5
3	0	0	0	5
4	0	0	0	10
5	5	5	0	0
6	0	0	0	0
6-minute Average: 1.9				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 6 Time: 236			
1	0	0	0	0
2	0	0	0	0
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 7 Time: 302			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 1				
Sun Angle (degrees):				
	Run 7 Time: 302			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				
	Run 8 Time: 330			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB1				
Sun Angle (degrees):				
	Run 8 Time: 330			
1	0	—	—	—
2	0	—	—	—
3	0	—	—	—
4	0	—	—	—
5	0	—	—	—
6	0	—	—	—
6-minute Average: 0				
Source Conditions: ACB 2				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Visible Emissions Evaluation

Weds, Early Morning, January 9th

Run Number(s) and Description: 2013 Runs 9-12
Units 1 & 2

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	ACBs
Date of Observation	01/09/2013
Start Time	0400
Stop Time	0530
Distance from observer (ft)	300'
Direction from observer	NNW
Stack height (fr. observer's elev.) (ft)	9', 8'
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 exact lengths
target?	sky
describe background to plume	#
unique features of plume or stack	—
	@ 400
Weather:	
ambient temperature (F)	35°
relative humidity	88%
wind direction	calm
wind speed	0-3
barometric pressure	30.38 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 9 Time: 0400			
1	5			
2	5			
3	5			
4	5			
5	5			
6	5			
6-minute Average:	5			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 11 Time: 0458			
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 9 Time: 0400			
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 11 Time: 0458			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 10 Time: 0430			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 12 Time: 0524			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 1			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 10 Time: 0430			
1	0			
2	0			
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 12 Time: 0524			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
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

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 1-9-13

Facility Name	GCC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-9-13
Start Time	720
Stop Time	945
Distance from observer (ft)	100'
Direction from observer	NW / WNW
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in) Approx.	20.4 x 8.42

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)	36°F
relative humidity	35%
wind direction	Calm
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	clear

Glasses worn:

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

Observer's name	MICHAEL T. MURPHY
Observer certification date	10-22-12
Certifying agency	KOOMTZ
Observer affiliation	AVOGADRO/UA

sec	0	15	30	45
min	Run 1 Time: 720			
1	10	10	10	10
2	10	10	10	10
3	10	10	10	10
4	10	10	5	10
5	10	10	5	10
6	10	10	10	10
6-minute Average:	9.6			
Source Conditions:	Cool down			
Sun Angle (degrees):	~~0~~ 10			

sec	0	15	30	45
min	Run 2 Time: 740			
1	10	5	5	10
2	5	10	5	10
3	10	5	5	10
4	10	10	10	5
5	10	5	10	5
6	5	5	10	10
6-minute Average:	7.7			
Source Conditions:	Cool down			
Sun Angle (degrees):	~~0~~ 10			

sec	0	15	30	45
min	Run 3 Time: 800			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	10	5	10	5
5	5	5	5	5
6	0	0	5	5
6-minute Average:	5.0			
Source Conditions:	Cool down			
Sun Angle (degrees):	~~0~~ 10			

sec	0	15	30	45
min	Run 4 Time: 820			
1	0	0	0	0
2	5	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:	0.4			
Source Conditions:	Cool down			
Sun Angle (degrees):	5			

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

sec	0	15	30	45
min	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:	Cool Down			
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 7 Time: 920			
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:	Cool Down			
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 8 Time: 940			
1	0	0	0	0
2	5	5	0	0
3	5	5	5	5
4	0	5	5	0
5	0	0	5	0
6	5	0	0	5
6-minute Average:	2.3			
Source Conditions:	Cool Down			
Sun Angle (degrees):	5			

Range of opacity readings:

low ~~0~~ high 10

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

Observer's Signature

Visible Emissions Evaluation

UNIT 2

Run Number(s) and Description

 1-9-13

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn, NY
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-9-13
Start Time	1000
Stop Time	1225
Distance from observer (ft)	100'/150'
Direction from observer	1/2 NW / 1/2 NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	Approx. 20.4 X 8.42

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	40%
wind direction	Calm
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	overcast

Glasses worn:

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

Observer's name	MIKE F. READY
Observer certification date	10-22-12
Certifying agency	KOOMTZ
Observer affiliation	AVOGADRO/DA

sec	0	15	30	45
min	Run 9 Time: 1000			
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:	Cool Down			
Sun Angle (degrees):	0			
	Run 10 Time: 1020			
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:	Cool Down			
Sun Angle (degrees):	0			
	Run 11 Time: 1040			
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:	Cool Down			
Sun Angle (degrees):	5			
	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:				
Source Conditions:	Cool Down			
Sun Angle (degrees):	5			

sec	0	15	30	45
min	Run 13 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:	Cool Down			
Sun Angle (degrees):	30			
	Run 14 Time: 1140			
1	5	10	10	5
2	5	10	10	5
3	5	10	5	5
4	10	10	10	5
5	5	10	5	5
6	5	10	5	5
6-minute Avorage:	7.1			
Source Conditions:	Cool Down			
Sun Angle (degrees):	50			
	Run 15 Time: 1200			
1	5	0	5	5
2	25	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	0	0
6	0	0	0	5
6-minute Average:	3.8			
Source Conditions:	Cool Down			
Sun Angle (degrees):	45			
	Run 16 Time: 1220			
1	5	5	0	0
2	5	0	0	0
3	5	5	5	5
4	5	5	0	5
5	5	0	0	5
6	5	5	0	0
6-minute Average:	2.7			
Source Conditions:	Cool Down			
Sun Angle (degrees):	45			

Range of opacity readings:

low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Run Number(s) and Description

 1-9-13

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	1-9-13
Start Time	1240
Stop Time	1505
Distance from observer (ft)	150'
Direction from observer	NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in) Aprox	20.4 x 8.42
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)	49°F
relative humidity	35%
wind direction	N
wind speed	Calm
barometric pressure	30.00
rain? fog? snow? haze?	Overcast
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

Observer's name	MARK T. IZZARD
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:	Cool Down			
Sun Angle (degrees):	40			
	Run 18 Time: 1300			
1	5	5	5	5
2	5	5	5	5
3	0	0	5	5
4	5	5	5	5
5	5	0	0	0
6	5	5	0	0
6-minute Average:	3.5			
Source Conditions:	Cool Down			
Sun Angle (degrees):	40			
	Run 19 Time: 1320			
1	0	0	5	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:	9.2			
Source Conditions:	Cool Down			
Sun Angle (degrees):	35			
	Run ___ Time:			
1	5	5	5	5
2	5	5	0	0
3	0	0	0	5
4	0	0	0	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.5			
Source Conditions:	Cool Down			
Sun Angle (degrees):	35			

sec	0	15	30	45
min	Run 21 Time: 1400			
1	5	5	10	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:	5.2			
Source Conditions:	Cool Down			
Sun Angle (degrees):	35			
	Run 22 Time: 1420			
1	5	5	5	5
2	5	0	0	0
3	5	5	5	0
4	5	5	5	0
5	0	0	5	0
6	0	5	5	5
6-minute Average:	3.1			
Source Conditions:	Cool Down			
Sun Angle (degrees):	30			
	Run 23 Time: 1440			
1	5	5	5	5
2	0	0	5	5
3	5	5	5	5
4	0	5	5	0
5	0	5	5	0
6	5	5	5	5
6-minute Average:	3.8			
Source Conditions:	Cool Down			
Sun Angle (degrees):	30			
	Run 24 Time: 1520			
1	5	5	5	5
2	5	0	0	5
3	5	5	5	5
4	5	5	0	0
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):	30			

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. 4 1-9-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	HCB
Date of Observation	1-9-13
Start Time	1520
Stop Time	1625
Distance from observer (ft)	150'
Direction from observer	Hook NE
Stack height (fr. observer's elev.) (ft)	10'
Stack Diameter (in)	20.4x8.42
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)	49°F
relative humidity	35%
wind direction	Calm
wind speed	Calm
barometric pressure	30.00
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	sec	0	15	30	45
min	Run 25 Time: 1520				min	Run Time:			
1	5	5	5	5	1				
2	5	5	5	0	2				
3	0	5	5	5	3				
4	0	0	5	5	4				
5	5	0	5	5	5				
6	5	5	5	5	6				
6-minute Average:	3.9				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	25				Sun Angle (degrees):				
	Run 26 Time: 1540					Run Time:			
1	5	5	5	5	1				
2	5	5	5	5	2				
3	5	5	5	5	3				
4	30	20	30	40	4				
5	100	40	35	30	5				
6	100	50	60	100	6				
6-minute Average:	28.9				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	15				Sun Angle (degrees):				
	Run 27 Time: 1600					Run Time:			
1	50	100	100	30	1				
2	100	60	20	40	2				
3	30	20	100	50	3				
4	100	40	50	100	4				
5	30	80	40	30	5				
6	20	10	100	50	6				
6-minute Average:	56.2				6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):	15				Sun Angle (degrees):				
	Run 28 Time: 1620					Run Time:			
1	40	30	40	60	1				
2	40	50	50	75	2				
3	50	100	50	50	3				
4	40	60	30	35	4				
5	30	30	25	40	5				
6	30	25	30	30	6				
6-minute Average:	44.6				6-minute Average:				
Source Conditions:	START UP				Source Conditions:				
Sun Angle (degrees):	15				Sun Angle (degrees):				

Range of opacity readings:
low 0 high 100

Number of readings above ~~10~~ 35 % were 37

Observer's Signature

Visible Emissions Evaluation

Wedn. Night January 9th 2013

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

Knit 2 Unit ■ = offline

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
Date of Observation	01/09/2013
Start Time	1900
Stop Time	2208
Distance from observer (ft)	300'
Direction from observer	NNW
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	"
unique features of plume or stack	—

Weather: @ 1900

ambient temperature (F)	48°
relative humidity	65%
wind direction	E
wind speed	
barometric pressure	30.19 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 Environmental

sec	0	15	30	45
min	Run 1 Time: 1900			
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:	lim. csp ACB2			
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2044			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	"			
Sun Angle (degrees):				

Run 2 Time: 1926				
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:	"			
Sun Angle (degrees):				

Run 6 Time: 2110				
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
6-minute Average:	0			
Source Conditions:	"			
Sun Angle (degrees):				

Run 3 Time: 1952				
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:	"			
Sun Angle (degrees):				

Run 7 Time: 2136				
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	"			
Sun Angle (degrees):				

Run 4 Time: 2018				
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

Run 8 Time: 2202				
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

Visible Emissions Evaluation

Wedn. Night, January 9th 2013

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

Unit 2 = on, Unit 1 = off

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
Date of Observation	01/09/2013
Start Time	2228
Stop Time	2352
Distance from observer (ft)	300'
Direction from observer	NNW
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 canex lengths
target?	Sky
describe background to plume	—
unique features of plume or stack	@ 2230
Weather:	
ambient temperature (F)	47°
relative humidity	58%
wind direction	E
wind speed	10-15 mph
barometric pressure	30.22
rain? fog? snow? haze?	
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: 2228			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):	(lim. cap.)			
	Run 10 Time: 2254			
1	0			
2				
3				
4	0	5	5	0
5	0	5	5	0
6	5	5	0	0
6-minute Average:	1.0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				
	Run 11 Time: 2320			
1	0			
2				
3				
4				
5				
6				
6-minute Average:	0			
Source Conditions:	ACB 2			
Sun Angle (degrees):				
	Run 12 Time: 2346			
1	0			
2	0			
3	0			
4	0			
5	0			
6	0			
6-minute Average:	0			
Source Conditions:	ACB 2			
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature