Tues. Early Morning, January 15th 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	01/15/2013
Start Time	0115
Stop Time	0426
Distance from observer (ft)	100'
Direction from observer	East
Stack height (fr. observer's elev.) (ft)	9'
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	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—

Weather: @0115

ambient temperature (F)	38°
relative humidity	82%
wind direction	S/calm
wind speed	0-4 mph
barometric pressure	30.28 in
rain? fog? snow? haze?	light rain

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

Run 1 Time: 0115

sec	0	15	30	45
min 1	5			
2				
3				
4				
5				
6				

6-minute Average: 5
Source Conditions:
Sun Angle (degrees):

Run 2 Time: 0141

sec	0	15	30	45
min 1	5			
2				
3				
4				
5				
6	5			

6-minute Average: 5
Source Conditions:
Sun Angle (degrees):

Run 3 Time: 0206

sec	0	15	30	45
min 1	5			
2				
3				
4				
5				
6				

6-minute Average: 5
Source Conditions:
Sun Angle (degrees):

Run 4 Time: 0232

sec	0	15	30	45
min 1	5			
2				
3				
4				
5				
6				

6-minute Average: 5
Source Conditions:
Sun Angle (degrees):

Run 5 Time: 0258

sec	0	15	30	45
min 1	5			
2				
3				
4				
5				
6				

6-minute Average: 5
Source Conditions:
Sun Angle (degrees):

Run 6 Time: 0324

sec	0	15	30	45
min 1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 7 Time: 0350

sec	0	15	30	45
min 1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 8 Time: 0420

sec	0	15	30	45
min 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

Tues. Early Morning, January 15th, 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	01/15/2013
Start Time	0450
Stop Time	0538
Distance from observer (ft)	100'
Direction from observer	E
Stack height (fr. observer's elev.) (ft)	9'
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	1-3 conex lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—

Weather:

ambient temperature (F)	36°
relative humidity	81%
wind direction	N
wind speed	0-4 mph
barometric pressure	30.25 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.

Run Number(s) and Description: ACB 1 Runs 9-11

sec	0	15	30	45
min	Run 9 Time: 0450			
1	5			
2				
3				
4	0			
5				
6				
6-minute Average:	2.5			
Source Conditions:				
Sun Angle (degrees):				
	Run 10 Time: 0516			
1	5			
2	5			
3	0			
4	5			
5	5			
6	5			
6-minute Average:	4.2			
Source Conditions:				
Sun Angle (degrees):				
	Run 11 Time: 0532			
1	5			
2				
3				
4				
5				
6				
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				
	Run 12 Time:			
1				
2				
3				
4				
5				
6				
6-minute Average:				
Source Conditions:				
Sun Angle (degrees):				

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

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

Run Number(s) and Description

 1-15-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn NY
Type of Facility	
Control Equipment / Emission Source	ACR
Date of Observation	1-15-13
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)	40
relative humidity	30%
wind direction	S
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 1 Time: 720			
1	5	5	5	5
2	10	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	10	5
6	5	5	5	5
6-minute Average:			5.2	
Source Conditions:				
Sun Angle (degrees):			0	
	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:			5.4	
Source Conditions:				
Sun Angle (degrees):			0	
	Run 3 Time: 800			
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 4 Time: 820			
1	20	20	20	20
2	15	15	15	15
3	5	15	20	15
4	20	20	20	15
5	15	15	15	15
6	15	10	10	15
6-minute Average:			15.8	
Source Conditions:				
Sun Angle (degrees):			5	

sec	0	15	30	45
min	Run 5 Time: 840			
1	10	10	5	10
2	10	5	5	5
3	5	5	5	10
4	5	5	5	5
5	10	5	5	5
6	5	5	0	0
6-minute Average:			5.8	
Source Conditions:				
Sun Angle (degrees):			10	
	Run 6 Time: 900			
1	15	15	10	10
2	10	10	5	5
3	5	10	5	5
4	10	5	5	10
5	5	5	5	5
6	10	5	5	5
6-minute Average:			7.5	
Source Conditions:				
Sun Angle (degrees):			10	
	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:				
Sun Angle (degrees):			10	
	Run 8 Time: 940			
1	10	10	5	5
2	5	10	5	5
3	10	10	5	5
4	10	10	5	5
5	5	5	10	5
6	5	5	10	5
6-minute Average:			6.9	
Source Conditions:				
Sun Angle (degrees):			10	

Range of opacity readings:

low 0 high 20

Number of readings above 10 % were 23

Observer's Signature

UNIT 1

Pg. 2 1-15-13

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	1-15-13
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)	22 x 8
Description of plume:	
continuous? fugitive? intermittent?	CONT.
color	White
water drops present? (Y/N)	N
attached steam plume? (Y/N)	N
detached steam plume? (Y/N)	N
secondary plume? (Y/N)	N
point where opacity read	Top edge
target?	
describe background to plume	Containers
unique features of plume or stack	
Weather:	
ambient temperature (F)	42°F
relative humidity	30%
wind direction	S
wind speed	0-5
barometric pressure	
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 9 Time: 1000			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5.0			
Source Conditions:				
Sun Angle (degrees):	15			

sec	0	15	30	45
min	Run 10 Time: 1020			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	0	5	5	5
5	0	5	5	5
6	5	5	5	5
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	20			

sec	0	15	30	45
min	Run 11 Time: 1040			
1	5	5	0	0
2	0	5	5	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):	25			

* Run 12 Time: 1100

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):	60			

sec	0	15	30	45
min	Run 13 Time: 1120			
1	10	5	5	5
2	5	10	10	5
3	10	10	5	5
4	5	5	5	10
5	10	5	5	5
6	10	5	5	5
6-minute Average:	6.7			
Source Conditions:				
Sun Angle (degrees):	60			

sec	0	15	30	45
min	Run 14 Time: 1140			
1	5	5	5	5
2	5	0	5	5
3	5	0	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	0	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	55			

sec	0	15	30	45
min	Run 15 Time: 1200			
1	0	5	0	5
2	5	5	5	0
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	55			

* Run 16 Time: 1220

1	10	10	10	10
2	10	10	10	5
3	10	10	10	5
4	10	10	10	5
5	10	10	5	10
6	5	10	5	5
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	50			

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

* NEW POSITION @ 11:00
DIRECTION - NE
DISTANCE - 150'
WIND - S @ 0-5

UNIT 1

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	1-15-13
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°F
relative humidity	30%
wind direction	SE
wind speed	0-5
barometric pressure	
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: Pg. 3 1-15-13

sec	0	15	30	45
min	Run 17 Time: 1240			
1	10	10	10	10
2	10	10	5	10
3	10	10	5	10
4	10	10	10	10
5	5	5	5	5
6	10	10	5	5
6-minute Average:	8.3			
Source Conditions:				
Sun Angle (degrees):	45			
min	Run 18 Time: 1300			
1	15	15	10	10
2	10	10	5	5
3	10	10	5	10
4	10	5	5	5
5	5	10	10	5
6	10	10	10	5
6-minute Average:	8.5			
Source Conditions:				
Sun Angle (degrees):	45			
min	Run 19 Time: 1320			
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):	45			
min	Run 20 Time: 1340			
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):	40			

sec	0	15	30	45
min	Run 21 Time: 1400			
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):	40			
min	Run 22 Time: 1420			
1	0	5	0	0
2	0	5	5	5
3	0	5	0	5
4	5	5	0	0
5	5	5	5	5
6	0	0	0	5
6-minute Average:	2.7			
Source Conditions:				
Sun Angle (degrees):	40 35			
min	Run 23 Time: 1440			
1	0	5	0	0
2	0	5	5	5
3	5	5	5	0
4	5	5	5	5
5	5	5	5	5
6	5	5	10	5
6-minute Average:	4.4			
Source Conditions:				
Sun Angle (degrees):	35			
min	Run 24 Time: 1500			
1	5	5	0	0
2	5	0	0	0
3	5	0	0	0
4	0	5	5	0
5	5	5	0	0
6	0	0	0	0
6-minute Average:	1.7			
Source Conditions:				
Sun Angle (degrees):	35			

Range of opacity readings: low 0 high 15

Number of readings above 10 % were 2

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

UNIT 1

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	1-15-13
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)	40°F
relative humidity	30%
wind direction	Calm
wind speed	Calm
barometric pressure	
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	KOOMT 2
Observer affiliation	AVOGADRO/DA

Run Number(s) and Description: Pg. 4 1-15-13

sec	0	15	30	45	sec	0	15	30	45
min	Run 2 Time: 1520				min	Run 29 Time: 1640			
1	15	10	10	10	1	5	5	5	5
2	10	10	10	10	2	5	5	5	5
3	10	10	10	5	3	5	5	5	5
4	5	5	5	10	4	5	5	5	5
5	5	5	5	5	5	5	5	5	5
6	5	5	5	5	6	5	5	5	5
6-minute Average:		7.7			6-minute Average:		5.0		
Source Conditions:					Source Conditions:				
Sun Angle (degrees):		30			Sun Angle (degrees):		5		
	Run 2 Time: 1540					Run Time:			
1	5	5	5	5	1				
2	5	5	5	5	2				
3	5	10	5	5	3				
4	5	5	5	5	4				
5	5	5	5	5	5				
6	5	5	5	5	6				
6-minute Average:		5.2			6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):		25			Sun Angle (degrees):				
	Run 2 Time: 1600					Run Time:			
1	0	0	0	0	1				
2	0	0	0	0	2				
3	0	0	0	0	3				
4	0	0	0	0	4				
5	0	0	0	0	5				
6	0	0	0	0	6				
6-minute Average:		0			6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):		20			Sun Angle (degrees):				
	Run 2 Time: 1620					Run Time:			
1	0	0	0	0	1				
2	0	0	0	0	2				
3	0	0	0	0	3				
4	0	0	0	0	4				
5	0	0	0	0	5				
6	0	0	0	0	6				
6-minute Average:		0			6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):		15			Sun Angle (degrees):				

Range of opacity readings:
low 0 high 10

Number of readings above 10 % were 0

Mark J. Ready
Observer's Signature

Tues. Early Morning, January 15th, 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	01/15/2013
Start Time	0115
Stop Time	0426
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: @0115

ambient temperature (F)	38°
relative humidity	82%
wind direction	S/calm
wind speed	0-4 mph
barometric pressure	30.28 in
rain? fog? snow? haze?	light rain

Glasses worn:

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

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

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

Run 1 Time: 0115

min	sec 0	15	30	45
1	5			
2				
3				
4				
5				
6	0			

6-minute Average: 4.8
Source Conditions:
Sun Angle (degrees):

Run 2 Time: 0141

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 3 Time: 0206

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 4 Time: 0232

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 5 Time: 0258

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 6 Time: 0324

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 7 Time: 0350

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 8 Time: 0420

min	sec 0	15	30	45
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

Tues. Morning Early, January 15th, 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	01/15/2013
Start Time	0450
Stop Time	0538
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)	36°
relative humidity	81%
wind direction	N
wind speed	0-4mph
barometric pressure	30.25in
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	—

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

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

Run 9 Time: 0450

min	sec 0	15	30	45
1	10			
2				
3	5			
4				
5				
6				

6-minute Average: 6.7
Source Conditions:
Sun Angle (degrees):

Run 10 Time: 0516

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 11 Time: 0532

min	sec 0	15	30	45
1	0			
2				
3				
4				
5				
6				

6-minute Average: 0
Source Conditions:
Sun Angle (degrees):

Run 12 Time:

min	sec 0	15	30	45
1				
2				
3				
4				
5				
6				

6-minute Average:
Source Conditions:
Sun Angle (degrees):

Run 13 Time:

min	sec 0	15	30	45
1				
2				
3				
4				
5				
6				

6-minute Average:
Source Conditions:
Sun Angle (degrees):

Run 14 Time:

min	sec 0	15	30	45
1				
2				
3				
4				
5				
6				

6-minute Average:
Source Conditions:
Sun Angle (degrees):

Run 15 Time:

min	sec 0	15	30	45
1				
2				
3				
4				
5				
6				

6-minute Average:
Source Conditions:
Sun Angle (degrees):

Run 16 Time:

min	sec 0	15	30	45
1				
2				
3				
4				
5				
6				

6-minute Average:
Source Conditions:
Sun Angle (degrees):

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Pg. 1 1-15-13

Visible Emissions Evaluation

Facility Name	ECC FBF
AVOGADRO Project No.	12-9191
Location (city, state)	Brooklyn MI
Type of Facility	
Control Equipment / Emission Source	ACB
Date of Observation	1-15-13
Start Time	720
Stop Time	
Distance from observer (ft)	100'
Direction from observer	NW
Stack height (fr. observer's elev.) (ft)	101'
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	30%
wind direction	S
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	
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/IDA

Run Number(s) and Description

sec	0	15	30	45
min	Run 1 Time: 720			
1	5	5	5	5
2	10	5	5	15
3	20	20	20	15
4	15	15	10	10
5	10	10	10	10
6	5	5	5	5
6-minute Average:	10.0			
Source Conditions:				
Sun Angle (degrees):	0			
min	Run 2 Time: 740			
1	20	15	15	15
2	15	15	15	15
3	10	10	10	10
4	10	10	10	10
5	10	10	10	10
6	10	10	10	10
6-minute Average:	11.9			
Source Conditions:				
Sun Angle (degrees):	0			
min	Run 3 Time: 800			
1	10	10	10	10
2	10	10	5	5
3	10	10	10	5
4	5	10	10	10
5	10	10	10	10
6	5	10	10	10
6-minute Average:	9.0			
Source Conditions:				
Sun Angle (degrees):	5			
min	Run 4 Time: 820			
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			

sec	0	15	30	45
min	Run 5 Time: 840			
1	5	5	5	5
2	5	5	5	5
3	5	0	5	5
4	0	0	0	0
5	0	5	0	0
6	5	5	0	0
6-minute Average:	2.9			
Source Conditions:				
Sun Angle (degrees):	10			
min	Run 6 Time: 900			
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	0	5	5	5
6-minute Average:	4.6			
Source Conditions:				
Sun Angle (degrees):	10			
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	5
6	5	5	5	5
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):	10			
min	Run 8 Time: 940			
1	0	0	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:	4.6			
Source Conditions:				
Sun Angle (degrees):	10			

Range of opacity readings:

low 0 high 20

Number of readings above 10 % were 15

Observer's Signature

UNIT 2

Visible Emissions Evaluation

Run Number(s) and Description: Pg. 2 1-15-13

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	1-15-13
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	30%
wind direction	S
wind speed	0-5
barometric pressure	
rain? fog? snow? haze?	OVERCAST
Glasses worn:	
corrective? (Y/N)	Y
sunglasses? (Y/N)	N

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

sec	0	15	30	45
min	Run 9 Time: 1000			
1	5	5	5	5
2	10	5	5	10
3	5	10	5	5
4	10	5	10	10
5	10	10	10	10
6	0	0	0	0
6-minute Average:			6.3	
Source Conditions:				
Sun Angle (degrees):			15	
	Run 10 Time: 1020			
1	10	5	10	10
2	10	5	5	10
3	5	5	10	5
4	5	5	5	5
5	0	5	5	10
6	5	5	5	5
6-minute Average:			6.3	
Source Conditions:				
Sun Angle (degrees):			20	
	Run 11 Time: 1040			
1	0	0	0	5
2	0	5	5	0
3	5	0	5	5
4	5	0	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:			3.5	
Source Conditions:				
Sun Angle (degrees):			25	
*	Run 12 Time: 1100			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	10	5	5	10
5	5	5	5	5
6	10	10	5	5
6-minute Average:			5.8	
Source Conditions:				
Sun Angle (degrees):			60	

sec	0	15	30	45
min	Run 13 Time: 1120			
1	5	5	5	10
2	5	5	5	5
3	5	5	10	5
4	5	5	5	10
5	5	5	5	5
6	5	5	5	5
6-minute Average:			5.6	
Source Conditions:				
Sun Angle (degrees):			60	
	Run 14 Time: 1140			
1	5	5	5	5
2	5	0	0	0
3	0	0	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	0	0
6-minute Average:			3.5	
Source Conditions:				
Sun Angle (degrees):			55	
	Run 15 Time: 1200			
1	0	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:			4.8	
Source Conditions:				
Sun Angle (degrees):			55	
	Run 16 Time: 1220			
1	5	5	5	5
2	5	0	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	0	0	0
6-minute Average:			4.2	
Source Conditions:				
Sun Angle (degrees):			50	

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

* NEW POSITION @ 11:00
Direction - NE
Distance - 150'
Wind - S @ 0-5

UNIT 2

Pg. 3 1-15-13

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	1-15-13
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	S
wind speed	0-5
barometric pressure	
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

Run Number(s) and Description

sec	0	15	30	45
min	Run 1 Time: 1240			
1	0	0	0	0
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:			4.2	
Source Conditions:				
Sun Angle (degrees):			45	

sec	0	15	30	45
min	Run 2 Time: 1400			
1	0	0	5	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:			0.2	
Source Conditions:				
Sun Angle (degrees):			40	

sec	0	15	30	45
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	
Source Conditions:				
Sun Angle (degrees):			45	

sec	0	15	30	45
min	Run 4 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	
Source Conditions:				
Sun Angle (degrees):			35	

sec	0	15	30	45
min	Run 5 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	
Source Conditions:				
Sun Angle (degrees):			45	

sec	0	15	30	45
min	Run 6 Time: 1712			
1	5	5	5	5
2	5	0	0	0
3	0	5	5	0
4	5	0	0	5
5	5	0	5	5
6	5	0	5	5
6-minute Average:			3.1	
Source Conditions:				
Sun Angle (degrees):			35	

sec	0	15	30	45
min	Run 7 Time: 1740			
1	5	5	0	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:			4.3	
Source Conditions:				
Sun Angle (degrees):			40	

sec	0	15	30	45
min	Run 8 Time: 1800			
1	5	5	0	5
2	0	5	0	0
3	5	5	0	0
4	0	5	0	0
5	5	5	0	5
6	0	0	0	5
6-minute Average:			2.3	
Source Conditions:				
Sun Angle (degrees):			35	

Range of opacity readings:

low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

UNIT 2

Pg. 4 1-15-13

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	1-15-13
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)	40°F
relative humidity	30%
wind direction	Calm
wind speed	Calm
barometric pressure	
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	sec	0	15	30	45
min	Run 25 Time: 1520				min	Run 29 Time: 1640			
1	0	10	10	10	1	5	5	5	5
2	10	10	10	10	2	5	5	5	5
3	5	5	5	5	3	5	5	5	5
4	5	5	5	5	4	5	5	5	5
5	5	5	5	5	5	5	5	5	5
6	5	0	5	5	6	5	5	5	5
6-minute Average:			6.0		6-minute Average:			5.0	
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			30		Sun Angle (degrees):			5	
	Run 26 Time: 1550					Run Time:			
1	5	5	5	5	1				
2	5	5	5	5	2				
3	5	5	5	5	3				
4	5	5	5	5	4				
5	5	5	5	5	5				
6	5	5	5	5	6				
6-minute Average:			5.0		6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			25		Sun Angle (degrees):				
	Run 27 Time: 1600					Run Time:			
1	15	5	10	5	1				
2	15	15	10	10	2				
3	10	10	10	10	3				
4	5	5	5	5	4				
5	5	5	5	5	5				
6	5	5	0	0	6				
6-minute Average:			7.3		6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			20		Sun Angle (degrees):				
	Run 28 Time: 1620					Run Time:			
1	5	5	5	5	1				
2	5	5	5	5	2				
3	0	0	5	5	3				
4	5	5	5	5	4				
5	5	5	5	0	5				
6	0	5	5	5	6				
6-minute Average:			4.2		6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):			15		Sun Angle (degrees):				

Range of opacity readings:

low 0 high 15

Number of readings above 10 % were 3

Observer's Signature