Wed. Early Morning, January 23rd, 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	01/23/2013
Start Time	0124
Stop Time	0432
Distance from observer (ft)	150'
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:	@0124
ambient temperature (F)	14°
relative humidity	33%
wind direction	SE
wind speed	3-7 mph
barometric pressure	30.21 in Hg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	

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

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

sec	0	15	30	45
min	**Run 1 Time: 0124**			
1	0	0	5	0
2	0	0	5	0
3	0	0	0	0
4	0	0	0	0
5	0	5	0	5
6	0	0	0	5
6-minute Average:	1.0			
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 0150			
1	0	0	0	0
2	0	5	0	0
3	0	0	0	0
4	5	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.4			
Source Conditions:				
Sun Angle (degrees):				
	Run 3 Time: 0216			
1	0	5	0	0
2	0	0	5	0
3	5	0	0	0
4	0	0	5	0
5	0	5	0	0
6	0	0	5	0
6-minute Average:	1.2			
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 0242			
1	0	0	0	0
2	0	0	0	5
3	0	0	0	0
4	5	0	0	0
5	5	0	0	0
6	0	0	0	5
6-minute Average:	0.8			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	**Run 5 Time: 0308**			
1	0	5	0	0
2	0	5	0	0
3	0	0	0	5
4	0	0	5	0
5	0	0	5	0
6	0	5	0	0
6-minute Average:	1.2			
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 0334			
1	5	5	5	5
2	0	0	5	5
3	0	5	0	5
4	0	0	0	5
5	0	5	0	5
6	0	5	5	0
6-minute Average:	2.6			
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 0400			
1	0	0	0	5
2	0	5	0	0
3	5	0	0	0
4	5	0	0	0
5	0	5	0	5
6	0	0	5	5
6-minute Average:	1.6			
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 0426			
1	0	0	0	0
2	5	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0.2			
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

Wedn. Early Morning, January 23rd, 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	01/23/2013
Start Time	0452
Stop Time	0550
Distance from observer (ft)	150'
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:	@0450
ambient temperature (F)	13°
relative humidity	40%
wind direction	SE
wind speed	4-6 mph
barometric pressure	30.22 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	WhiteHow
Observer affiliation	Avogadro Env.

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

sec	0	15	30	45
min	**Run 9**	**Time: 0452**		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				
Run	**10**	**Time: 0518**		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				
Run	**11**	**Time: 0544**		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	5	0
6	0	0	0	0
6-minute Average:	0.7			
Source Conditions:				
Sun Angle (degrees):				
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):				
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

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

WEDNESDAY MORNING – JANUARY 23, 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	1/23/2012
Start Time	0720
Stop Time	1026
Distance from observer (ft)	150'
Direction from observer	N
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)	12° F
relative humidity	41%
wind direction	W
wind speed	5-10 mph
barometric pressure	30.24"
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	N

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WHITLOW
Observer affiliation	AVOGADRO ENV.

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

sec	0	15	30	45
min	**Run 12 Time: 0730**			
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 14 Time: 0818				
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 16 Time: 0904				
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 18 Time: 0956				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average:	0			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	**Run 13 Time: 0746**			
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 15 Time: 0836				
1	5	5	0	0
2	0	5	5	5
3	5	0	5	5
4	5	5	0	0
5	0	0	0	5
6	5	5	5	5
6-minute Average:	3.13			
Source Conditions:				
Sun Angle (degrees):				
Run 17 Time: 0930				
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 19 Time: 1026				
1	5	0	5	5
2	5	0	0	0
3	5	0	0	0
4	0	0	5	0
5	5	5	5	0
6	0	0	5	5
6-minute Average:	2.5			
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

WEDNESDAY AFTERNOON - JANUARY 23, 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	1/23/2013
Start Time	1048
Stop Time	1406
Distance from observer (ft)	150'
Direction from observer	NE
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 corex length
target?	sky
describe background to plume	sky
unique features of plume or stack	
Weather:	
ambient temperature (F)	15°F
relative humidity	38%
wind direction	NW
wind speed	5-10 mph
barometric pressure	30.26
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	N

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WHITLOW
Observer affiliation	AVOGADRO ENV.

Run Number(s) and Description: ACB1 RUNS 20-27

sec	0	15	30	45
min	Run 20 Time: 1048			
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 21 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			
Source Conditions:				
Sun Angle (degrees):				
	Run Time: 1232			
1	5	5	5	5
2	5	5	5	10
3	10	5	5	10
4	5	5	5	5
5	10	5	5	5
6	5	5	5	5
6-minute Average:	5.63			
Source Conditions:				
Sun Angle (degrees):				
	Run Time: 1334			
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 21 Time: 1114			
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 23 Time: 1206			
1	5	5	0	0
2	0	0	5	5
3	5	5	5	0
4	5	0	0	5
5	5	5	5	0
6	5	5	5	0
6-minute Average:	3.13			
Source Conditions:				
Sun Angle (degrees):				
	Run Time: 1308			
1	5	5	5	5
2	0	0	5	0
3	0	0	5	5
4	5	5	0	0
5	5	0	0	0
6	5	5	0	0
6-minute Average:	2.50			
Source Conditions:				
Sun Angle (degrees):				
	Run Time: 1400			
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

* GOOD CLEAR DAY - LOW WINDS - COLD

* LOW OPACITY READINGS - 10% MAX

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	1/23/2013
Start Time	1426
Stop Time	1734
Distance from observer (ft)	150'
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 CAREO LENGTHS
target?	SKY
describe background to plume	SKY
unique features of plume or stack	-
Weather:	
ambient temperature (F)	21°F
relative humidity	24%
wind direction	NW
wind speed	5-10 mph
barometric pressure	30.18"
rain? fog? snow? haze?	CLEAR
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	N

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WHITLOW
Observer affiliation	AVOGADRO ENV

WEDNESDAY AFTERNOON — JANUARY 23, 2013

ACB 1 RUNS 28 - 35

sec	0	15	30	45
min	Run 28 Time: 1426			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 29 Time: 1438			
1	5	0	0	5
2	5	5	5	0
3	5	5	0	0
4	5	5	5	5
5	0	0	0	5
6	0	5	0	0
6-minute Average:	2.71			
Source Conditions:				
Sun Angle (degrees):				

Run 30 Time: 1518				
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 31 Time: 1544				
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 32 Time: 1610				
1	0	0	0	0
2	0	0	5	5
3	0	5	0	0
4	5	0	5	0
5	0	0	5	0
6	5	5	5	0
6-minute Average:	1.88			
Source Conditions:				
Sun Angle (degrees):				

Run 33 Time: 1630				
1	5	5	5	5
2	5	5	0	0
3	5	5	5	0
4	0	0	0	0
5	0	0	5	5
6	5	5	5	5
6-minute Average:	3.13			
Source Conditions:				
Sun Angle (degrees):				

Run 34 Time: 1700				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	5	5	5	0
5	0	0	5	0
6	5	5	5	5
6-minute Average:	1.67			
Source Conditions:				
Sun Angle (degrees):				

Run 35 Time: 1723				
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	6	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

* LOW OPACITY READINGS

* OPACITY READINGS ALWAYS TEND TO JUMP 5-10 % HIGHER, WHENEVER MORE DEBRIS IS ADDED

Wed. Night, January 23rd, 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	01/23/2013
Start Time	1940
Stop Time	2256
Distance from observer (ft)	150'
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 over lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	—
	@1940

Weather:

ambient temperature (F)	17°
relative humidity	33%
wind direction	SE
wind speed	4-6 mph
barometric pressure	30.2 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.

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

sec	0	15	30	45
min	Run 1 Time: 1940			
1	0	0	0	5
2	0	0	0	0
3	0	5	0	0
4	0	5	0	0
5	0	0	5	0
6	0	0	5	0
6-minute Average: 1.0				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 2006			
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: 2032			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	0	5	5	5
5	5	5	0	5
6	5	5	5	5
6-minute Average: 4.6				
Source Conditions:				
Sun Angle (degrees):				
	Run 4 Time: 2058			
1	0	0	5	0
2	0	0	5	0
3	0	5	0	0
4	5	0	0	0
5	5	0	0	0
6	0	5	0	5
6-minute Average: 1.4				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 5 Time: 2124			
1	0	5	0	0
2	0	0	0	0
3	5	0	0	5
4	0	0	5	0
5	0	5	0	0
6	0	0	0	0
6-minute Average: 1.0				
Source Conditions:				
Sun Angle (degrees):				
	Run 6 Time: 2158			
1	5	10	5	10
2	5	5	10	5
3	10	5	10	5
4	10	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average: 6.2				
Source Conditions:				
Sun Angle (degrees):				
	Run 7 Time: 2224			
1	0	0	5	0
2	0	0	0	5
3	0	0	0	0
4	5	0	0	0
5	0	5	0	0
6	0	0	0	5
6-minute Average: 1.0				
Source Conditions:				
Sun Angle (degrees):				
	Run 8 Time: 2250			
1	5	0	0	0
2	0	0	5	0
3	0	0	0	5
4	0	0	5	0
5	0	0	0	0
6	5	0	0	0
6-minute Average: 1.0				
Source Conditions:				
Sun Angle (degrees):				

Range of opacity readings: low 0 high 10

Number of readings above 10 % were 0

Observer's Signature

Wedn. Night, January 23rd, 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	01/23/2013
Start Time	2330
Stop Time	2402
Distance from observer (ft)	150'
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	—
	@2310
Weather:	
ambient temperature (F)	15°
relative humidity	40%
wind direction	SE
wind speed	4-6 mph
barometric pressure	30.21 inHg
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	yes
sunglasses? (Y/N)	

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

Run Number(s) and Description: ACB 1 Runs 9-10

sec	0	15	30	45
min	Run 9 Time: 2330			
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 10 Time: 2356			
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 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):				

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 5 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Visible Emissions Evaluation

Wed. Early Morning, January 23rd, 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	01/23/2013
Start Time	0124
Stop Time	0432
Distance from observer (ft)	1501
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 canex lengths
target?	Sky
describe background to plume	Sky
unique features of plume or stack	—
Weather:	@0124
ambient temperature (F)	14°
relative humidity	33%
wind direction	SE
wind speed	3-7 mph
barometric pressure	30.21 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	Whittaw
Observer affiliation	Avogadro Env.

sec	0	15	30	45
Run 1 Time: 0124				
1	0	0	0	0
2	0	0	0	5
3	0	0	0	0
4	5	0	0	0
5	0	5	0	0
6	0	0	0	0
6-minute Average: 0.6				
Source Conditions:				
Sun Angle (degrees):				
Run 2 Time: 0150				
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: 0216				
1	0	0	0	0
2	0	0	5	0
3	0	0	0	0
4	0	0	0	5
5	0	0	5	0
6	0	0	0	0
6-minute Average: 0.6				
Source Conditions:				
Sun Angle (degrees):				
Run 4 Time: 0242				
1	0	0	0	0
2	0	0	0	0
3	0	5	0	0
4	0	5	0	0
5	0	0	0	0
6	5	0	0	0
6-minute Average: 0.6				
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
Run 5 Time: 0308				
1	0	0	5	0
2	0	0	0	0
3	5	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.4				
Source Conditions:				
Sun Angle (degrees):				
Run 6 Time: 0334				
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	0	0
6-minute Average: 0.2				
Source Conditions:				
Sun Angle (degrees):				
Run 7 Time: 0400				
1	0	0	0	5
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0.2				
Source Conditions:				
Sun Angle (degrees):				
Run 8 Time: 0426				
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

Visible Emissions Evaluation

Wed. Early Morning, January 23rd, 2013

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	01/23/2013
Start Time	0452
Stop Time	0550
Distance from observer (ft)	150'
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:	@0450
ambient temperature (F)	13°
relative humidity	40%
wind direction	SE
wind speed	4-6mph
barometric pressure	30.22 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: ACB 2 Runs 9-11

sec	0	15	30	45
min	Run 9	Time: 0452		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 10	Time: 0518		
1	0	0	0	0
2	0	0	0	0
3	0	0	0	0
4	0	0	0	0
5	0	0	0	0
6	0	0	0	0
6-minute Average: 0				
Source Conditions:				
Sun Angle (degrees):				
	Run 11	Time: 0544		
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):				

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 0

Number of readings above 10 % were 0

Observer's Signature

WEDNESDAY MORNING – JANUARY 23, 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	1/23/2013
Start Time	0720
Stop Time	1026
Distance from observer (ft)	150'
Direction from observer	N
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 corex lengths
target?	Sky
describe background to plume	Sky
unique features of plume or stack	—
Weather:	
ambient temperature (F)	12° F
relative humidity	41%
wind direction	W
wind speed	5-10 mph
barometric pressure	30.24"
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	N

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WHITLOW
Observer affiliation	AVOGADRO ENV.

Run Number(s) and Description

ACB 2 RUN 12 – 19

sec	0	15	30	45
min	Run 12 Time: 0720			
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 13 Time: 0736			
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 14 Time: 0818			
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 15 Time: 0839			
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 16 Time: 0904			
1	0	0	0	0
2	0	0	0	0
3	0	0	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	2.92			
Source Conditions:				
Sun Angle (degrees):				
	Run 17 Time: 0930			
1	5	5	5	5
2	0	0	5	5
3	0	0	0	5
4	5	5	5	5
5	0	0	5	5
6	0	0	0	0
6-minute Average:	2.71			
Source Conditions:				
Sun Angle (degrees):				
	Run 18 Time: 0956			
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 19 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:				
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

WEDNESDAY AFTERNOON – JANUARY 23, 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	1/23/2013
Start Time	1048
Stop Time	1406
Distance from observer (ft)	150'
Direction from observer	NE
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 corner lengths
target?	sky
describe background to plume	sky
unique features of plume or stack	–

Weather:

ambient temperature (F)	15°F
relative humidity	38%
wind direction	NW
wind speed	5-10 mph
barometric pressure	30.26
rain? fog? snow? haze?	clear

Glasses worn:

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

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WATTLOW
Observer affiliation	AVOGADRO ENV

Run Number(s) and Description: ACB 2 RUNS 20-27

sec	0	15	30	45
min	Run 20 Time: 1048			
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 21 Time: 1140			
1	0	0	5	0
2	5	5	0	0
3	0	5	5	5
4	0	0	5	0
5	5	5	5	0
6	0	0	5	0
6-minute Average:	2.29			
Source Conditions:				
Sun Angle (degrees):				
	Run 24 Time: 1239			
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 26 Time: 1334			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 22 Time: 1214			
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 23 Time: 1306			
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 25 Time: 1308			
1	0	0	5	0
2	0	5	5	5
3	0	0	0	0
4	0	0	5	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.25			
Source Conditions:				
Sun Angle (degrees):				
	Run 27 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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

* GOOD CLEAR DAY – COLD – & LOW WINDS – LOW OPACITY READINGS

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

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	1/23/2013
Start Time	1426
Stop Time	1734
Distance from observer (ft)	150'
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)	21°F
relative humidity	24%
wind direction	NW
wind speed	5-10 mph
barometric pressure	30.18"
rain? fog? snow? haze?	clear
Glasses worn:	
corrective? (Y/N)	N
sunglasses? (Y/N)	N

Observer's name	AARON T. JOHNSON
Observer certification date	1-6-2013
Certifying agency	WHITLOW
Observer affiliation	AVOGADRO ENV.

WEDNESDAY AFTERNOON - JANUARY 23, 2013

ACB 2 RUNS 28 - 35

sec	0	15	30	45
min	Run 28 Time: 1426			
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 29 Time: 1513			
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 30 Time: 1610			
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 31 Time: 1703			
1	5	5	5	5
2	5	5	5	5
3	5	5	5	5
4	5	5	5	5
5	5	5	5	5
6	5	5	5	5
6-minute Average:	5			
Source Conditions:				
Sun Angle (degrees):				

sec	0	15	30	45
min	Run 32 Time: 1753			
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 33 Time: 1844			
1	0	0	0	0
2	5	5	0	0
3	5	0	0	5
4	0	0	5	5
5	0	0	0	0
6	0	0	0	0
6-minute Average:	1.25			
Source Conditions:				
Sun Angle (degrees):				
	Run 34 Time: 1936			
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 35 Time: 1738			
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):				

Range of opacity readings: low 0 high 5

Number of readings above 10 % were 0

Observer's Signature

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

* LOW OPACITY READINGS

* OPACITY READINGS ALWAYS TEND TO JUMP 5-10% HIGHER WHENEVER MORE DEBRIS IS ADDED

* EMPTY ASH @ 535 & CREATED SLIGHTLY HIGER OPACITY READINGS FOR A FEW MINUTES - (15-20 MINUTES)

* @ 540 PM ADDED NEW DEBRIS (5-20% OPACITY)

* OPACITY READINGS BACK DOWN TO 0-5% BEFORE 6:00PM EST

Wed. Night, January 23rd, 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	01/23/2013
Start Time	1940
Stop Time	2256
Distance from observer (ft)	150'
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	—
	@1940
Weather:	
ambient temperature (F)	17°
relative humidity	33°
wind direction	SE
wind speed	4-6mph
barometric pressure	30.21 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: ACB 2 Runs 1-8

sec	0	15	30	45
min	Run 1 Time: 1940			
1	5	5	10	5
2	10	5	5	10
3	5	5	5	5
4	10	5	10	5
5	5	5	5	10
6	10	10	5	5
6-minute Average: 6.6				
Source Conditions:				
Sun Angle (degrees):				
	Run 2 Time: 2006			
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: 2032			
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: 2058			
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: 2124			
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: 2158			
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: 2224			
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: 2250			
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

AVOGADRO ENVIRONMENTAL CORPORATION, Easton Pa

Wedn. Night, January 23rd, 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	01/23/2013
Start Time	2330
Stop Time	2402
Distance from observer (ft)	150'
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: @2310

ambient temperature (F)	15°
relative humidity	40%
wind direction	SE
wind speed	4-6 mph
barometric pressure	30.21 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	Whittaker
Observer affiliation	Avogadro Env.

Run Number(s) and Description: ACB 2 Runs 9-10

sec	0	15	30	45	sec	0	15	30	45
min	Run 9 Time: 2330				min	Run Time:			
1	0	0	0	0	1				
2	0	0	0	0	2				
3	0	0	0	10	3				
4	0	0	0	0	4				
5	0	0	0	0	5				
6	0	0	0	0	6				
6-minute Average: 0					6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run 10 Time: 2356					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					6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run Time:					Run Time:			
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
6-minute Average:					6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				
	Run Time:					Run Time:			
1					1				
2					2				
3					3				
4					4				
5					5				
6					6				
6-minute Average:					6-minute Average:				
Source Conditions:					Source Conditions:				
Sun Angle (degrees):					Sun Angle (degrees):				

Range of opacity readings: low 0 high —

Number of readings above 10 % were —

Observer's Signature