Exhibit A

Response of Kinder Morgan/Chicago Arrow Terminal, 2929 E. 126th Street, to CDPH's Request for Information related to Chicago Arrow's Request for Variances from Air Pollution Control Rules and Regulations for Control of Emissions from Handling and Storage of Bulk Material Piles

Exhibit B

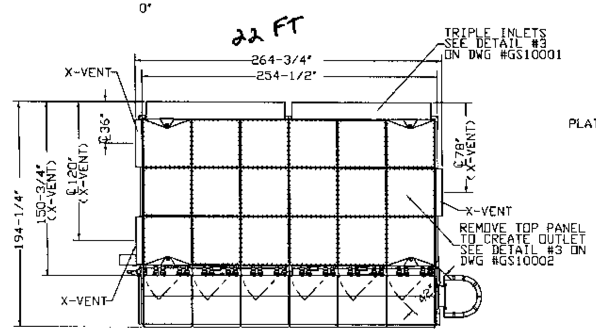
Response of Kinder Morgan/Chicago Arrow Terminal, 2929 E. 126th Street, to CDPH's Request for Information related to Chicago Arrow's Request for Variances from Air Pollution Control Rules and Regulations for Control of Emissions from Handling and Storage of Bulk Material Piles

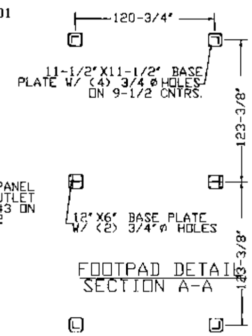
APPROVAL DRAWING ONLY
NOT FOR PRODUCTION

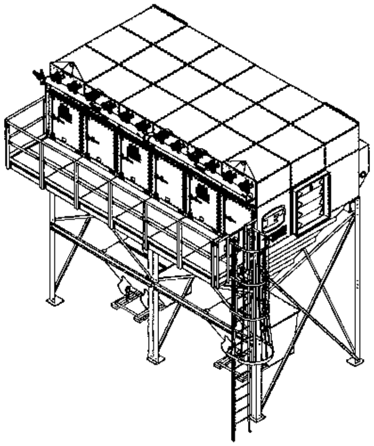
APPROVED:__________ DATE:__________

APPROVED
AS NOTED:__________ DATE:__________

DESTROY ALL PRIOR REVISIONS

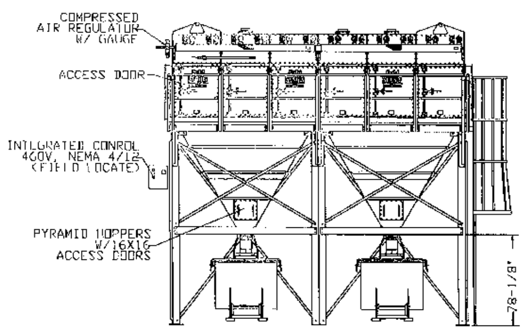


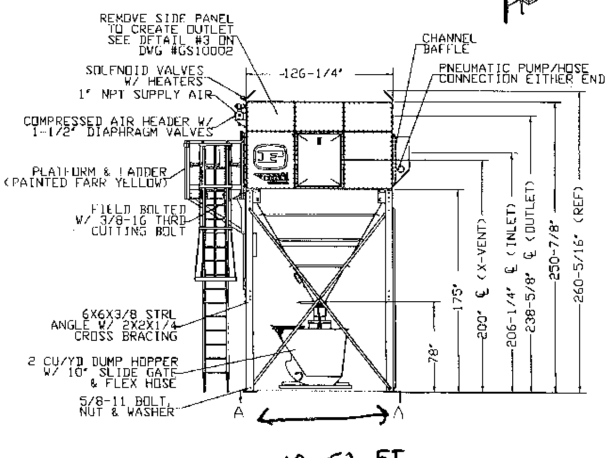




ITEMS INCLUDED BUT NOT SHOWN:
1. (1) GROUND MOUNT EXHAUST FAN, 150HP, 3/60/460V, SIZE 49, CLASS IV ACF WHEEL, CW, DISCHARGE BOTTOM ANGULAR UP @ 45°, INLET BOX VERTICAL @ 360° MOTOR POSITION W.
2. (72) POLYTECH STD FILTERS, FLTR-GS-GR-325
3. (1) 36" MECHANICAL ISOLATION DEVICE
4. (1) PNEUMATIC VACUUM PUMP/HOSE KIT
5. (1) INTEGRATED CONTROL, 460V, NEMA 4/12 ENCLOSURE, MOTOR STARTER FOR 150 OFT FAN, MAIN FUSIBLE DISCONNECT.

SPECIFICATIONS:
1. MODULAR CONSTRUCTION FROM 10 Ga & 7 Ga HRCS
2. ITC CONTROLS REQUIRE 460 VAC THREE PHASE 50/60 HZ.
3. SOLENOIDS REQUIRE 120/1/60 VAC.
4. NEMA 4 & 12 RATING ON ELECTRICAL ENCLOSURES.
5. CLEANING SYSTEM REQUIRES 60 SCFM OF CLEAN DRY COMPRESSED AIR WITH FACTORY SETTINGS AT 90 PSI.
6. OPERATING PRESSURE: -3 TO 0 PSIG
7. VESSEL STRENGTH: 3.5 PSIG
8. WEIGHTS (COLLECTOR & FILTERS): 12,380 LBS
(HOPPER & SUPPORT): 5,400 LBS
DUMP HOPPERS: 2,300 LBS
PLATFORM & LADDER: 2,900 LBS
TOTAL WEIGHT: 22,980 LBS





MODEL: GS72

FINISH: FARR GREEN POWDER PAINT

APPLICATION DATA:

CFM: 60,000 @ 9.0"W.G.
AIR-TO-CLOTH RATIO: 2.56:1
DUST TYPE: METAL POWDER
INLET VELOCITY: 1,875.0 FPM
APPLICATION: ALLOY DUST
(OUTDOOR INSTALLATION)
PRED: 2.25 PSI
KST: 200 BAR-M/S
PMAX: 8 BAR

SHIPPING INFO:

EQUIPMENT END USER: KINDER MORGAN CHICAGO, IL

CUSTOMER REP: PROCESS RESOURCES INC. JOHN DIETRICH

P.O. #: 64909-1
FARR #: A85518

**THE CUSTOMER ASSUMES THE RESPONSIBILITY FOR CONTACTING THEIR INSURANCE UNDERWRITER AND ADVISING CAMFIL/FARR IN REGARD TO SPECIFIC APPLICATION REQUIREMENTS OF EXPLOSION VENTING OR IF ADDITIONAL FIRE PROTECTION AND SAFETY EQUIPMENT MAY BE REQUIRED. THE BUYER IS ALSO CAUTIONED TO ADHERE TO PRESCRIBED OSHA, NFPA, FEDERAL, STATE AND LOCAL CODES AND REGULATIONS APPLICABLE TO INDUSTRIAL VENTILATION SYSTEMS, WHICH CAMFIL/FARR EQUIPMENT MAY BE APPLIED ON.

UNLESS OTHERWISE NOTED DIMENSIONS ARE IN INCHES; TOLERANCES ARE: FRACTIONAL ± 1/32; 2 PLACE DECIMAL ± 0.010; 3 PLACE DECIMAL ± 0.030; ANGULAR ± 0°	Air Filtration Control	MAC PAC DATA			
		ENTITY CODE	PRODUCT CLASS	SUB CLASS	UNIT OF MEASURE
		40	20		EA
		CROSS REF.	NONE		
		SCALE: 1:42	SHEET 1 OF 1		
TITLE	GS72 DUST COLLECTION SYSTEM				
DO NOT SCALE PRINT	SIZE D	DRAWING NO. A85518001	REV. A		

Exhibit C

Response of Kinder Morgan/Chicago Arrow Terminal, 2929 E. 126th Street, to CDPH's Request for Information related to Chicago Arrow's Request for Variances from Air Pollution Control Rules and Regulations for Control of Emissions from Handling and Storage of Bulk Material Piles

TABLE OF CONTENTS

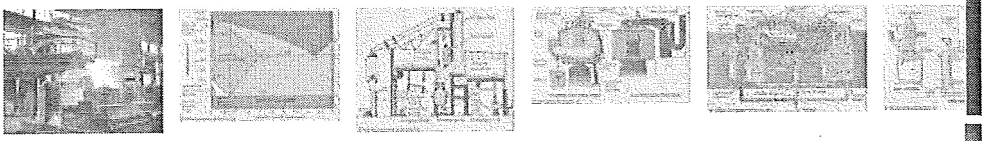
Steel

Written by: E.F. Wondris Last Updated 7-16-2014

REMOVING OXYGEN

As the carbon level is lowered in liquid steel, the level of dissolved oxygen theoretically increases according to the relationship %C × %O = 0.0025. This means that, for instance, a steel with 0.1 percent carbon, at equilibrium, contains about 0.025 percent, or 250 parts per million, dissolved oxygen. The level of dissolved oxygen in liquid steel must be lowered because oxygen reacts with carbon during solidification and forms carbon monoxide and blowholes in the cast. This reaction can start earlier, too, resulting in a dangerous carbon monoxide boil in the ladle. In addition, a high oxygen level creates many oxide inclusions that are harmful for most steel products. Therefore, usually at the end of steelmaking during the tapping stage, liquid steel is deoxidized by adding aluminum or silicon. Both elements are strong oxide formers and react with dissolved oxygen to form alumina (Al_2O_3) or silica. These float to the surface of the steel, where they are absorbed by the slag. The upward movement of these inclusions is often slow because they are small (*e.g.*, 0.05 millimetre), and combinations of various deoxidizers are sometimes used to form larger inclusions that float more readily. In addition, stirring the melt with argon or an electromagnetic field often serves to give them a lift.

IMAGES VIDEOS INTERACTIVE QUIZZES LISTS



ALLOYING

Deoxidation is also important before alloying steel with easy oxidizable metals such as chromium, titanium, and vanadium, in order to minimize losses and improve process control. Metals that do not oxidize readily, such as nickel, cobalt, molybdenum, and copper, can be added in the furnace to take advantage of high heating rates. In fact, alloying always has thermal effects on steelmaking—for example, the use of energy to heat and melt the alloying agents, or the heat of reaction or solution when they combine with other elements. Fortunately, there exists a large amount of empirical data, obtained from thousands of thermodynamic experiments, that, when supported by theoretical principles, allows steelmakers to predict such temperature changes.

Most alloys are added in the form of ferroalloys, which are iron-based alloys that are cheaper to produce than the pure metals. Many different grades are available. For example, ferrosilicon is supplied with levels of 50, 75, and 90 percent silicon and with varying levels of carbon and other additions.

REMOVING HYDROGEN AND NITROGEN

Also important for steelmaking is the absorption and removal of the two gases hydrogen and nitrogen. Hydrogen can enter liquid steel from moist air, damp refractories, and wet flux and alloy additions. It causes brittleness of solidified steel—especially in large pieces, such as heavy forgings, that do not permit the gas to diffuse to the surface. Hydrogen can also form blowholes in castings. Nitrogen does not move into and out of liquid steel as easily as hydrogen, but it is well absorbed by liquid steel in the high-temperature zones of an electric arc or oxygen jet, where nitrogen molecules (N_2) are broken up into atoms (N). Like hydrogen, nitrogen substantially decreases the ductility of steel.

REFRACTORY LINER

Basic steelmaking takes place in containers lined with basic refractories. These may be bricks or ram material made of highly stable oxides, such as magnesite, alumina, or the double oxides chrome-magnesite and dolomite. It is desirable that the refractories not participate in the steelmaking reactions, but unfortunately they do erode and corrode. Refractory bricks are produced in all shapes and grades by a highly specialized industry.

TESTING

Testing and sampling are an important part of liquid steelmaking. They are carried out by mechanized and often automated facilities, which immerse lances that are equipped with sensors for rapid computation of temperature and dissolved carbon, oxygen, and hydrogen. Test lances also take samples for analysis in laboratories. All results are usually fed automatically into a process-control computer.

Basic oxygen steelmaking

More than half the world's steel is produced in the basic oxygen process (BOP), which uses pure oxygen to convert a charge of liquid blast-furnace iron and scrap into steel. The basic oxygen furnace (BOF) is a refractory-lined, tiltable converter into which a vertically movable, water-cooled lance is inserted to blow oxygen through nozzles at supersonic velocity onto the charge (see figure). The use of pure oxygen at high flow rates results in such fast oxidation of the elements contained in blast-furnace iron that only about 20 minutes are required per heat—*i.e.,* to refine one charge. Converters vary in size and are operated for heats ranging from 30 to 360 tons.

THE CHARGE

When oxygen contacts blast-furnace iron, a great amount of heat is released by the ensuing exothermic reactions, especially the oxidation of silicon to silica, so that using only blast-furnace iron would result in a liquid steel temperature too high for casting. Therefore, before the hot metal is added, a specific amount of scrap is charged into the furnace. Melting this scrap consumes about 340 kilocalories per kilogram, effectively cooling the process. A typical BOP charge, therefore, consists of about 75 percent liquid iron and 25 percent scrap. This requires a reliable supply of low-cost iron with a uniform chemical composition, which is attainable only by keeping the operating condition of a blast furnace as constant as possible; this in turn requires a consistent iron consumer. There are also certain iron properties—for example, the silicon and sulfur content—that are selected to optimize the blast furnace and BOF operations and to produce steel at minimal cost. Such interdependence requires that blast furnaces and BOFs work within a well-integrated operating system.

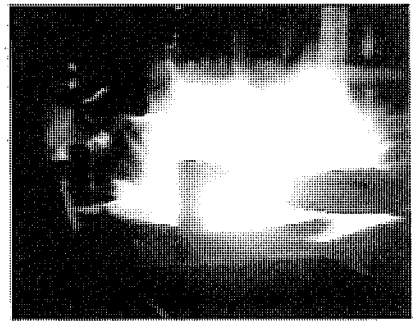
Molten Metal Splash and Furnace Refractory Safety

Molten metal splash is the most common cause of melt deck injuries and is caused by the addition of wet materials to the molten bath. It can be minimized by diligently inspecting and treating scrap. Metal run-out ranks among the most severe accidents that

Molten metal splash is the most common cause of melt deck injuries and is caused by the addition of wet materials to the molten bath. It can be minimized by diligently inspecting and treating scrap. Metal run-out ranks among the most severe accidents that

By Emad Tabatabei and Robert C. Turner, P.E.

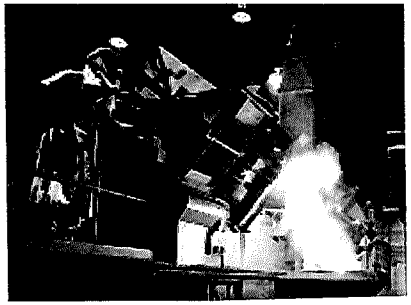
Wet charge materials, sealed scrap, and bridging are all safety hazards that can lead to catastrophic explosions in foundries. By diligently examining and treating scrap, following induction furnace safety procedures, properly training and retraining personnel, and use of automated melt shop equipment, founders can be confident their operations are as safe as possible.



An explosion occurs when moisture is confined by molten metal.

Wet charge materials are a serious safety hazard in all foundries. Water, moisture, or any liquid-bearing material instantaneously turns to steam when coming in contact with molten metal — expanding to 1,600 times its original volume and producing a violent explosion. This occurs without warning and throws molten metal and possibly high-temperature solids out of the furnace, putting workers, the furnace itself, and nearby plant and equipment at risk.

A water/molten metal explosion can occur in any type of furnace. For an induction furnace, however, the aftereffects may be more serious, including the possibility of additional explosions caused by liquid in a ruptured cooling system coming in contact with molten metal in the bath. Molten metal need not be present in the furnace for a water/molten metal explosion to occur. Explosions also can occur if sealed drums or containers containing water are charged into an empty but hot furnace. In this case, the force of the explosion will eject the newly charged material and quite likely damage the refractory lining as well.



The violent and unpredictable nature of a water/molten metal explosion makes the wearing of appropriate Personal Protective Equipment (PPE) by melt shop workers imperative. PPE can help to prevent disfiguring, incapacitating or fatal burns.

Some foundries reduce the possibility of water/molten metal explosions by storing scrap under cover for a least one day and then carefully inspecting bales and containers for any residual moisture. But a more reliable solution employed by an increasing number of foundries is to use remote charging systems with charge dryers or preheaters. Remote charging systems permit the operator to stand safely back from the furnace or behind protective screens during charging. Dryers and preheaters maximize the removal of water and moisture before the scrap enters the bath.

Exhibit D

Response of Kinder Morgan/Chicago Arrow Terminal, 2929 E. 126th Street, to CDPH's Request for Information related to Chicago Arrow's Request for Variances from Air Pollution Control Rules and Regulations for Control of Emissions from Handling and Storage of Bulk Material Piles

EPA METHOD 9

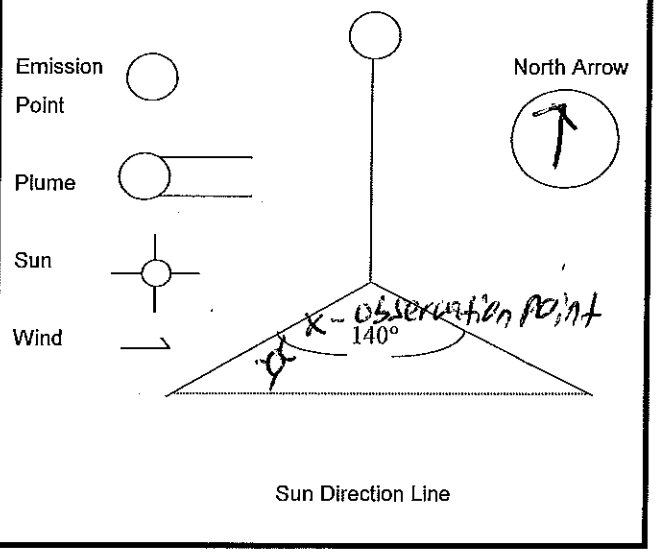
VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Barge 4CFC 2x714
Emission Point Description: _____
Source Height: 5 ft Height Relative to Observer: 5 ft
Distance from Observer: 25 ft Direction from Observer: Start: N End: N
Plume Type: (Continuous, Fugutive, or Intermittent) Start: Intermittent End: Intermittent
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: _____ End: _____
Plume Color: Start: Grey End: Grey
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: Tree line End: Tree line Background Color: Green
Point in Plume Where Opacity was Determined: ~ ' from stack exit
Sky Conditions: Start: Cloudy End: Cloudy Ambient Temperature: Start: 66 F° End: 66 F°
Wind Direction: Start: NNE End: NNE Wind Speed: Start: 9 mph End: 9 mph
Relative Humidity: Start: 46% End: 46% Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	5	0	0	1	30					
1	0	0	0	5	1	31					
2	0	0	0	0	0	32					
3	0	0	5	0	1	33					
4	0	5	5	0	3	34					
5	0	0	0	0	0	35					
6	0	5	0	0	1	36					
7	0	0	0	0	0	37					
8	0	0	0	0	0	38					
9						39					
10						40					
11						41					
12						42					
13						43					
14						44					
15						45					
16						46					
17						47					
18						48					
19						49					
20						50					
21						51					
22						52					
23						53					
24						54					
25						55					
26						56					
27						57					
28						58					
29						59					

SOURCE SKETCH LAYOUT



Highest six minute average: 1%

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 306 End: 312

60-Minute Averge: _____

Observer's Name: Jeremy Dunn

Certified By: Carl Koontz

Certification #: _____ Exp. Date: _____

Signature: Jeremy Dunn Date: 9/16/14

VISIBLE EMISSION OBSERVATION FORM

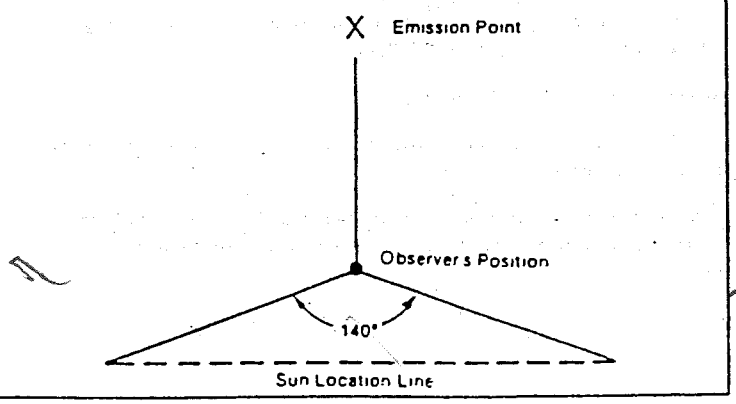
No. VLB 9122

COMPANY NAME	Chicago Ferro
STREET ADDRESS	2926 E 126th St
CITY	Chicago
STATE	IL
ZIP	60633
PHONE (KEY CONTACT)	
SOURCE ID NUMBER	
PROCESS EQUIPMENT	excavator
OPERATING MODE	Loading Trucks
CONTROL EQUIPMENT	
OPERATING MODE	
DESCRIBE EMISSION POINT	
HEIGHT ABOVE GROUND LEVEL	
HEIGHT RELATIVE TO OBSERVER Start / End	
DISTANCE FROM OBSERVER Start / End	
DIRECTION FROM OBSERVER Start / End	
DESCRIBE EMISSIONS Start	12:40
End	1:40
EMISSION COLOR Start / End	White
IF WATER DROPLET PLUME Attached ☐ / Detached ☐	
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED Start / End	
DESCRIBE PLUME BACKGROUND Start / End	
BACKGROUND COLOR Start / End	Gray
SKY CONDITIONS Start / End	Cloudy
WIND SPEED Start / End	
WIND DIRECTION Start / End	
AMBIENT TEMP Start / End	
WET BULB TEMP	
RH, percent	

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH

Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE	START TIME	END TIME
11-3-14	12:40	1:40

MIN \ SEC	0	15	30	45	COMMENTS	
1	30	25	30	20	-- 26.25 KS	23
2	20	—	30	—	12.5 KW	24
3	15	15	—	10	OXCUT 10.0	OX 13
4	40	—	30	25	OXCUT SHOT SIDES 23.75	OX 10
5	25	—	—	25	12.5	23
6	—	—	25	—	6.25	24
7	—	15	30	20	16.25	13
8	20	—	—	~~25~~	11.25	10
9	15	15	—	20	12.5	23
10	—	—	15	20	8.75	24
11						13
12					NO	10
13					TRUCKS	23
14						24
15	20	—	20	20	15.0	13
16	—	15	15	—	7.5	10
17	15	15	—	25	13.75	23
18	15	10				24
19						13
20						10
21					NO TRUCKS	23
22						24
23	10	15	20	20	16.25	13
24						10
25						23
26						24
27					DOWN	13
28					LIDS	10
29						23
30						24

OBSERVER'S NAME (PRINT): B.L Buchinski

OBSERVER'S SIGNATURE: Bill Buchinski | DATE: 11-3-14

ORGANIZATION:

CERTIFIED BY | DATE:

CONTINUED ON VEO FORM NUMBER

UNOFFICIAL

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME	Kinder Morgan Chicago Ferro
STREET ADDRESS	2926 E 126th St.
CITY	Chicago
STATE	IL
ZIP	60633
PHONE (KEY CONTACT)	
SOURCE ID NUMBER	

PROCESS EQUIPMENT	backhoe, loader
OPERATING MODE	sack burn
CONTROL EQUIPMENT	NA
OPERATING MODE	on dock

DESCRIBE EMISSION POINT: burn point when dumping sacks on dock

HEIGHT ABOVE GROUND LEVEL	4'
HEIGHT RELATIVE TO OBSERVER	Start -2' End
DISTANCE FROM OBSERVER	Start 25' End
DIRECTION FROM OBSERVER	Start NE End

DESCRIBE EMISSIONS: Start gray dust End

EMISSION COLOR	Start gray End
IF WATER DROPLET PLUME	Attached ☐ Detached ☐

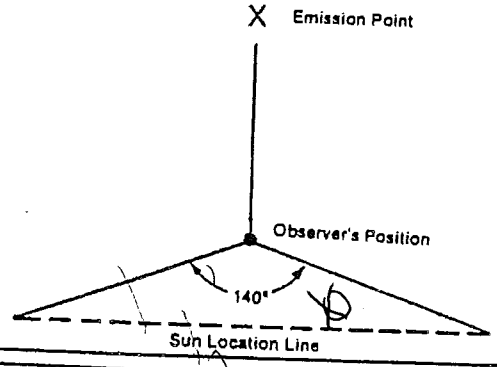
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start burn point End

DESCRIBE PLUME BACKGROUND: Start barge End

BACKGROUND COLOR	Start green End
SKY CONDITIONS	Start clear End
WIND SPEED	Start 0 End
WIND DIRECTION	Start N End
AMBIENT TEMP	Start 65 End
WET BULB TEMP	
RH, percent	63%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE: 9/19/14 START TIME: 10:50 END TIME

SEC / MIN	0	15	30	45	COMMENTS
1	0	0	0	0	
2	0	0	0	0	
3	0	0	10	5	
4	0	0	5	0	
5	0	0	0	0	
6	0	0	0	0	
7	0	0	10	0	loader
8	0	0	5	5	
9	5	5	0	0	
10	0	0	0	5	loader
11	0	0	0	0	
12	0	0	5	0	
13	5	5	5	10	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	10	
17	5	10	5	5	
18	5	0	0	0	
19	5	5	0	0	loader
20	0	0	0	10	
21	5	10	5	5	
22	5	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	10	5	
26	15	10	5	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	5	0	5	
30	5	5	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: [signature] DATE: 9/19/14

ORGANIZATION: KM

CERTIFIED BY: Peromet DATE:

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME: Kinder Morgan

STREET ADDRESS: 2926 E 126th St.

CITY: Chicago | STATE: IL | ZIP: 60633

PHONE (KEY CONTACT) | SOURCE ID NUMBER

PROCESS EQUIPMENT: SuperSack unloading | OPERATING MODE: outdoor barn

CONTROL EQUIPMENT | OPERATING MODE

DESCRIBE EMISSION POINT: drop point 3 FESI 752

HEIGHT ABOVE GROUND LEVEL: 4 Ft | HEIGHT RELATIVE TO OBSERVER: Start [redacted] 0' End

DISTANCE FROM OBSERVER: Start [redacted] 20' End | DIRECTION FROM OBSERVER: Start N End

DESCRIBE EMISSIONS: Start Sky End Sky

EMISSION COLOR: Start ltblue End ltblue | IF WATER DROPLET PLUME: Attached ☐ Detached ☐

POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start drop point End drop point

DESCRIBE PLUME BACKGROUND: Start End

BACKGROUND COLOR: Start End | SKY CONDITIONS: Start End

WIND SPEED: Start End | WIND DIRECTION: Start End

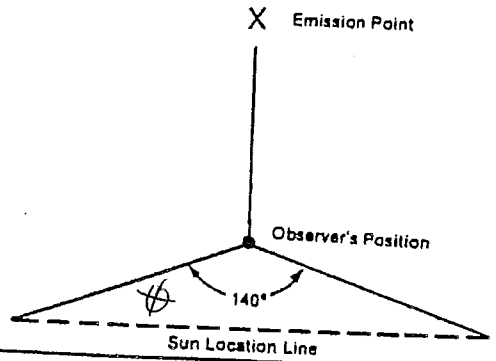
AMBIENT TEMP: Start End | WET BULB TEMP | RH, percent

Stack with Plume

Sun

Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE	START TIME	END TIME

MIN \ SEC	0	15	30	45	COMMENTS
1	0	5	0	5	
2	5	5	0	0	
3	0	0	0	0	
4	0	0	0	0	
5	5	5	0	0	
6	0	0	0	0	
7	0	0	10	0	
8	5	0			
9					
10					
11					
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28					
29					
30					

OBSERVER'S NAME (PRINT)

OBSERVER'S SIGNATURE | DATE

ORGANIZATION

CERTIFIED BY | DATE

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME	Kinder Morgan
STREET ADDRESS	2926 E 126th St.
CITY	Chicago
STATE	IL
ZIP	60633
PHONE (KEY CONTACT)	
SOURCE ID NUMBER	

UNOFFICIAL

PROCESS EQUIPMENT	backhoe truck, barge
OPERATING MODE	normal
CONTROL EQUIPMENT	
OPERATING MODE	

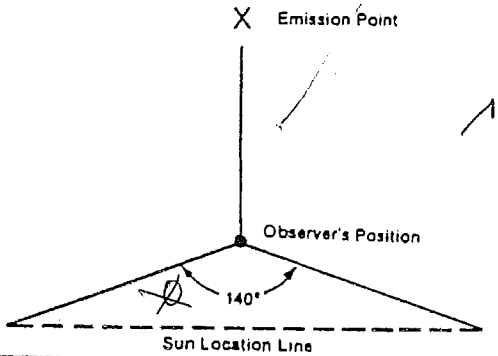
DESCRIBE EMISSION POINT: HCFM, barge unloading

HEIGHT ABOVE GROUND LEVEL	8'
HEIGHT RELATIVE TO OBSERVER	Start 4' End 4'
DISTANCE FROM OBSERVER	Start 35' End 35'
DIRECTION FROM OBSERVER	Start N End N

DESCRIBE EMISSIONS	Start gray dust End gray dust
EMISSION COLOR	Start gray End gray
IF WATER DROPLET PLUME	Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED	Start drop point End drop point
DESCRIBE PLUME BACKGROUND	Start treeline End treeline
BACKGROUND COLOR	Start green End green
SKY CONDITIONS	Start mostly cloudy End mostly cloudy
WIND SPEED	Start 2mph End 7mph
WIND DIRECTION	Start SSW End SSW
AMBIENT TEMP	Start 86F End 87F
WET BULB TEMP	
RH, percent	69%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE	START TIME	END TIME
9/5/14	1:45	

MIN \ SEC	0	15	30	45	COMMENTS
1	0	0	0	0	
2	5	5	0	0	
3	0	0	0	0	
4	0	5	0	0	
5	0	5	0	0	
6	0	5	0	0	
7	0	0	0	5	
8	0	0	0	0	
9	0	0	0	5	
10	0	5	0	0	
11	0	0	0	0	
12	0	5	0	0	
13	0	5	0	0	
14	0	0	0	0	
15	0	5	0	0	
16	0	5	0	0	
17	0	0	0	0	
18	5	0	0	0	
19	5	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	5	5	0	0	
23	0	0	0	5	
24	0	0	0	0	
25	0	5	0	0	
26	0	0	0	0	
27	0	0	5	0	
28	0	0	5	5	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT)	Jillian Rodgers
OBSERVER'S SIGNATURE	
DATE	9/5/14
ORGANIZATION	Kinder Morgan
CERTIFIED BY	Aeromet
DATE	
CONTINUED ON VEO FORM NUMBER	

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME: Kinder Morgan			
STREET ADDRESS: 2926 126th St.			
CITY: Chicago	STATE: IL	ZIP: 60633	
PHONE (KEY CONTACT)	SOURCE ID NUMBER		

PROCESS EQUIPMENT: loader, truck, barge	OPERATING MODE: normal
CONTROL EQUIPMENT	OPERATING MODE

DESCRIBE EMISSION POINT: unloading of barge, EE in barge, HCFM

HEIGHT ABOVE GROUND LEVEL: 8	HEIGHT RELATIVE TO OBSERVER: Start 4' End 4'
DISTANCE FROM OBSERVER: Start 30' End 30'	DIRECTION FROM OBSERVER: Start NE End NE

DESCRIBE EMISSIONS: Start gray dust End gray dust

EMISSION COLOR: Start gray End gray	IF WATER DROPLET PLUME: Attached ☐ Detached ☐

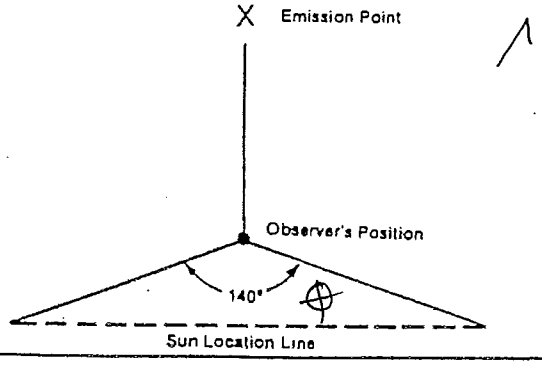
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start drop point End drop point

DESCRIBE PLUME BACKGROUND: Start Sky End Sky

BACKGROUND COLOR: Start blue	End blue	SKY CONDITIONS: Start clear	End clear
WIND SPEED: Start 3mph	End 4mph	WIND DIRECTION: Start SSW	End S
AMBIENT TEMP: Start 78F	End 79F	WET BULB TEMP	RH, percent: 55%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE: 9/13/14 — START TIME: 10:53 — END TIME: 11:23

SEC / MIN	0	15	30	45	COMMENTS
1	0	0	5	0	
2	0	0	0	0	
3	0	0	0	5	
4	5	5	0	5	
5	0	0	0	0	
6	0	0	5	5	
7	0	0	5	10	
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12	0	0	0	5	
13	5	0	0	5	
14	5	0	0	0	
15	0	0	0	0	
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20	0	5	5	0	
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22	0	0	0	0	
23	0	0	0	0	
24	5	0	0	10	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	5	0	0	10	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE — DATE: 9/13/14

ORGANIZATION: Kinder Morgan

CERTIFIED BY — DATE

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 126th		
CITY: Chicago	STATE: IL	ZIP: 60633
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: loader, truck	OPERATING MODE: normal
CONTROL EQUIPMENT:	OPERATING MODE:

DESCRIBE EMISSION POINT: loading of trucks, W side of bldg. F, F21

HEIGHT ABOVE GROUND LEVEL: 0-20'	HEIGHT RELATIVE TO OBSERVER: Start — End —
DISTANCE FROM OBSERVER: Start 140' End 140'	DIRECTION FROM OBSERVER: Start S End S

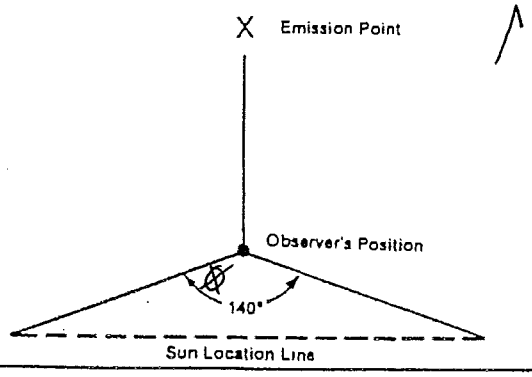
DESCRIBE EMISSIONS: Start gray dust	End gray dust
EMISSION COLOR: Start gray End NA	IF WATER DROPLET PLUME: Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start overhead door	End overhead door

DESCRIBE PLUME BACKGROUND: Start treeline		End treeline	
BACKGROUND COLOR: Start green	End green	SKY CONDITIONS: Start clear	End clear
WIND SPEED: Start 4mph	End 3mph	WIND DIRECTION: Start SSW	End SSW
AMBIENT TEMP: Start 79F	End 78F	WET BULB TEMP	RH, percent

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH

Draw North Arrow



ADDITIONAL INFORMATION:

OBSERVATION DATE	START TIME	END TIME
9/3/14	10:17	10:47

SEC / MIN	0	15	30	45	COMMENTS
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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	
7	0	0	0	0	
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9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
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22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers	
OBSERVER'S SIGNATURE	DATE: 9/3/14
ORGANIZATION: Kinder Morgan	
CERTIFIED BY	DATE

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 126th St.		
CITY: Chicago	STATE: IL	ZIP: 60633
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: loader, truck	OPERATING MODE: normal
CONTROL EQUIPMENT:	OPERATING MODE:

DESCRIBE EMISSION POINT: loading into truck, E side of breezeway, building F

HEIGHT ABOVE GROUND LEVEL: 0-20'	HEIGHT RELATIVE TO OBSERVER: Start — End —
DISTANCE FROM OBSERVER: Start 40' End 40'	DIRECTION FROM OBSERVER: Start NW End NW

DESCRIBE EMISSIONS: Start white dust End white dust

EMISSION COLOR: Start white End white	IF WATER DROPLET PLUME: Attached ☐ Detached ☐

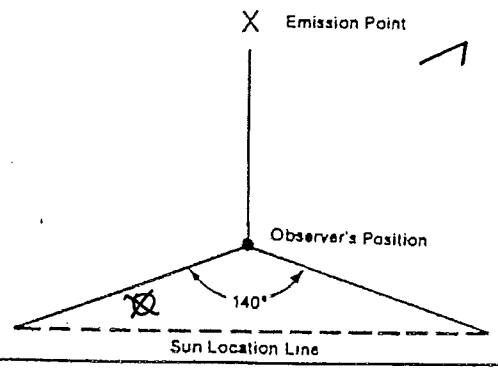
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start overhead door End overhead door

DESCRIBE PLUME BACKGROUND: Start building side End building side

BACKGROUND COLOR: Start yellow End yellow	SKY CONDITIONS: Start clear End clear	
WIND SPEED: Start 2mph End 0mph	WIND DIRECTION: Start SW End S	
AMBIENT TEMP: Start 76F End 79F	WET BULB TEMP: NA	RH, percent: 62%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



OBSERVATION DATE	START TIME	END TIME
9/13/14	9:35	10:05

SEC / MIN	0	15	30	45	COMMENTS
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2	0	5	5	5	
3	0	0	0	0	
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5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	5	
10	5	5	0	5	
11	5	5	5	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	5	
18	5	0	0	0	
19	0	0	5	5	
20	5	0	0	0	
21	0	0	0	0	
22	0	0	0	5	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: [signature] DATE: 9/13/14

ORGANIZATION: KM

CERTIFIED BY: DATE:

ADDITIONAL INFORMATION:

CONTINUED ON VEO FORM NUMBER:

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME	Kinder Morgan
STREET ADDRESS	2926 126th St.
CITY	Chicago
STATE	IL
ZIP	60633
PHONE (KEY CONTACT)	
SOURCE ID NUMBER	

PROCESS EQUIPMENT	loader, barge, truck
OPERATING MODE	normal
CONTROL EQUIPMENT	
OPERATING MODE	

DESCRIBE EMISSION POINT	unloading of HCFM barge
HEIGHT ABOVE GROUND LEVEL	8'
HEIGHT RELATIVE TO OBSERVER	Start 4' End 4'
DISTANCE FROM OBSERVER	Start 30' End 30'
DIRECTION FROM OBSERVER	Start [redacted] NW End NW

DESCRIBE EMISSIONS	Start dark gray smoke End dark gray smoke
EMISSION COLOR	Start lt gray End dk gray
IF WATER DROPLET PLUME	Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED	Start drop point End drop point

DESCRIBE PLUME BACKGROUND	Start barge lids	End barge lids	
BACKGROUND COLOR	Start H. gray	End lt gray	
SKY CONDITIONS	Start clear	End clear	
WIND SPEED	Start 2mph	End 2mph	
WIND DIRECTION	Start SSW	End SSW	
AMBIENT TEMP	Start 8F	End	
WET BULB TEMP			
RH, percent	78%		

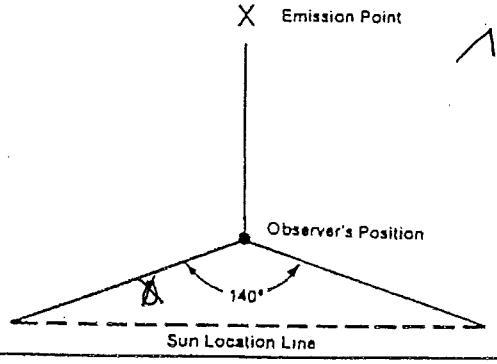
Stack with Plume ⊂

Sun ⊕

Wind →

SOURCE LAYOUT SKETCH

Draw North Arrow



ADDITIONAL INFORMATION

OBSERVATION DATE	START TIME	END TIME
9/3/14	8:31	9:01

MIN \ SEC	0	15	30	45	COMMENTS
1	0	0	5	0	
2	0	5	0	0	
3	0	5	0	0	
4	0	0	0	0	
5	0	0	0	0	break to re-tie
6	0	0	0	0	barge
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	5	5	10	
16	5	0	0	0	
17	0	15	5	5	
18	0	0	5	0	
19	0	0	0	6	
20	10	5	0	0	
21	10	5	0	0	
22	0	0	0	15	
23	0	0	0	5	
24	0	0	0	0	
25	0	10	5	5	
26	5	5	0	0	
27	0	0	0	5	
28	0	0	10	0	
29	0	0	0	0	
30	0	10	0	0	

OBSERVER'S NAME (PRINT)	Jillian Rodgers
OBSERVER'S SIGNATURE	
DATE	9/3/14
ORGANIZATION	Kinder Morgan
CERTIFIED BY	
DATE	
CONTINUED ON VEO FORM NUMBER	

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 E 126th St.		
CITY: Chicago	STATE: IL	ZIP: 60630
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: barge unloading, MCFM	OPERATING MODE: Normal
CONTROL EQUIPMENT: NA	OPERATING MODE: NA

DESCRIBE EMISSION POINT: barge unloading, MCFM

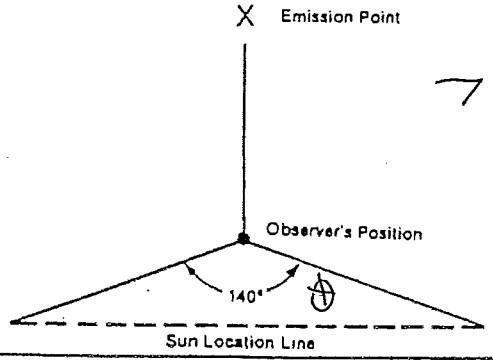
HEIGHT ABOVE GROUND LEVEL: 8'	HEIGHT RELATIVE TO OBSERVER: Start 4' End 4'
DISTANCE FROM OBSERVER: Start 40' End 40'	DIRECTION FROM OBSERVER: Start N End N

DESCRIBE EMISSIONS: Start gray dust	End gray dust
EMISSION COLOR: Start gray	End gray
IF WATER DROPLET PLUME: Attached ☐	Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start drop point	End drop point

DESCRIBE PLUME BACKGROUND: Start tree line	End tree line	
BACKGROUND COLOR: Start green	End green	SKY CONDITIONS: Start mostly cloudy End mostly cloudy
WIND SPEED: Start 11mph	End 11mph	WIND DIRECTION: Start W End W
AMBIENT TEMP: Start 73F	End 74F	WET BULB TEMP: RH, percent 86%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



7

ADDITIONAL INFORMATION:

OBSERVATION DATE	START TIME	END TIME
9/2/14	10:02	10:32

SEC / MIN	0	15	30	45	COMMENTS
1	0	0	0	0	
2	0	0	0	0	
3	0	0	5	0	
4	0	0	5	10	
5	0	0	0	0	
6	0	0	0	5	
7	5	0	0	5	
8	5	0	0	0	
9	0	0	0	0	
10	5	5	0	0	
11	10	5	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	5	0	0	
17	0	5	5	0	
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19	0	0	0	0	
20	0	0	0	5	
21	5	0	0	0	
22	0	0	0	0	
23	5	0	0	0	
24	5	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	5	5	
29	0	0	10	5	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers	
OBSERVER'S SIGNATURE:	DATE: 9/2/14
ORGANIZATION: Kinder Morgan	
CERTIFIED BY:	DATE:

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 126th St.		
CITY: Chicago	STATE: IL	ZIP: 60630
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: barge unloading	OPERATING MODE: Normal
CONTROL EQUIPMENT: NA	OPERATING MODE: NA

DESCRIBE EMISSION POINT: barge unloading of MCFM 2 x 1/2

HEIGHT ABOVE GROUND LEVEL: 8ft	HEIGHT RELATIVE TO OBSERVER: Start 4ft End 4ft
DISTANCE FROM OBSERVER: Start 50' End 50'	DIRECTION FROM OBSERVER: Start N End N

DESCRIBE EMISSIONS: Start gray dust End gray dust

EMISSION COLOR: Start gray End gray	IF WATER DROPLET PLUME: Attached ☐ Detached ☐

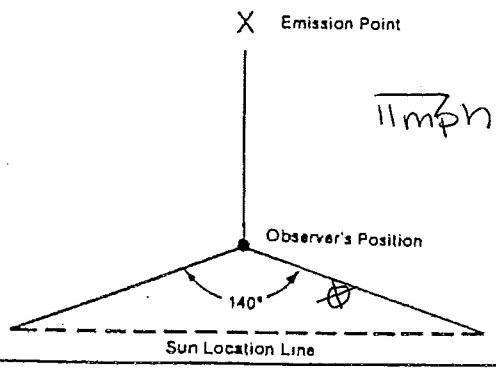
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start drop point End drop point

DESCRIBE PLUME BACKGROUND: Start treeline End treeline

BACKGROUND COLOR: Start green End green	SKY CONDITIONS: Start partly cloudy End partly cloudy	
WIND SPEED: Start 11mph End 11mph	WIND DIRECTION: Start West End West	
AMBIENT TEMP: Start 72 F End	WET BULB TEMP: NA	RH, percent: 90

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION:

OBSERVATION DATE	START TIME	END TIME
9/2/14	8:39	9:09

SEC / MIN	0	15	30	45	COMMENTS
1	5	5	0	0	
2	10	5	0	0	
3	0	0	0	5	
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5	5	5	5	0	
6	0	0	0	0	
7	0	0	5	5	
8	0	5	10	5	
9	0	0	0	0	
10	0	0	0	0	
11	5	5	5	0	
12	0	0	5	0	
13	0	0	0	0	
14	0	0	0	0	
15	5	0	0	5	
16	10	5	0	0	
17	0	0	0	0	
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25	5	0	0	0	
26	0	0	0	0	
27	0	5	5	5	
28	5	5	0	5	
29	0	10	5	5	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: [signature] DATE: 9/2/14

ORGANIZATION: Kinder Morgan

CERTIFIED BY: DATE:

CONTINUED ON VEO FORM NUMBER:

VISIBLE EMISSION OBSERVATION FORM

No.

UNOFFICIAL

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 126th St.		
CITY: Chicago	STATE: IL	ZIP: 60633
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: loader truck	OPERATING MODE: Normal
CONTROL EQUIPMENT:	OPERATING MODE:

DESCRIBE EMISSION POINT: truck loading, W side of bldg F

SiMn 2x1/2

HEIGHT ABOVE GROUND LEVEL: 0-20'	HEIGHT RELATIVE TO OBSERVER: Start 0' End 0'
DISTANCE FROM OBSERVER: Start 300' End 300'	DIRECTION FROM OBSERVER: Start S End S

DESCRIBE EMISSIONS

Start: End:

EMISSION COLOR: Start End	IF WATER DROPLET PLUME: Attached ☐ Detached ☐

POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start End

DESCRIBE PLUME BACKGROUND: Start treeline End treeline

BACKGROUND COLOR: Start green End green	SKY CONDITIONS: Start mostly Cloudy End mostly Cloudy	
WIND SPEED: Start 6mph End	WIND DIRECTION: Start SW End	
AMBIENT TEMP: Start 74F End	WET BULB TEMP:	RH, percent: 80%

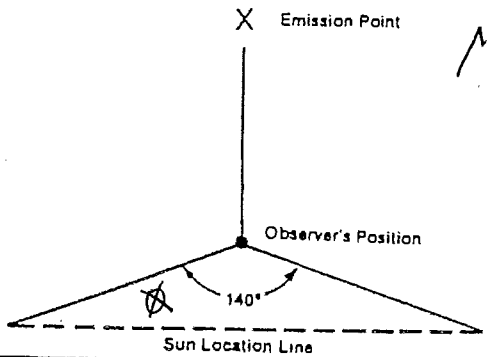
Stack with Plume

Sun

Wind

SOURCE LAYOUT SKETCH

Draw North Arrow



OBSERVATION DATE	START TIME	END TIME
9/2/14	10:40	

SEC / MIN	0	15	30	45	COMMENTS
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2	0	0	0	0	
3	0	0	0	0	
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5	0	0	0	0	
6	0	0	0	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	SiMn 3x1
14	0	0	0	0	
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16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
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25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: DATE: 9/2/14

ORGANIZATION:

CERTIFIED BY: DATE:

ADDITIONAL INFORMATION:

CONTINUED ON VEO FORM NUMBER:

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME: Kinder Morgan		
STREET ADDRESS: 2926 E 126th St.		
CITY: Chicago	STATE: IL	ZIP: 60630
PHONE (KEY CONTACT):	SOURCE ID NUMBER:	

PROCESS EQUIPMENT: truck loading, 75% FeSi	OPERATING MODE: Normal
CONTROL EQUIPMENT: NA	OPERATING MODE: NA

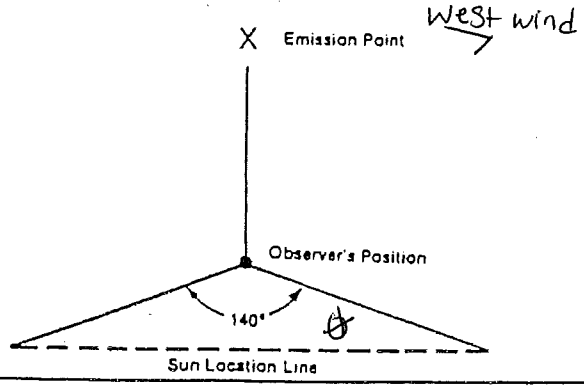
DESCRIBE EMISSION POINT: E side of building F, truck loading of 75% FESI, 2 x 1/2	
HEIGHT ABOVE GROUND LEVEL: 0 - 20'	HEIGHT RELATIVE TO OBSERVER: Start 0 End 0
DISTANCE FROM OBSERVER: Start 25' End 25'	DIRECTION FROM OBSERVER: Start NW End NW

DESCRIBE EMISSIONS: Start gray dust	End gray dust
EMISSION COLOR: Start gray End gray	IF WATER DROPLET PLUME: Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start overhead door	End overhead door

DESCRIBE PLUME BACKGROUND: Start buildingside	End building side	
BACKGROUND COLOR: Start yellow End yellow	SKY CONDITIONS: Start partly cloudy	End partly cloudy
WIND SPEED: Start 11 mph End 11 mph	WIND DIRECTION: Start W	End W
AMBIENT TEMP: Start 72 End	WET BULB TEMP: NA	RH, percent: 90%

Stack with Plume ⊂
Sun ⊕
Wind →

SOURCE LAYOUT SKETCH — Draw North Arrow



OBSERVATION DATE: 9/2/14			START TIME: 9:32	END TIME: 10:02	
SEC / MIN	0	15	30	45	COMMENTS
1	0	0	0	10	
2	10	10	10	10	
3	5	5	5	0	
4	0	0	0	0	
5	0	0	0	5	
6	5	5	5	0	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	switch to MCFM
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers	
OBSERVER'S SIGNATURE: JR	DATE: 9/2/14
ORGANIZATION: Kinder Morgan	
CERTIFIED BY	DATE
CONTINUED ON VEO FORM NUMBER	

ADDITIONAL INFORMATION

UNOFFICIAL

EPA METHOD 9

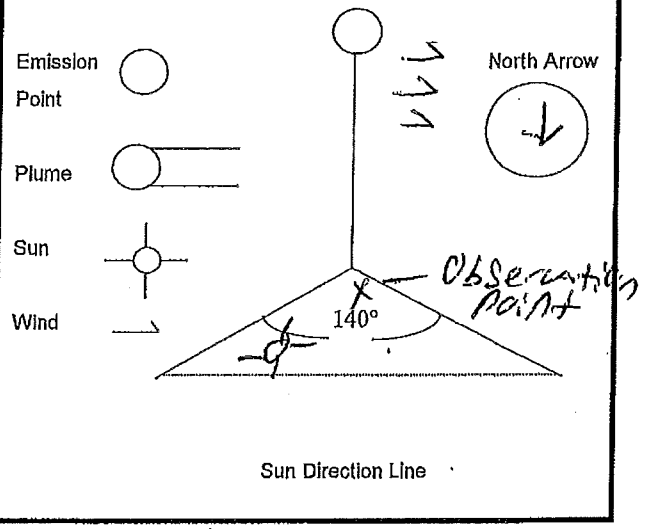
VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Loading SF off N
Emission Point Description: 4 Building F - West End 4
Source Height: 4 ft Height Relative to Observer: 4 ft
Distance from Observer: 300 ft Direction from Observer: Start: S End: S
Plume Type: (Continuous, Fugulive, or Intermittent) Start: End:
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: End:
Plume Color: Start: N/A End: N/A
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: Treeline End: Treeline Background Color: Green
Point in Plume Where Opacity was Determined: ~ ~~from stack exit~~
Sky Conditions: Start: Partly Cloudy End: Partly Cloudy Ambient Temperature: Start: 74 F° End: 74 F°
Wind Direction: Start: SW End: SW Wind Speed: Start: 6 mph End: 6 mph
Relative Humidity: Start: 80 End: 80 Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	0	0	0	0	30					
1	0	0	0	0	0	31					
2	0	0	0	0	0	32					
3	0	0	0	0	0	33					
4	0	0	0	0	0	34					
5	0	0	0	0	0	35					
6	0	0	0	0	0	36					
7	0	0	0	0	0	37					
8	0	0	0	0	0	38					
9	0	0	0	0	0	39					
10	0	0	0	0	0	40					
11	0	0	0	0	0	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	0	0	0	0	0	44					
15	0	0	0	0	0	45					
16	0	0	0	0	0	46					
17	0	0	0	0	0	47					
18	0	0	0	0	0	48					
19	0	0	0	0	0	49					
20	0	0	0	0	0	50					
21	0	0	0	0	0	51					
22	0	0	0	0	0	52					
23	0	0	0	0	0	53					
24	0	0	0	0	0	54					
25	0	0	0	0	0	55					
26	0	0	0	0	0	56					
27	0	0	0	0	0	57					
28	0	0	0	0	0	58					
29	0	0	0	0	0	59					

SOURCE SKETCH LAYOUT



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 10:40A End: 11:10A

60-Minute Averge: _____

Observer's Name: Jeremy Doss
Certified By: Carl Koontz AS
Certification #: _____ Exp. Date: _____
Signature: Jeremy Doss Date: 9/2/14

UNOFFICIAL

EPA METHOD 9

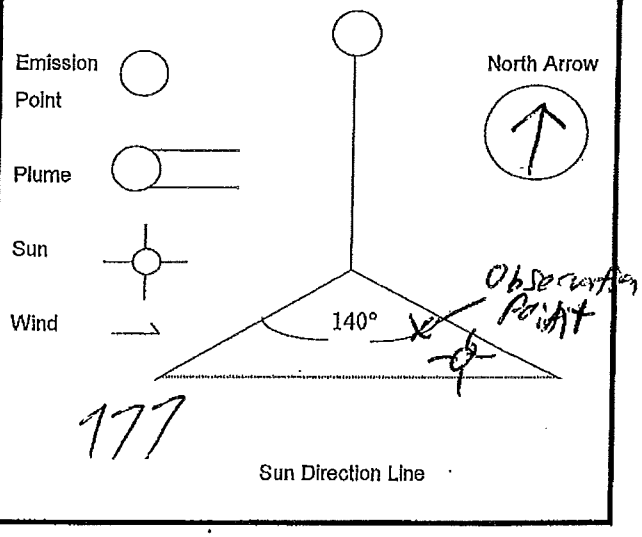
VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Unloading barge HCFM
Emission Point Description: Dock Barge
Source Height: 6 ft Height Relative to Observer: 4 ft
Distance from Observer: 40 ft Direction from Observer: Start: N End: N
Plume Type: (Continuous, Fugulive, or (Intermittent)) Start: End:
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: End:
Plume Color: Start: Grey End: Grey
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: Treeline End: Treeline Background Color: Green
Point in Plume Where Opacity was Determined: ~~from stack exit~~
Sky Conditions: Start: Partly Cloudy End: Partly Cloudy Ambient Temperature: Start: 73 F° End: 73 F°
Wind Direction: Start: SW End: SW Wind Speed: Start: 5 mph End: 5 mph
Relative Humidity: Start: 83 End: 83 Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	0	0	0	0	30					
1	0	0	0	0	0	31					
2	0	0	5	5	3	32					
3	0	0	0	5	1	33					
4	0	0	0	0	0	34					
5	0	0	0	5	1	35					
6	0	0	0	5	1	36					
7	5	0	0	0	1	37					
8	0	0	0	0	0	38					
9	10	5	0	15	8	39					
10	10	0	0	0	3	40					
11	0	0	0	0	0	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	0	0	0	0	0	44					
15	10	0	0	5	4	45					
16	10	0	0	0	3	46					
17	0	0	0	0	0	47					
18	0	0	0	0	0	48					
19	0	0	0	0	0	49					
20	0	0	0	0	0	50					
21	0	0	0	0	0	51					
22	5	5	0	10	5	52					
23	0	0	0	0	0	53					
24	0	0	0	0	0	54					
25	0	0	0	0	0	55					
26	0	0	0	0	0	56					
27	0	10	0	0	3	57					
28	0	0	15	10	6	58					
29	0	0	0	0	0	59					

SOURCE SKETCH LAYOUT



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 10:02A End: 10:30A

60-Minute Averge: 1%

Observer's Name: Jeremy Dosh
Certified By: Carl Koontz ASS
Certification #: _____ Exp. Date: _____
Signature: _____ Date: 9/2/14

UNOFFICIAL

EPA METHOD 9

VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

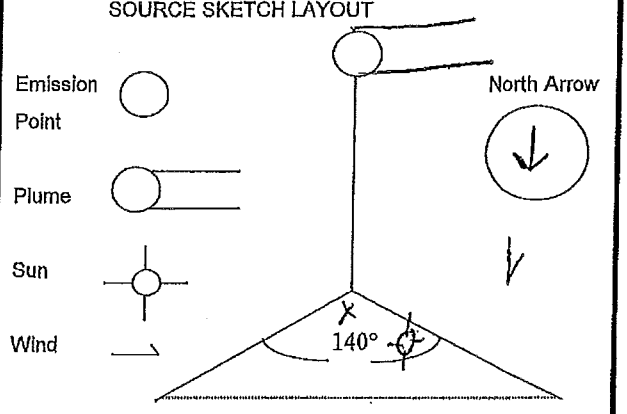
Control Device, Process Equipment, Operating Mode: Loading HCFM Magnesite 9010
Emission Point Description: Building F Breezeway - West End
Source Height: 4 ft Height Relative to Observer: 0 ft
Distance from Observer: 200 ft Direction from Observer: Start: South End: South
Plume Type: (Continuous, Fugutive, or Intermittent) Start: _____ End: _____
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: _____ End: _____
Plume Color: Start: Grey End: Brown & Grey
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: trees End: trees Background Color: Green
Point in Plume Where Opacity was Determined: ~ ~~from Stack exit~~
Sky Conditions: Start: partly cloudy End: partly cloudy Ambient Temperature: Start: 77 F° End: 77 F°
Wind Direction: Start: NNW End: NNW Wind Speed: Start: 12 mph End: 12 mph
Relative Humidity: Start: 64% End: 64% Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	50	20	15	10	24	30					
1	5	5	15	30	14	31					
2	45	55	40	25	41	32					
3	25	15	15	10	16	33					
4	5	5	5	5	5	34					
5	5	5	0	10	5	35					
6	25	50	50	45	43	36					
7	40	25	20	5	23	37					
8	0	0	0	5	1	38					
9	5	10	15	15	9	39					
10	10	5	5	5	6	40					
11	5	5	5	5	5	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	10	10	15	20	14	44					
15	45	50	50	10	39	45					
16	10	5	5	5	6	46					
17	5	5	10	35	14	47					
18	45	50	45	30	43	48					
19	25	15	20	55	29	49					
20	70	50	40	20	45	50					
21	15	10	10	5	10	51					
22	5	15	25	20	16	52					
23	15	10	5	10	10	53					
24	10	5	5	5	6	54					
25	5	5	5	5	5	55					
26	5	5	5	5	5	56					
27	5	15	20	15	14	57					
28	10	10	10	15	11	58					
29	20	10	5	5	10	59					

Brown

Grey

SOURCE SKETCH LAYOUT



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 1:24p End: 1:55p

60-Minute Averge: 16%

Observer's Name: Jeremy Doss
Certified By: Carl Koontz Aes.
Certification #: _____ Exp. Date: _____
Signature: Jeremy Doss Date: 8/27/14

VISIBLE EMISSION OBSERVATION FORM

No.

COMPANY NAME	OBSERVATION DATE	START TIME	END TIME
Kinder Morgan, Inc. Arrow Termina	8/27/14	1:24P	1:54P

STREET ADDRESS: 2926 E 126th St.

CITY	STATE	ZIP
Chicago	IL	60633

PHONE (KEY CONTACT): 773-646-8000 — SOURCE ID NUMBER:

PROCESS EQUIPMENT	OPERATING MODE
Loader, Semitruck	Loading
CONTROL EQUIPMENT	OPERATING MODE
NA	NA

DESCRIBE EMISSION POINT: Material handling of HCFM and Magnesite 9010 in breezeway of Bldg. F

HEIGHT ABOVE GROUND LEVEL	HEIGHT RELATIVE TO OBSERVER
4ft.	Start 0ft. End 0ft.
DISTANCE FROM OBSERVER	DIRECTION FROM OBSERVER
Start 200' End 200'	Start S End S

DESCRIBE EMISSIONS: Start white smoke End white smoke

EMISSION COLOR	IF WATER DROPLET PLUME
Start White End white	Attached ☐ Detached ☐

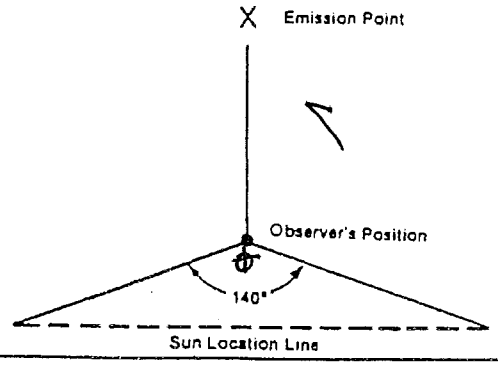
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start exit of door End exit of door

DESCRIBE PLUME BACKGROUND: Start trees End trees

BACKGROUND COLOR	SKY CONDITIONS
Start green End green	Start partly Cloudy End partly Cloudy
WIND SPEED	WIND DIRECTION
Start 12mph End 12mph	Start NNW End NNW
AMBIENT TEMP	WET BULB TEMP / RH, percent
Start 77F End 77F	64%

SOURCE LAYOUT SKETCH — Draw North Arrow

Stack with Plume
Sun
Wind



ADDITIONAL INFORMATION

SEC / MIN	0	15	30	45	COMMENTS
1	45	35	15	10	white smoke
2	10	5	10	25	"
3	60	40	35	30	"
4	20	15	10	10	"
5	10	5	5	5	"
6	5	0	0	0	"
7	5	50	50	40	Brown smoke
8	40	25	20	5	"
9	0	5	5	5	"
10	5	10	10	5	"
11	10	5	5	5	"
12	5	5	5	5	"
13	0	0	0	0	
14	0	0	0	0	
15	15	15	25	40	white smoke
16	50	60	40	25	"
17	15	10	10	5	"
18	10	5	20	40	"
19	50	50	40	30	"
20	25	20	25	45	"
21	55	50	45	35	"
22	15	10	10	10	"
23	5	25	35	10	"
24	10	15	15	15	"
25	10	10	10	5	"
26	5	5	10	5	"
27	5	5	5	5	"
28	10	20	25	20	"
29	15	25	15	15	"
30	50	20	15	10	"

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: [signature] DATE: 8/27/14

ORGANIZATION: Kinder Morgan

CERTIFIED BY — DATE

CONTINUED ON VEO FORM NUMBER

VISIBLE EMISSION OBSERVATION FORM

No.

UNOFFICIAL

COMPANY NAME: Kinder Morgan, Inc. Arrow Terminal	OBSERVATION DATE: 8/27/14	START TIME: 9:58 / END TIME: 10:28
STREET ADDRESS: 2926 E 126th St.		
CITY: Chicago / STATE: IL / ZIP: 60633		
PHONE (KEY CONTACT): 773-646-8000 / SOURCE ID NUMBER:		

PROCESS EQUIPMENT: Loader, Semitruck	OPERATING MODE: Loading
CONTROL EQUIPMENT: NA	OPERATING MODE: NA

DESCRIBE EMISSION POINT: Material handling of SIMN in W breezeway of building F

HEIGHT ABOVE GROUND LEVEL: 4'	HEIGHT RELATIVE TO OBSERVER: Start 0' End 0'
DISTANCE FROM OBSERVER: Start 20' End 20'	DIRECTION FROM OBSERVER: Start SW End SW

DESCRIBE EMISSIONS: Start white smoke End white smoke

EMISSION COLOR: Start White End White	IF WATER DROPLET PLUME: Attached ☐ Detached ☐

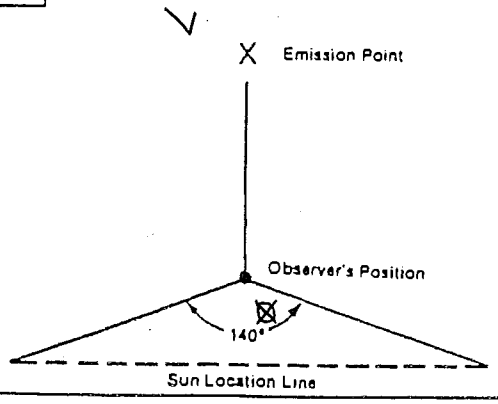
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start exit of door End exit of door

DESCRIBE PLUME BACKGROUND: Start Sky End Sky

BACKGROUND COLOR: Start blue white End blue white	SKY CONDITIONS: Start partly cloudy End partly cloudy
WIND SPEED: Start 10mph End 10mph	WIND DIRECTION: Start ENE End ENE
AMBIENT TEMP: Start 75F End 75F	WET BULB TEMP: / RH, percent: 78%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



SEC / MIN	0	15	30	45	COMMENTS
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	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	15	15	15	white smoke
15	10	5	0	0	"
16	5	0	0	0	"
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	5	0	5	"
22	0	5	0	0	"
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: / DATE: 8/27/14

ORGANIZATION: Kinder Morgan

CERTIFIED BY: / DATE:

ADDITIONAL INFORMATION:

CONTINUED ON VEO FORM NUMBER:

VISIBLE EMISSION OBSERVATION FORM

UNOFFICIAL

No.

COMPANY NAME	Kinder Morgan, Inc. Arrow Terminal
STREET ADDRESS	2926 E 126th St.
CITY	Chicago
STATE	IL
ZIP	60633
PHONE (KEY CONTACT)	773-646-8000
SOURCE ID NUMBER	

PROCESS EQUIPMENT	Loader, Semitruck
OPERATING MODE	Loading
CONTROL EQUIPMENT	NA
OPERATING MODE	NA

DESCRIBE EMISSION POINT	Material handling of FESI 75% in E breezeway of building F
HEIGHT ABOVE GROUND LEVEL	4'
HEIGHT RELATIVE TO OBSERVER	Start 0' End 0'
DISTANCE FROM OBSERVER	Start 20[redacted]' End 20[redacted]'
DIRECTION FROM OBSERVER	Start [redacted] End [redacted] N

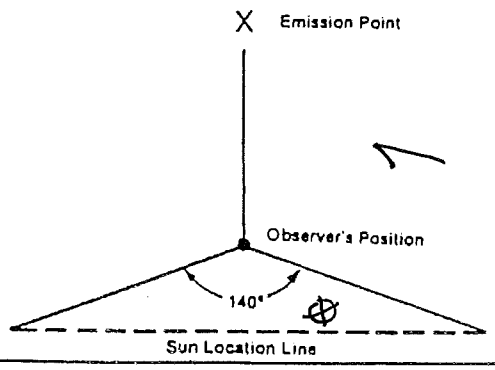
DESCRIBE EMISSIONS	Start NA End NA
EMISSION COLOR	Start NA End NA
IF WATER DROPLET PLUME	Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED	Start NA End NA

DESCRIBE PLUME BACKGROUND	Start Sky	End Sky	
BACKGROUND COLOR	Start blue white	End blue white	
SKY CONDITIONS	Start clear/Cloudless	End partly cloudy	
WIND SPEED	Start 10mph	End 10mph	
WIND DIRECTION	Start ENE	End ENE	
AMBIENT TEMP	Start 76F	End 76F	
WET BULB TEMP			
RH, percent	65%		

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH

Draw North Arrow



OBSERVATION DATE	START TIME	END TIME
8/27/14	10:34	11:04

SEC / MIN	0	15	30	45	COMMENTS
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	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT)	Jillian Rodgers
OBSERVER'S SIGNATURE	[signature]
DATE	8/27/14
ORGANIZATION	Kinder Morgan
CERTIFIED BY	
DATE	

ADDITIONAL INFORMATION

CONTINUED ON VEO FORM NUMBER

UNOFFICIAL

EPA METHOD 9

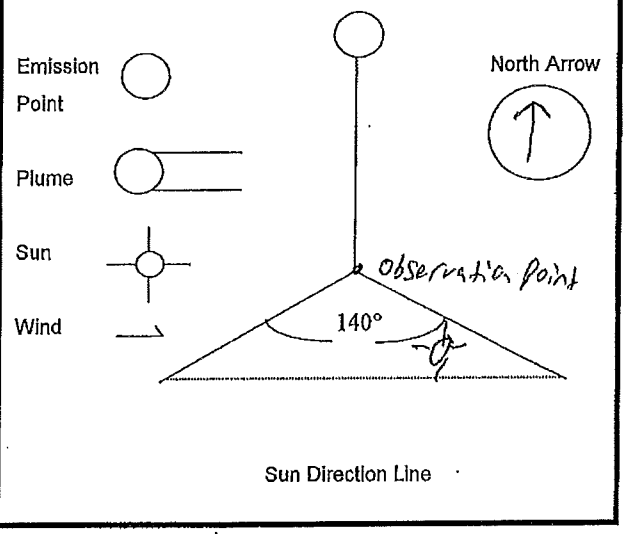
VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Unloading Barge Pig Iron
Emission Point Description: Dock barge
Source Height: 60 ft Height Relative to Observer: 5 ft
Distance from Observer: 58 ft Direction from Observer: Start: N End: N
Plume Type: (Continuous, Fugutive, or Intermittent) Start: _____ End: _____
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: _____ End: _____
Plume Color: Start: N/A End: N/A
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: treeline End: treeline Background Color: Green
Point in Plume Where Opacity was Determined: ~ ~~from stack exit~~
Sky Conditions: Start: partly cloudy End: partly cloudy Ambient Temperature: Start: 73 F° End: 73 F°
Wind Direction: Start: NNE End: NNE Wind Speed: Start: 6 mph End: 6 mph
Relative Humidity: Start: 77 End: 77 Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	0	0	0	0	30					
1	0	0	0	0	0	31					
2	0	0	0	0	0	32					
3	0	0	0	0	0	33					
4	0	0	0	0	0	34					
5	0	0	0	0	0	35					
6	0	0	0	0	0	36					
7	0	0	0	0	0	37					
8	0	0	0	0	0	38					
9	0	0	0	0	0	39					
10	0	0	0	0	0	40					
11	0	0	0	0	0	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	0	0	0	0	0	44					
15	0	0	0	0	0	45					
16	0	0	0	0	0	46					
17	0	0	0	0	0	47					
18	0	0	0	0	0	48					
19	0	0	0	0	0	49					
20	0	0	0	0	0	50					
21	0	0	0	0	0	51					
22	0	0	0	0	0	52					
23	0	0	0	0	0	53					
24	0	0	0	0	0	54					
25	0	0	0	0	0	55					
26	0	0	0	0	0	56					
27	0	0	0	0	0	57					
28	0	0	0	0	0	58					
29	0	0	0	0	0	59					

SOURCE SKETCH LAYOUT



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 8:49a End: 9:19a

60-Minute Averge: 0%

Observer's Name: Jeremy Ross

Certified By: Carl Kontz

Certification #: _____ Exp. Date: _____

Signature: [signature] Date: 8/27/14

Printed on: 6/9/2014

UNOFFICIAL

EPA METHOD 9

VISIBLE EMISSIONS OBSERVATION FORM

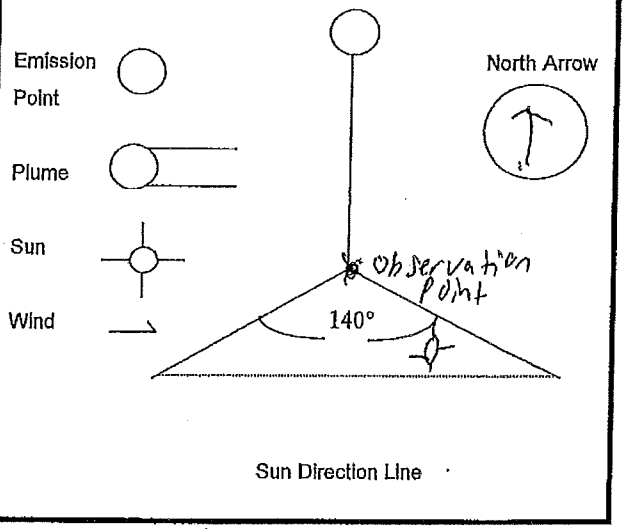
CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Loading FeSi 75%
Emission Point Description: Building F Breezeway - East End
Source Height: 4 ft Height Relative to Observer: 0 ft
Distance from Observer: 20 ft Direction from Observer: Start: N End: N
Plume Type: (Continuous, Fugutive, or Intermittent) Start: _____ End: _____
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: _____ End: _____
Plume Color: Start: N/A End: N/A
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) _____
Plume Background Description: Start: Sky End: Sky Background Color: Blue
Point In Plume Where Opacity was Determined: ~ ' from stack exit
Sky Conditions: Start: Partly Cloudy End: Partly Cloudy
Wind Direction: Start: ENE End: ENE
Relative Humidity: Start: 65% End: 65%

Ambient Temperature: Start: 76 F° End: 76 F°
Wind Speed: Start: 16 mph End: 10 mph
Wet Bulb Temp: Start: _____ F° End: _____ F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	0	0	0	0	30					
1	0	0	0	0	0	31					
2	0	0	0	0	0	32					
3	0	0	0	0	0	33					
4	0	0	0	0	0	34					
5	0	0	0	0	0	35					
6	0	0	0	0	0	36					
7	0	0	0	0	0	37					
8	0	0	0	0	0	38					
9	0	0	0	0	0	39					
10	0	0	0	0	0	40					
11	0	0	0	0	0	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	0	0	0	0	0	44					
15	0	0	0	0	0	45					
16	0	0	0	0	0	46					
17	0	0	0	0	0	47					
18	0	0	0	0	0	48					
19	0	0	0	0	0	49					
20	0	0	0	0	0	50					
21	0	0	0	0	0	51					
22	0	0	0	0	0	52					
23	0	0	0	0	0	53					
24	0	0	0	0	0	54					
25	0	0	0	0	0	55					
26	0	0	0	0	0	56					
27	0	0	0	0	0	57					
28	0	0	0	0	0	58					
29	0	0	0	0	0	59					

SOURCE SKETCH LAYOUT



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.
A six minute average greater than 40% opacity occured _____ times.
Opacity Time: Start: 10:34A End: 11:04A
60-Minute Averge: 0%

Observer's Name: Jeremy Doss
Certified By: Carl Koontz ASSC
Certification #: _____ Exp. Date: _____
Signature: Jeremy Doss Date: 8/27/14

D.B.M.

VISIBLE EMISSION OBSERVATION FORM

No. ACC 00217

UNOFFICIAL

COMPANY NAME: Kinder Morgan Chicago		
STREET ADDRESS:		
CITY	STATE	ZIP
PHONE (KEY CONTACT)	SOURCE ID NUMBER	

PROCESS EQUIPMENT: Back-Hoe	OPERATING MODE: Normal
CONTROL EQUIPMENT: Piene Mucatto	OPERATING MODE: Worker

DESCRIBE EMISSION POINT: Bucket IN Bed of Truck

HEIGHT ABOVE GROUND LEVEL: 8 FT	HEIGHT RELATIVE TO OBSERVER: Start 10:15 End 10:45
DISTANCE FROM OBSERVER: Start 10:15 End 10:45 — 50 Ft	DIRECTION FROM OBSERVER: Start End

DESCRIBE EMISSIONS: DUST From BARGE

Start 10:15 AM	End 10:45 AM
EMISSION COLOR: White	IF WATER DROPLET PLUME: Attached ☐ Detached ☐
Start End	

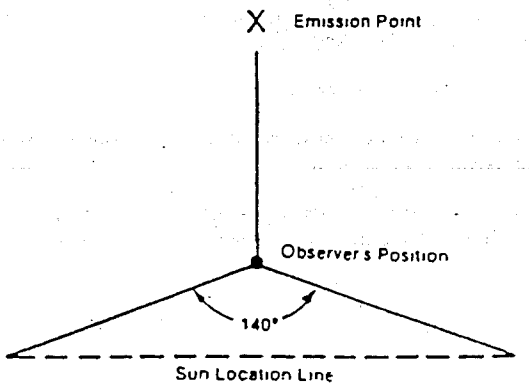
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start End

DESCRIBE PLUME BACKGROUND: Start 10:15 (Brown Trees) End 10:45

BACKGROUND COLOR: Start 10:15 End 10:45	SKY CONDITIONS: Partly Cloudy Start 10:15 End 10:45
WIND SPEED: Start End	WIND DIRECTION: North Start 10:15 End 10:45
AMBIENT TEMP: Start 10:15 End 10:45 — 24°F	WET BULB TEMP / RH, percent

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



ADDITIONAL INFORMATION:

OBSERVATION DATE: 11.19.14 — START TIME: 10:15 AM — END TIME: 10:45 AM

MIN \ SEC	0	15	30	45	COMMENTS
1	5%	5%	—	10%	5%
2	—	—	10%	10%	5%
3	10%	10%	—	—	5%
4	—	—	—	—	NO TRUCKS
5	—	—	—	—	" "
6	—	—	—	—	" "
7	—	—	—	—	" "
8	10%	5%	5%	—	5%
9	—	—	—	—	NO TRUCKS
10	—	—	—	—	" "
11	—	—	—	—	" "
12	5%	10%	10%	—	6.25%
13	—	—	—	—	NO TRUCKS
14	—	—	—	—	" "
15	5%	10%	—	—	3.75%
16	10%	—	10%	—	5%
17	—	10%	—	—	2.5%
18	5%	—	5%	—	2.5%
19	—	—	—	—	NO TRUCK
20	10%	—	—	—	2.5%
21					Changing LIDS
22					
23					
24					
25					
26					
27					
28					
29					
30					

OBSERVER'S NAME (PRINT): Bill Buchinski

OBSERVER'S SIGNATURE: Bill Buchinski — DATE: 11.19.14

ORGANIZATION:

CERTIFIED BY — DATE:

CONTINUED ON VEO FORM NUMBER:

VISIBLE EMISSION OBSERVATION FORM

No.

UNOFFICIAL

COMPANY NAME: Kinder Morgan, Inc. Arrow Term		OBSERVATION DATE: 8/27/14	START TIME: 8:49 / END TIME: 9:19
STREET ADDRESS: 2926 E 126th St.			
CITY: Chicago	STATE: IL / ZIP: 60633		
PHONE (KEY CONTACT): 773- 646-8000	SOURCE ID NUMBER:		

PROCESS EQUIPMENT: Barge, Dump Truck, Crane	OPERATING MODE: Unloading
CONTROL EQUIPMENT: NA	OPERATING MODE: NA

DESCRIBE EMISSION POINT: Barge unloading of pig iron at dock

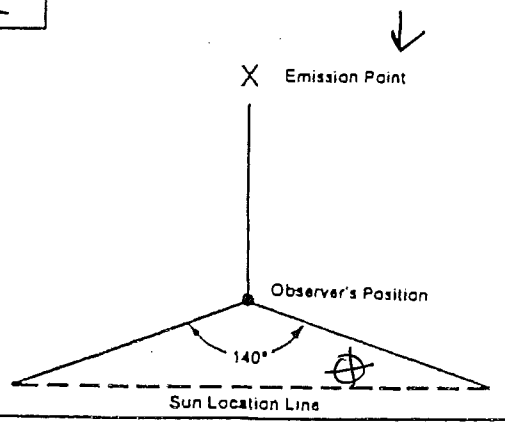
HEIGHT ABOVE GROUND LEVEL: 4'	HEIGHT RELATIVE TO OBSERVER: Start 5' End 5'
DISTANCE FROM OBSERVER: Start 50' End 50'	DIRECTION FROM OBSERVER: Start N End N

DESCRIBE EMISSIONS: Start NA End NA	
EMISSION COLOR: Start NA End NA	IF WATER DROPLET PLUME: Attached ☐ Detached ☐
POINT IN THE PLUME AT WHICH OPACITY WAS DETERMINED: Start NA End NA	

DESCRIBE PLUME BACKGROUND: Start [redacted] Treeline	End [redacted] Treeline	
BACKGROUND COLOR: Start [redacted]reen	End green	SKY CONDITIONS: Start partly cloudy End partly cloudy
WIND SPEED: Start 10mph	End 10mph	WIND DIRECTION: Start NNE End NNE
AMBIENT TEMP: Start 73F	End 73F	WET BULB TEMP: RH, percent 77%

Stack with Plume
Sun
Wind

SOURCE LAYOUT SKETCH — Draw North Arrow



SEC / MIN	0	15	30	45	COMMENTS
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	
7	0	0	0	0	
8	0	0	0	0	
9	0	0	0	0	
10	0	0	0	0	
11	0	0	0	0	
12	0	0	0	0	
13	0	0	0	0	
14	0	0	0	0	
15	0	0	0	0	
16	0	0	0	0	
17	0	0	0	0	
18	0	0	0	0	
19	0	0	0	0	
20	0	0	0	0	
21	0	0	0	0	
22	0	0	0	0	
23	0	0	0	0	
24	0	0	0	0	
25	0	0	0	0	
26	0	0	0	0	
27	0	0	0	0	
28	0	0	0	0	
29	0	0	0	0	
30	0	0	0	0	

OBSERVER'S NAME (PRINT): Jillian Rodgers

OBSERVER'S SIGNATURE: [signature] DATE: 8/27/14

ORGANIZATION: Kinder Morgan

CERTIFIED BY: DATE:

ADDITIONAL INFORMATION:

CONTINUED ON VEO FORM NUMBER:

UNOFFICIAL

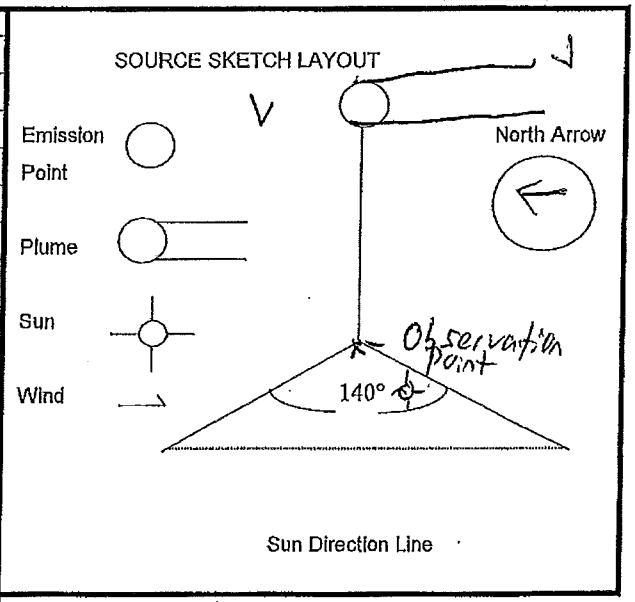
EPA METHOD 9

VISIBLE EMISSIONS OBSERVATION FORM

CLIENT _____ W.O.# _____
SOURCE _____ DATE _____
SOURCE ADDRESS _____

Control Device, Process Equipment, Operating Mode: Loading SJMN
Emission Point Description: 4 Building F Breezeway - West End
Source Height: 4 ft Height Relative to Observer: 0 ft
Distance from Observer: 20 ft Direction from Observer: Start: SW End: SW
Plume Type: (Continuous, Fugitive, or Intermittent) Start: _____ End: _____
Description of Emission: (Coning, Fanning, Looping, Lofting, or Fumigating) Start: _____ End: _____
Plume Color: Start: Grey End: Grey
Water Droplets Present: (Y/N) N Plume: (Attached, Detached, or N/A) N/A
Plume Background Description: Start: treeline End: Green Background Color: _____
Point in Plume Where Opacity was Determined: ~~From stack exit~~
Sky Conditions: Start: partly cloudy End: partly cloudy Ambient Temperature: Start: 73 F° End: 73 F°
Wind Direction: Start: ENE End: ENE Wind Speed: Start: 10 mph End: 10 mph
Relative Humidity: Start: 69% End: 69% Wet Bulb Temp: Start: F° End: F°

Min.	0	15	30	45	Avg	Min.	0	15	30	45	Avg
0	0	0	0	0	0	30					
1	0	0	0	0	0	31					
2	0	0	0	0	0	32					
3	0	0	0	0	0	33					
4	0	0	0	0	0	34					
5	0	0	0	0	0	35					
6	0	0	0	0	0	36					
7	0	0	0	0	0	37					
8	0	0	0	0	0	38					
9	0	0	0	0	0	39					
10	0	0	0	0	0	40					
11	0	0	0	0	0	41					
12	0	0	0	0	0	42					
13	0	0	0	0	0	43					
14	0	0	0	10	3	44					
15	10	5	0	0	4	45					
16	0	0	0	0	0	46					
17	0	5	0	0	1	47					
18	0	0	0	0	0	48					
19	0	0	0	0	0	49					
20	0	0	0	5	1	50					
21	5	5	5	0	4	51					
22	0	0	0	0	0	52					
23	0	0	0	0	0	53					
24	0	0	0	0	0	54					
25	0	0	0	0	0	55					
26	0	0	0	0	0	56					
27	0	0	0	0	0	57					
28	0	0	0	0	0	58					
29	0	0	0	0	0	59					



Highest six minute average: _____

A six minute average greater than 20% opacity occured _____ times.

A six minute average greater than 40% opacity occured _____ times.

Opacity Time: Start: 9:58A End: 10:28A

60-Minute Averge: 0%

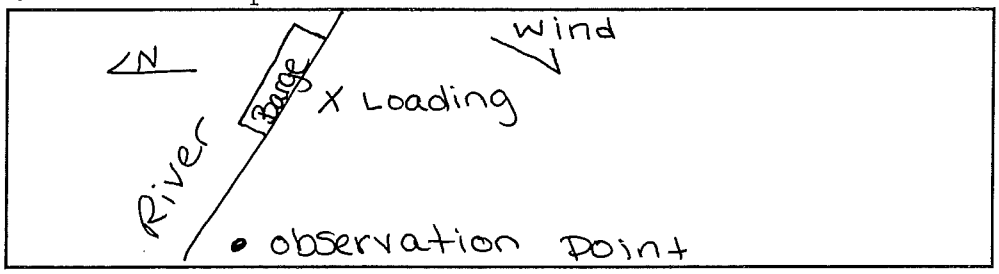
Observer's Name: Jeremy Poss
Certified By: Carl Koontz Ass.
Certification #: _____ Exp. Date: _____
Signature: Jeremy Poss Date: 8/27/14

Printed on: 6/9/2014

J:\000587\Metals\Air\EPA Method 9 VE Observation Form (2).xls

FUGITIVE OR SMOKE EMISSION INSPECTION OUTDOOR LOCATION	
Company Kinder Morgan Location Arrow Terminal Company Rep. Steve Caudle	Observer Jillian Rodgers Affiliation KM Date 8/27/14
Sky Conditions partly cloudy Precipitation NA	Wind Direction NNE Wind Speed 6MPH
Industry Bulk Warehousing	Process Unit Barge

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.



OBSERVATIONS	Clock Time	Observation period duration, min:sec	Accumulated emission time, min:sec
Begin Observation	9:37	6:00	0:00
	9:42		
End Observation	9:42		

Figure 22-1

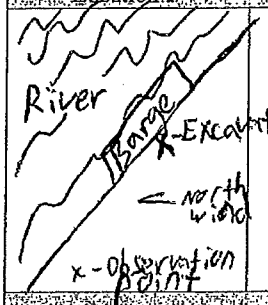
UNOFFICIAL

FUGITIVE OR SMOKE EMISSION INSPECTION
OUTSIDE LOCATION – METHOD 22

Company: Kinder Morgan	Observer: Jeremy Doss
Location: Ferro Terminal	Affiliation: Kinder Morgan
Company Rep.: Steve Caudle	Date: 8/29/14
Sky Conditions: Partly Cloudy	Wind Direction: NNE
Precipitation: 0%	Wind Speed: 6 MPH
Industry: Bulk Warehousing	Process Unit: Barge - Pig Iron

Sketch Process Unit. Indicate observer position relative to source; indicate potential emission points and/or actual emission points.

Location 1 | Location 2 | Location 3 | Location 4 | Location 5



OBSERVATIONS

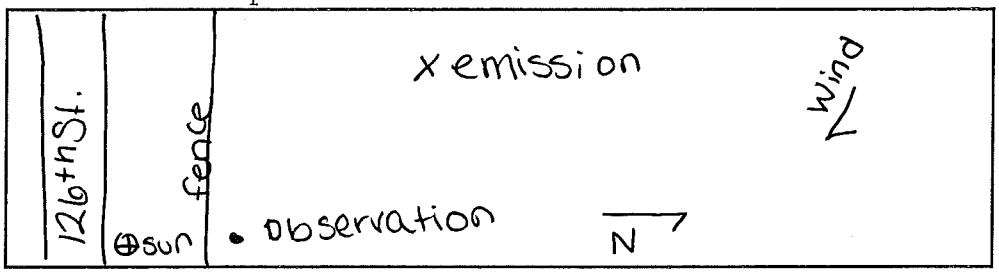
Location	Clock Time	Observation Period Duration (min:sec)	Actual Emission Time (min:sec)
Location 1: Start	9:37A		
Location 1: Stop	9:43A	6:00	0:00
Location 2: Start			
Location 2: Stop			
Location 3: Start			
Location 3: Stop			
Location 4: Start			
Location 4: Stop			
Location 5: Start			
Location 5: Stop			

Total Sample Time:	6:00
Total Emission Time:	0
Emission Frequency: (Total Emission Time/Total Sample Time) x 100%	0 %

FUGITIVE OR SMOKE EMISSION INSPECTION
OUTDOOR LOCATION

Company Kinder Morgan Location Arrow Terminal Company Rep. Steve Caudle	Observer J. Rodgers Affiliation KM Date 8/27/14
Sky Conditions partly cloudy Precipitation NA	Wind Direction NNW Wind Speed 12 mph
Industry Bulk Warehousing/HCFM	Process Unit Bldg. 7

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.



OBSERVATIONS	Clock Time	Observation period duration, min:sec	Accumulated emission time, min:sec
Begin Observation	2:07	6:00	0:00
	2:13		
End Observation	2:13		

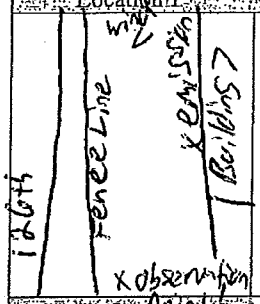
Figure 22-1

FUGITIVE OR SMOKE EMISSION INSPECTION
OUTSIDE LOCATION – METHOD 22

Company: Kinder Morgan	Observer: Jeremy Doss
Location: Ferro Terminal	Affiliation: Kinder Morgan
Company Rep.: Steve Caudle	Date: 8/27/14
Sky Conditions: Partly Cloudy	Wind Direction: NNE
Precipitation: 0%	Wind Speed: 12 mph
Industry: Bulk Warehousing	Process Unit: Loading - HCFM

Sketch Process Unit. Indicate observer position relative to source; indicate potential emission points and/or actual emission points.

Location 1 | Location 2 | Location 3 | Location 4 | Location 5



OBSERVATIONS

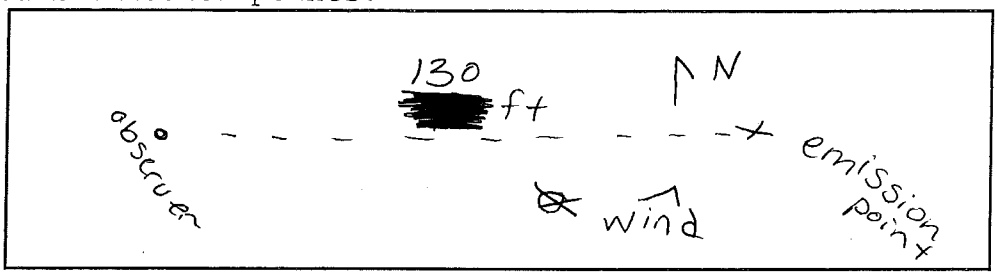
Location	Clock Time	Observation Period Duration (min:sec)	Actual Emission Time (min:sec)
Location 1: Start	2:07 pm		
Location 1: Stop	2:13 pm	6:00	0:00
Location 2: Start			
Location 2: Stop			
Location 3: Start			
Location 3: Stop			
Location 4: Start			
Location 4: Stop			
Location 5: Start			
Location 5: Stop			

Total Sample Time:	6:00
Total Emission Time:	0:00
Emission Frequency: (Total Emission Time/Total Sample Time) x 100%	0%

FUGITIVE OR SMOKE EMISSION INSPECTION
OUTDOOR LOCATION

Company Kinder Morgan Location Arrow Company Rep. Jillian Rodgers	Observer J. Rodgers Affiliation KM Date 9/2/14
Sky Conditions Partly cloudy Precipitation No	Wind Direction W Wind Speed 11 mph
Industry Warehousing, Special	Process Unit barg

Sketch process unit: indicate observer position relative to source; indicate potential emission points and/or actual emission points.



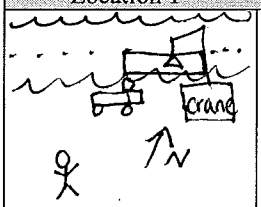
OBSERVATIONS	Clock Time	Observation period duration, min:sec	Accumulated emission time, min:sec
Begin Observation	9:12	6:00	
End Observation	9:18		

Figure 22-1

FUGITIVE OR SMOKE EMISSION INSPECTION
UNOFFICIAL
OUTSIDE LOCATION – METHOD 22

Company Kinder Morgan	**Observer** Jillian Rodgers
Location Dock	**Affiliation** KM-EHS Specialist
Company Rep. Jillian Rodgers	**Date** 12/11/14
Sky Conditions Cloudy	**Wind Direction** W
Precipitation N/A	**Wind Speed** 9 mph
Industry Alloy handling/storage	**Process Unit** Barge unloading - DBM

Sketch Process Unit: Indicate observer position relative to source; indicate potential emission points and/or actual emission points.

Location 1	Location 2	Location 3	Location 4	Location 5
				

OBSERVATIONS

Location	Clock Time	Observation Period Duration (min:sec)	Actual Emission Time (min:sec)
Location 1: Start	12:01		
Location 1: Stop	12:07	6:00	0:00
Location 2: Start			
Location 2: Stop			
Location 3: Start			
Location 3: Stop			
Location 4: Start			
Location 4: Stop			
Location 5: Start			
Location 5: Stop			

Total Sample Time:	6:00
Total Emission Time:	0:00
Emission Frequency: (Total Emission Time/Total Sample Time) x 100%	N/A

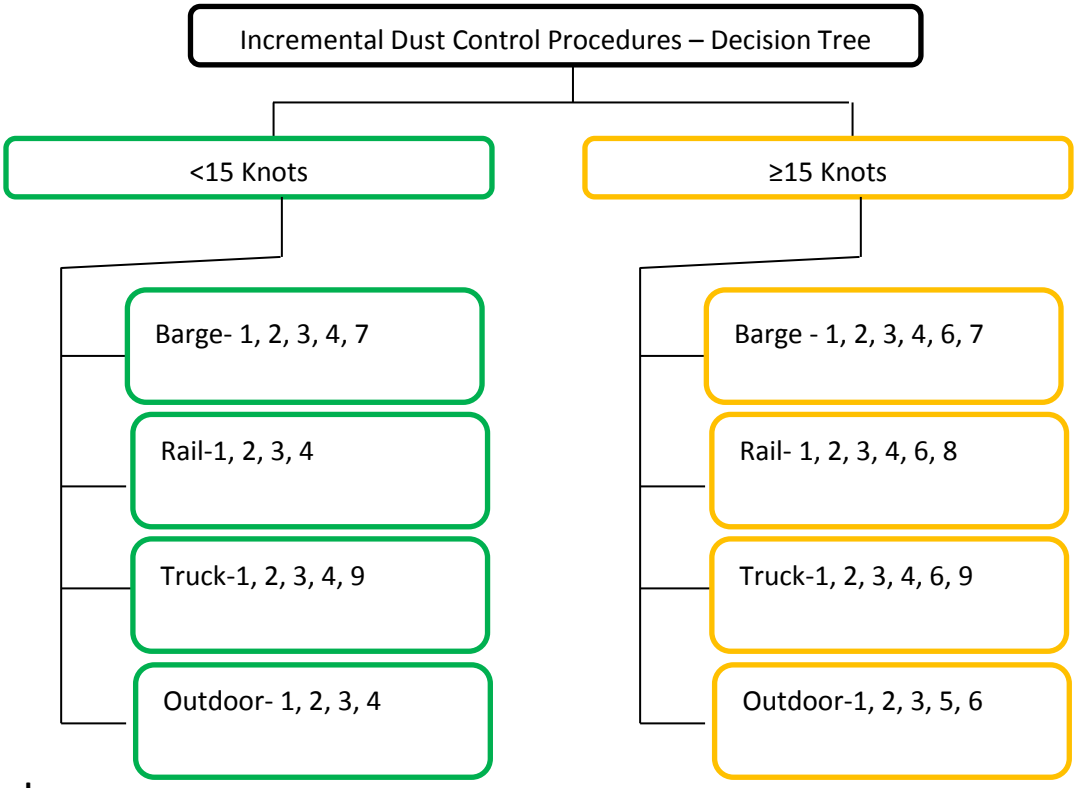
Exhibit E

Response of Kinder Morgan/Chicago Arrow Terminal, 2929 E. 126th Street, to CDPH's Request for Information related to Chicago Arrow's Request for Variances from Air Pollution Control Rules and Regulations for Control of Emissions from Handling and Storage of Bulk Material Piles

Chicago Arrow Terminal – Incremental Dust Control Procedures and Decision Tree for Bulk Products

Four bulk product categories

1. Barge Bulk Unloading (Barge)*
2. Rail Car Bulk Loading (Rail)*
3. Truck Bulk Loading or Unloading (Truck)
4. Outdoor storage piles; Pig Iron, Aggregates and other non-moisture sensitive products. (Outdoor)



Control Procedures

1. Follow Best Management Practices
2. Utilize "You Can Stop" when visible emissions and/or opacity are in question.
3. Any transfer point will cease operation if opacity or visible emission limits are reached and/or in question, until corrective actions are taken.
4. Apply water to non-moisture sensitive products (Ex. Pig iron), weather (temperature) permitting.
5. Apply water to non-moisture sensitive products (Ex. Pig iron), weather (temperature) permitting. If weather does not permit water suppression and the pig iron is neither snow-covered nor frozen, loading will take place indoors.
6. Personnel on site who can measure opacity and/or visible emissions; according to EPA Method 9 and/or 22.
7. Limit the number of barge lids removed from a covered barge at a time, as follows:
    a. Fiberglass Stacking Barge Lids – 3.
    b. Metal Rolling/Sliding Barge Lids - 3
    c. Metal Stacking Barge Lids - 5.
8. Open and load or unload rail cars through one access point at a time.
9. Load outbound trucks (from indoor storage) indoors.

* Loading of barges and unloading of railcars occurs very infrequently