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Ursula Kramer Nelson, P.E.
Director

(520) 724-7400
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March 2, 2016

Permit #: 6067

Freeport-McMoRan Sierrita Inc.
Attn: Chad Fretz
6200 W. Duval Mine Road
Green Valley, AZ 85629

Sent Via Email:
Chad_Fretz@fmi.com

OPPORTUNITY TO CORRECT - PC1602-106

Dear Mr. Fretz,

On February 9, 2016, a representative of the Pima County Department of Environmental Quality (PDEQ) conducted an inspection at 6200 W. Duval Mine Road Green Valley, Arizona, after receiving public complaints and a letter submitted by Freeport-McMoRan Sierrita Inc. (FMSI) pertaining to fugitive dust from the FMSI Sierrita tailings impoundment on January 31, 2016. Upon review of the report and inspection, PDEQ management determined that a deficiency occurred of the following permit requirement:

- PDEQ Air Quality Operating Permit No. 6067 Attachment B. II. E.1
The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

PDEQ determined that an opportunity to correct this deficiency will be afforded to FMSI. Within **thirty (30)** days of the date of this letter, please submit to PDEQ a written response outlining the corrective actions to be taken to achieve and maintain compliance with the cited permit condition during future wind events. The compliance determination report is attached for your reference. If you have questions, please contact me at (520) 724-7400.

Sincerely,

Kimberly Baeza
Air Compliance Inspector

Attachment: Compliance Determination Report

cc: Bryce Cooke, Bryce_Cooke@fmi.com
Eric Werner, Eric_Werner@fmi.com
PDEQ File #: 6067-0R:29



Compliance Determination Report

Tracking ID: 6067-OR:29

Permit #: 6067

Source: Freeport McMoRan Sierrita Inc.

Location: 6200 W. Duval Mine Road, Green Valley, AZ

Inspector: Kimberly Baeza

Compliance Status: Non-compliant

Following a dust event from the Freeport-McMoRan Sierrita Inc. (FMSI) property located at 6200 W. Duval Mine Road on January 31, 2016, the Pima County Department of Environmental Quality (PDEQ) received citizen complaints and a letter from FMSI. The letter, dated February 3, 2016, indicated that intermittent visible emissions, including fugitive dust, beyond the property boundary, from the Sierrita tailings impoundment, occurred from between 3:00 pm and 6:00 pm on January 31, 2016. PDEQ staff member Janice Easley also photographed dust generating from the Sierrita tailings impoundment on January 31, 2016, between approximately 3:30 pm and 5:00 pm. Kimberly Baeza inspected the tailings impoundment on February 9, 2016, to assess conditions (Attachment 1).

The February 3, 2016, letter included Tailings Impoundment Surface Inspection records for dates ranging from January 25, 2016, to February 1, 2016. The records indicated that Magnesium Chloride ($MgCl_2$) was applied to Phases 1, 2, and 3 of the North dam and wet tailings slurry was deposited in Phases 1 and 3 of the South dam. On February 9, 2016, Inspector Baeza observed vehicle tracks on the North dam indicative of $MgCl_2$ surface application. She did not observe evidence of recent wet tailings slurry deposition to the North dam and level of the tailings impoundment interior appeared to be approaching the outer berm height.

During a conference call between FMSI and PDEQ staff on February 17, 2016, FMSI Environmental Chief, Dave Caskey, clarified that dust from the Sierrita tailings impoundment crossed the property boundary of Duval Mine Road near Mission Road during the January 31, 2016, reported dust event.

Following the inspection, Inspector Baeza emailed Bryce Cooke and Eric Werner and asked them to answer the questions below and to provide additional documentation regarding:

- Who provided the emergency call that Mr. Cooke received about the dust event?
- Tailings Dam Environmental Activities Report for the month of January
- January 2016 weekly visible surveys required by the Tailings Dam Dust Control Management Plan
- Documentation for quantities and locations of Envirotac II applications

- Clarify how the number of gallons of water applied is calculated. What is the capacity of the water trucks used?

Over the telephone and in an email on February 16, 2016, Mr. Cooke explained how he was notified of the dust event. He explained that a call was received by the security office, which then communicated the event via FMSI internal incident line to Fernando Alday, Environmental Engineer. Mr. Alday then contacted the tailings supervisor, Erik Fleming, who then called Mr. Cooke and Mr. Caskey. On February 18, 2016, Mr. Werner provided both the Weekly Fugitive Source Visible Observation and the Tailings Dam Environmental Activities Report for January 2016 (Attachment 2). Condition XIX.B.3.d of Permit No. 6067 requires the permittee to monitor the tailings dam for fugitive dust; and the Weekly Visible Observation documents show compliance with said condition. Per the Tailings Dam Dust Control Management Plan, FMSI is required to record locations where dust suppressant is applied. The Tailings Dam Environmental Activities Reports show where $MgCl_2$ was applied, but not where the applications of Envirotac II occurred. On February 24, 2016, Mr. Cooke explained that Envirotac II is mixed with water on a 10:1 ratio and applied using a water truck. He went on to say that they track the location and application consistency of Envirotac II by adding a pigment to the solution. On February 26, 2016, Mr. Cooke provided additional information regarding how FMSI calculates and tracks application of Envirotac II.

The Tailings Dam Environmental Activities Reports covering the period from January 1, 2016, through February 4, 2016, indicated that $MgCl_2$ was applied to Phases 1, 2, and 3 of the North dam and Phase 3 of the South dam and wet tailings slurry was deposited in Phases 1, 2, and 3 of the South dam.

Permit No. 6067 Attachment B Specific Conditions, II. Facility-Wide Requirements, E. Visibility Limiting Standard, 1 & 2 state:

The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.

Condition II.E.1 shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source.

Visible emissions of light colored dust generating from the Sierrita tailings impoundment surface on the east side of the North dam that were observed and photographed by Janice Easley on January 31, 2016, blew northeast and diffused across Continental Road. Permit condition II.E.1 requires FMSI to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken. Tailings storage is an operation that cannot be ceased during wind events and precautions are required to be taken to prevent diffusion of visible dust beyond the property boundary before and during wind events. Permit condition II.E.2 exempts II.E.1 during high wind events if control measures taken were

commensurate with the size or scope of the emission source. The dimensional area of unstable tailings surface, the concentration and extent of the dust plume generated, and the duration of the emission event are evidence that control measures taken by FMSI were not commensurate with the size and scope of the tailings impoundment surface.

PDEQ management determined that an Opportunity to Correct will be issued to FMSI for a deficiency of Permit Condition II.E.1.

Attachments:

1. Inspection Report dated February 9, 2016
2. Weekly Fugitive Source Visible Observations and the Tailings Dam Environmental Activities Reports



Inspection Report

Tracking ID: 6067-0R:29

Source: Freeport-McMoRan Sierrita, Inc.
Location: 6200 W. Duval Mine Road, Green Valley, AZ
Date: February 9, 2016
Arrival Time: 10:55 AM
Departure Time: 12:20 PM
Inspector: Kimberly Baeza
Spoke With: Bryce Cooke, Eric Werner, Erik Fleming
Phone #: 520-393-2419
Reason for Inspection: Dust complaints and dust event report follow-up

The Pima County Department of Environmental Quality (PDEQ) received two complaints regarding “heavy clouds” and a “massive amount” of dust blowing from the tailings piles of the Freeport-McMoRan Sierrita, Inc. (FMSI) mine located at 6200 W. Duval Mine Road, Green Valley, Arizona, at 2:00 PM and 4:00 PM on January 31, 2016. PDEQ staff member, Janice Easley, took photos of light colored dust emissions generating from the surface of the tailings impoundment and blowing downward across the northern section of the eastern face from approximately 3:30 PM to 5:30 PM on January 31, 2016 (Attachment 1, Photos No. 1 through 5).

On February 1, 2016, Bryce Cooke, Senior Environmental Scientist with FMSI, telephoned the PDEQ Air Compliance Manager to provide notification of a tailings dust emission event that took place between 3:00 PM and 6:00 PM on January 31, 2016, and said a written report would be submitted following the phone call. PDEQ received the report on February 8, 2016 (Attachment 2). The report indicated that FMSI personnel did not observe tailings dust emissions in excess of 20% opacity and detailed the measures FMSI took to control dust from the tailings impoundment.

Before visiting the FMSI property on February 9, 2016, I drove along Camino del Sol in Green Valley to observe the tailings dam (Photo 6). The day was clear with a barely discernable breeze from the south. As I drove along the road parallel to the eastern side-slope of the tailings dam I observed a water truck driving along the perimeter of the tailings dam (Photo 7). I did not observe airborne dust.

I entered the FMSI property at approximately 10:55 AM, after communicating with Mr. Cooke over the phone and agreeing to wait for him in the visitor parking lot. When Mr. Cooke arrived a few minutes later he was accompanied by Eric Werner, Environmental Engineer. I explained the reason for my visit and read inspection rights to both Mr. Cooke and Mr. Werner before we departed to inspect the tailings dam (Attachment 3).

Our first stop was at the field office of the tailings dam crew. Erik Fleming, Supervisor of the Tailings Dam, explained the efforts his crew makes to control dust. He explained that in anticipation of the strong winds predicted for January 31, 2016, a Sunday, he scheduled a volunteer crew of 6 men to continue dust mitigation work on a day the tailings crew usually does not work. He explained that since January 13, 2016, they started daily applications of $MgCl_2$ and Envirotac II, a chemical dust suppressant colloquially referred to as gorilla snot. Mr. Fleming also showed me his daily inspection records and pointed out the areas where they had anticipated dust issues and where they concentrated their efforts on January 31, 2016, and the days preceding the dust event.

Mr. Fleming accompanied us when we left the field office and drove up the tailings dam. As we made our way along the western perimeter of the deposition area (Photo 8), Mr. Fleming reiterated and elaborated on what he mentioned in the office. He pointed out the northeast corner of the tailings dam where they applied copious amounts of water and $MgCl_2$; and from where the dust plume emanated on January 31, 2016. From the berm we were able to see the area (identified in the Tailings Impoundment Surface Inspection form as cell 9 of South Phase 1) to where deposition was moved in an effort to control dust. This 'jumping deposition' was described as a last-ditch effort, as the process is time consuming and interrupts the even distribution of slurry around the berm. Mr. Fleming explained that jumping deposition to that area, which they had identified as potentially problematic, was effective in controlling dust emissions and the area did not contribute to the dust event of January 31, 2016. Also visible from the berm were the track of the All Tracks vehicles used to apply water and $MgCl_2$ to the surface of the deposition area (Photo 9). Mr. Fleming explained it takes 3-4 weeks after deposition to be able to safely drive the All Tracks vehicles on newly deposited slurry, and 4.5-5 weeks in the winter time.

The report received by PDEQ on February 8, 2016, stated that an EPA Method 9 Visible Emissions Observation "was not conducted during the event due to the inability to obtain a proper observation point with a proper position relative to the sun." The photos taken by PDEQ staff showed the dust plume over an approximately 2 hour time span and I asked Mr. Cooke to explain why a trained observer had not been able get in position to conduct EPA Method 9. Mr. Cooke explained that he received an emergency call alerting him to the dust event while he was near the intersection of La Canada Boulevard and Duval Mine Road. None of the tailings crew workers are trained EPA Method 9 observers he explained; and although he was not on duty that weekend, he responded to the call because he was in the vicinity of the property. He received the call around 5:00 PM; and from his location, accompanied by the FMSI Environmental Chief, the opacity of the dust plume did not appear to exceed 20% opacity. He further explained that he attempted to enter the property to investigate the dust plume but was unable to establish communication with the tailings dam crew. Company policy requires proper PPE and communication with the tailings dam crew before entering the tailings dam area; and he had neither. I completed the onsite inspection and departed the FMSI property around 12:20 PM.

Attachments:

1. Photographic Log
2. Letter dated February 3, 2016
3. Inspection Rights Form signed February 9, 2016

Site Location:

6200 W. Duval Mine Road, Green Valley, AZ

Photographer:

Kimberly Baeza

Tracking #:

6067-OR:29

Photo No. 1

Date: 1/31/16
Photo by Janice
Easley



Photo No. 2

Date: 1/31/16
Photo by Janice
Easley





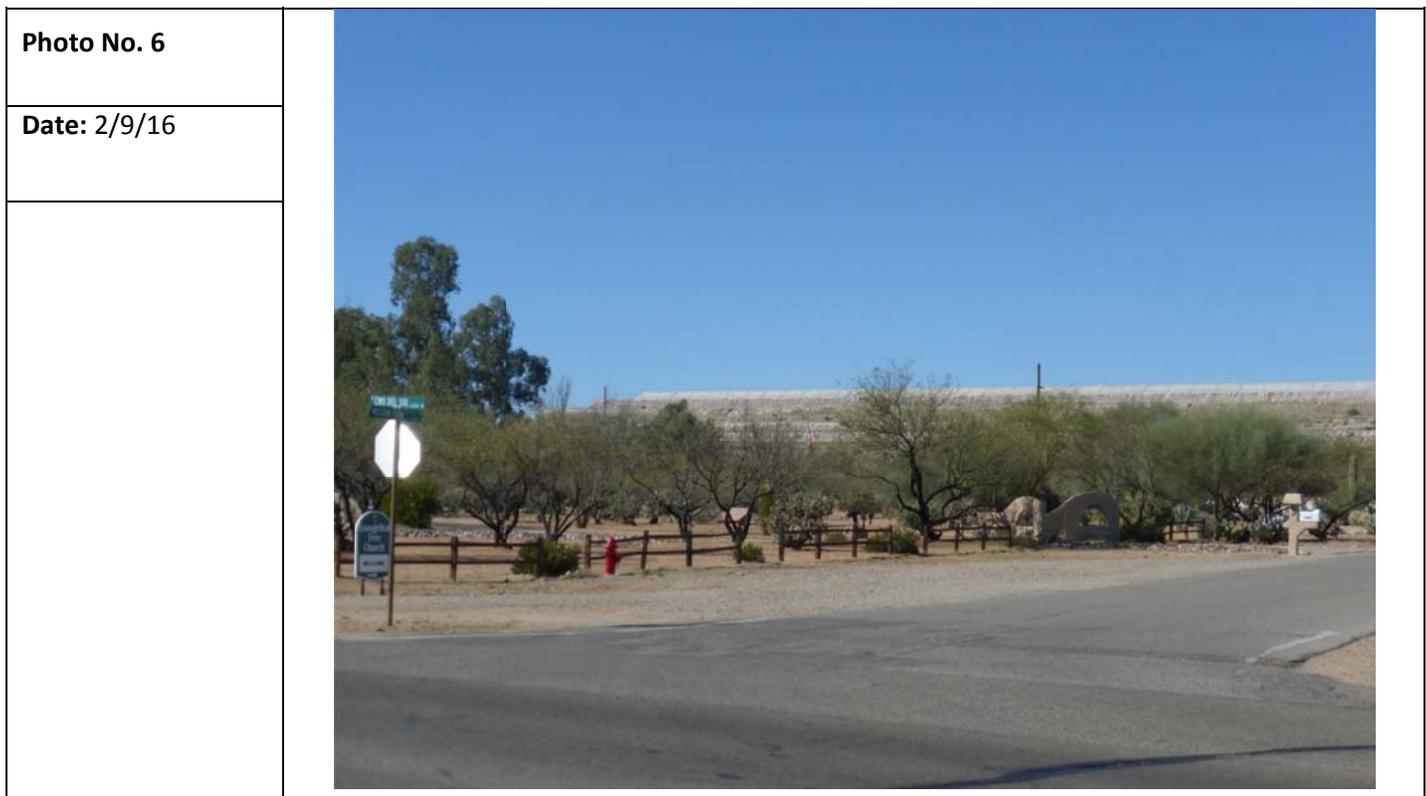




Photo No. 9

Date: 2/9/16





Freeport-McMoRan Sierrita Inc.
6200 W. Duval Mine Rd.
PO Box 527
Green Valley, Arizona 85622-0527

RECEIVED BY
PIMA COUNTY

FEB 8 2016

DEPARTMENT OF
ENVIRONMENTAL QUALITY

February 3, 2016

**Via Email: Air.Permits@pima.gov and
Certified Mail: 7015 1520 0002 5365 7621**

Return Receipt Requested

Mr. Scott Porter
Environmental Quality Manager
Pima County Department of Environmental Quality
33 N Stone Ave, Suite 730
Tucson, Arizona 85701

**Re: Follow up to dust event which occurred on January 31, 2016 at
Freeport-McMoRan's Sierrita Operations**

Dear Mr. Porter:

This letter is to provide additional information to my call to your office on February 1, 2016. In anticipation of the high winds on January 31, 2016, Freeport-McMoRan's Sierrita Inc. (Sierrita) took extensive measures, detailed below, to control dust from the tailings impoundment. As a result, we were able to keep opacity below the 20 percent permit limit. Nevertheless, because some dust did cross the property boundary, Sierrita is providing this additional information to PDEQ.

Pursuant to Sierrita's Title V permit, number 6067, issued January 30, 2016, Sierrita has two obligations related to fugitive dust. First, Attachment B, Condition II.E states:

1. The Permittee shall not cause, suffer, allow, or permit diffusion of visible emissions, including fugitive dust, beyond the property boundary line within which the emissions become airborne. Sources may be required to cease temporarily the activity or operation which is causing or contributing to the emissions until reasonably necessary and feasible precautions are taken.
2. Condition II.E.1 shall not apply when wind speeds exceed twenty-five (25) miles per hour (using the Beaufort Scale of Wind-Speed Equivalents, or as recorded by the National Weather Service). This exception does not apply if control measures have not been taken or were not commensurate with the size or scope of the emission source".

On January 31, 2016, sustained winds in excess of 27 miles per hour with gusts up to 40 miles per hour caused intermittent visible emissions, including fugitive dust, beyond the property boundary line, from the Sierrita tailings impoundment between 3:00 PM and 6:00 PM. Weather data was collected from an on-site meteorological station. Attachment "Meteorological station Sierrita 013116"

As you know, on an ongoing basis, Sierrita employs "reasonable precautions," as defined by Attachment B, Section XIX.B.1.b(viii) and (ix) of the Title V permit, to prevent excessive amounts of particulate

matter from becoming airborne from the tailings impoundment. In addition to these ongoing precautions, tailings supervisors responded to National Weather Service high wind advisories by supplementing dust control efforts by scheduling a 12 hour weekend shift on January 31, 2016. During this time, Sierrita tailing crews applied 57 truckloads of water equivalent to 224,000 gallons, moved deposition on dam (see attachment, "tailings 013116"), this activity was in addition to Sierrita's ongoing efforts that, from January 1-31, 2016, saw the application of approximately 83,300 gallons of $MgCl_2$ on the surface of the impoundment, 1,350,000 gallons of water to wet berms and roads in the tailings area, and 105,000 gallons of Envirotac II to the impoundment berms. As an example of these efforts we have attached the weekly "Tailing Impound Surface Inspections" for the week preceding this event. Additional inspections were completed to assist in managing the tailings impoundment. January 25, 26, 27, 29, 31, and February 1, 2016 (Attached: Tailing impoundment surface inspections 2016).

Pursuant to Attachment B, Section XIX.B.1.a, Sierrita shall not cause, allow or permit visible emissions from any fugitive dust source in excess of 20% opacity. In this case, the opacity was observed by both a Method 9 certified Senior Environmental Scientist and a Method 9 trained (although not currently certified) Environmental Chief. A Reference Method 9 observation was not conducted during the event due to the inability to obtain a proper observation point with a proper position relative to the sun. However, both the observers indicated that visible emissions did not exceed the 20% opacity standard during this observation period.

Based upon the information and actions taken at Sierrita, we do not believe the high wind event of January 31, 2016 resulted in either an excess emissions event or a permit deviation. Nevertheless, because there were such high winds and some low levels of fugitive dust did cross property boundary, Sierrita wanted to provide PDEQ a summary of the event in addition to the telephone notice made on February 1, 2016.

Sincerely,

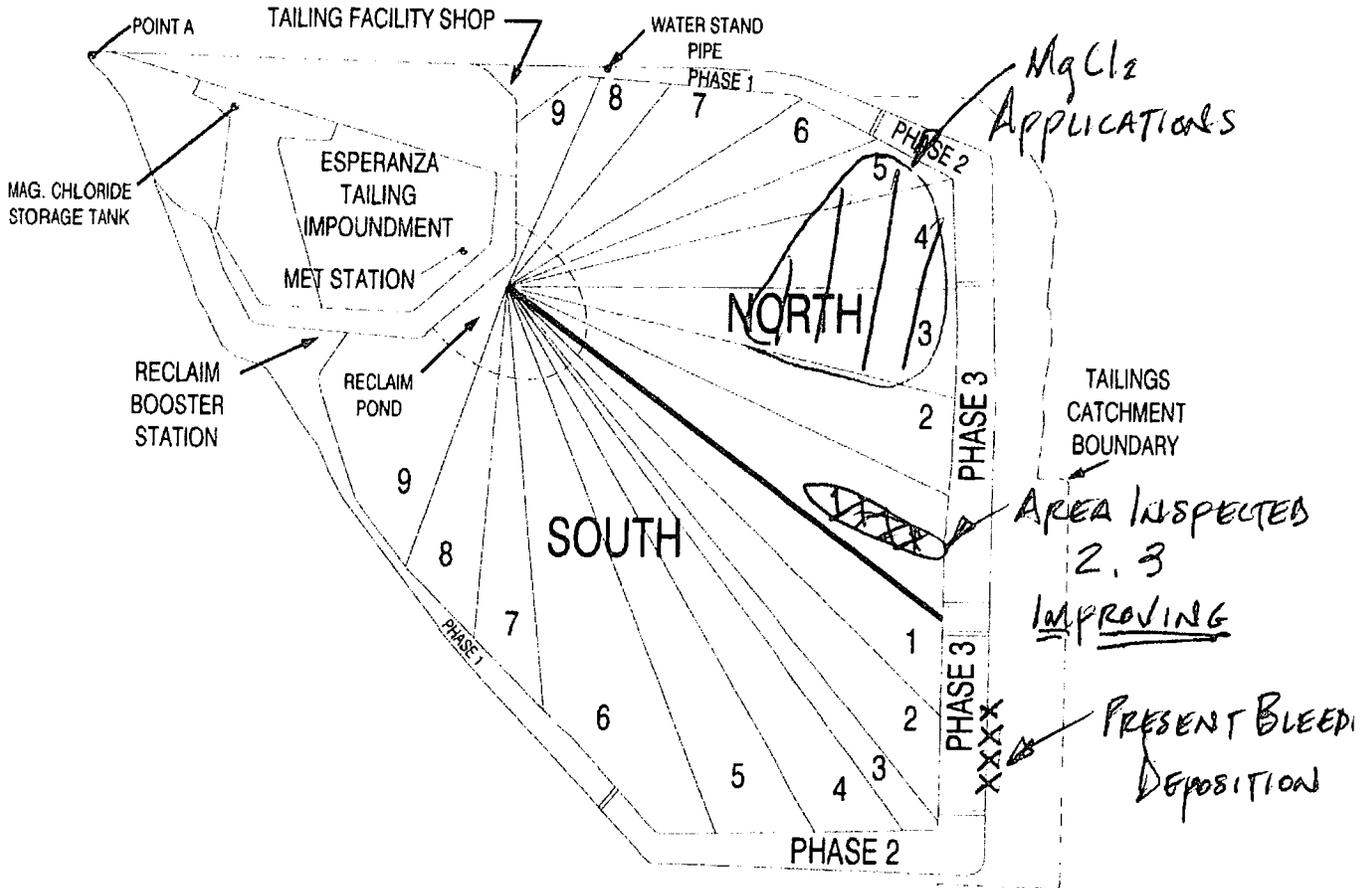
Bryce Cooke

Senior Environmental Air Scientist

Tailings Impoundment Surface Inspection (2016)

Date: 01/25/16
 Time: 1100
 Conditions: SUNNY, CALM
 Dam Inspected: NORTH Phase(s) 0
 GPS Coordinates: _____

Inspected by: D.E. FLEMING



Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

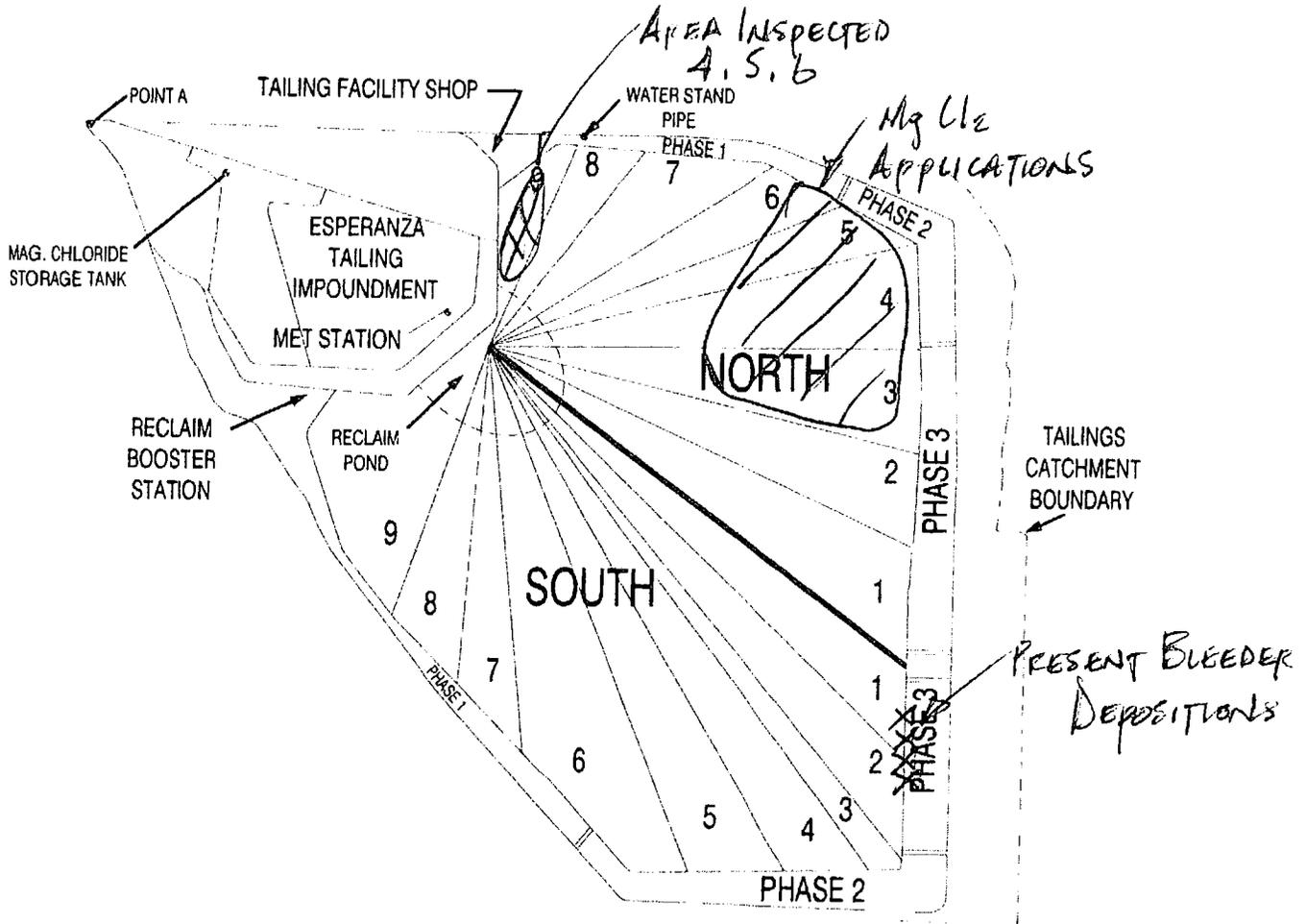
Action Plan: H2O TRUCK ACTIVE . ALLTRACKS ACTIVE PHASE 2
 Dust Suppressant Applied: H2O, MgCl2 Completed Y/N _____ If N Date Completed _____ Initial _____
 Gallons Used: 6300 gal Operator: LUCIO, CODINA, PINA

Weather Conditions: Wind Speed _____ Gusts To _____ Temperature 60°F Precipitation Last 24 Hrs. Y (N)

Tailings Impoundment Surface Inspection

Date: 01/26/16
 Time: 1030
 Conditions: SUNNY
 Dam Inspected: NORTH Phase(s) 1
 GPS Coordinates: _____

Inspected by: D.E. FLEMING



Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

Action Plan: H2O TRUCKS ACTIVE, ALLTRACKS ACTIVE PHASE 2.

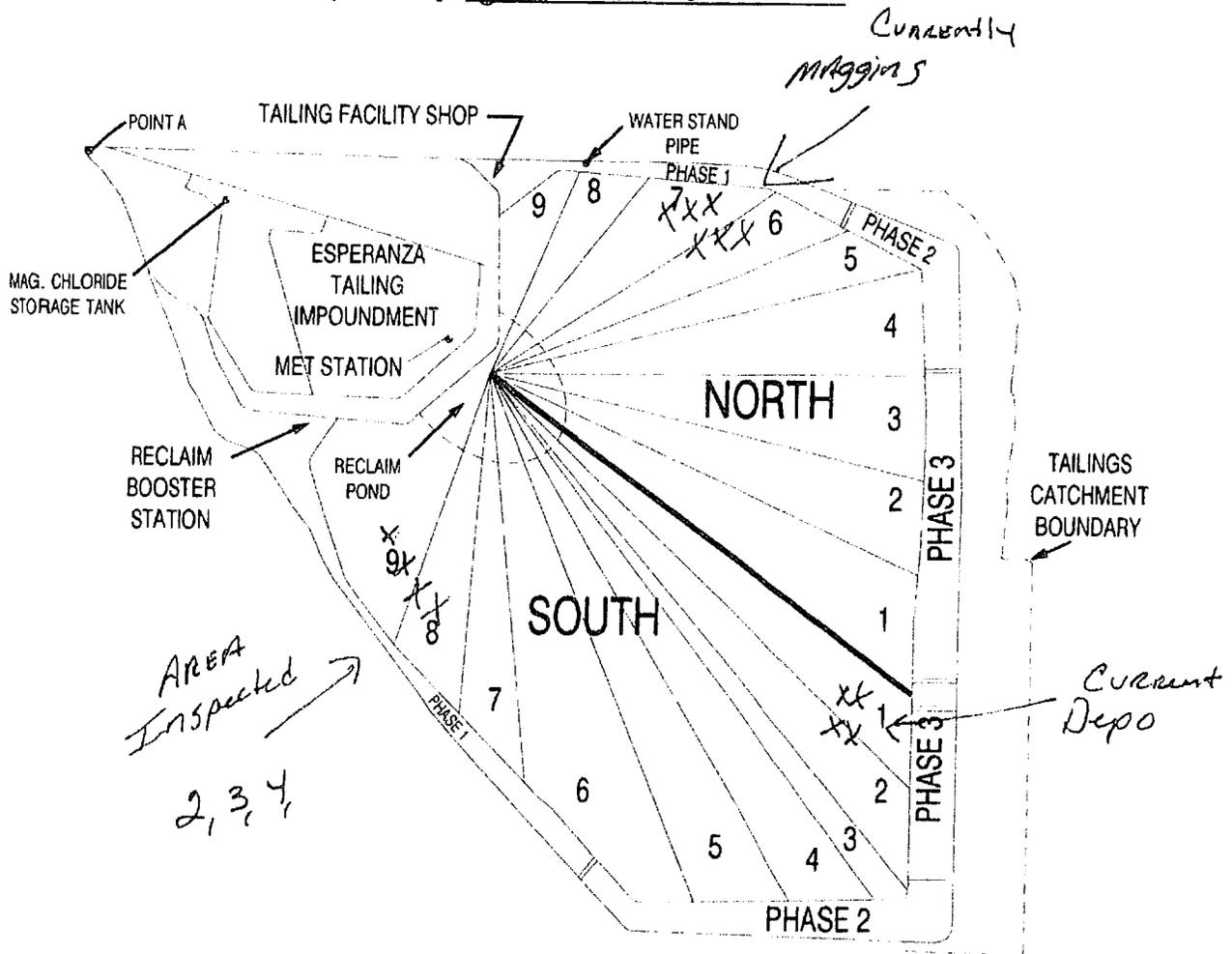
Dust Suppressant Applied: H2O, MgCl2 Completed Y/N _____ If N Date Completed _____ Initial _____
 Gallons Used: 7700gal Operator: CODINA, LUCIO, PINA

Weather Conditions: Wind Speed _____ Gusts To _____ Temperature 65° Precipitation Last 24 Hrs. (N)

Tailings Impoundment Surface Inspection

Date: 1-27-16
 Time: 9:45 AM
 Conditions: Clear & sunny
 Dam Inspected: South Phase(s): 1 WEST END
 GPS Coordinates: _____

Inspected by: GAMILLO JOE



Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

Action Plan: H2O, MAG, ALL TRACKS ACTIVE

Dust Suppressant Applied: H2O MAG Completed Y/N: _____ If N Date Completed: _____ Initial: _____
 Tons Used: 5600 Operator: PINA, LUCIA

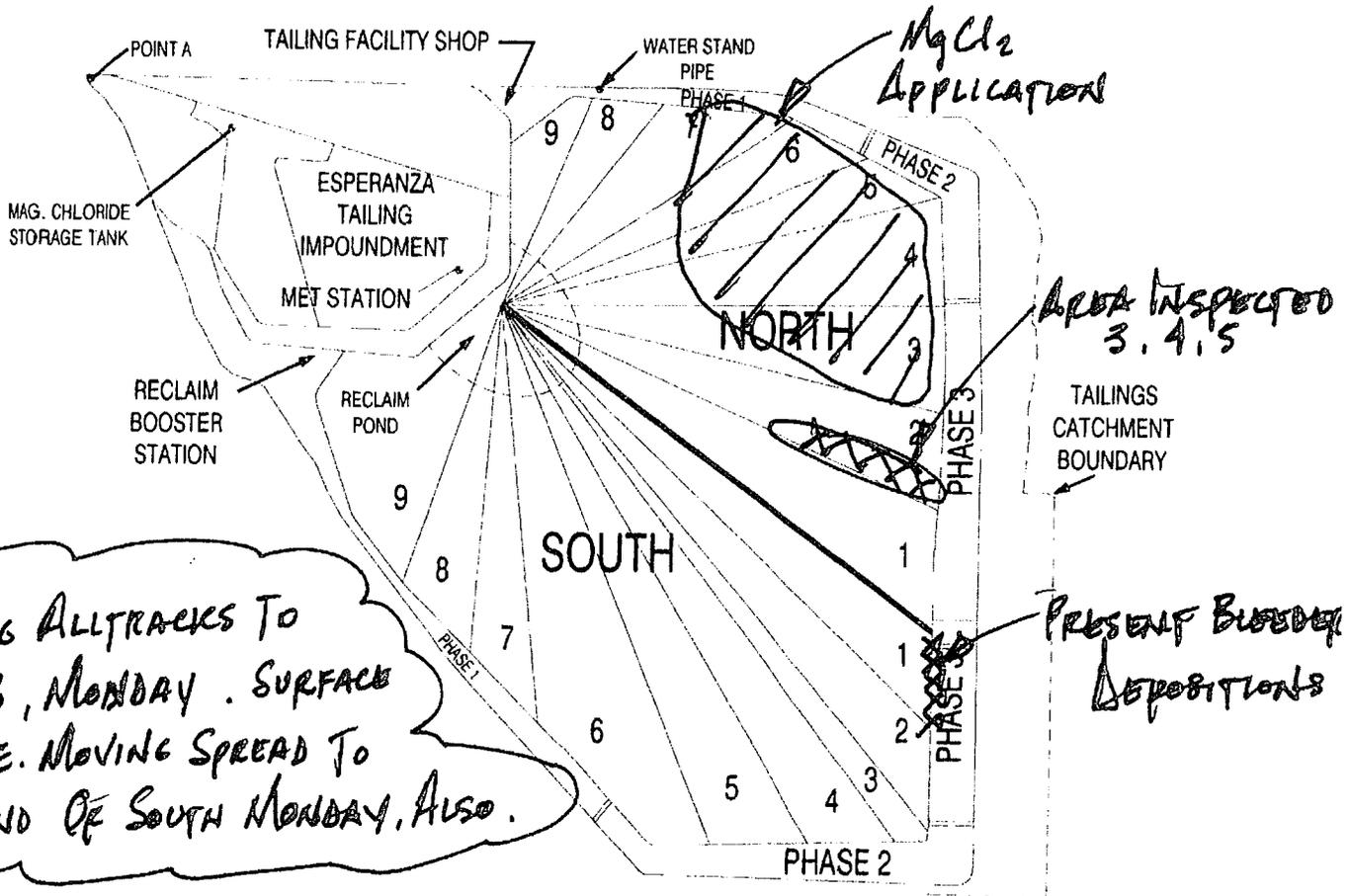
Weather Conditions: Wind Speed 0 Gusts To 0 Temperature 61 Precipitation Last 24 Hrs. Y/N: _____

Fax to 393-2651

Tailings Impoundment Surface Inspection

Date: 01/29/16
 Time: 1300
 Conditions: SUNNY, CALM
 Dam Inspected: NORTH Phase(s) 3
 GPS Coordinates: _____

Inspected by: D. E. FLEMING



MOVING ALL TRACKS TO PHASE 3, MONDAY. SURFACE PASSABLE. MOVING SPREAD TO WEST END OF SOUTH MONDAY, ALSO.

Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

Action Plan: H2O TRUCKS ACTIVE. ALL TRACKS ACTIVE PHASE 1, NORTH.
 Suppressant Applied: H2O, MgCl2 Completed Y/N _____ If N Date Completed _____ Initial _____
 Tons Used _____ Operator: LUCIO, CODINA, PACHECO

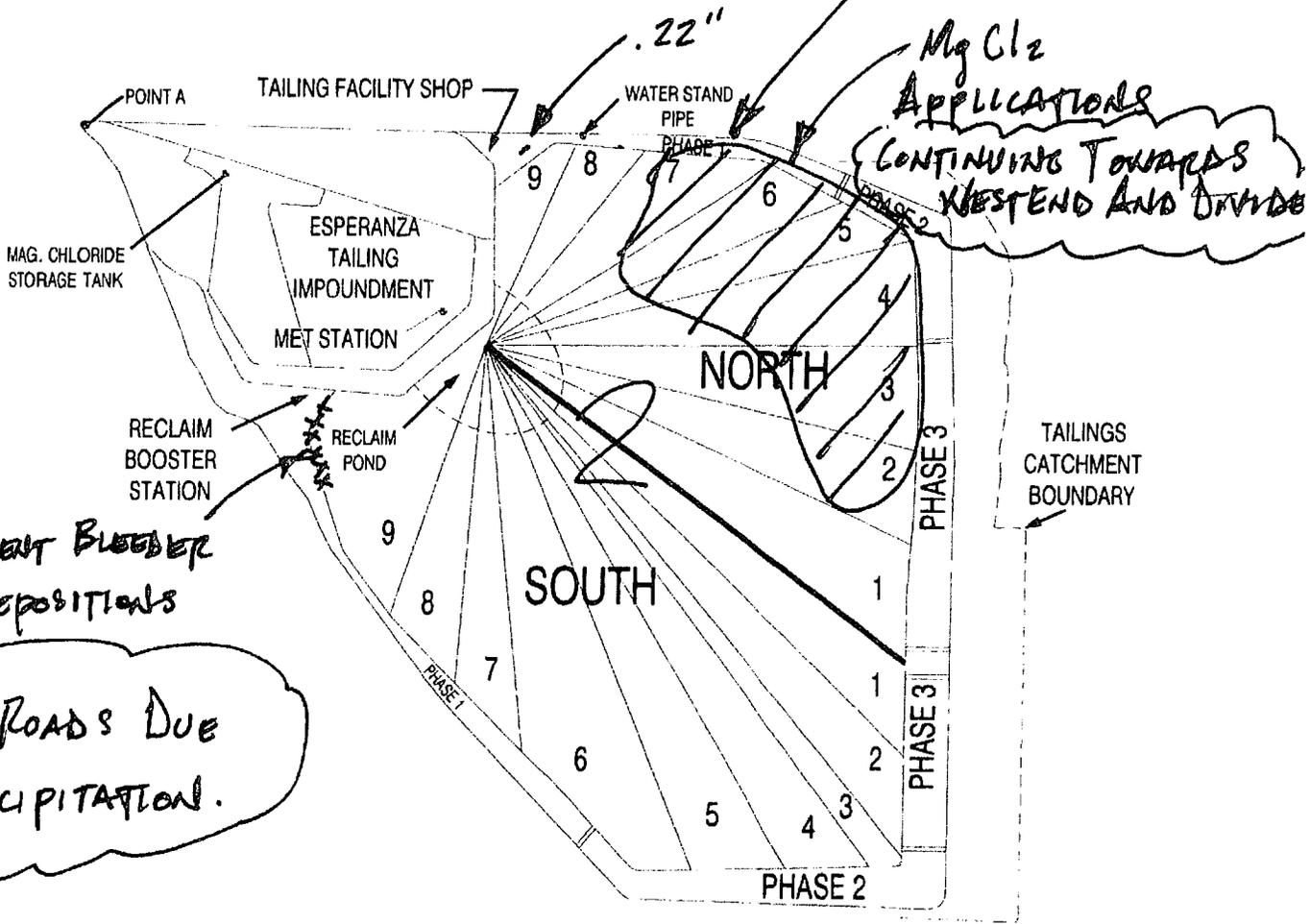
Weather Conditions: Wind Speed _____ Gusts To _____ Temperature 70°F Precipitation Last 24 Hrs. Y/N (N)

Tailings Impoundment Surface Inspection

Date: 02/01/16
 Time: 1030
 Conditions: HIGH WINDS, LIGHT PRECIP
 Dam Inspected: ALL Phase(s): ALL
 GPS Coordinates: _____

Inspected by: D. E. FLEMING

SEVERE DUNING



MUDDY ROADS DUE TO PRECIPITATION.

Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

Action Plan: H2O TRUCKS STANDING BY. ALL TRACKS ACTIVE.

Dust Suppressant Applied: MgCl2 Completed Y/N: _____ If N Date Completed: _____ Initial: _____
 Conditions Used: _____ Operator: COJINA, LUCIO, PINA

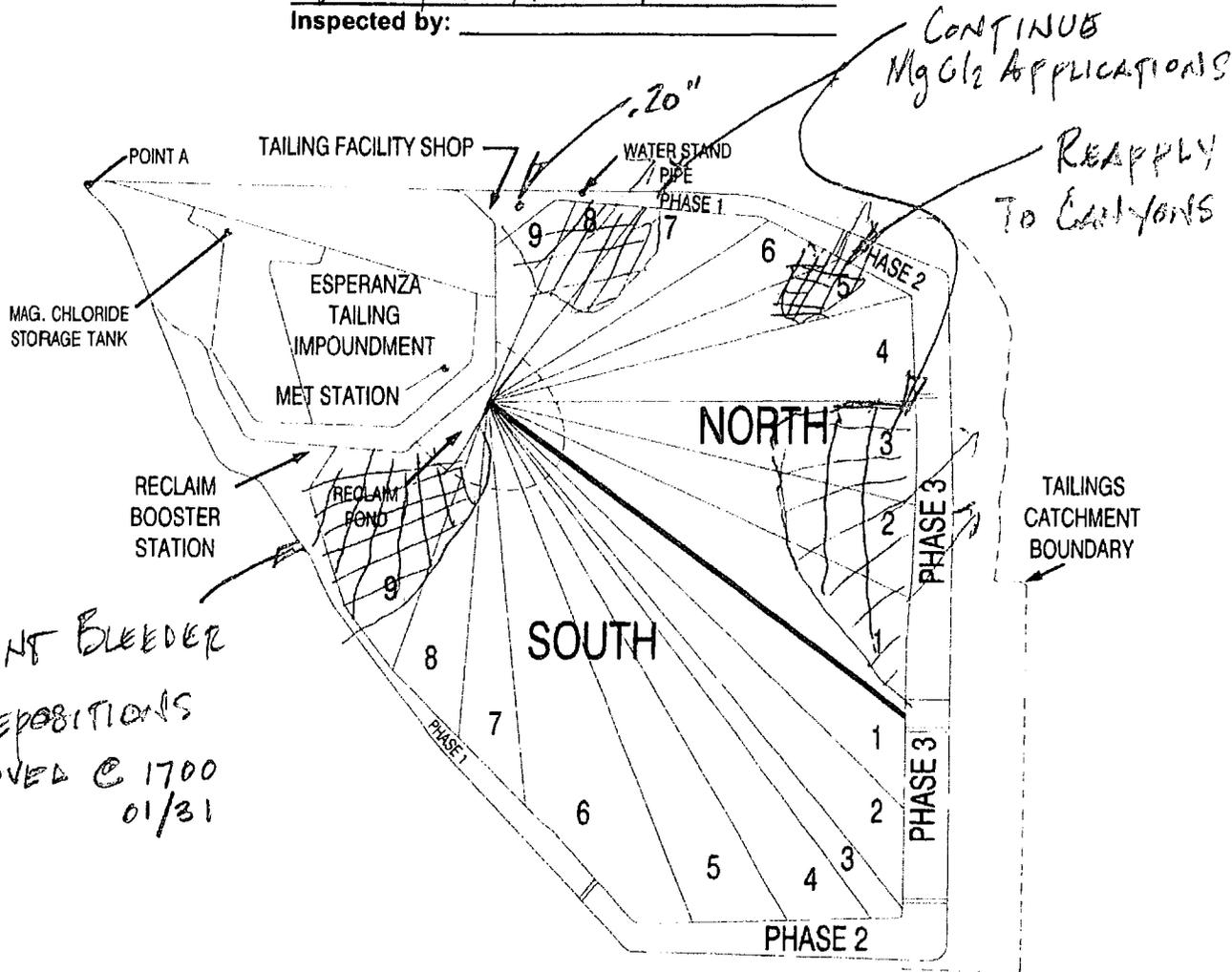
Weather Conditions: Wind Speed 19 Gusts To 26 Temperature 56°F Precipitation Last 24 Hrs: Y/N

Tailings Impoundment Surface Inspection

Date: 01/31 DETAILS A: 6
 Time _____
 Conditions _____
 Dam Inspected _____ Phase(s) _____
 GPS Coordinates _____

GARCIA, JJ BUUFFLY
 ↓ PACHECO
 DURING ON A NORTH
 DAM BEAM!

OBSERVATION FEEDBACK
 Inspected by: _____



Mark area inspected on diagram using number below that best describes conditions observed.

1	Recent Deposition (14 days or less)	No Action Required
2	Moist Surface	No Action Required
3	Established Algae/Salt Crust	No Action Required
4	Crusted with light surface sands (blown in/washed in)	Watch Area / Reinspect in one week
5	Crusts breaking down	Watch Area / Reinspect in one week
6	Piles of Standing Sands (blown in)	Action Required - Deposition or Suppressant Application
7	Broken Down Crust	Action Required - Deposition or Suppressant Application
8	Delta	Action Required - Deposition or Suppressant Application
9	Area with Dust Suppressant Previously Applied	Watch Area / Reinspect as required

Action Plan:

Dust Suppressant Applied _____ Completed Y / N If N Date Completed _____ Initial _____
 Gallons Used _____ Operator _____

Weather Conditions: Wind Speed _____ Gusts To _____ Temperature _____ Precipitation Last 24 Hrs. Y / N

Fax to 393-2651

Meteorological Station Screenshot

Time Stamp	Precip_Tot	Precip_24	WS_MPH	WindDir	Wind Direction Converted (Blowing Towards)	Gust
1/31/2016 0:00	0	0	15.79	58.74	ENE	22.18
1/31/2016 1:00	0	0	16.16	59.15	ENE	22.45
1/31/2016 2:00	0	0	16.82	60.74	ENE	22.67
1/31/2016 3:00	0	0	16.21	62.25	ENE	22.1
1/31/2016 4:00	0	0	15.69	60.64	ENE	21.66
1/31/2016 5:00	0	0	15.73	61.86	ENE	21.26
1/31/2016 6:00	0	0	15.63	63.73	ENE	21.22
1/31/2016 7:00	0	0	15.35	67.17	ENE	19.51
1/31/2016 8:00	0	0	14.17	62.04	ENE	18.33
1/31/2016 9:00	0	0	13.78	58.51	ENE	20.21
1/31/2016 10:00	0	0	15.76	49.99	NE	22.31
1/31/2016 11:00	0	0	16.46	35.31	NE	26.52
1/31/2016 12:00	0	0	17.11	44.94	NE	26.04
1/31/2016 13:00	0	0	24.89	45.8	NE	36.91
1/31/2016 14:00	0	0	26.87	43.34	NE	44.94
1/31/2016 15:00	0	0	31.85	46.91	NE	46.25
1/31/2016 16:00	0	0	32.57	51.81	NE	48.57
1/31/2016 17:00	0.15	0.15	35.36	47.3	NE	51.34
1/31/2016 18:00	0	0.15	34.1	48.7	NE	47.65
1/31/2016 19:00	0	0.15	30.31	48.23	NE	42.31
1/31/2016 20:00	0	0.15	29.34	45.15	NE	43.53
1/31/2016 21:00	0.18	0.33	35.11	44.66	NE	57.56
1/31/2016 22:00	0	0.33	29.65	45.6	NE	40.77
1/31/2016 23:00	1.46	1.79	37.46	44.59	NE	58.13
2/1/2016 0:00	1.78	3.57	40.85	45.91	NE	59.14
2/1/2016 1:00	4.04	4.04	44.97	45.28	NE	63.87
2/1/2016 2:00	0.92	4.96	35.31	49.87	NE	52.08
2/1/2016 3:00	0.09	5.05	25.42	78.75	E	39.76

1/31/2016 SE Corner

Time Stamp	WindDir_D1_Avg	Wind Direction Converted (Blowing Towards)	Ws_MPH_s_Avg	Gust
1/31/2016 0:00	38.09	NE	11.11	14.95
1/31/2016 1:00	29.84	NNE	12.89	18.92
1/31/2016 2:00	28.89	NNE	13.32	17.98
1/31/2016 3:00	39.08	NE	8.88	11.68
1/31/2016 4:00	21.05	NNE	12.05	15.77
1/31/2016 5:00	17.8	NNE	13.28	16.66
1/31/2016 6:00	19.53	NNE	14.58	18.14
1/31/2016 7:00	26.28	NNE	12.18	14.59
1/31/2016 8:00	28.22	NNE	11.79	14.24
1/31/2016 9:00	24.11	NNE	12.44	16.95
1/31/2016 10:00	43.97	NE	12.8	18.72
1/31/2016 11:00	197.4	SSW	15.7	21.89
1/31/2016 12:00	46.81	NE	16.66	24.21
1/31/2016 13:00	118.8	ESE	22.3	31.54
1/31/2016 14:00	54.79	NE	22.83	33.65
1/31/2016 15:00	32.58	NNE	24.6	38.08
1/31/2016 16:00	36.47	NE	27.08	38.11
1/31/2016 17:00	18.06	NNE	28.01	39.65
1/31/2016 18:00	23.62	NNE	25.02	37.79
1/31/2016 19:00	21.31	NNE	24.28	34.59
1/31/2016 20:00	19.82	NNE	20.44	29.92
1/31/2016 21:00	17.52	NNE	22.86	32.5
1/31/2016 22:00	27.6	NNE	23.84	33.59
1/31/2016 23:00	52.25	NE	31.47	42.96
2/1/2016 0:00	36.74	NE	33.43	48.72
2/1/2016 1:00	19.88	NNE	34.74	48.72
2/1/2016 2:00	38.22	NE	25.84	39.19

10 meters tower



PIMA COUNTY
ENVIRONMENTAL QUALITY

PIMA COUNTY DEPARTMENT OF ENVIRONMENTAL QUALITY

33 N. Stone Avenue, Suite 700, Tucson, AZ 85701-1429

Phone (520) 724-7400 FAX (520) 838-7432

http://webcms.pima.gov/government/environmental_quality/

AIR PROGRAM
NOTIFICATION OF INSPECTION RIGHTS

SOURCE INFORMATION

PC# 1602-001, 1602-002

Permit # 6067

Regulated Person Freeport McMoran

On-site Representative Bryce Cook Title _____

Site Location 6200 W. Huwal Mine Rd Phone 520-393-2419

Site Contact _____ E-Mail _____

Mailing Address 6200 W. Huwal Mine Road, Green Valley

PDEQ INFORMATION

Inspector Name Kimberly Baeza Phone 520-724-7436

Inspection Date February 9, 2016 Time 10:55 am

Accompanied by _____

Questions or comments on these procedures, your inspection and due process rights or this form may be directed to the Pima County Department of Environmental Quality (PDEQ) inspector listed on this form at (520) 724-7400. While I have the right to decline to sign this form, the PDEQ representative(s) may still proceed with the inspection under Pima County Code (PCC) 17.20.050.

I acknowledge that I have read and understand the Inspection Rights on the back of this form.

Signature [Signature] Date 2/9/16

_____ Refused to sign the Notification.

Authorized on-site representative is not present at the facility.



PIMA COUNTY

ENVIRONMENTAL QUALITY

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**AIR PROGRAM
NOTIFICATION OF INSPECTION RIGHTS**

SOURCE INFORMATION

PC# 1602-001 & -002 Permit # 6067

Regulated Person Freeport McMoran

On-site Representative Eric Warner Title _____

Site Location _____ Phone _____

Site Contact _____ E-Mail _____

Mailing Address _____

PDEQ INFORMATION

Inspector Name Kumbukh Baeza Phone 724-7436

Inspection Date February 9, 2016 Time 11:13am

Accompanied by _____

Questions or comments on these procedures, your inspection and due process rights or this form may be directed to the Pima County Department of Environmental Quality (PDEQ) inspector listed on this form at (520) 724-7400. While I have the right to decline to sign this form, the PDEQ representative(s) may still proceed with the inspection under Pima County Code (PCC) 17.20.050.

I acknowledge that I have read and understand the Inspection Rights on the back of this form.

Signature Eric Warner Date 2/9/16

_____ Refused to sign the Notification.

Authorized on-site representative is not present at the facility.

Tailings Dam Environmental Activities Report

Operator: D.E. FLEMING

Date: 02/05/16

Primary Controls

	N/S	Phase	Area		
Area of Deposition	5	1	9		
Special Wetting Areas	—	—	—		
Water Truck #	88	36	94	37	87
# of Loads	21	25	51	17	12

	Gallons	Location	Approx. Area Covered
Alltrack/Marsh Buggy Application	27300	NORTH P1/3	ACRES +
MgCl Applied to Roads	—	—	—

Site Conditions

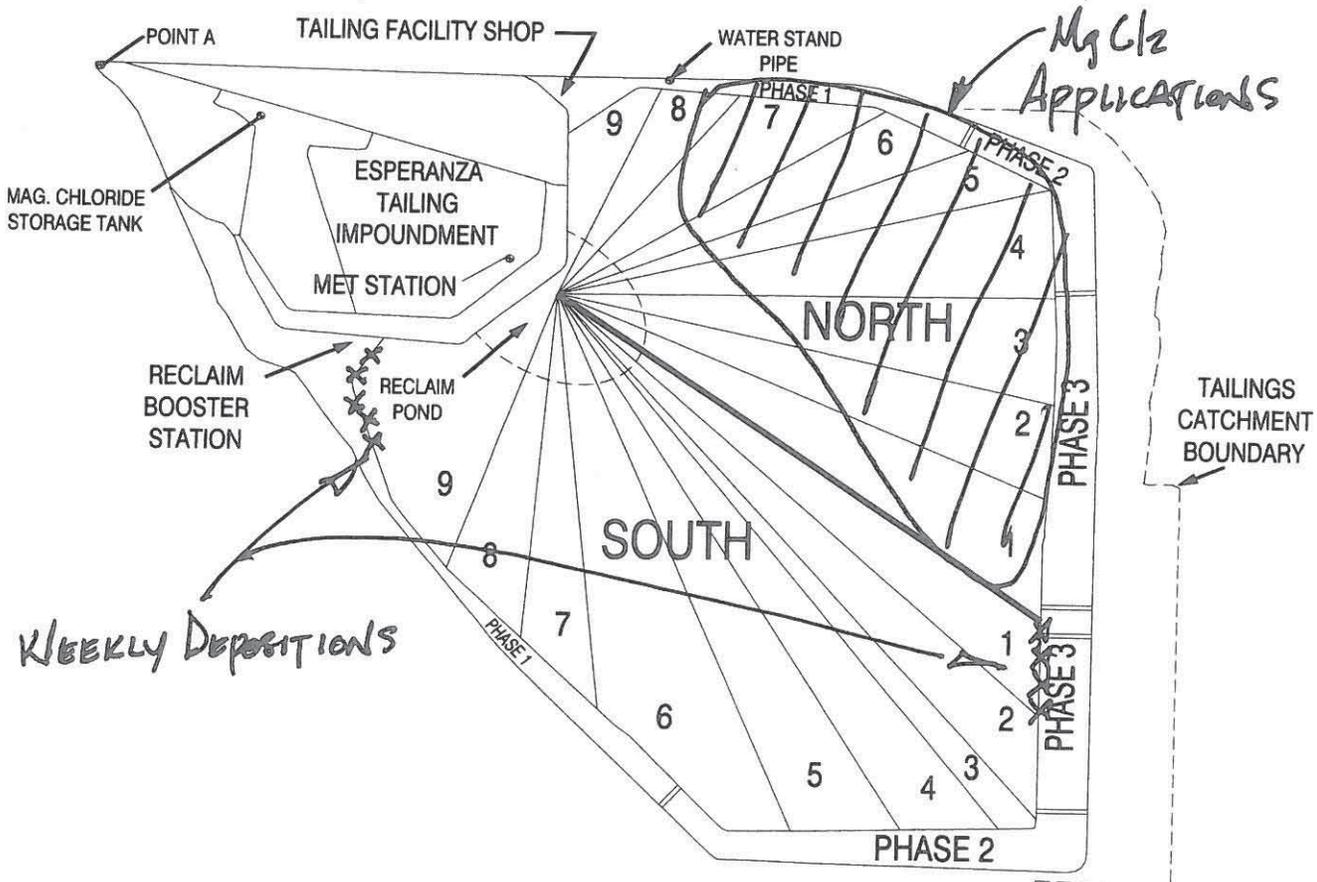
Areas Under Construction	—	—	—
Inches of Rain	.22	@ TAILING SHOP	

Special Projects

Area of Application

Hydroseeding Area	—
	—

Comments MgCl₂, ENVIROtac II Applications, EXTREME WIND EVENT 01/31 - 02/01. DEPOSITION MOVED FROM P 3 TO P1 SOUTH DAM.



Attachment A

Tailings Dam Environmental Activities Report

01/22 THRU 01/28

Operator: D. E. FLEMING

Date: 01/29/12

Primary Controls

	N/S	Phase	Area		
Area of Deposition	5	3	1.2		
Special Wetting Areas	—	—	—		
Water Truck #	88	36	AM 94	37	Rental
# of Loads	3	27	19	∅	∅

	Gallons	Location	Approx. Area Covered
Alltrack/Marsh Buggy Application	28000	NORTH P1.2	ACRES+
MgCl Applied to Roads	—	—	—

Site Conditions

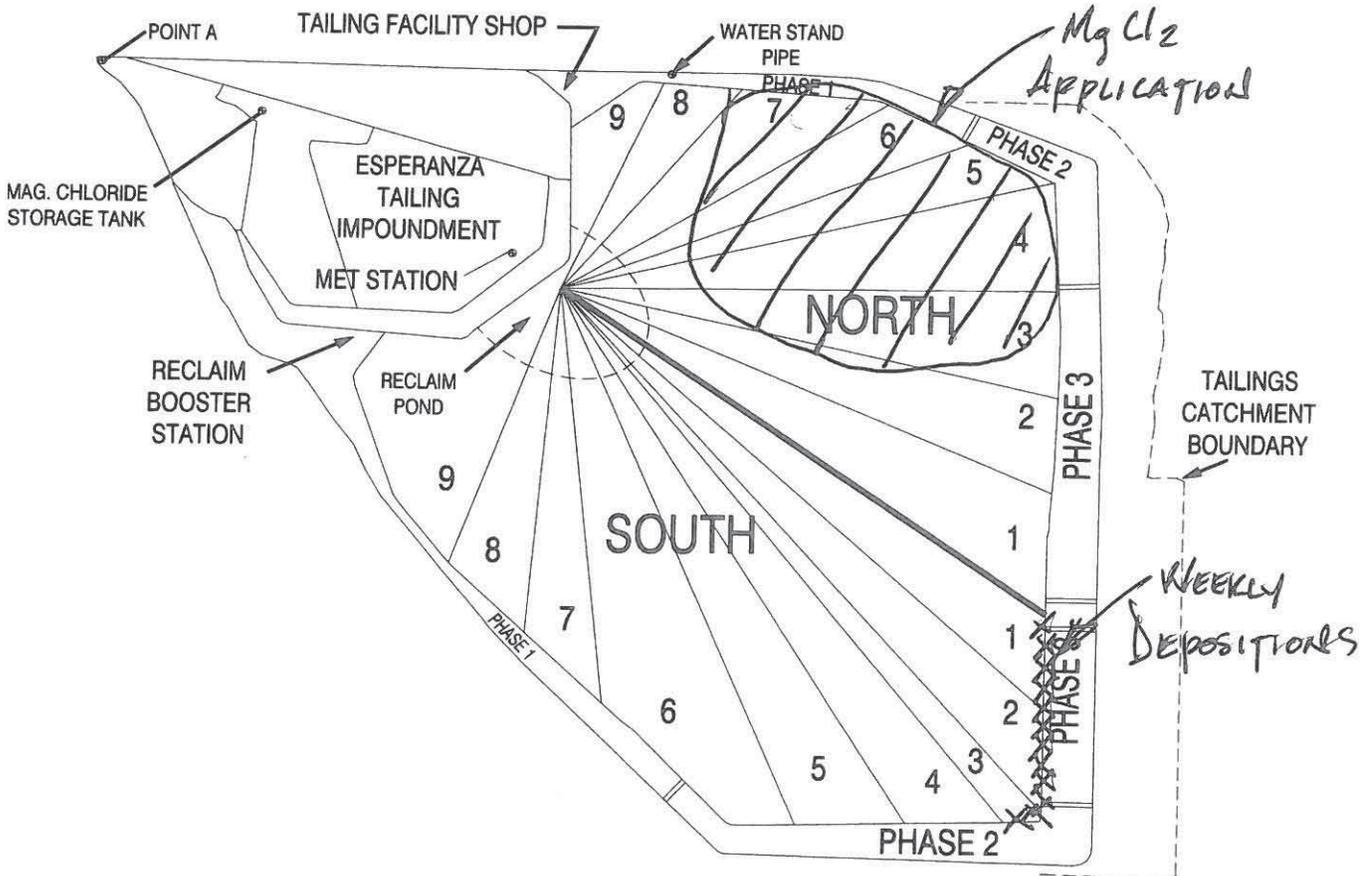
Areas Under Construction	—	—	—
Inches of Rain	∅		

Special Projects

Area of Application

Hydroseeding Area	—
	—

Comments MgCl₂ APPLICATIONS TO PHASE 1, NORTH DAM.
DEPOSITIONS SOUTH DAM.



Attachment A

Tailings Dam Environmental Activities Report

01/15 THRU 01/21

Operator: D. E. FLEMING

Date: 01/22/16

Primary Controls

	N/S	Phase	Area		
Area of Deposition	5	3	2.1		
Special Wetting Areas	-	-	-		
Water Truck #	88	36	294	37	Rental
# of Loads	6	6	18	18	Ø

	Gallons	Location	Approx. Area Covered
Alltrack/Marsh Buggy Application	37100	NORTH P2	ACRES +/-
MgCl Applied to Roads	-	-	-

Site Conditions

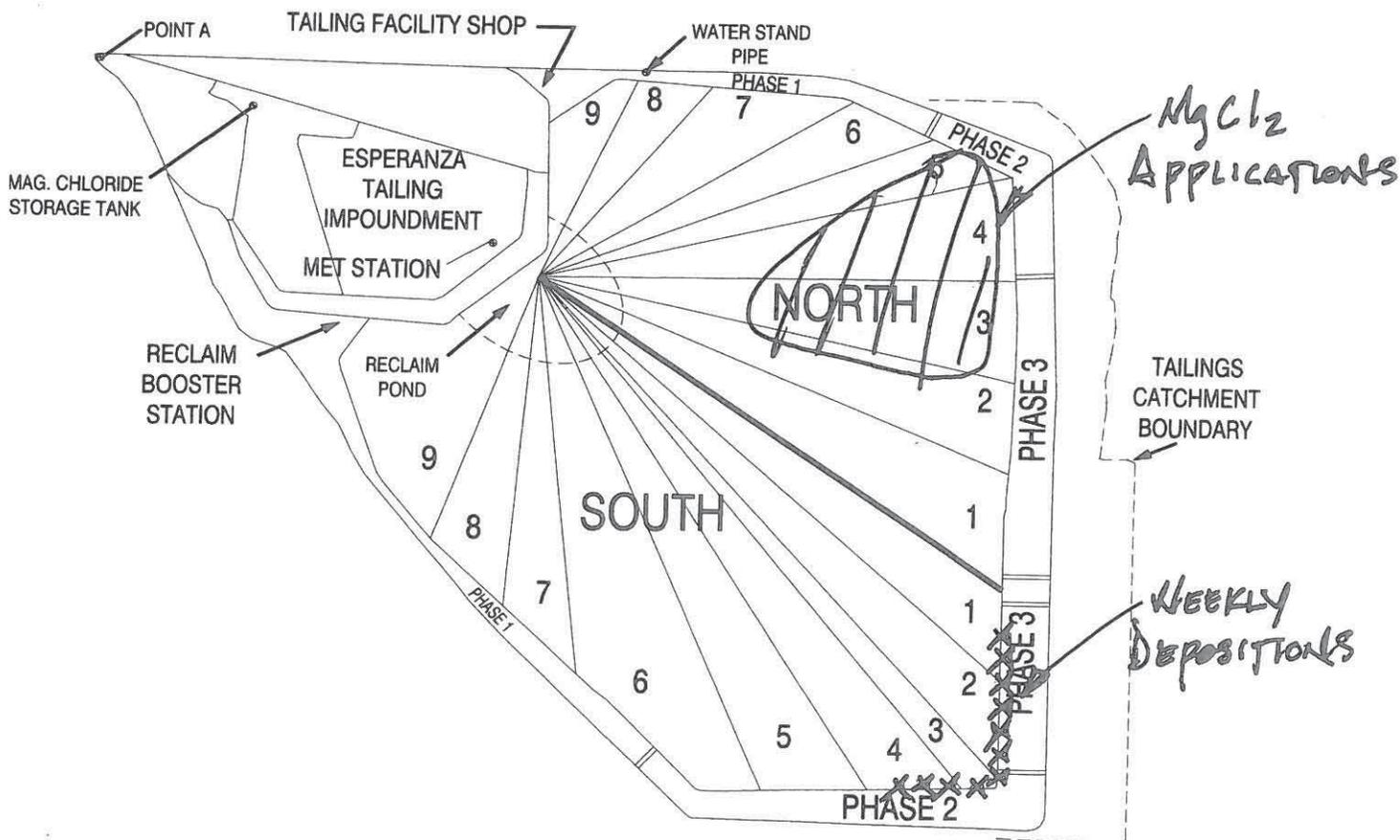
Areas Under Construction	-	-	-
Inches of Rain	Ø	-	-

Special Projects

Area of Application

Hydroseeding Area	-
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Comments MgCl₂ APPLICATIONS TO PH 1, 2 NORTH DAM.



Attachment A

Tailings Dam Environmental Activities Report

01/08 THRU 01/14

Operator: D. E. FLEMING

Date: 01/15/16

Primary Controls	N/S	Phase	Area		
Area of Deposition	S	2	6.5		
Special Wetting Areas	—	—	—		
Water Truck #	88	36	84	37	Rental
# of Loads	2	∅	∅	∅	∅
	Gallons	Location	Approx. Area Covered		
Alltrack/Marsh Buggy Application	9100	South PH3	ACRES +		
MgCl Applied to Roads	—	—	—		

Site Conditions

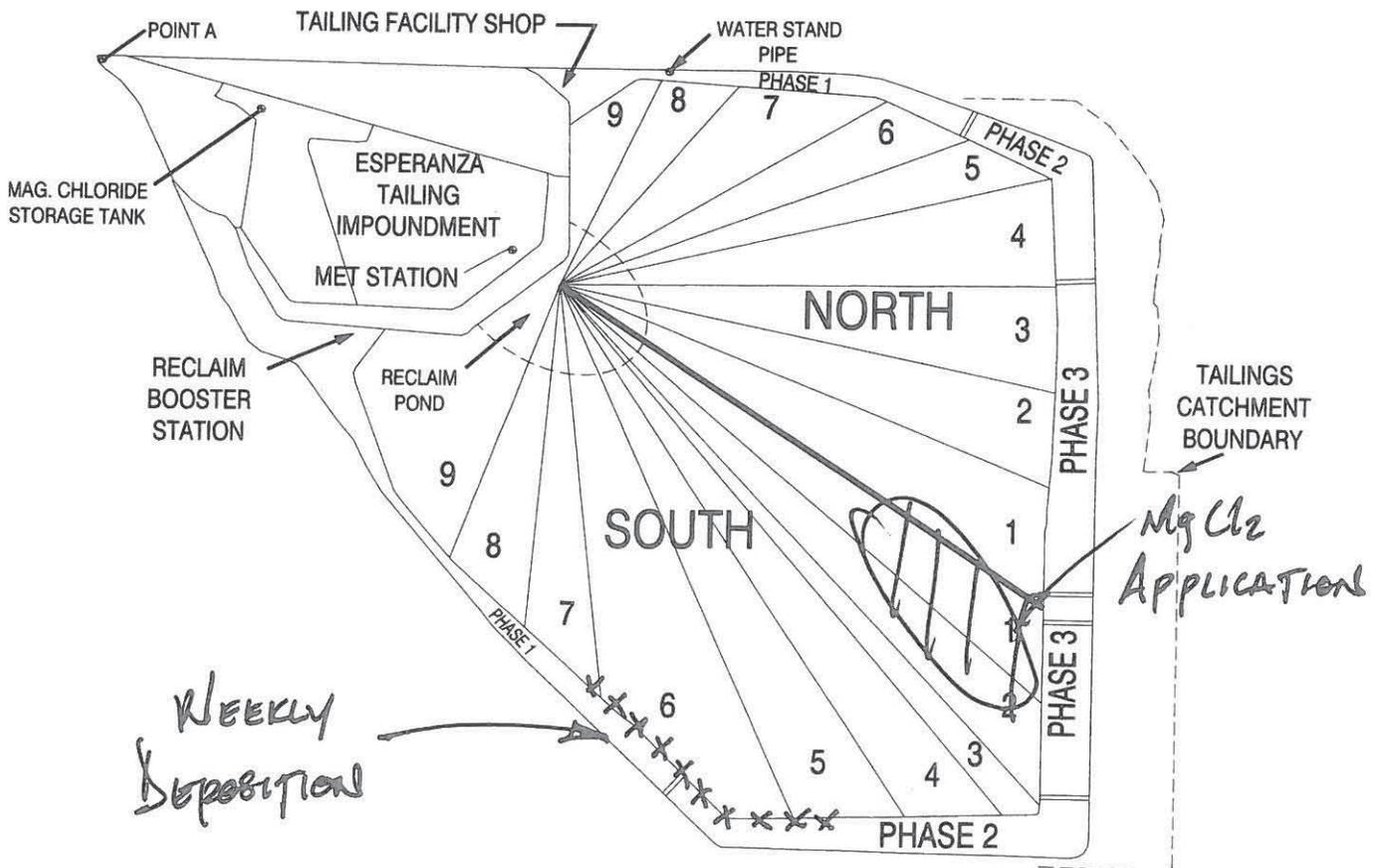
Areas Under Construction	—	—	—
Inches of Rain	∅		

Special Projects

Area of Application

Hydroseeding Area	

Comments DEPOSITION CONTINUES SOUTH DAM. MgCl₂ APPLICATION TO PHASE 3, SOUTH DAM



Attachment A

Tailings Dam Environmental Activities Report

1/1/2016 thru 1/7/2016

Operator: STORMEE MITHOKY

Date: 1/08/2016

Primary Controls

Area of Deposition	N/S	Phase	Area
Area of Deposition	5	1	8
Special Wetting Areas	—		
Water Truck #	88	36	84 94 37
# of Loads	0	0	0 0 0

Gallons Location Approx. Area Covered

Alltrack/Marsh Buggy Application	—		
MgCl Applied to Roads	—		

Site Conditions

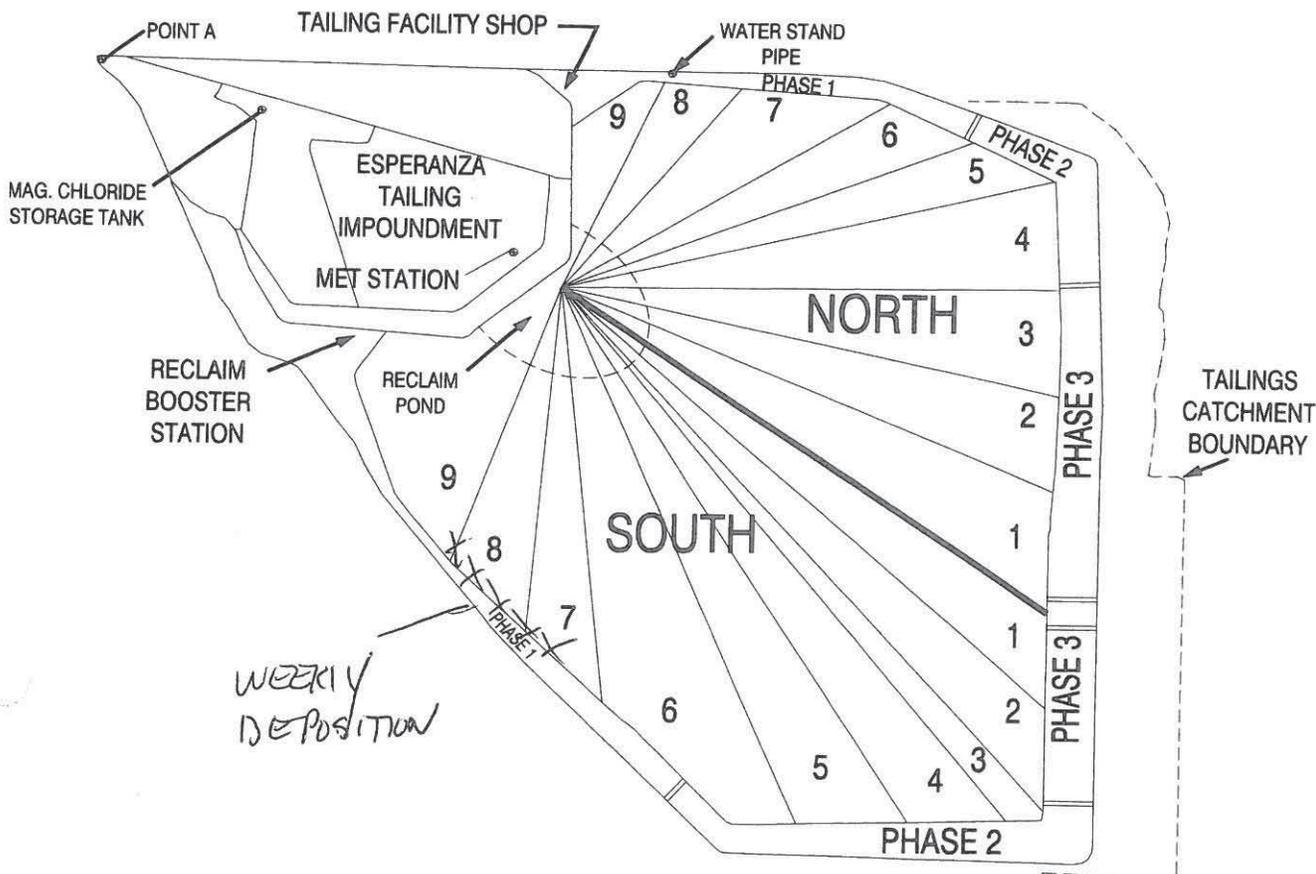
Areas Under Construction	—		
Inches of Rain	1.65		

Special Projects

Area of Application

Hydroseeding Area	Ø
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Comments RAIN



Freeport-McMoRan Sierrita Inc. Weekly Fugitive Source Visible Observations (as required by Permit #42862, Condition XIX.B.3.d)

Name of Certified Method 9 Observer: *Robert Taylor*

Date: *1-28-16*

Signature: *[Signature]*

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (If Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
Mine Operations							
<i>11:23</i>	088	Drilling Operations	M3 - M5	20	N		
<i>N/A</i>	066	Blasting Operations	M3 - M5	20	N		
<i>11:23</i>	097	Haul Truck Loading & Dumping	M1 - M5	20	N		
<i>↓</i>	077	Unpaved Roads (Ore Hauling)	M1 - M5, TB2	20	↓		
<i>↓</i>	089	Ammonium Nitrate Storage	M4	20	↓		
<i>↓</i>	N/A	Truck Ore Transport	M1 - M5	20	↓		
Primary Crushing and Overland Conveying							
<i>11:23</i>	N/A	Primary Crusher Building (Opacity applies only to the building not wet scrubbers.)	M3	10	N		
<i>↓</i>	072	A3 Stack to Sierrita Coarse Ore Stockpile	P1	20	N		
<i>↓</i>	102	B4 Stack to Sierrita Coarse Ore Stockpile	P1	20	N		
<i>↓</i>	N/A	Coarse Ore Stockpile	P1	20	N		
Fine Ore Crushing, Storage, Handling & Milling							
<i>11:40</i>	N/A	Secondary Crushing Building (Opacity applies only to the building not wet scrubber.)	P1	10	N		
<i>11:00</i>	073	Copper/Molybdenum Concentrate Storage Areas	P2, P6	20	N		
<i>11:00</i>	N/A	Lime Handling Building	P2, P6	20	N		
<i>11:00</i>	N/A	Mill Building	P1, P6	10	N		
<i>10:44</i>	087	Sierrita Tailings Facility	T1, T2, T3	20	N		
Molybdenum Plant							
<i>11:00</i>	119	Rhenium Recovery Operation	P2	20	N		
<i>11:20</i>	118	Molybdenum Leach Plant	P1	20	N		
<i>11:25</i>	118	Solar Drying Pad	P7	20	N		

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (if Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
11:31	N/A	Molybdenum Roaster Building	P1, P7	20	N		
11:31	N/A	Molybdenum Cannery Building	P1	20	N		
Decant Solids and Handling							
11:41	123	Dry Decant Front-end Loader	P3	20	N		
X	123	Dry Decant Feed Hopper	P3	20		Removed From Service	
Miscellaneous and Fugitive Emission Sources							
11:37	076	Organic Storage Tanks SX #1, #2	P4	20	N		
X	076	Organic Storage Tanks SX #3	P4	20			
11:34	078	Gasoline Storage Tanks	P1	20	N		SX-3 has not been put into operation
10:30	105	Twin Buttes Electrowinning Tankhouse	TB1	20	N		
11:00	N/A	Mill Cooling Tower	P6	20	N		
11:00	N/A	Crystal Plant Cooling Tower	P5	20	N		
11:00	N/A	Rhenium Cooling Tower	P2	20	N		
11:40	N/A	Parking Lot Use	M4, P1 - P7, TB1	20	N		
N/A	N/A	Parking Lot Construction	M4, P1 - P7, TB1	20	N/A		
	N/A	Ancillary Roadway Use	M1 - M5, TB2	20	I		
	N/A	Ancillary Roadway Construction, Repair, or Re-Construction	M1 - M5	20	I		
	N/A	Excavation Activities	M1 - M5	20	I		
11:39	N/A	Street sweeping activities	P1 - P7	20	N		

Instructions:

- If you see a plume from a fugitive source that on an instantaneous basis appears to exceed the opacity standard, then if practicable, take a six-minute Method 9 observation of the plume.
- If the six-minute opacity exceeds the opacity standard:
 - Adjust or repair the controls or equipment to reduce opacity to below the opacity standard; AND
 - Report it as an excess emissions
- If the six-minute opacity does not exceed the opacity standard:
 - Record the Location, Date, Time, and results of the Method 9.

Freeport-McMoRan Sierrita Inc. Weekly Fugitive Source Visible Observations (as required by Permit #42862, Condition XIX.B.3.d)

Name of Certified Method 9 Observer: *Robert Long*

Date: *1-21-16*

Signature: *[Signature]*

Time of Observation	Title V ID #	Source Description	Observation Point <small>(See Maps - Fugitive Source Management Plan)</small>	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) <small>(Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason</small>	Description of Corrective Action Taken (if Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
Mine Operations							
<i>10:01</i>	088	Drilling Operations	M3 - M5	20	<i>N</i>		
<i>NA</i>	066	Blasting Operations	M3 - M5	20	<i>NA</i>		
<i>10:01</i>	097	Haul Truck Loading & Dumping	M1 - M5	20	<i>N</i>		
<i>[]</i>	077	Unpaved Roads (Ore Hauling)	M1 - M5, TB2	20	<i>[]</i>		
<i>[]</i>	089	Ammonium Nitrate Storage	M4	20	<i>[]</i>		
<i>[]</i>	N/A	Truck Ore Transport	M1 - M5	20	<i>[]</i>		
Primary Crushing and Overland Conveying							
<i>10:09</i>	N/A	Primary Crusher Building (Opacity applies only to the building not wet scrubbers.)	M3	10	<i>N</i>		
<i>10:07</i>	072	A3 Stackler to Sierrita Course Ore Stockpile	P1	20	<i>N</i>		
<i>10:07</i>	102	B4 Stackler to Sierrita Course Ore Stockpile	P1	20	<i>N</i>		
<i>10:00</i>	N/A	Coarse Ore Stockpile	P1	20	<i>N</i>		
Fine Ore Crushing, Storage, Handling & Milling							
<i>9:56</i>	N/A	Secondary Crushing Building (Opacity applies only to the building not wet scrubber.)	P1	10	<i>N</i>		
<i>10:15</i>	073	Copper/Molybdenum Concentrate Storage Areas	P2, P6	20	<i>N</i>		
<i>9:57</i>	N/A	Lime Handling Building	P2, P6	20	<i>N</i>		
<i>9:45</i>	N/A	Mill Building	P1, P6	10	<i>N</i>		
<i>9:31</i>	087	Sierrita Tailings Facility	T1, T2, T3	20	<i>N</i>		
Molybdenum Plant							
<i>9:57</i>	119	Rhenium Recovery Operation	P2	20	<i>N</i>		
<i>10:15</i>	118	Molybdenum Leach Plant	P1	20	<i>N</i>		
<i>10:15</i>	118	Solar Drying Pad	P7	20	<i>N</i>		

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (If Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
10-13	N/A	Molybdenum Roaster Building	P1, P7	20	N		
10-13	N/A	Molybdenum Cannery Building	P1	20	N		
Decant Solids and Handling							
10-16	123	Dry Decant Front-end Loader	P3	20	N		
X	123	Dry Decant Feed Hopper	P3	20		Removed From Service	
Miscellaneous and Fugitive Emission Sources							
10-24	076	Organic Storage Tanks SX #1, #2	P4	20	N		
X	076	Organic Storage Tanks SX #3	P4	20		SX 3 has not been put into operation	
10-21	078	Gasoline Storage Tanks	P1	20	N		
9-18	105	Twin Buttes Electrowinning Tankhouse	TB1	20	N		
9-50	N/A	Mill Cooling Tower	P6	20	N		
9-47	N/A	Crystal Plant Cooling Tower	P5	20	N		
9-52	N/A	Rhenium Cooling Tower	P2	20	N		
10-17	N/A	Parking Lot Use	M4, P1 - P7, TB1	20	N		
10-17	N/A	Parking Lot Construction	M4, P1 - P7, TB1	20	NA		
10-17	N/A	Ancillary Roadway Use	M1 - M5, TB2	20	L		
10-17	N/A	Ancillary Roadway Construction, Repair, or Re-Construction	M1 - M5	20			
10-17	N/A	Excavation Activities	M1 - M5	20	N		
10-15	N/A	Street sweeping activities	P1 - P7	20	N		

Instructions:

- If you see a plume from a fugitive source that on an instantaneous basis appears to exceed the opacity standard, then if practicable, take a six-minute Method 9 observation of the plume.
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Freeport-McMoRan Sierrita Inc. Weekly Fugitive Source Visible Observations (as required by Permit #42862, Condition XIX.B.3.d)

Name of Certified Method 9 Observer: *[Signature]*

Date: 1-14-16

Signature: *[Signature]*

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (if Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
Mine Operations							
<i>[Handwritten]</i>	088	Drilling Operations	M3 - M5	20	N		
<i>[Handwritten]</i>	066	Blasting Operations	M3 - M5	20	N		
<i>[Handwritten]</i>	097	Haul Truck Loading & Dumping	M1 - M5	20	N		
<i>[Handwritten]</i>	077	Unpaved Roads (Ore Hauling)	M1 - M5, TB2	20	N		
<i>[Handwritten]</i>	089	Ammonium Nitrate Storage	M4	20	N		
<i>[Handwritten]</i>	N/A	Truck Ore Transport	M1 - M5	20	N		
Primary Crushing and Overland Conveying							
<i>[Handwritten]</i>	N/A	Primary Crusher Building (Opacity applies only to the building not wet scrubbers.)	M3	10	N		
<i>[Handwritten]</i>	072	A3 Stocker to Sierrita Coarse Ore Stockpile	P1	20	N		
<i>[Handwritten]</i>	102	B4 Stocker to Sierrita Coarse Ore Stockpile	P1	20	N		
<i>[Handwritten]</i>	N/A	Coarse Ore Stockpile	P1	20	N		
Fine Ore Crushing, Storage, Handling & Milling							
<i>[Handwritten]</i>	N/A	Secondary Crushing Building (Opacity applies only to the building not wet scrubber.)	P1	10	N		
<i>[Handwritten]</i>	073	Copper/Molybdenum Concentrate Storage Areas	P2, P6	20	N		
<i>[Handwritten]</i>	N/A	Lime Handling Building	P2, P6	20	N		
<i>[Handwritten]</i>	N/A	Mill Building	P1, P6	10	N		
<i>[Handwritten]</i>	087	Sierrita Tailings Facility	T1, T2, T3	20	N		
Molybdenum Plant							
<i>[Handwritten]</i>	119	Rhenium Recovery Operation	P2	20	N		
<i>[Handwritten]</i>	118	Molybdenum Leach Plant	P1	20	N		
<i>[Handwritten]</i>	118	Solar Drying Pad	P7	20	N		

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (If Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
12:51	N/A	Molybdenum Roaster Building	P1, P7	20	N		
12:54	N/A	Molybdenum Cannery Building	P1	20	N		
Decant Solids and Handling							
12:54	123	Dry Decant Front-end Loader	P3	20	N		
X	123	Dry Decant Feed Hopper	P3	20		Removed From Service	
Miscellaneous and Fugitive Emission Sources							
12:10	076	Organic Storage Tanks SX #1, #2	P4	20	N		
X	076	Organic Storage Tanks SX #3	P4	20		SX.3 has not been put into operation	
13:07	078	Gasoline Storage Tanks	P1	20	N		
11:54	105	Twin Buttes Electrowinning Tankhouse	TB1	20	N		
12:20	N/A	Mill Cooling Tower	P6	20	N		
12:23	N/A	Crystal Plant Cooling Tower	P5	20	N		
12:31	N/A	Rhenium Cooling Tower	P2	20	N		
13:01	N/A	Parking Lot Use	M4, P1 - P7, TB1	20	N		
N/A	N/A	Parking Lot Construction	M4, P1 - P7, TB1	20	N/A		
	N/A	Ancillary Roadway Use	M1 - M5, TB2	20			
	N/A	Ancillary Roadway Construction, Repair, or Re-Construction	M1 - M5	20			
	N/A	Excavation Activities	M1 - M5	20			
	N/A	Street sweeping activities	P1 - P7	20			

Instructions:

- If you see a plume from a fugitive source that on an instantaneous basis appears to exceed the opacity standard, then if practicable, take a six-minute Method 9 observation of the plume.
- If the six-minute opacity exceeds the opacity standard:
 - Adjust or repair the controls or equipment to reduce opacity to below the opacity standard; AND
 - Report it as an excess emissions
- If the six-minute opacity does not exceed the opacity standard:
 - Record the Location, Date, Time, and results of the Method 9.

Freeport-McMoRan Sierrita Inc. Weekly Fugitive Source Visible Observations (as required by Permit #42862, Condition XIX.B.3.d)

Name of Certified Method 9 Observer: Melissa Himebaugh
 Signature: Melissa Himebaugh

Date: 1-6-16

Time of Observation	Title V ID #	Source Description	Observation Point <small>(See Maps - Fugitive Source Management Plan)</small>	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) IF Yes, then next column	Results of the Method 9 Observation, if required (%) <small>(Attach Method 9 Observation Form to this Report) IF Method 9 reading not practicable, note reason</small>	Description of Corrective Action Taken (if Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
Mine Operations							
1033	088	Drilling Operations	M3 - M5	20	N		
N/A	066	Blasting Operations	M3 - M5	20	Not observed		
1034	097	Haul Truck Loading & Dumping	M1 - M5	20	N		
1034	077	Unpaved Roads (Ore Hauling)	M1 - M5, TB2	20	N		
1011	089	Ammonium Nitrate Storage	M4	20	N		
1035	N/A	Truck Ore Transport	M1 - M5	20	N		
Primary Crushing and Overland Conveying							
1034	N/A	Primary Crusher Building (Opacity applies only to the building not wet scrubbers.)	M3	10	N		
1053	072	A3 Stackler to Sierrita Coarse Ore Stockpile	P1	20	N		
↓	102	B4 Stackler to Sierrita Coarse Ore Stockpile	P1	20	N		
	N/A	Coarse Ore Stockpile	P1	20	N		
Fine Ore Crushing, Storage, Handling & Milling							
1056	N/A	Secondary Crushing Building (Opacity applies only to the building not wet scrubber.)	P1	10	N		
1347	073	Copper/Molybdenum Concentrate Storage Areas	P2, P6	20	N		
1405	N/A	Lime Handling Building	P2, P6	20	N		
1347	N/A	Mill Building	P1, P6	10	N		
0915	087	Sierrita Tailings Facility	T1, T2, T3	20	N		
Molybdenum Plant							
1347	119	Rhenium Recovery Operation	P2	20	N		
↓	118	Molybdenum Leach Plant	P1	20	N		
	118	Solar Drying Pad	P7	20	N		

Time of Observation	Title V ID #	Source Description	Observation Point (See Maps - Fugitive Source Management Plan)	Permitted Opacity (%)	Survey indicates Method 9 Observation is required (Y or N). (During survey there was plume that exceeded the baseline opacity standard) If Yes, then next column	Results of the Method 9 Observation, if required (%) (Attach Method 9 Observation Form to this Report) If Method 9 reading not practicable, note reason	Description of Corrective Action Taken (if Method 9 exceeds baseline level but is less than opacity standard, adjust or repair controls or equipment, to reduce opacity to or below baseline level. If Method 9 exceeds baseline and opacity standard, adjust or repair controls or equipment to reduce opacity to or below baseline level and complete excess emissions report.)
1341	N/A	Molybdenum Roaster Building	P1, P7	20	N		
1344	N/A	Molybdenum Cannery Building	P1	20	N		
Decant Solids and Handling							
1347	123	Dry Decant Front-end Loader	P3	20	N		
X	123	Dry Decant Feed Hopper	P3	20		Removed From Service	
Miscellaneous and Fugitive Emission Sources							
0943	076	Organic Storage Tanks SX #1, #2	P4	20	N		
X	076	Organic Storage Tanks SX #3	P4	20		SX 3 has not been put into operation	
1323	078	Gasoline Storage Tanks	P1	20	N		
0945	105	Twin Buttes Electrowinning Tankhouse	TB1	20	N		
	N/A	Mill Cooling Tower	P6	20			
1322	N/A	Crystal Plant Cooling Tower	P5	20	N		
	N/A	Rhenium Cooling Tower	P2	20			
1350	N/A	Parking Lot Use	M4, P1 - P7, TB1	20	N		
N/A	N/A	Parking Lot Construction	M4, P1 - P7, TB1	20	N/A		
1302	N/A	Ancillary Roadway Use	M1 - M5, TB2	20	N		
N/A	N/A	Ancillary Roadway Construction, Repair, or Re-Construction	M1 - M5	20	No activity observed		
1045	N/A	Excavation Activities	M1 - M5	20	N		
N/A	N/A	Street sweeping activities	P1 - P7	20	No activity observed		

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