Buckskin Mining Company

12/02/2012

Ambient Air Exceedance Documentation

12/02/2012

AIR QUALITY ALERT MESSAGE
NATIONAL WEATHER SERVICE RAPID CITY SD
325 AM MST SUN DEC 2 2012

...BLOWING DUST HEALTH ALERT IN EFFECT FOR THE ENTIRE POWDER RIVER BASIN OF NORTHEASTERN WYOMING FROM 1000 AM MST THIS MORNING UNTIL 800 PM MST THIS EVENING...

SOUTHWESTERLY WINDS WILL INCREASE THIS MORNING ACROSS CAMPBELL COUNTY. SUSTAINED WINDS OF 25 TO 35 MPH...WITH GUSTS TO NEAR 50 MPH...ARE EXPECTED FROM LATE THIS MORNING THROUGH EARLY THIS EVENING.

THE WYOMING AIR QUALITY DIVISION RECOMMENDS THE ELDERLY...YOUNG CHILDREN...AND INDIVIDUALS WITH RESPIRATORY PROBLEMS AVOID EXCESSIVE
PHYSICAL EXERTION AND MINIMIZE OUTDOOR ACTIVITIES DURING THIS TIME. ALTHOUGH THESE PEOPLE ARE MOST SUSCEPTIBLE TO HEALTH IMPACTS...THE AIR QUALITY DIVISION ALSO ADVISES THAT EVERYONE SHOULD AVOID PROLONGED EXPOSURE TO THE POOR AIR QUALITY CONDITIONS.

--
Tanner B. Shatto
District 3 Engineer
Wyoming Department of Environmental Quality
Air Quality Division
Direct: (307)675-5626
Office: (307)673-9337
Fax: (307)672-2213
tanner.shatto@wyo.gov

12/11/2012

Landon.Smith

From:	Landon.Smith
Sent:	Tuesday, December 11, 2012 11:34 AM
To:	Tanner Shatto (Tanner.Shatto@wyo.gov)
Cc:	Kirk Billings (kirk.billings@wyo.gov); Greg Passini (Greg.Passini@kiewit.com); Rick.Comer; Matt.Young; Conan.Mullaney
Subject:	Buckskin Mine December 2, 2012 PM 10 Exceedance

Tracking:

Recipient	Read
Tanner Shatto (Tanner.Shatto@wyo.gov)	
Kirk Billings (kirk.billings@wyo.gov)	
Greg Passini (Greg.Passini@kiewit.com)	
Rick.Comer	Read: 12/11/2012 12:06 PM
Matt.Young	Read: 12/11/2012 1:59 PM
Conan.Mullaney	Read: 12/11/2012 11:34 AM

Mr. Shatto,

On December, 2nd 2012 Buckskin Mine exceeded the 24 hour particulate matter (PM10) concentration on the North TEOM. Preliminary data shows a concentration of 167.8 µg/m^3 for the before listed date. Buckskin is requesting that this data be flagged due to exceptionally high winds that day. Buckskin is currently gathering data, and will send a report in a timely manner.

If you have any questions please do not hesitate to contact myself or Greg Passini (Greg.Passini@Kiewit.com).

Thank you

Landon A. Smith
Environmental Coordinator

BUCKSKIN MINING COMPANY
PO Box 3027, Gillette, WY 82716
Office: (307) 686-5404
Fax: (307)-686-5445

Kiewit

12/21/2012

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

December 21, 2012

Cara Keslar
Wyoming Department of Environmental Quality
Air Quality Division
112 West 25th Street
Cheyenne, WY 82002

RE: Request for use of Natural Events Action Plan (NEAP) for variance on Air Quality Exceedance due to Natural High Wind and Blowing Dust Event on 12-02-2012.
Buckskin Mine, Air Quality Permit #MD-11186

Dear Cara,

On December 2, 2012 the Buckskin Mine experienced an exceedance of allowable particulate concentrations on our North TEOM. With the attached documentation, Buckskin is requesting this event to be flagged due to a natural high wind event that was widespread throughout northeastern Wyoming. Buckskin's TEOM's were being impacted from the regional area as well as from mining operations.

Throughout the 24hr period, as the attached documentation indicates, wind gusts peaked at 63.3 mph and were coupled with sustained winds as high as 41.6 mph. In those situations, very little can be done to control dust levels in the air. In this particular situation, alterations in production were made in accordance with the NEAP for Coal Mines in the Powder River Basin (*3.4.3 Category 3: Reactionary Control Measures*). Along with (*3.4.2 Category 2: Additional Best Control Measures*) that will be discussed further in the attached data. However, even if the mine had completely shut down operations, the dust levels would still have been over allowable limits.

Buckskin is hereby requesting this exceedance be flagged as an exceptional event.

If there are any questions, please do not hesitate to contact me

Sincerely,

Landon Smith

Landon Smith
Environmental Coordinator
Landon.Smith@Kiewit.com
Phone: (307) 686-5404

cc: Greg Passini, Tanner Shatto, Kirk Billings

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Natural Event Summary

Buckskin Mining Company underwent a high wind event on December 2, 2012. Sustained winds were as high as 41mph for the 24 hour period with gusts up to 63.3 mph. This event resulted in an exceedance of the 24 hour air particulate concentration of Buckskin's north TEOM. Data from the north TEOM shows the major contributor to exceeding the 24 hour standard was the hourly concentrations recorded from 11:00 AM until 3:00 PM. The average concentration during this period was 699.26 $\mu g/m^3$. The high concentration for the day was also reached during this period with a concentration of 980.8 $\mu g/m^3$. Wind speed coincided with the before listed concentrations and time frame with an average wind speed of 39.37 mph and a high gust of 63.3 mph coming from an average azimuth of 200 degrees. Operations were notified at 8:47 AM that strong winds were possible that day, and to take precautions according to our TEOM action plan.

Discussion

Meteorological Information

On December 2, the average wind speed for the 24 hour period was 25.74 mph, with gusts recorded up to 63.3 mph out of the south. Highest wind speeds were recorded between the hours of 10:00 AM and 3:00 PM, averaging 39.37 mph. The highest gust was also recorded during this same time at 63.3 mph. Five year historic data provided by the North TEOM's MET station reports an average wind speed of 10.87 mph. This information supports that Buckskin's exceedance was the result of exceptionally high winds on December 2, 2012. For additional information please see attached tables and charts at the back of this document.

PM_{10} Monitoring Equipment

Buckskin Mining Company has implemented a real time continuous data monitoring system called the North and the West TEOMS, based on their geographical placement at the mine. Along with ambient air monitoring, a weather station was placed by the North TEOM and provides real time wind speed, wind direction, temperature humidity, and solar radiation. With this data, a TEOM Action Plan was created and implemented. Whenever a benchmark is reached at the TEOM, an email notification is sent to the superintendents, engineers, mine manager and our TEOM consultant IML. With these notifications, a suitable response is enacted that could involve running more water trucks, lowering backfills, or shutting down production.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

North TEOM (Downwind) and West TEOM (Upwind)

On December 2, the downwind North TEOM Monitoring location recorded a peak in hourly concentration at 11:00 AM of 980.8 $\mu g/m^3$ at which time concentration levels began to fall gradually, until the final 24 hour concentration level was reached at 170 $\mu g/m^3$. The Upwind West TEOM showed the same response in terms of times of increased concentration in response to the winds. Its concentration peaked at 10:00 AM with a reading of 130.5 $\mu g/m^3$ and gradually decreased to a final 24 hour concentration of 25.3 $\mu g/m^3$.

Operations Reactionary Control Measures

BMC has instated a TEOM Action Plan that provides structure for temporary alteration of mining activities during periods of high concentrations. On December 2, 2012 a high wind alert was sent from the TEOM at 10:00 am, followed by a High 1 hour concentration at 10:00 am. Prior to these alerts, a 'Blowing dust health alert' email was sent to the pit superintendents at 8:47am cautioning that high winds were in the forecast for the day. As such, superintendents referred to *3.4.3 category 3* of the Natural Events Action Plan for the Coal Mines of the Powder River Basin and moved all backfill operations to the lowest bench, backfill 3, and assigned a 30,000gal water truck to that run. Concentrations at this time, 8:00am-9:41am were still at an acceptable concentration level of 27.7 and 34.7 $\mu g/m^3$ respectively. At 9:42am the highest wind gust was recorded at 63.3 mph which elevated the hourly concentration to 878 $\mu g/m^3$. At this time, BMC's action plan advises to use any means to control dust. An additional 20,000 gal water truck was added. BMC usually begins lunches at 11:00am. With the conditions as they were, 30min lunches were scheduled to begin at 10:30am and last through 1:00pm. The highest concentration levels were recorded from 10:00am – 2:00am, the time at which operations lunches were taking place and production was at a minimum. BMC's action plan requires that dust levels in the pit be monitored. Superintendents documented that dust levels stemming from operations in the pit were being suppressed by the 2 water trucks, short hauls and lower backfills, and without the exceptionally high winds, Buckskin would have remained under the 150 $\mu g/m^3$ limit. Pictures in the back of this packet can provide visual reference.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Timeline of the Event

05:30- Day Shift Begins
08:47- Blowing Dust Health Alert Advisory from AQD sent to pit superintendents
Superintendents moved to one low backfill, backfill 3
Assigned a 30,000gal water truck to BF3 Run-operated for the rest of shift
09:42- Highest Recorded Wind Gust: 63.3mph
20,000gal water truck added-operated for the rest of shift
10:00- High Wind Alert from TEOM sent to appropriate BMC Staff.
High Concentration Alert from TEOM 878.8 $\mu g/m^3$
10:30- Early Lunches Started
11:00- Highest Concentration Recorded 980.8 $\mu g/m^3$ during the time of limited production
14:00- Last 1 hour Concentration level over 150 $\mu g/m^3$
24 hour concentration level alert sent from TEOM at 153 $\mu g/m^3$
15:00- 1 hour Concentration Levels below 150 $\mu g/m^3$ limit at 114.7 $\mu g/m^3$

Photos of the Event

Contained at the back of this documentation.

Best Available Control Measures

- Areas where topsoil has been replaced are ripped and seeded as soon as its practical after topsoil replacement
- During the operation of topsoil stripping, the active operation is frequently watered to reduce dust emissions.
- At the time of the event, all topsoil operations were complete, and windrows were constructed
- Buckskin has no final graded backfill larger than 300 contiguous acres
- Long term out-of-pit overburden and topsoil piles are seeded.
- Pads in front of truck dumps are cleaned, treated, and maintained to prevent material that accumulates on the pads due to spillage from being pulverized and a potential source of fugitive dust.
- When possible, Buckskin schedules topsoil removal, grading backfill, and topsoil replacement concurrently to minimize open areas
- Topsoil Contractors, and Scoria Contractors are required to apply water around their work area.
- All of Buckskin's permanent roads and areas around facilities are treated with magnesium chloride annually to prevent dust.

- Buckskin's operational areas are watered continually by water trucks ranging from 20,000 to 30,000 gallons.
- As a preventative measure, Buckskin ensures that nearby Collins Road and McGee Road also receive magnesium chloride treatment.
- Stilling sheds, bag houses, and passive enclosure control systems are used in plant operations.

Historical Data for the TEOM Sites

On electronic file with the WDEQ in the quarterly monitoring reports. This information can be provided upon request by other means as well.

General Data from the Event

Contained at the back of this documentation in the form of tables and graphs.

News Accounts of the Event

From: Tanner B. Shatto
District 3 Engineer
Wyoming Department of Environmental Quality

AIR QUALITY ALERT MESSAGE
NATIONAL WEATHER SERVICE RAPID CITY SD
325 AM MST SUN DEC 2 2012

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BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-01-2012

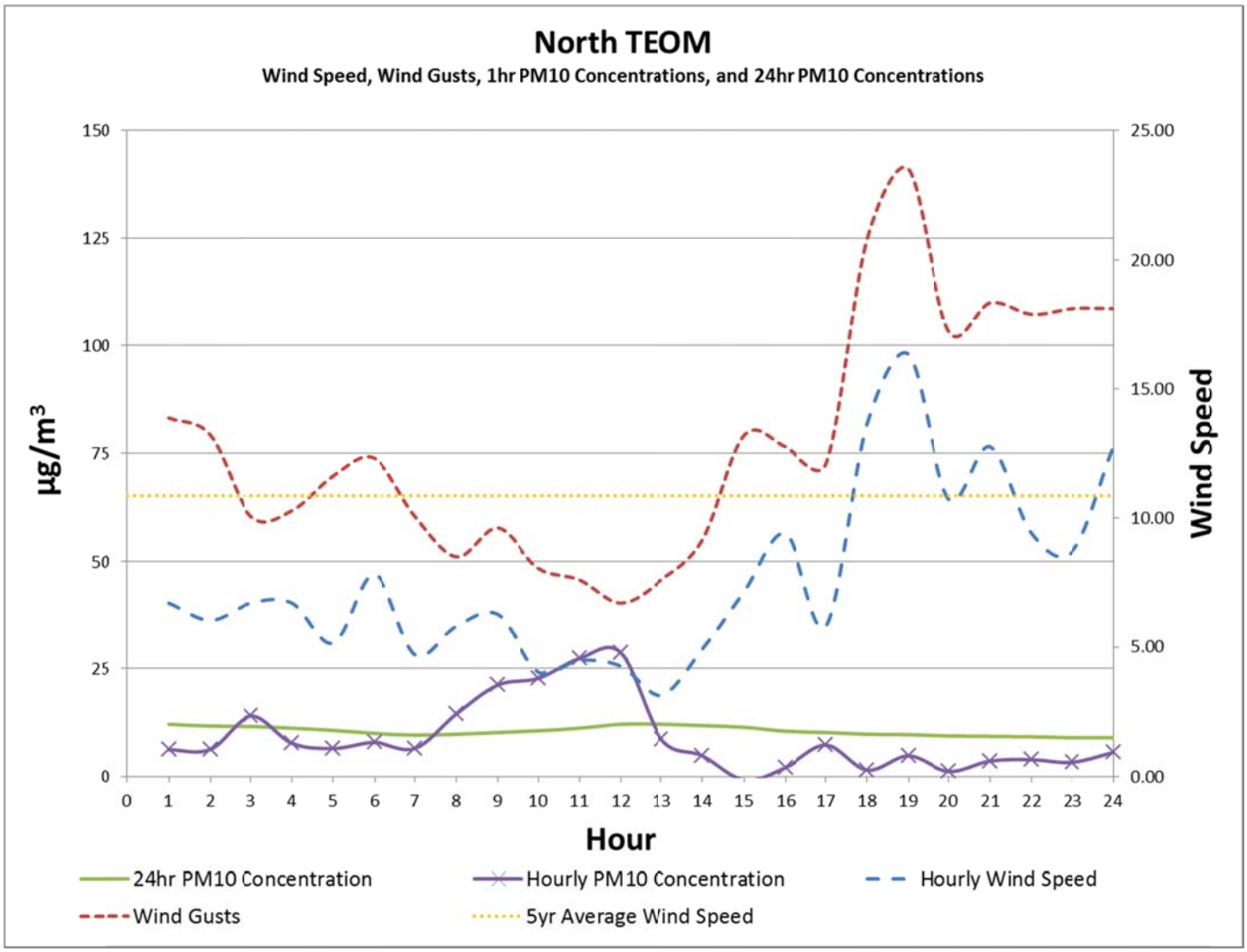
Table 1										
North TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
1-Dec-12										
12:00 AM	3	6.71	200	0	6.2	13.9	11:05 PM	6.2	5.6	12.1
01:00 AM	2.7	6.04	179	0	5.9	13.2	12:15 AM	6.3	5.7	11.7
02:00 AM	3	6.71	183	0	4.5	10.1	01:32 AM	14	12.7	11.6
03:00 AM	3	6.71	209	0	4.6	10.3	02:42 AM	7.7	6.9	11.2
04:00 AM	2.3	5.14	233	0	5.2	11.6	03:57 AM	6.5	5.9	10.7
05:00 AM	3.5	7.83	350	0	5.5	12.3	04:53 AM	7.9	7.2	10
06:00 AM	2.1	4.70	166	0	4.5	10.1	05:00 AM	6.5	6	9.6
07:00 AM	2.6	5.82	163	0	3.8	8.5	06:36 AM	14.5	13.4	9.8
08:00 AM	2.8	6.26	167	0	4.3	9.6	07:53 AM	21.2	19.4	10.2
09:00 AM	1.8	4.03	150	0	3.6	8.1	08:34 AM	22.7	20.7	10.6
10:00 AM	2	4.47	162	0	3.4	7.6	09:48 AM	27.3	24.9	11.2
11:00 AM	1.9	4.25	177	0	3	6.7	10:14 AM	28.6	25.6	12.1
12:00 PM	1.4	3.13	182	0	3.4	7.6	11:36 AM	8.7	7.7	12.1
01:00 PM	2.2	4.92	265	0	4.1	9.2	12:12 PM	4.8	4.2	11.8
02:00 PM	3.2	7.16	268	0	5.9	13.2	01:50 PM	-0.8	-0.7	11.4
03:00 PM	4.2	9.40	235	0	5.7	12.8	02:21 PM	2.1	1.9	10.5
04:00 PM	2.6	5.82	245	0	5.4	12.1	03:00 PM	7.3	6.5	10.2
05:00 PM	6.1	13.65	230	0	9.3	20.8	04:30 PM	1.5	1.4	9.8
06:00 PM	7.3	16.33	227	0	10.5	23.5	05:08 PM	4.8	4.3	9.7
07:00 PM	4.8	10.74	200	0	7.7	17.2	06:15 PM	1.2	1.1	9.4
08:00 PM	5.7	12.75	203	0	8.2	18.3	07:15 PM	3.6	3.3	9.3
09:00 PM	4.2	9.40	202	0	8	17.9	08:27 PM	3.9	3.5	9.2
10:00 PM	3.9	8.72	199	0	8.1	18.1	09:45 PM	3.3	3	9
11:00 PM	5.7	12.75	205	0	8.1	18.1	10:38 PM	5.6	5.1	9
5yr Wind Speed Average		10.87								

Table 1: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the North TEOM on December 1, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-01-2012



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM

12-02-2012 HIGH WIND EVENT

Table 2										
North TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
2-Dec-12										
12:00 AM	4.2	9.40	161	0	6.5	14.5	11:17 PM	9.5	8.6	9.1
01:00 AM	4.3	9.62	171	0	6.4	14.3	12:24 AM	9.9	9	9.3
02:00 AM	3.7	8.28	173	0	6.5	14.5	01:01 AM	9.2	8.4	9
03:00 AM	4.6	10.29	192	0	7.7	17.2	02:45 AM	4.8	4.3	8.9
04:00 AM	4.5	10.07	180	0	7.5	16.8	03:17 AM	3.9	3.6	8.8
05:00 AM	4.1	9.17	158	0	7.8	17.4	04:30 AM	8.6	7.9	8.8
06:00 AM	7.3	16.33	181	0	9.8	21.9	05:26 AM	11.6	10.5	9.1
07:00 AM	7.7	17.22	173	0	11.5	25.7	06:56 AM	8.3	7.4	8.9
08:00 AM	7.8	17.45	156	0	12.4	27.7	07:06 AM	13.5	12.1	8.5
09:00 AM	9.3	20.80	176	0	15.5	34.7	08:40 AM	30.6	27.2	8.9
10:00 AM	17.1	38.25	194	0	28.3	63.3	09:42 AM	878.8	776.1	44.4
11:00 AM	18.6	41.61	186	0	26.1	58.4	10:14 AM	980.8	861.6	84.3
12:00 PM	17.5	39.15	188	0	25.7	57.5	11:53 AM	768.7	670.5	116.6
01:00 PM	18.1	40.49	190	0	26.1	58.4	12:01 PM	677.3	589.3	144.9
02:00 PM	16.7	37.36	189	0	24.5	54.8	01:00 PM	190.7	165.7	153
03:00 PM	13.7	30.65	191	0	21.3	47.6	02:43 PM	114.7	99.5	158
04:00 PM	13.4	29.97	192	0	20.4	45.6	03:59 PM	95.2	82.5	161.9
05:00 PM	14.4	32.21	197	0	20.5	45.9	04:02 PM	90.8	78.8	165.4
06:00 PM	15.4	34.45	201	0	21.4	47.9	05:42 PM	62.5	54.4	167.5
07:00 PM	15.3	34.23	203	0	20.8	46.5	06:06 PM	31.7	27.6	168.8
08:00 PM	15.6	34.90	207	0	21.3	47.6	07:46 PM	29.4	25.6	169.6
09:00 PM	15	33.55	208	0	21.3	47.6	08:59 PM	21.7	18.9	169.9
10:00 PM	14.6	32.66	217	0	20.8	46.5	09:14 PM	20.8	18.2	170.3
11:00 PM	13.3	29.75	246	0	22.7	50.8	10:57 PM	35.4	31.2	170
5yr Wind Speed Average		10.87			average	39.52				

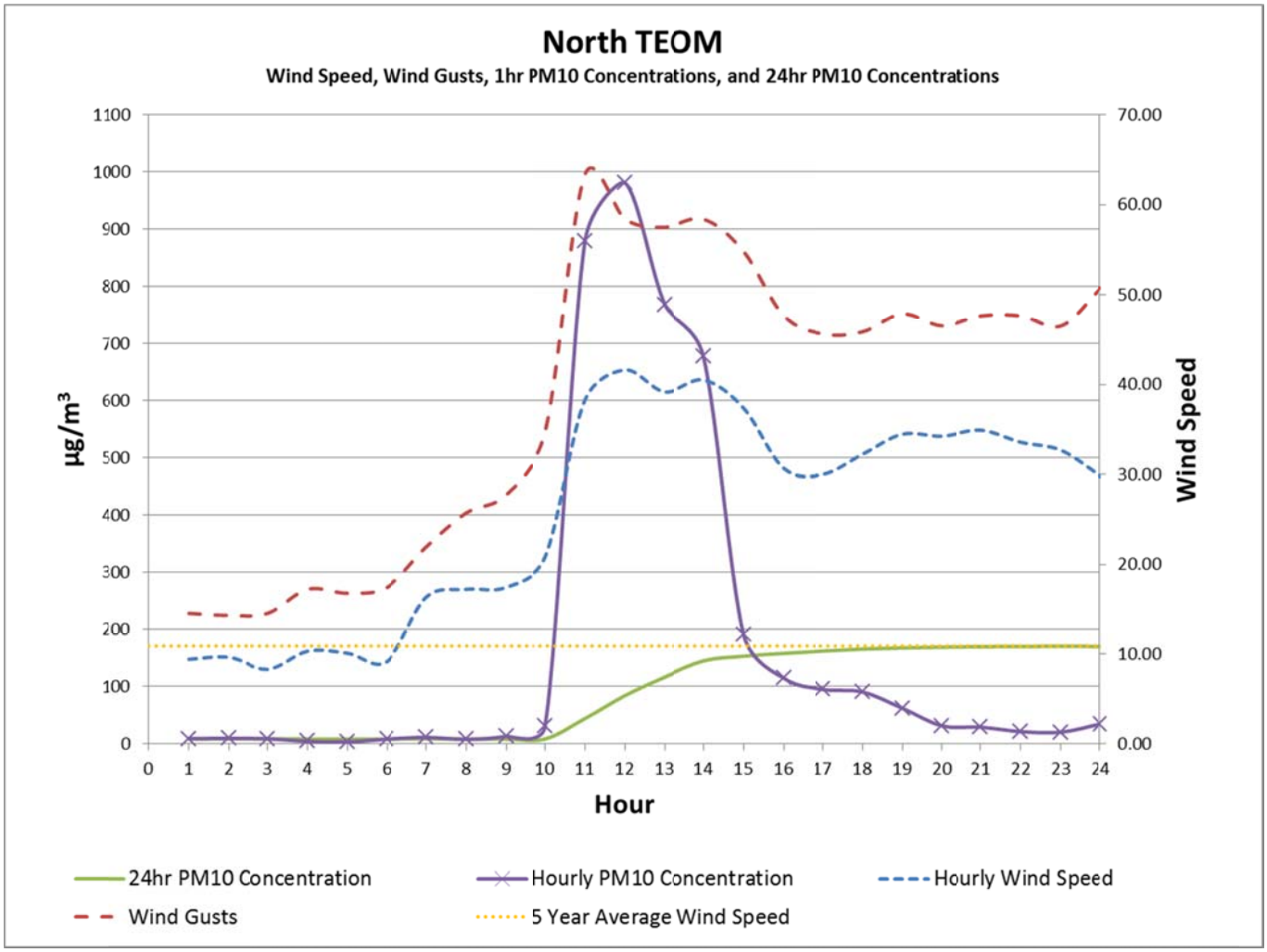
Table 2: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the North TEOM on December 2, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM

12-02-2012 HIGH WIND EVENT



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM

12-01-2012

Table 3										
West TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
1-Dec-12										
12:00 AM	3	6.71	200	0	6.2	13.9	11:05 PM	6	5.3	9.2
01:00 AM	2.7	6.04	179	0	5.9	13.2	12:15 AM	5.4	4.8	9.2
02:00 AM	3	6.71	183	0	4.5	10.1	01:32 AM	7.8	7	9.2
03:00 AM	3	6.71	209	0	4.6	10.3	02:42 AM	7.5	6.7	9
04:00 AM	2.3	5.14	233	0	5.2	11.6	03:57 AM	7.2	6.4	9
05:00 AM	3.5	7.83	350	0	5.5	12.3	04:53 AM	7.5	6.8	8.9
06:00 AM	2.1	4.70	166	0	4.5	10.1	05:00 AM	5.3	4.8	8.4
07:00 AM	2.6	5.82	163	0	3.8	8.5	06:36 AM	6.5	6	8.1
08:00 AM	2.8	6.26	167	0	4.3	9.6	07:53 AM	8.1	7.3	8
09:00 AM	1.8	4.03	150	0	3.6	8.1	08:34 AM	7	6.3	7.9
10:00 AM	2	4.47	162	0	3.4	7.6	09:48 AM	7.9	7.1	7.8
11:00 AM	1.9	4.25	177	0	3	6.7	10:14 AM	6	5.3	7.9
12:00 PM	1.4	3.13	182	0	3.4	7.6	11:36 AM	2.8	2.4	7.6
01:00 PM	2.2	4.92	265	0	4.1	9.2	12:12 PM	2.6	2.3	7.3
02:00 PM	3.2	7.16	268	0	5.9	13.2	01:50 PM	3.2	2.8	7.1
03:00 PM	4.2	9.40	235	0	5.7	12.8	02:21 PM	3.5	3	6.9
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05:00 PM	6.1	13.65	230	0	9.3	20.8	04:30 PM	3.2	2.8	6.2
06:00 PM	7.3	16.33	227	0	10.5	23.5	05:08 PM	4.3	3.8	6
07:00 PM	4.8	10.74	200	0	7.7	17.2	06:15 PM	4.1	3.7	5.9
08:00 PM	5.7	12.75	203	0	8.2	18.3	07:15 PM	3.6	3.3	5.7
09:00 PM	4.2	9.40	202	0	8	17.9	08:27 PM	4.6	4.1	5.5
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5yr Wind Speed Average		10.87								

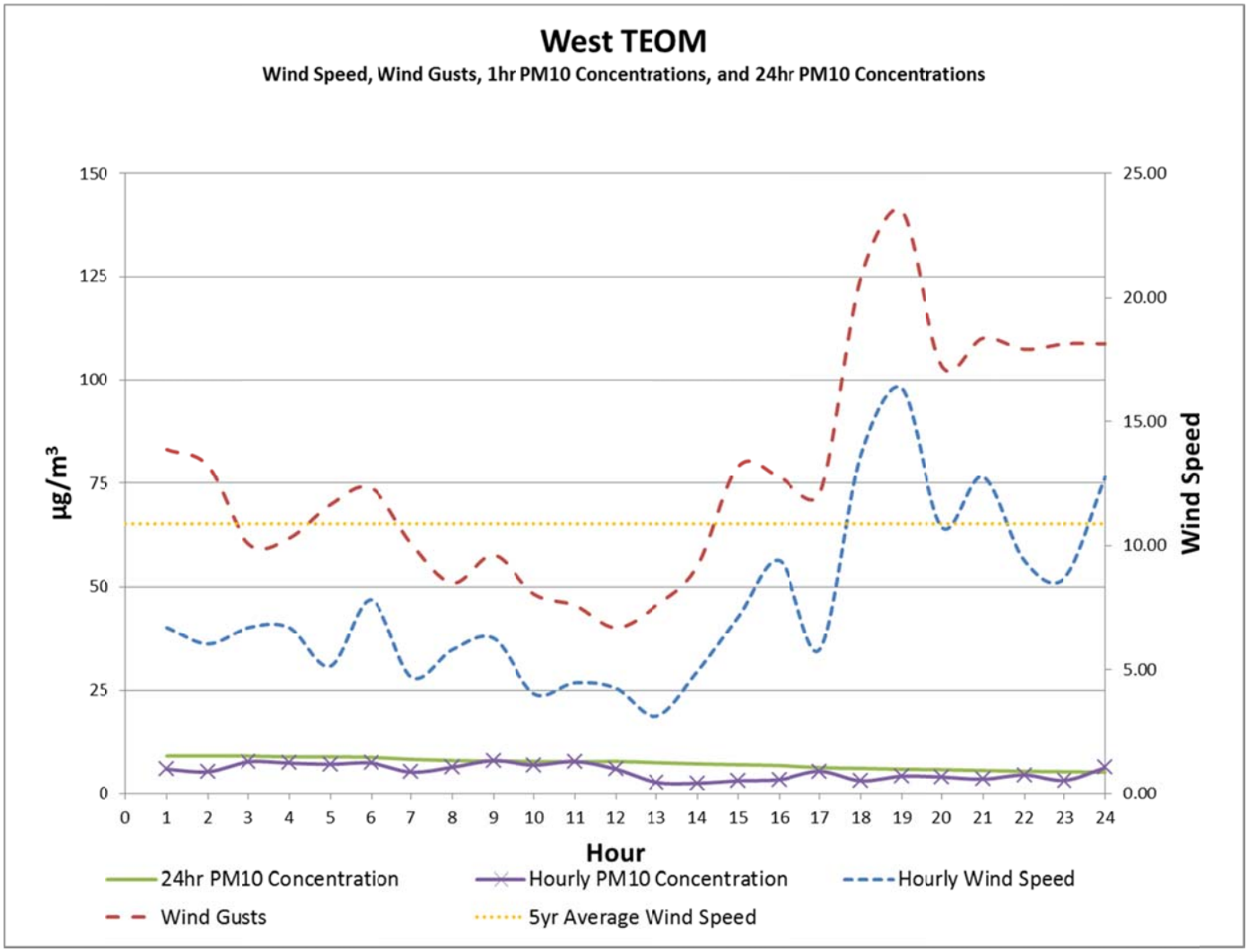
Table 3: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the West TEOM on December 1, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM

12-1-2012



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM

12-2-2012 HIGH WIND EVENT

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02:00 AM	3.7	8.28	173	0	6.5	14.5	01:01 AM	5.4	4.8	5.3
03:00 AM	4.6	10.29	192	0	7.7	17.2	02:45 AM	3.3	2.9	5.1
04:00 AM	4.5	10.07	180	0	7.5	16.8	03:17 AM	3.4	3.1	4.9
05:00 AM	4.1	9.17	158	0	7.8	17.4	04:30 AM	4.6	4.1	4.8
06:00 AM	7.3	16.33	181	0	9.8	21.9	05:26 AM	5.2	4.7	4.8
07:00 AM	7.7	17.22	173	0	11.5	25.7	06:56 AM	4.3	3.8	4.7
08:00 AM	7.8	17.45	156	0	12.4	27.7	07:06 AM	6.3	5.6	4.7
09:00 AM	9.3	20.80	176	0	15.5	34.7	08:40 AM	8.6	7.5	4.8
10:00 AM	17.1	38.25	194	0	28.3	63.3	09:42 AM	130.5	114.1	9.9
11:00 AM	18.6	41.61	186	0	26.1	58.4	10:14 AM	41.8	36.3	11.4
12:00 PM	17.5	39.15	188	0	25.7	57.5	11:53 AM	57.3	49.5	13.8
01:00 PM	18.1	40.49	190	0	26.1	58.4	12:01 PM	58.4	50.4	16.1
02:00 PM	16.7	37.36	189	0	24.5	54.8	01:00 PM	32.3	27.8	17.4
03:00 PM	13.7	30.65	191	0	21.3	47.6	02:43 PM	37.7	32.4	18.8
04:00 PM	13.4	29.97	192	0	20.4	45.6	03:59 PM	35.1	30.1	20.1
05:00 PM	14.4	32.21	197	0	20.5	45.9	04:02 PM	26.1	22.5	21
06:00 PM	15.4	34.45	201	0	21.4	47.9	05:42 PM	27.6	23.8	21.9
07:00 PM	15.3	34.23	203	0	20.8	46.5	06:06 PM	25.5	22	22.8
08:00 PM	15.6	34.90	207	0	21.3	47.6	07:46 PM	25.5	22.1	23.7
09:00 PM	15	33.55	208	0	21.3	47.6	08:59 PM	19.6	17	24.2
10:00 PM	14.6	32.66	217	0	20.8	46.5	09:14 PM	17.5	15.2	24.8
11:00 PM	13.3	29.75	246	0	22.7	50.8	10:57 PM	22.7	19.8	25.3
5yr wind speed average		10.87			average	39.52				

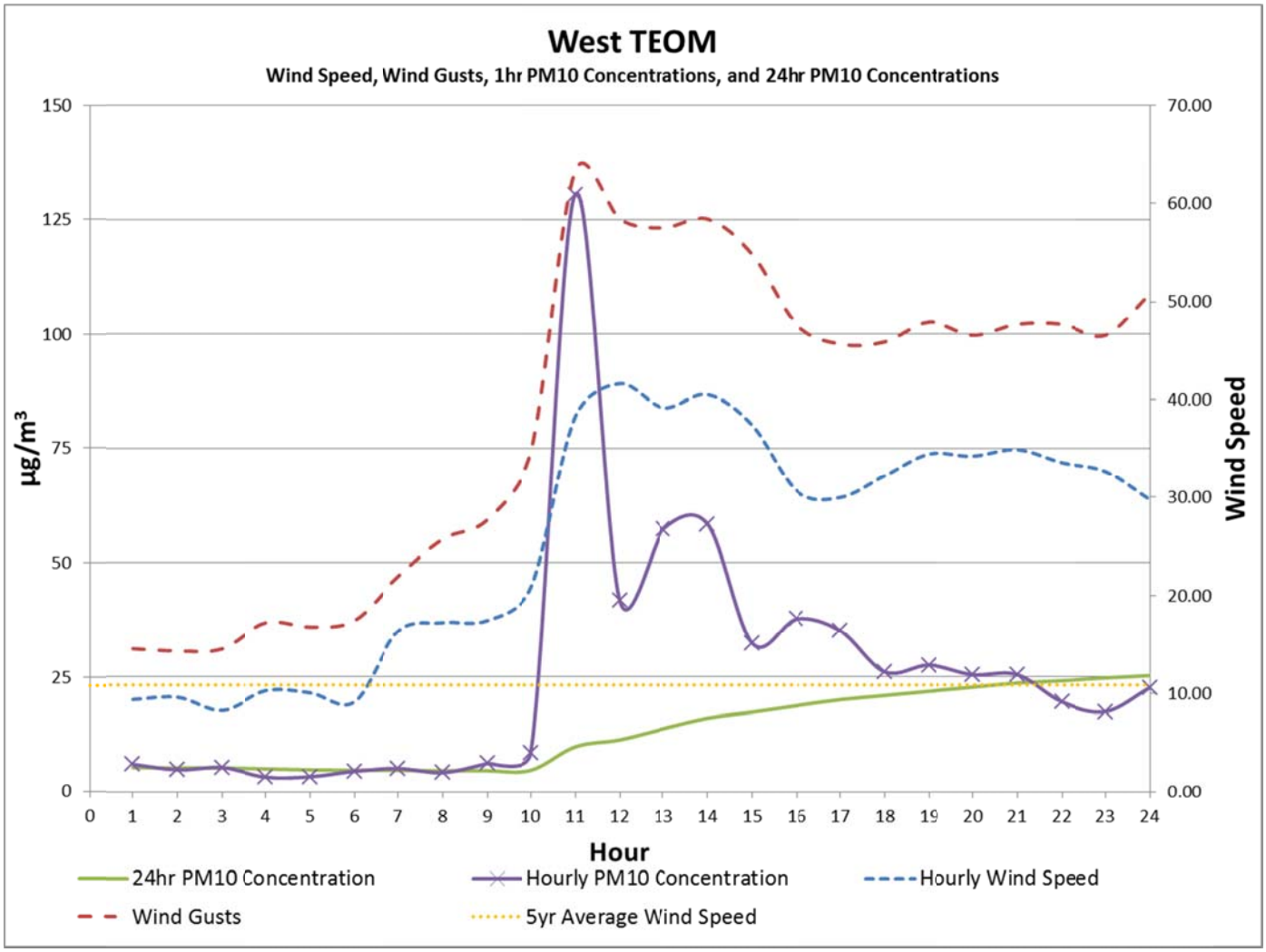
Table 4: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the West TEOM on December 2, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM

12-2-2012 HIGH WIND EVENT



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Pictures of the Event

Main Pit Looking South East

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Main Pit Looking East

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Water Truck on the Backfill 3 Run

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Main Pit Looking South West

BUCKSKIN MINING COMPANY

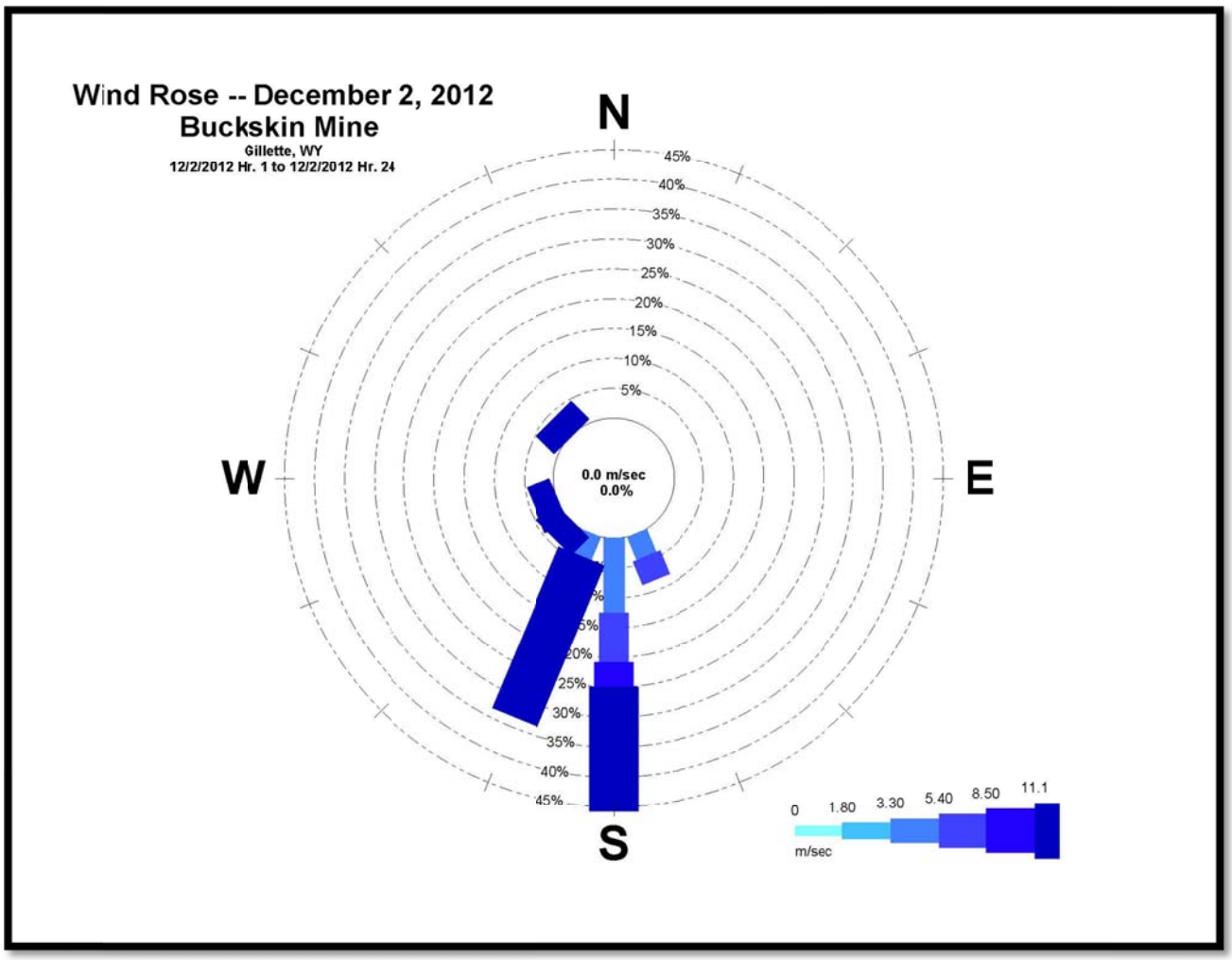
BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Fugitive Dust Coming from Rawhide Mine Outside of Our Permit

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Metrological Figures



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine

Meteorological Data Summary

12/2/2012 - 12/2/2012

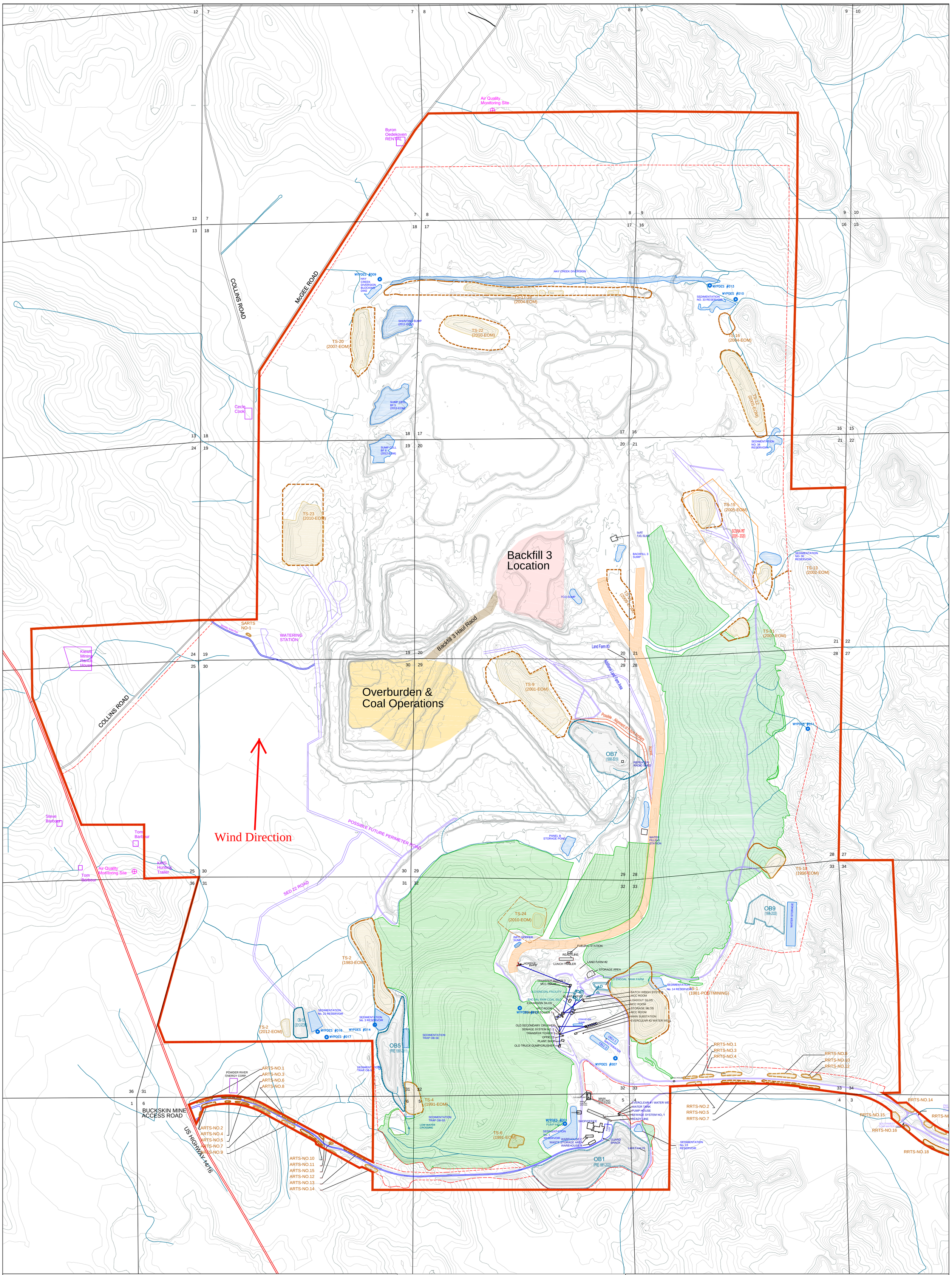
Hourly Data

	Average/Total	Max	Min
Wind Speed (m/sec)	11.9	18.6	3.7
Sigma-Theta (°)	8.1	15.0	5.7
Temperature (C)	10.3	14.7	5.0
10m Temperature (C)	10.7	14.9	6.0
Precipitation (in)	0.00	0.00	
Solar Radiation (w/m^2)	38.2	182.1	

Predominant wind direction was from the S sector,
accounting for 45.8% of the possible winds

Data Recovery

Parameter	Possible (hours)	Reported (hours)	Recovery
Wind Speed	24	24	100.00%
Wind Direction	24	24	100.00%
Sigma-Theta	24	24	100.00%
Temperature	24	24	100.00%
10m Temperature	24	24	100.00%
Precipitation	24	24	100.00%
Solar Radiation	24	24	100.00%



Buckskin Permit Boundary
Affected Area Boundary
Scoria Stockpile Area
Overburden Stockpile
Line Represents Permitted Area
Color Represents Actual Pile

WYPDES Discharge Point
Air Quality Monitor Site
Reclamation
Existing Mine Pond with Structure Number Use, and Years Operational
Topsoil Stockpile
Blue Line RepresentsDrainage Ditch
Color Represents Actual Pile

PRIMARY ROADS
Haul Road (Current)
Paved Access Road
Unpaved Access Road

ANCILLARY ROADS
2-Track
Ancillary Access with possible scoria surface

0 1000 2000 3000
1 inch = 1000 feet

N

BUCKSKIN MINING COMPANY

Mine Facilities Overview

BUCKSKIN MINING COMPANY
PO Box 3027
Campbell County
Gillette, WY 82717
307-686-5439

MAP # 1

Revision:
Design: 12-2-2012 NEAP
Spec:
Plot:

Drawn By: Landon Smith
Checked by: Landon Smith
Date: 12-21-2012

02/21/2013

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Matt Mead, Governor

Todd Parfitt, Director

February 21, 2013 Certified Mail Receipt Number: 7011 1570 0003 4871 6867

Mr. Landon Smith
Environmental Coordinator
Buckskin Coal Mine
P.O. Box 3027
Gillette, WY 82717

Re: Request for Flag under the Exceptional Event Rule for PM_{10} December 2, 2012 Exceedance

Dear Mr. Smith,

The Air Quality Division (AQD) has reviewed the request to flag the December 2, 2012 PM_{10} ambient monitored data as an Exceptional Event in accordance with the 40 CFR Part 50.14 at the Buckskin Coal Mine (Buckskin). Although the AQD has placed a temporary "High Wind" flag in AQS on the December 2, 2012 PM_{10} data, with the description "Possible Exceptional Event – under evaluation by AQD", the team of AQD staff found deficiencies in the "weight of evidence" approach presented in the December 21, 2012 submittal. Supplemental information is needed before AQD can determine if all elements were addressed to exclude event-related concentrations from regulatory determinations.

The review team requests the following information/ answers to the following questions to clarify the packet:

- A timeline for the day noting equipment idled and/or moved in reaction to the high readings.
- A facility map showing equipment location, mining activities and water distribution activities throughout the day.
- The NEAP requires, at minimum, that documentation packages include a discussion on Best Available Control Measures (BACM) and Reactionary Control Measures (RCM). BACM is defined as control measures that a mine can continuously implement, but are not permit requirements. Buckskin Mining Company identified a list of BACM measures employed at the mine; however, this list appears to also include controls which are required by permit. The Division requests that Buckskin Mining Company separate the controls required by permit (BACT) from those which are continuously employed but are not required by permit (BACM).
- Please discuss the exposed acreage at the mine on the day of the exceedance.
- Table 2 indicates that the 10:00am concentration at the North TEOM was 878.8 $\mu g/m^3$, while the corresponding graph shows the 10th hour concentration was well below 100 $\mu g/m^3$. To minimize confusion, please revise the graphs throughout the submission so that the x-axis uses the same time scale as the table.

The AQD level of review for Exceptional Event packages is greatly dependent on the level of detail and information provided by the facility in the request to flag exceedances. EPA has also provided examples of exceptional events demonstrations that meet the requirements of the draft high wind guidance. The

following link http://www.epa.gov/ttn/analysis/exevents.htm is the best place to find examples of information that are needed to have EPA concur with an exceptional event demonstration.

Please keep in mind that while AQD had an extensive staff of monitoring, compliance and permitting personnel available to evaluate the documentation packet, this packet will also be reviewed by the public and EPA.

Please submit the requested supplemental information to Cara Keslar, Monitoring Section Supervisor no later than two (2) weeks from receipt of this letter. The AQD evaluation team will reconvene to determine if all requirements were met under the Exceptional Event Rule. If all requirements of the rule were met, AQD will keep the flags in the AQS database and the documentation package will be made available for public review and submitted to EPA Region 8 for concurrence. If you have questions please contact me at (307) 335-6963 or kirk.billings@wyo.gov.

Sincerely,

Kirk Billings
Air Quality Analyst, Monitoring Section

Cc: Cara Keslar, Monitoring Section Supervisor

02/27/2013

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

February 27, 2013

Cara Keslar
Wyoming Department of Environmental Quality
Air Quality Division
112 West 25th Street
Cheyenne, WY 82002

RE: Request for Flag under the Exceptional Event Rule for PM_{10} December 02, 2012 Exceedance

Dear Cara,

Included are Buckskin Mining Company's responses to Air Quality Division's questions concerning the December 02, 2012 PM_{10} exceedance.

Sincerely,

Landon Smith

Landon Smith
Environmental Coordinator
Email: Landon.Smith@Kiewit.com
Phone: (307) 686-5404

cc: Greg Passini

Comment: A timeline for the day noting equipment idled and/ or moved in reaction to the high readings.

Response: 05:30- Day shift begins

08:47- Blowing Dust Health Alert Advisory from AQD was sent to pit superintendents.

- Superintendents took action by moving the two overburden hauls to the lowest backfill dump, Backfill three, and assigned a 30,000 gallon water truck to that backfill 3 haul route for the rest of shift.

09:42- Highest recorded wind gust: 63.3mph

- Superintendents added a 20,000 gallon water truck to assist in dust suppression on backfill and overburden benches.

10:00- High Wind Alert was sent from the TEOM to appropriate BMC Staff.

- At the same time, a High Concentration Alert of 878.8µg/m^3 was received from the TEOM
- BMC reacted by taking early lunches in order to idle production during the event.

10:30- Early Lunches were started.

-Coal operations were first. Equipment idled at this time were 10-2766 shovel, 10-2936 Back Hoe, 10-2765 shovel, nine 240 ton haul trucks, and one 24m caterpillar blade for a total shutdown time of 1 hour. See Map #1 for equipment location.

- Production at this time was reduced by roughly half
- Water trucks remained active throughout the entire lunch period, 10:30-13:00.

11:00- Highest one hour concentration was received, 980.8µg/m^3 at a time of limited productivity.

11:30- Overburden operations begin lunch

-10-3038 P&H 4100 shovel idled first along with six, 400ton Caterpillar 797 haul trucks and 1 Caterpillar 24m Blade for approximately 30 minutes.

12:00- The final overburden lunch is started

-10-2927 P&H 4100 shovel is idled along with five, 400ton Caterpillar 797 haul trucks for approximately 30 minutes.

12:30- Additional support equipment lunch begins

-Equipment idled at this time were two Caterpillar Lube trucks, three Caterpillar rubber tire dozers, and two Caterpillar track dozers for approximately 30 minutes.

14:00- The last 1 hour concentration over 150µg/m^3 was recorded.

- The first high 24 hour concentration level alert 153µg/m^3 was sent from the TEOM

15:00- 1 hour concentration levels fall below the maximum allowable limit to 114.7µg/m^3

Comment: A facility map showing equipment location, mining activities, and water distribution

activities throughout the day.

Response: Enclosed with the response packet.

Comment: AQD requests that BMC separates the controls required by the permit BACT from those which are continuously employed but not required by the permit BACM

Response: Controls required by the permit:

- Areas where topsoil has been replaced are ripped and seeded as soon as its practical after topsoil replacement

- During the operation of topsoil stripping, the active operation is frequently watered to reduce dust emissions.
    - At the time of the event, all topsoil operations were complete, and windrows were constructed
- Pads in front of truck dumps are cleaned, treated, and maintained to prevent material that accumulates on the pads due to spillage from being pulverized and a potential source of fugitive dust.
- All of Buckskin's permanent roads and areas around facilities are treated with magnesium chloride annually to prevent dust.
- Buckskin's operational areas are watered continually by water trucks ranging from 20,000 to 30,000 gallons.
- As a preventative measure, Buckskin ensures that nearby Collins Road and McGee Road also receive magnesium chloride treatment.
- Stilling sheds, bag houses, and passive enclosure control systems are used in plant operations.

Continuously Employed Controls

- Buckskin has no final graded backfill larger than 300 contiguous acres that need to be addressed.
- Long term out-of-pit overburden and topsoil piles are seeded.
- When possible, Buckskin schedules topsoil removal, grading backfill, and topsoil replacement concurrently to minimize open areas
- Topsoil Contractors, and Scoria Contractors are required to apply water around their work area.
- As a preventative measure, Buckskin ensures that nearby Collins Road and McGee Road also receive magnesium chloride treatment.

Comment: Please discuss the exposed acreage at the mine on the day of the exceedance.

Response: On December 02, 2012 approximately 130 acres were exposed due to topsoil salvage operations. The entire 130 acres were stabilized by windrows and rough grading. BMC inspects these control measures regularly to insure proper control. During the event, these windrows were adequately controlling wind shear at ground level. Windrows were verified and deemed acceptable on an August 28, 2012 WYDEQ Air Quality Inspection. In addition, two topsoil piles, TS-09 and TS-23, that received topsoil from the above stated area were seeded and mulched at the time of the event.

Comment: To minimize confusion please revise the graphs throughout the submission so that the x-axis uses the same time scale as the table.

Response: Revised tables and graphs are contained at the back of this packet.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-01-2012

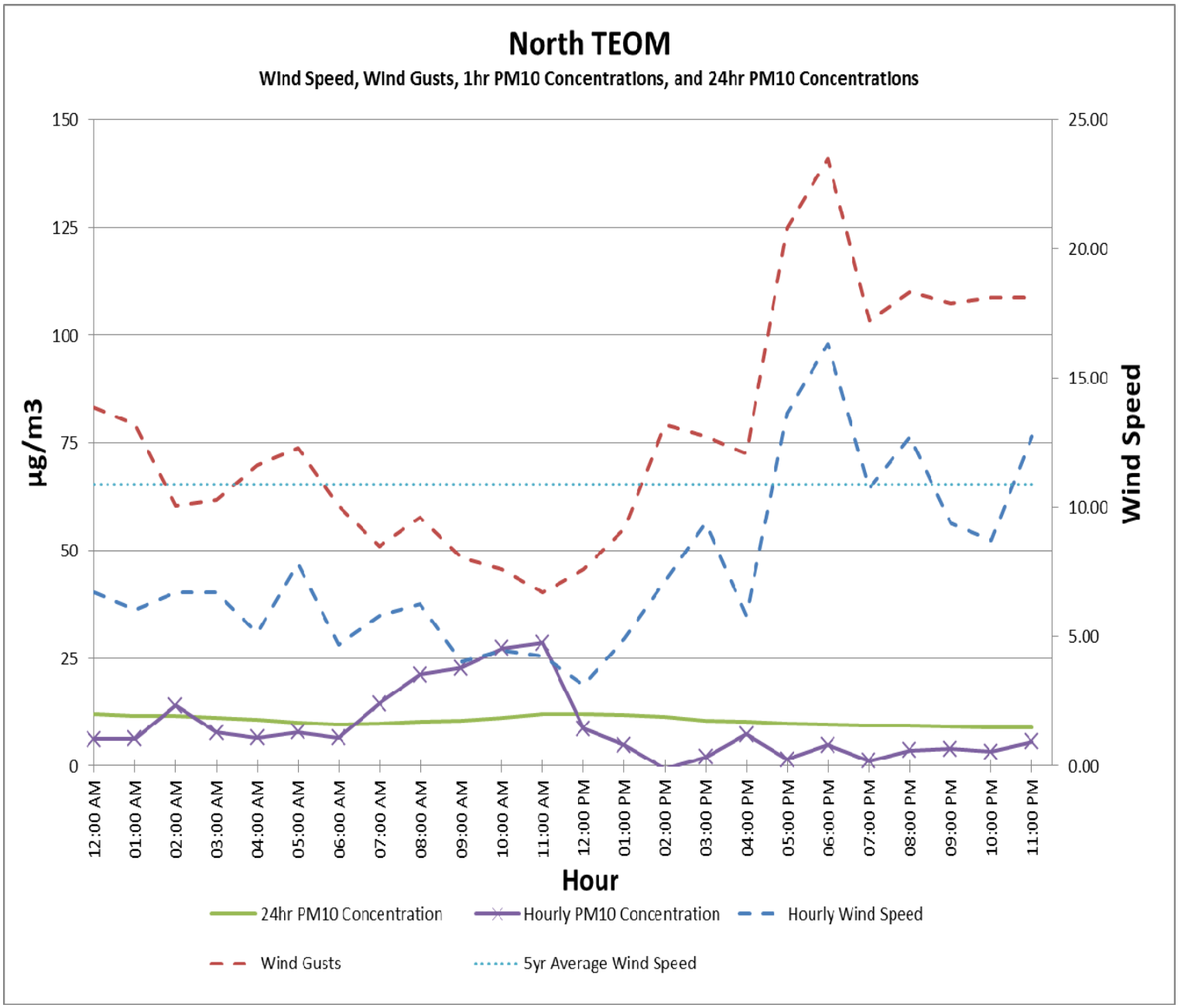
Table 1										
North TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
1-Dec-12										
12:00 AM	3	6.71	200	0	6.2	13.9	11:05 PM	6.2	5.6	12.1
01:00 AM	2.7	6.04	179	0	5.9	13.2	12:15 AM	6.3	5.7	11.7
02:00 AM	3	6.71	183	0	4.5	10.1	01:32 AM	14	12.7	11.6
03:00 AM	3	6.71	209	0	4.6	10.3	02:42 AM	7.7	6.9	11.2
04:00 AM	2.3	5.14	233	0	5.2	11.6	03:57 AM	6.5	5.9	10.7
05:00 AM	3.5	7.83	350	0	5.5	12.3	04:53 AM	7.9	7.2	10
06:00 AM	2.1	4.70	166	0	4.5	10.1	05:00 AM	6.5	6	9.6
07:00 AM	2.6	5.82	163	0	3.8	8.5	06:36 AM	14.5	13.4	9.8
08:00 AM	2.8	6.26	167	0	4.3	9.6	07:53 AM	21.2	19.4	10.2
09:00 AM	1.8	4.03	150	0	3.6	8.1	08:34 AM	22.7	20.7	10.6
10:00 AM	2	4.47	162	0	3.4	7.6	09:48 AM	27.3	24.9	11.2
11:00 AM	1.9	4.25	177	0	3	6.7	10:14 AM	28.6	25.6	12.1
12:00 PM	1.4	3.13	182	0	3.4	7.6	11:36 AM	8.7	7.7	12.1
01:00 PM	2.2	4.92	265	0	4.1	9.2	12:12 PM	4.8	4.2	11.8
02:00 PM	3.2	7.16	268	0	5.9	13.2	01:50 PM	-0.8	-0.7	11.4
03:00 PM	4.2	9.40	235	0	5.7	12.8	02:21 PM	2.1	1.9	10.5
04:00 PM	2.6	5.82	245	0	5.4	12.1	03:00 PM	7.3	6.5	10.2
05:00 PM	6.1	13.65	230	0	9.3	20.8	04:30 PM	1.5	1.4	9.8
06:00 PM	7.3	16.33	227	0	10.5	23.5	05:08 PM	4.8	4.3	9.7
07:00 PM	4.8	10.74	200	0	7.7	17.2	06:15 PM	1.2	1.1	9.4
08:00 PM	5.7	12.75	203	0	8.2	18.3	07:15 PM	3.6	3.3	9.3
09:00 PM	4.2	9.40	202	0	8	17.9	08:27 PM	3.9	3.5	9.2
10:00 PM	3.9	8.72	199	0	8.1	18.1	09:45 PM	3.3	3	9
11:00 PM	5.7	12.75	205	0	8.1	18.1	10:38 PM	5.6	5.1	9
5yr Wind Speed Average		10.87								

Table 1: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the North TEOM on December 1, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-01-2012



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-02-2012 High Wind Event

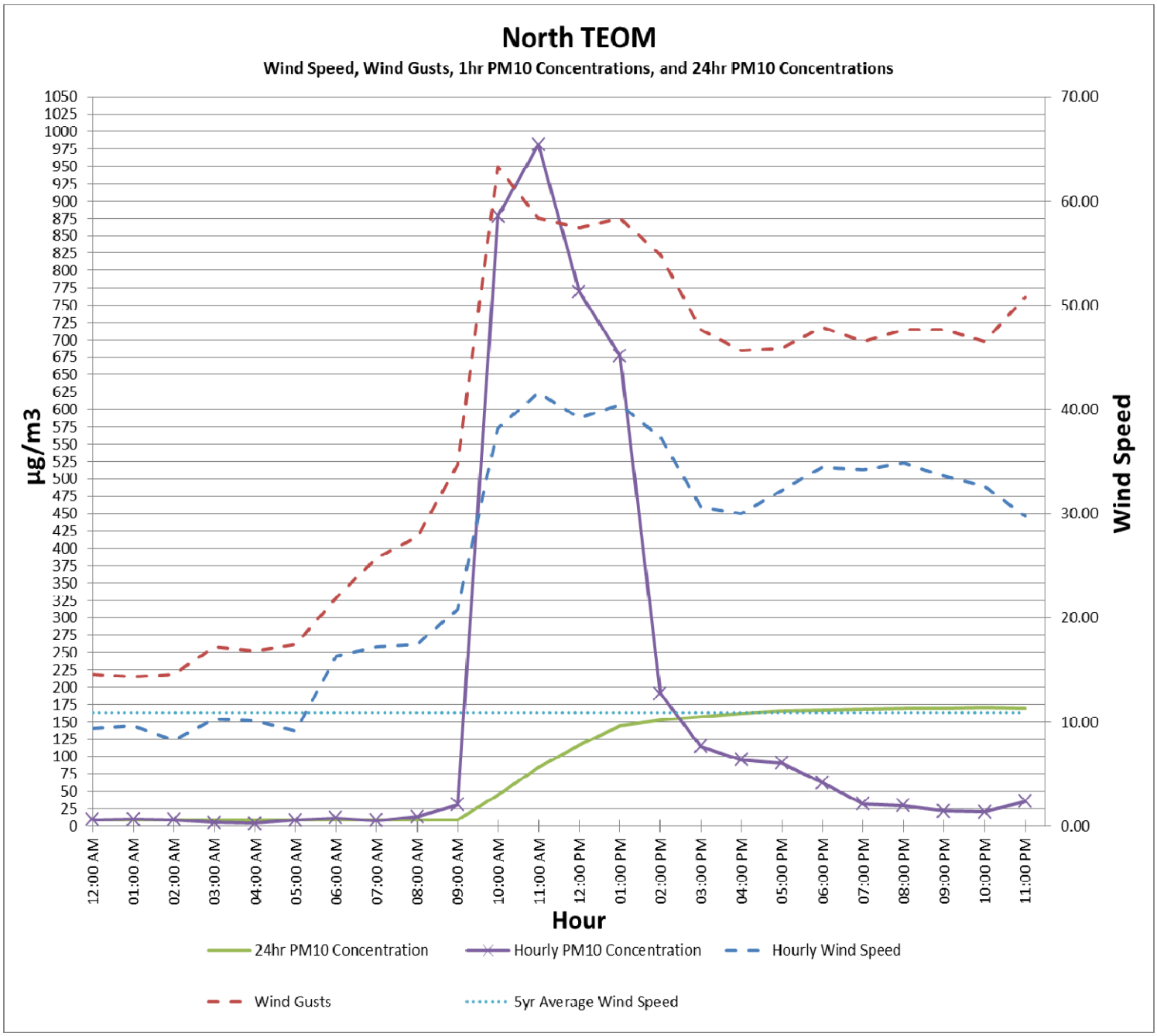
Table 2										
North TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
2-Dec-12										
12:00 AM	4.2	9.40	161	0	6.5	14.5	11:17 PM	9.5	8.6	9.1
01:00 AM	4.3	9.62	171	0	6.4	14.3	12:24 AM	9.9	9	9.3
02:00 AM	3.7	8.28	173	0	6.5	14.5	01:01 AM	9.2	8.4	9
03:00 AM	4.6	10.29	192	0	7.7	17.2	02:45 AM	4.8	4.3	8.9
04:00 AM	4.5	10.07	180	0	7.5	16.8	03:17 AM	3.9	3.6	8.8
05:00 AM	4.1	9.17	158	0	7.8	17.4	04:30 AM	8.6	7.9	8.8
06:00 AM	7.3	16.33	181	0	9.8	21.9	05:26 AM	11.6	10.5	9.1
07:00 AM	7.7	17.22	173	0	11.5	25.7	06:56 AM	8.3	7.4	8.9
08:00 AM	7.8	17.45	156	0	12.4	27.7	07:06 AM	13.5	12.1	8.5
09:00 AM	9.3	20.80	176	0	15.5	34.7	08:40 AM	30.6	27.2	8.9
10:00 AM	17.1	38.25	194	0	28.3	63.3	09:42 AM	878.8	776.1	44.4
11:00 AM	18.6	41.61	186	0	26.1	58.4	10:14 AM	980.8	861.6	84.3
12:00 PM	17.5	39.15	188	0	25.7	57.5	11:53 AM	768.7	670.5	116.6
01:00 PM	18.1	40.49	190	0	26.1	58.4	12:01 PM	677.3	589.3	144.9
02:00 PM	16.7	37.36	189	0	24.5	54.8	01:00 PM	190.7	165.7	153
03:00 PM	13.7	30.65	191	0	21.3	47.6	02:43 PM	114.7	99.5	158
04:00 PM	13.4	29.97	192	0	20.4	45.6	03:59 PM	95.2	82.5	161.9
05:00 PM	14.4	32.21	197	0	20.5	45.9	04:02 PM	90.8	78.8	165.4
06:00 PM	15.4	34.45	201	0	21.4	47.9	05:42 PM	62.5	54.4	167.5
07:00 PM	15.3	34.23	203	0	20.8	46.5	06:06 PM	31.7	27.6	168.8
08:00 PM	15.6	34.90	207	0	21.3	47.6	07:46 PM	29.4	25.6	169.6
09:00 PM	15	33.55	208	0	21.3	47.6	08:59 PM	21.7	18.9	169.9
10:00 PM	14.6	32.66	217	0	20.8	46.5	09:14 PM	20.8	18.2	170.3
11:00 PM	13.3	29.75	246	0	22.7	50.8	10:57 PM	35.4	31.2	170
5yr Wind Speed Average		10.87			average	39.52				

Table 2: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the North TEOM on December 2, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine North TEOM
12-02-2012 High Wind Event



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM
12-01-2012

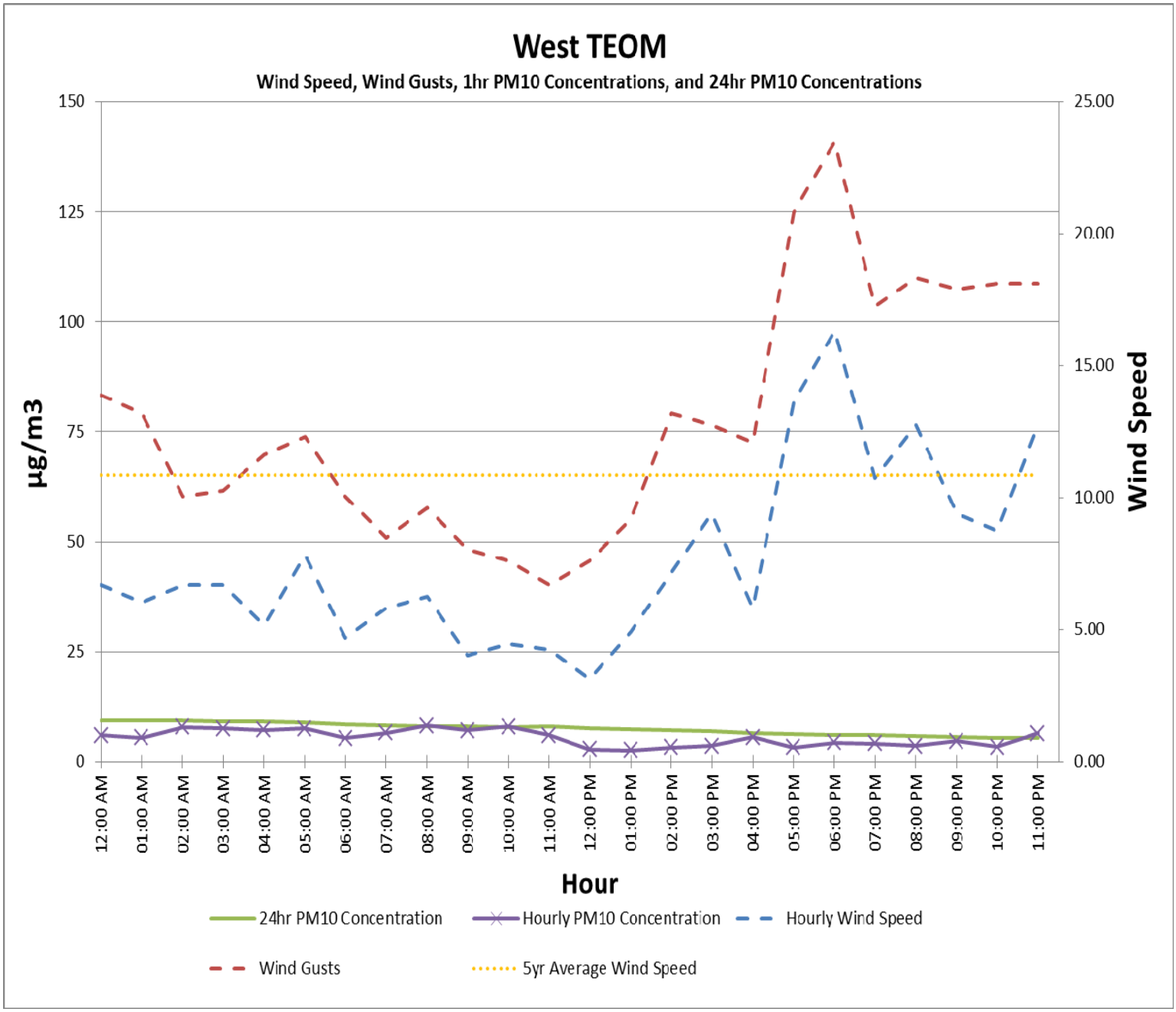
Table 3										
West TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
1-Dec-12										
12:00 AM	3	6.71	200	0	6.2	13.9	11:05 PM	6	5.3	9.2
01:00 AM	2.7	6.04	179	0	5.9	13.2	12:15 AM	5.4	4.8	9.2
02:00 AM	3	6.71	183	0	4.5	10.1	01:32 AM	7.8	7	9.2
03:00 AM	3	6.71	209	0	4.6	10.3	02:42 AM	7.5	6.7	9
04:00 AM	2.3	5.14	233	0	5.2	11.6	03:57 AM	7.2	6.4	9
05:00 AM	3.5	7.83	350	0	5.5	12.3	04:53 AM	7.5	6.8	8.9
06:00 AM	2.1	4.70	166	0	4.5	10.1	05:00 AM	5.3	4.8	8.4
07:00 AM	2.6	5.82	163	0	3.8	8.5	06:36 AM	6.5	6	8.1
08:00 AM	2.8	6.26	167	0	4.3	9.6	07:53 AM	8.1	7.3	8
09:00 AM	1.8	4.03	150	0	3.6	8.1	08:34 AM	7	6.3	7.9
10:00 AM	2	4.47	162	0	3.4	7.6	09:48 AM	7.9	7.1	7.8
11:00 AM	1.9	4.25	177	0	3	6.7	10:14 AM	6	5.3	7.9
12:00 PM	1.4	3.13	182	0	3.4	7.6	11:36 AM	2.8	2.4	7.6
01:00 PM	2.2	4.92	265	0	4.1	9.2	12:12 PM	2.6	2.3	7.3
02:00 PM	3.2	7.16	268	0	5.9	13.2	01:50 PM	3.2	2.8	7.1
03:00 PM	4.2	9.40	235	0	5.7	12.8	02:21 PM	3.5	3	6.9
04:00 PM	2.6	5.82	245	0	5.4	12.1	03:00 PM	5.5	4.9	6.4
05:00 PM	6.1	13.65	230	0	9.3	20.8	04:30 PM	3.2	2.8	6.2
06:00 PM	7.3	16.33	227	0	10.5	23.5	05:08 PM	4.3	3.8	6
07:00 PM	4.8	10.74	200	0	7.7	17.2	06:15 PM	4.1	3.7	5.9
08:00 PM	5.7	12.75	203	0	8.2	18.3	07:15 PM	3.6	3.3	5.7
09:00 PM	4.2	9.40	202	0	8	17.9	08:27 PM	4.6	4.1	5.5
10:00 PM	3.9	8.72	199	0	8.1	18.1	09:45 PM	3.3	3	5.4
11:00 PM	5.7	12.75	205	0	8.1	18.1	10:38 PM	6.4	5.8	5.3
Syr Wind Speed Average		10.87								

Table 3: Wind speed, Wind gust speeds, hourly PM_{10} concentations, and 24-hour PM_{10} concentrations on the West TEOM on December 1, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM
12-01-2012



BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM
12-02-2012

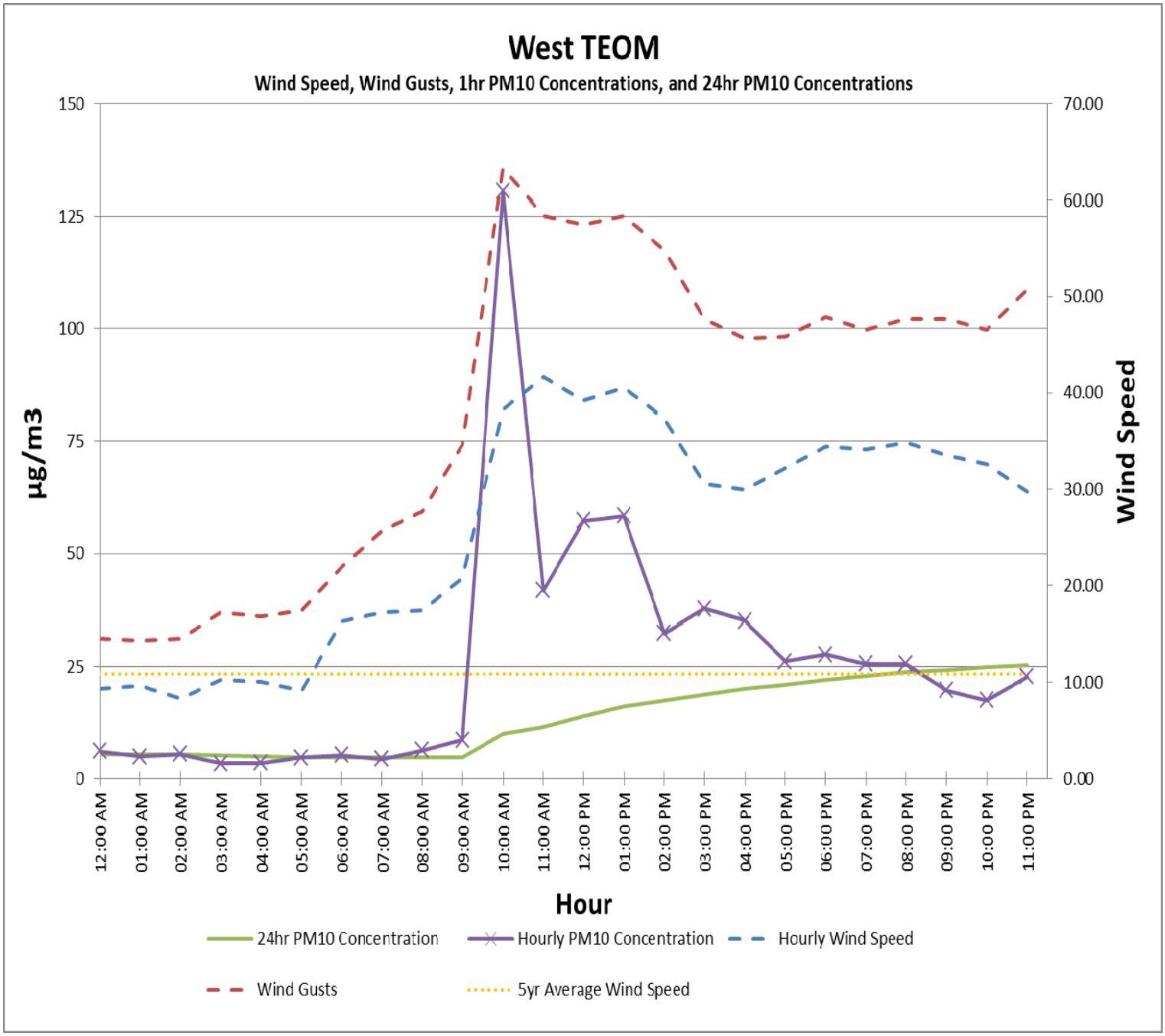
Table 4										
West TEOM										
Date/Time	Wind Speed (m/s)	Wind Speed (mi/hr)	Wind Direction (°)	Precip (in)	Gust (m/s)	Gust (mi/Hr)	Time of Gust	Hourly PM Conc (STP) (µg/m^3)	Hourly PM Conc (LTP) (µg/m^3)	24-hour Avg Conc (STP) (µg/m^3)
2-Dec-12										
12:00 AM	4.2	9.40	161	0	6.5	14.5	11:17 PM	6.1	5.5	5.4
01:00 AM	4.3	9.62	171	0	6.4	14.3	12:24 AM	4.9	4.4	5.3
02:00 AM	3.7	8.28	173	0	6.5	14.5	01:01 AM	5.4	4.8	5.3
03:00 AM	4.6	10.29	192	0	7.7	17.2	02:45 AM	3.3	2.9	5.1
04:00 AM	4.5	10.07	180	0	7.5	16.8	03:17 AM	3.4	3.1	4.9
05:00 AM	4.1	9.17	158	0	7.8	17.4	04:30 AM	4.6	4.1	4.8
06:00 AM	7.3	16.33	181	0	9.8	21.9	05:26 AM	5.2	4.7	4.8
07:00 AM	7.7	17.22	173	0	11.5	25.7	06:56 AM	4.3	3.8	4.7
08:00 AM	7.8	17.45	156	0	12.4	27.7	07:06 AM	6.3	5.6	4.7
09:00 AM	9.3	20.80	176	0	15.5	34.7	08:40 AM	8.6	7.5	4.8
10:00 AM	17.1	38.25	194	0	28.3	63.3	09:42 AM	130.5	114.1	9.9
11:00 AM	18.6	41.61	186	0	26.1	58.4	10:14 AM	41.8	36.3	11.4
12:00 PM	17.5	39.15	188	0	25.7	57.5	11:53 AM	57.3	49.5	13.8
01:00 PM	18.1	40.49	190	0	26.1	58.4	12:01 PM	58.4	50.4	16.1
02:00 PM	16.7	37.36	189	0	24.5	54.8	01:00 PM	32.3	27.8	17.4
03:00 PM	13.7	30.65	191	0	21.3	47.6	02:43 PM	37.7	32.4	18.8
04:00 PM	13.4	29.97	192	0	20.4	45.6	03:59 PM	35.1	30.1	20.1
05:00 PM	14.4	32.21	197	0	20.5	45.9	04:02 PM	26.1	22.5	21
06:00 PM	15.4	34.45	201	0	21.4	47.9	05:42 PM	27.6	23.8	21.9
07:00 PM	15.3	34.23	203	0	20.8	46.5	06:06 PM	25.5	22	22.8
08:00 PM	15.6	34.90	207	0	21.3	47.6	07:46 PM	25.5	22.1	23.7
09:00 PM	15	33.55	208	0	21.3	47.6	08:59 PM	19.6	17	24.2
10:00 PM	14.6	32.66	217	0	20.8	46.5	09:14 PM	17.5	15.2	24.8
11:00 PM	13.3	29.75	246	0	22.7	50.8	10:57 PM	22.7	19.8	25.3
5yr wind speed average		10.87			average	39.52				

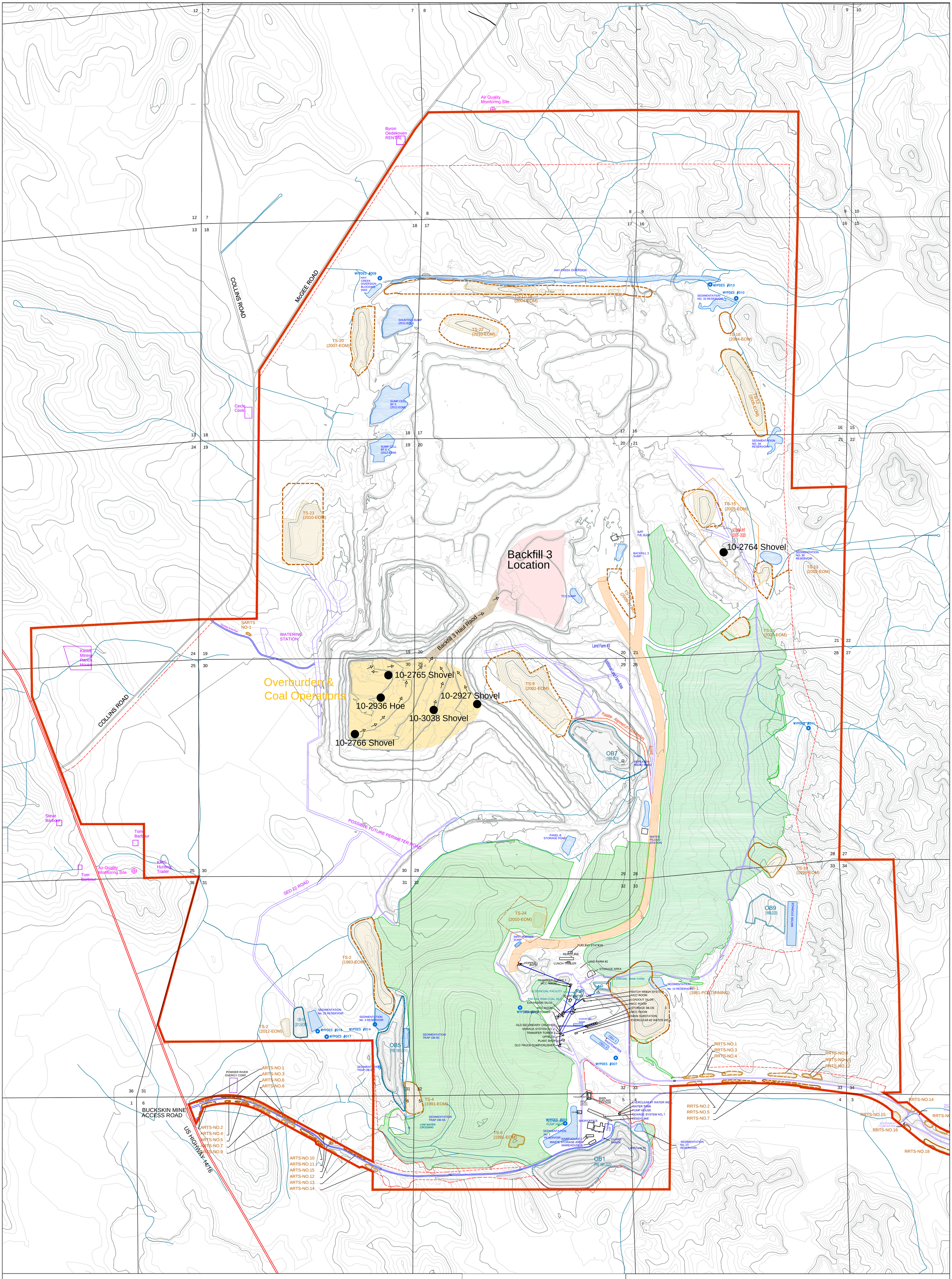
Table 4: Wind speed, Wind gust speeds, hourly PM_{10} concentrations, and 24-hour PM_{10} concentrations on the West TEOM on December 2, 2012.

BUCKSKIN MINING COMPANY

BUCKSKIN MINE, PO BOX 3027 ~ GILLETTE, WY 82717

Buckskin Mine West TEOM
12-02-2012 High Wind Event





Overburden & Coal Mining Area That Recieved Dust Supression Water on 12-02-12

Backfill Area That Recieved Dust Supression Water on 12-02-12

Backfill Three Haulage Route That Recieved Dust Supression Water on 12-02-12

Haul Route Direction

Buckskin Permit Boundary

Affected Area Boundary

Scoria Stockpile Area

Overburden Stockpile Line Represents Permitted Area Color Represents Actual Pile

WYPDES Discharge Point

Air Quality Monitor Site

Reclamation

Existing Mine Pond with Structure Number Use, and Years Operational

Topsoil Stockpile Blue Line RepresentsDrainage Ditch Color Represents Actual Pile

PRIMARY ROADS

Haul Road (Current) That recieved Dust Suppression 12-02-12

Paved Access Road

Unpaved Access Road

ANCILLARY ROADS

2-Track

Ancillary Access with Possible Scoria Surface

N

0 1000 2000 3000

1 inch = 1000 feet

BUCKSKIN MINING COMPANY

Mine Facilities Overview

BUCKSKIN MINING COMPANY
PO Box 3027
Campbell County
Gillette, WY 82717
307-686-5439

MAP # 1

Revision:

Design: 12-2-2012 NEAP

Spec:

Plot:

Drawn By: Landon Smith

Checked by: Landon Smith

Date: 02-26-2013

04/29/2013

Matt Mead, Governor

Department of Environmental Quality

To protect, conserve and enhance the quality of Wyoming's environment for the benefit of current and future generations.

Todd Parfitt, Director

April 29, 2013

Mr. Greg Passini
Environmental Manager
Buckskin Coal Mine
P.O. Box 3027
Gillette, WY 82716

Re: Request for Flag under the Exceptional Event Rule for PM_{10} December 2, 2012 Exceedance

Dear Mr. Passini,

On December 2, 2012, the Buckskin Mine's North sampler recorded an exceedance of the 24-hour PM_{10} standard, with a final concentration of 167.8 $\mu g/m^3$.

On December 26, 2012 the Air Quality Division (AQD) received a request that data for the North monitor on this day be flagged under 40 CFR Part 50.14 "Treatment of Data Influenced by Exceptional Events" due to high winds.

On March 4, 2013, at the request of the AQD, Buckskin submitted additional information to clarify the request to flag the data under 40 CFR Part 50.14.

After review of the submitted materials, the AQD has decided to pursue Buckskin's request to flag the PM_{10} data collected at the North monitor on December 2, 2012 under 40 CFR 50.14.

The next step in the process is a 30 day public comment period. In order to move forward, the AQD needs an electronic copy of all the documentation and correspondence submitted during the review process. All correspondence, starting with the original notification to the AQD, the original Exceptional Event packet, any requests for additional information, responses to those requests and other information submitted to the AQD during the review process should be combined into a single, chronologically ordered .pdf document and submitted to the AQD.

Once received, the chronological packet will be posted to the AQD's website and the public comment period will be advertised.

Buckskin's final packet is requested on or before May 13, 2013. Please email it to kirk.billings@wyo.gov

Please contact Kirk Billings at (307) 335-6963 or kirk.billings@wyo.gov if you have any questions regarding this matter.

Sincerely,

Cara Keslar
Monitoring Section Supervisor

Cc: Kirk Billings, Air Quality Analyst
Tanner Shatto, District 3 District Engineer
Landon Smith, Environmental Coordinator, Buckskin Coal Mine