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MONITORING REPORTS YEAR(S):

2016 - 2018

BLAGG ENGINEERING, INC.

P.O. Box 87, Bloomfield, New Mexico 87413 Phone: (505)632-1199 Fax: (505)632-3903

USPS Certified: 7012 1010 0002 1168 7494

March 2, 2017

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Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Annual Report: Permit NM-02-0002 BP Schneider Waste Management Facility SW/4 Sec. 28 - T32N - R10W, San Juan County, NM

Dear Mr. Jones:

On behalf of BP America Production Co., Blagg Engineering, Inc. (BEI) is submitting this annual report for the Schneider Waste Management Facility, Permit NM-02-0002. This report is for 2016 calendar year monitoring. Attached are spread sheets summarizing weekly evaporation pond and monthly sump monitoring inspection results.

General Pond Monitoring

During the 2016 monitoring year, weekly inspections did not indicated the generation of dissolved sulfide or hydrogen sulfide gas during any inspections. Normal produced water inflow to the evaporation facility was suspended for the entire year. For most inspections the pond was dry, or had only a trace of precipitation water at levels too low to measure parameters (pH, temperature, dissolved oxygen). Freeboard exceeded 3.4 feet for the entire year

Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2016 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

Sludge thickness was measured on April 25, 2016. On this date most of the measurement points tested at less than 3/4-inch, with an average overall thickness of 1.0 inches.

Leak Detection System Monitoring

Year-end leak detection monitoring indicates the liner system has good integrity with no leaks. The pond was lined with a new PVC liner and secondary leak detection system in 2005. This newer (shallow) leak detection system did not record any accumulations of water. An older, deep leak detection system has been left in place as a backup and small amounts of fluid accumulation (<0.1 gallon/day) from water trapped within the older system continues to be observed and periodically removed.

Questions or comments concerning this transmittal may be directed to myself at (505)320-1183 or John Ritchie with BP at (505)326-9200.

Respectfully submitted: *Blagg Engineering, Inc.*

My C. Blogg

Jeffrey C. Blagg, P.E. President

Attachments: Monitoring Spread Sheets

cc: Brandon Powell, NMOCD Aztec District Office John Ritchie, BP SJ Operations Center

BP America Production Company Schneider Waste Management Facility Field Inspection Data Summary 2016

	Wind Speed	Wind Direction	H2S	Dissolved Sulfide	Dissolved Oxygen	Temp.		Free Board	Liner/Berm	
Inspection Date	(MPH)	(Degrees)	(ppm)	(ppm)	(ppm)	(celcius)	рН	(feet)	integrity	Comments
01/04/2016	2-5	180	0.0			-		>3.4'	Y	Trace precipitation water only
01/15/2016	5-8	45	0.0					>3.4'	Y	u
01/20/2016	10-15	270	0.0	-				>3.4'	Y	n
01/28/2016	3-5	135	0.0	**				>3.4'	Y	11
02/03/2016	5-8	0	0.0					>3.4'	Y	u
02/08/2016	2-4	45	0.0					>3.4'	Y	0
02/17/2016	5-8	45	0.0			-		>3.4'	Y	11
02/22/2016	Calm	1	0.0		-		-	>3.4'	Y	U
02/29/2016	4-6	180	0.0		-	1	1	>3.4'	Y	
03/07/2016	8-10	270	0.0			1	-	>3.4'	Y	"
03/14/2016	5-10	235	0.0	**				>3.4'	Y	0
03/24/2016	Calm		0.0			-		>3.4'	Y	n
03/29/2016	15-25	210	0.0					>3.4'	Y	u
04/05/2016	2-4	90	0.0	-				>3.4'	Y	n
04/11/2016	Calm	-	0.0					>3.4'	Y	0
04/18/2016	Calm		0.0					>3.4'	Y	n
04/25/2016	10-15	270	0.0		·			>3.4'	Y	"
04/25/2016	Measure	Sludge: Averag	ge Thickne	ess at an aver	rage of 1-inch	: Minimum	0.0", N	1aximum	4-inches (NW	Corner)
05/04/2016	5-10	45	0.0					>3.4'	Y	u ,
05/11/2016	2-6	180	0.0			**		>3.4'	Y	11
05/18/2016	8-12	270	0.0					>3.4'	Ŷ	n
05/26/2016	5-10	235	0.0					>3.4'	Y	n
06/01/2016	4-8	90	0.0					>3.4'	Y	Dry - Some Salt on Base
06/08/2016	10-15	260	0.0		-		••	>3.4'	Y	n

	Wind Speed	Wind Direction	H2S	Dissolved Sulfide	Dissolved Oxygen	Temp.		Free Board	Liner/Berm	
Inspection Date	(MPH)	(Degrees)	(ppm)	(ppm)	(ppm)	(celcius)	рH	(feet)	Integrity	Comments
06/14/2016	Calm		0.0		-		1	>3.4'	Y	0
06/20/2016	8-10	135	0.0	-		-		>3.4'	Y	"
06/27/2016	0-1	0	0.0					>3.4'	Y	11
07/01/2016	Calm		0.0		[°]			>3.4'	Y	Trace precipitation water only
07/07/2016	5-8	90	0.0				-	>3.4'	Y	11
07/15/2016	8-12	180	0.0					>3.4'	Y	11
07/19/2016	2-4	0	0.0					>3.4'	Y	11
07/25/2016	2-6	235	0.0	-	-			>3.4'	Y	n
08/03/2016	4-8	270	0.0				-	>3.4'	Y	11
08/10/2016	1-3	135	0.0	0.0	TSTM	30 C	8.1	>3.4'	Y	About 1" Precipitation Water
08/15/2016	2-5	0	0.0			-		>3.4'	Y	Trace precipitation water only
08/22/2016	0-2	45	0.0	-	-		1	>3.4'	Y	"
08/29/2016	Calm		0.0					>3.4'	Ŷ	11
09/02/2016	2-4	270	0.0					>3.4'	Y	II
09/07/2016	2-4	180	0.0					>3.4'	Y	"
09/13/2016	5-10	150	0.0	-				>3.4'	Y	11
09/23/2016	1-3	210	0.0	-				>3.4'	Y	n
09/26/2016	2-4	210	0.0					>3.4'	Y	n
10/03/2016	5-15	180	0.0					>3.4'	Y	11
10/11/2016	4-8	0	0.0					>3.4'	Y	"
10/17/2016	5-10	270	0.0					>3.4'	Y	n
10/28/2016	5-10	45	0.0					>3.4'	Y	n
11/04/2016	Calm		0.0					>3.4'	Y	n
11/10/2016	3-5	270	0.0					>3.4'	Y	n
11/18/2016	1-4	135	0.0					>3.4'	Y	n
11/21/2016	8-12	45	0.0	-				>3.4'	Y	n n
12/01/2016	Calm		0.0		-			>3.4'	Y	n
12/07/2016	4-8	270	0.0	0.0	TSTM	4.2 C	8.8	>3.4'	Y	Precipitation, about 1-Inch on 2/3 of pond
12/14/2016	Calm		0.0	0.0	TSTM	3.6 C	8.9	>3.4'	Y	Precipitation, about 1-Inch on 2/3 of pond
12/23/2016	1-2	180	0.0	0.0	TSTM	2.9 C	8.7	>3.4'	Y	Precipitation, about 1-Inch on 90% of pond
12/27/2016	3-5	0	0.0	0.0	TSTM	0.7 C	8.8	>3.4'	<u> </u>	Precipitation, about 1-Inch on 90% of pond

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Schneider Waste Management Facility Monthly Sump Inspection Field Data 2016

			New NE S	UMP			New SE S	UMP	-	
Inspection Date	Water in Sumps	Dissolved Sulfide (ppm)	Dissolved Oxygen (ppm)	Temp. (celcius)	pН	Dissolved Sulfide (ppm)	Dissolved Oxygen (ppm)	Temp. (celcius)	рН	Comments
01/04/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	Minor Precip Water Only Entering Sumps in Old (deep) Sump System (water in sumps is below inlet) New Sump Inspection System Dry
02/03/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	"
03/07/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	n
04/05/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	11
05/04/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	91
06/01/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	17
07/01/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	11
08/03/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	"
09/02/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	"
10/03/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	r+
11/04/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	1F
12/01/2016	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	"

BLAGG ENGINEERING, INC.

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USPS Certified: 7012 1010 0002 1168 7487

February 23, 2016

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Mr. Brad Jones New Mexico Oil Conservation Division 1220 South St. Francis Drive Santa Fe, New Mexico 87505

Re: Annual Report: Permit NM-02-0002 BP Schneider Waste Management Facility SW/4 Sec. 28 - T32N - R10W, San Juan County, NM

Dear Mr. Jones:

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General Pond Monitoring

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Landfarm Treatment Zone Monitoring

No landfarm cells were constructed during the 2015 calendar year and no treatment zone monitoring was required or performed.

Evaporation Pond Sludge Thickness

Sludge thickness was measured on November 18, 2015. On this date most of the measurement points tested at less than 3/4-inch, with an average overall thickness of 0.9 inches.

Leak Detection System Monitoring

Year-end leak detection monitoring indicates the liner system has good integrity with no leaks. The pond was lined with a new PVC liner and secondary leak detection system in 2005. This newer (shallow) leak detection system did not record any accumulations of water. An older, deep leak detection system has been left in place as a backup and small amounts of fluid accumulation (<0.1 gallon/day) from water trapped within the older system continues to be observed and periodically removed.

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Respectfully submitted: *Blagg Engineering, Inc.*

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BP America Production Company Schneider Waste Management Facility Field Inspection Data Summary 2015

	Wind Speed	Wind Direction	H2S	Dissolved Sulfide	Dissolved Oxygen	Temp.		Free Board	Liner/Berm	
Inspection Date		(Degrees)	(ppm)	(ppm)	(ppm)	(celcius)	pН	(feet)	Integrity	Comments
01/05/2015	2-4	From 120	0	NA	NA	NA	NA	>3.4'	YES	Pond Dry. All Pond Inflow Off.
01/12/2015	3-5	From 0	0	NA	NA	NA	NA	>3.4'	YES	u
01/20/2015	6-8	From 180	0	NA	NA	NA	NA	>3.4'	YES	li
01/27/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	u
02/03/2015	3-5	From 270	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond
02/09/2015	8-12	From 270	0	NA	NA	NA	NA	>3.4'	YES	и
02/16/2015	6-8	From 135	0	NA	NA	NA	NA	>3.4'	YES	11
02/23/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES	н
03/02/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond
03/09/2015	3-5	From 90	0	NA	NA	NA	NA	>3.4'	YES	н
03/16/2015	6-8	From 235	0	NA	NA	NA	NA	>3.4'	YES	11
03/23/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES	n
03/30/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	11
04/02/2015	3-5	From 0	0	NA	NA	NA	NA	>3.4'	YES	и
04/06/2015	2-4	From 180	0	NA	NA	NA	NA	>3.4'	YES	0
04/15/2015	12-18	From 270	0	NA	NA	NA	NA	>3.4'	YES	11
04/20/2015	6-8	From 90	0	NA	NA	NA	NA	>3.4'	YES	u
04/27/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	n
05/04/2015	10-15	From 180	0	NA	NA	NA	NA	>3.4'	YES	н
05/13/2015	2-4	From 310	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond
05/20/2015	6-8	From 90	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond
05/25/2015	8-12	From 180	0	NA	NA	NA	NA	>3.4'	YES	1
06/01/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	1
06/08/2015	8-12	From 270	0	NA	NA	NA	NA	>3.4'	YES	11

Inspection Date	Wind Speed (MPH)	Wind Direction (Degrees)	H2S (ppm)	Dissolved Sulfide (ppm)	Dissolved Oxygen (ppm)	Temp. (celcius)	рН	Free Board (feet)	Liner/Berm Integrity	Comments	
06/15/2015	2-4	From 0	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
06/22/2015	4-8	From 120	0	NA	NA	NA	NA	>3.4'	YES	II.	
06/29/2015	3-5	From 180	0	NA	NA	NA	NA	>3.4'	YES	н	
07/06/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES	0	
07/13/2015	6-8	From 270	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
07/20/2015	10-15	From 180	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
07/27/2015	2-4	From 0	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
08/05/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	11	
08/12/2015	8-12	From 310	0	NA	NA	NA	NA	>3.4'	YES	11	
08/19/2015	Calm	NA	· 0	NA	NA	NA	NA	>3.4'	YES	11	
08/24/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES		
09/02/2015	7-10	From 270	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
09/09/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
09/15/2015	10-15	From 180	0	NA	NA	NA	NA	>3.4'	YES	11	
09/21/2015	3-5	From 90	0	NA	NA	NA	NA	>3.4'	YES	u	e t
09/28/2015	6-8	From 135	0	NA	NA	NA	NA	>3.4'	YES	n	с. Х. С.
10/02/2015	10-15	From 180	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
10/07/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	e vento de la companya de la company
10/12/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
10/19/2015	6-8	From 270	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
10/26/2015	10-15	From 180	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
11/04/2015	3-5	From 90	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
11/10/2015	10-15	From 90	0	NA	NA	NA	NA	>3.4'	YES	Pond precip. being pumped dry by vacuum truck	
11/18/2015	2-4	From 90	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond. Measure Sludge.	
11/23/2015	8-12	From 270	0	NA	NA	NA	NA	>3.4'	YES	4	
12/03/2015	3-5	From 270	0	NA	NA	NA	NA	>3.4'	YES	H	
12/07/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	R	
12/14/2015	6-8	From 135	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
12/21/2015	4-8	From 120	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	
12/29/2015	Calm	NA	0	NA	NA	NA	NA	>3.4'	YES	" Trace Precip Water in Pond	

Schneider Waste Management Facility Monthly Sump Inspection Field Data 2015

			New NE S	SUMP			New SE S	UMP		
Inspection Date	Water in Sumps	Dissolved Sulfide (ppm)	Dissolved Oxygen (ppm)	Temp. (celcius)	pН	Dissolved Sulfide (ppm)	Dissolved Oxygen (ppm)	Temp. (ceicius)	рН	Comments
										Minor Precip Water Only Entering Sumps in Old (deep) Sump System (water in sumps is below inlet)
01/05/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	New Sump Inspection System Dry
02/03/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	11
03/02/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	ů,
04/02/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	1
05/04/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	li l
06/01/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	1
07/06/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	10
08/05/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	1
09/02/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	8
10/02/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	11
11/04/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	11
11/11/2015	Yes									Old sumps being pumped dry with vac truck
12/03/2015	Trace Only	NA	NA	NA	NA	NA	NA	NA	NA	No new water in sumps