

July 9, 2018

Bond releases at the New Horizon Mine permit (C-1981-008) began in July 1989 with SL-1. SL-19 was the latest bond release approved on May 15, 2018. The tracking of the bond released acres has been confusing over the NH Mine's 30-year history and has resulted in inconsistencies in acreage tracking by both the operator and the Division.

The first series of bond releases mostly dealt with pre-law disturbances in the area known collectively as the New Horizon 1 Mine, which lies to the north of the New Horizon 2 Mine. During the early releases at the NH1 Mine, it was common practice to release sections of land known as "areas." General descriptions were used to describe locations of these "areas" and acres were listed but not defined as either permitted or disturbed. Another common practice during the early bond releases was to automatically remove the bond released area from the permit boundary without a secondary revision describing the boundary changes. This created confusion in determining the relevant maps and what parcels of land remained in the permit boundary.

The process of determining where the errors had occurred started by working backwards through the records. Three datasets were created to determine the bond released acres location and exactly how many acres have been released.

- The first attached dataset is a spreadsheet of all reported acreages found in the Findings documents for the life of the mine. This included all SL, PR, MT and RN findings that could be found (MT1 and SL2 findings were not located).
- The second dataset is another spreadsheet with the acres reported on the decision forms for all the permitting actions dating back to 1993 (this date was the earliest available in Laserfiche). The number of disturbed acres, bond release acres (Phases I, II and III) and permitted acres were recorded. The data from the ARR forms submitted by the operator is also included in this dataset.
- The third dataset is a collection of maps used to determine acreages and locations. It should be noted here that former mapping techniques and modern mapping methods (GIS/GPS) do not always yield the same results; therefore, map comparisons were mostly used to determine the location of bond released acres and for relative acreage sizing. This data set is not attached because of its size and complexity. All the maps used in this dataset are available in Laserfiche.

After completing and comparing the three datasets, many inconsistencies were realized within each dataset and between all datasets. The inconsistencies could be categorized into 5 categories:

- 1) No clear distinction in the application or findings documents between permitted and disturbed acres,

- 2) Typos or inaccuracies in acreage reporting on ARR and decision forms,
- 3) Inconsistencies in mapping of similar areas on different maps,
- 4) Inaccurate descriptions in findings, and
- 5) The naming of 'areas' was not consistent between different permitting actions.

The following is a list of all the bond releases explaining how many acres were released, where the acres are located and clarifying any inconsistencies.

SL 01 – 07/05/1989

New Horizon 1 - County Landfill

55.6 acres released from liability reported in SL-1 Findings.

42.2 acres released from liability reported in SL-4 Findings.

The Operations Map-Exhibit 12-1 in the SL-1 file verifies that the area is approximately 55.6 acres. It has been agreed upon by both the Division and ERMR that 55.6 is the permitted acreage and 42.2 is the disturbed acreage. These acres have been counted as receiving Phase I, II and III bond released.

This area is located N of AA Road and N/ NE of 2700 Road.

SL 02 – 10/06/1993

New Horizon 1 - Montrose County landfill

14.2 acres released from liability reported in 1/5/1994 letter. A Findings document was not found. No distinction was made in the letter if the acres were permitted or disturbed. Looking at the Operations Map-Exhibit 12-1 in the SL-1, file it appears that the permit and disturbed area were the same. It has been agreed upon by both the Division and ERMR that 14.2 is both permitted and disturbed acreage. These acres have been counted as receiving Phase I, II and III bond released.

The area is located N of AA Road and E of 2650 Road.

SL 03 – 12/16/1994

Phase I on New Horizon 1, Sec 25 215.5 acres (excluding 98.4 acres of the "Rice Tract")

(Phase II on Areas 1 and 2 of New Horizon 1 denied)

SL 04 – 05/06/1996

Phase I for 98.6 acres on Rice Tract of New Horizon 1.

Phase I on 51.8 acres of Area 1 (southeast corner) of New Horizon 2.

SL 05 – 01/08/1998

Phase I on 67.4 acres of Area 2 of New Horizon 2.

SL 06 – 07/23/1999

Phase I on 43.4 acres of Mine 2.

SL 07 – 12/21/2001

Phase II and III on New Horizon 1, Areas 1 and 2. This area comprises 215.5 permitted acres of which 134.9 acres were disturbed. The decision form states that 209.2 acres were removed but no documentation was found explaining this value.

SL 08 – 10/25/2002

Phase I on Area 4 of New Horizon 2, 85.64 acres.

RN 04 – 03/25/2003

The Findings state that on 12/2001 (SL7), the Division approved PIII release of 221.8 ac of the Mine 1 area, leaving 98.6 ac (Rice Tract). The value of 221.8 acres was not supported in other documents and therefore not used in further calculations. Also, this statement appears to be a source of confusion. It can be interpreted to mean that the Rice Tract did not achieve PIII but has been PII released. Later findings documents (RN5 and RN6) state that the vegetation was not adequate to “achieve the Phase III revegetation success standards,” suggesting that Phase II has been achieved. The Rice Tract only achieved Phase I in SL4. It contains 98.6 permitted acres of which 74.3 acres are disturbed.

SL 09 – 07/16/2007

Drill holes/exploration holes in NH2 area.

SL 10 – 10/22/2007

Irrigation pipeline relocation

SL 11 – 06/12/2009

Phase I and II on six areas of NH2 east of 2700 Road

Phase I 116.52 acres

Phase II 300.04 acres

SL12 through SL20 address parcels in the NH2 portion of the mine area. These SLs were better documented and don't need additional explanation to what is already in the respective Findings documents.

Additional Information:

The Rice Tract is currently bonded in both the New Horizon (C-1981-008) and the New Horizon North permits (C-2010-089). No tasks are listed in the NH cost estimate for Phase II work. Task 66 is a revegetation costs and is the only remaining task for the NH1 portion of the mine.

During the review of the SL-19 application, the number of acres reported to be Phase I, II and III bond released were not consistent between the Annual Reclamation Report, the Division's Permit System and various maps. Data was gathered from all the findings documents, revision decision forms dating back to 1993 (see attached) and available maps to account for the acres. A review of the data shows that over the NH Mine's 30 year history, numerous errors in accounting, mapping and reporting were made. The Division worked with ERMR using the historic data and modern mapping data (GIS/GPS) to determine the values for the bond released acres. The total values for bond released acres, including the acres approved for release in SL-19, are: Phase I – 872.8, Phase II – 645.05 and Phase III – 481.92.

The Permit System was adjusted in SL-19 so these cumulative values will be the values used in all bond release actions from this point forward.

New Horizon - Permitting Actions for Acreage Tracking

		Disturbed Acreages				Bond Released Acres						Permitted Acres							
		Decision Forms		ARR		Findings			ARR			Decision Forms		Findings					
Date	Revision	Acres Dist.	Total Dist.		Acres Dist.	Total	P I	P II	P III		P I	P II	P III	+/-	Total		+/-	Total	
Mar-17	TR78	0.00	838.00											0.00	913.92				
Mar-17	SL15	0.00	838.00				23.5	111.4						0.00	913.92		0.00	913.92	
Jan-17	SL18	0.00	838.00												0.00	913.92		0.00	913.92
Jan-17	TR76	0.00	838.00												0.00	913.92			
2016					0.00	809.30					868.2	521.3	221.3						
Dec-16	TR75	0.00	838.00											0.00	913.92				
Nov-16	MR103	0.00	838.00											0.00	913.92				
Oct-16	TR74	0.00	838.00											0.00	913.92				
Oct-16	SO2	0.00	838.00											0.00	913.92				
Aug-16	TR73	-14.97	838.00											-14.97	913.92				
Jul-16	MR101	0.00	852.97											0.00	928.89				
Jun-16	MR102	0.00	852.97																
Jun-16	MR100	0.00	852.97																
Jun-16	TR72	0.00	852.97																
May-16	TR70	0.00	862.37																
May-16	TR71	0.00	862.37											0.00	928.89				
Apr-16	MR96	0.00	862.37																
Apr-16	MR99	0.00	862.37																
Mar-16	MR98	0.00	862.37																
Mar-16	MR97	0.00	862.37																
Mar-16	SL17	-9.40	852.97				5.8	9.4	9.4					-	928.89		-	928.89	
Feb-16	SL16	0.00	862.37				107.8							-	928.89		-	928.98	
2015					0.00	801.96					678.84	583.48	215.5						
Dec-15	TR69	0.00	862.37																
Nov-15	MT7																-	926.06	
Nov-15	SI1	0.00	862.37																
Jun-15	TR68	0.00	862.37											0.00	928.89				
Jun-15	MR95	0.00	862.37											0.00	928.89				
Jun-15	MR94	0.00	862.37											0.00	928.89				
May-15	MR93	0.00	862.37											0.00	928.89				
May-15	TR67	0.00	862.37											0.00	928.89				
Apr-15	TR66	0.00	862.37											0.00	928.89				
Mar-15	TR65	2.83	862.37											+2.83	928.89				
Feb-15	MR92	0.00	859.54											0.00	926.06				
2014					0.00	801.96					678.84	583.48	215.5						
Oct-14	TR64	0.10	859.54											0.00	926.06				
Aug-14	MR91	0.00	859.44											0.00	926.06				
Jun-14	MR90	0.00	859.44											0.00	926.06				
May-14	TR63	-7.22	859.44											0.00	926.06				
May-14	MR89	0.00	866.66											0.00	926.06				
Feb-14	PR8	0.00	866.66											0.00	926.06		-	926.06	
Jan-14	MR88	0.00	866.66											0.00	926.06				
2013					8.80	801.96					678.84	583.48	215.5						
Nov-13	MR87	0.00	866.66											0.00	926.06				
Nov-13	SL13	0.00	866.66				100.16	7.22	7.22					0.00	926.06		-	-	
Oct-13	RN6	0.00	866.66											0.00	926.06		-	926.06	
Jul-13	SL14	WD												0.00	926.06				
Jul-13	MR86	0.00	866.66											0.00	926.06				
Jun-13	PR7	WD												0.00	926.06				
Feb-03	MR85	0.00	866.66																
2012					22.00	787.96					678.84	583.48	215.5						
Jun-12	MR84	0.00	866.66																
Jun-12	SL12	WD																	
May-12	MR83	0.00	866.66																
May-12	TR62	0.00	866.66																
2011					36.66	765.69					678.84	583.48	215.5						
Dec-11	MR82	0.00	866.66											0.00	926.06				
Nov-11	TR60	0.00	866.66											0.00	926.06				
Nov-11	TR61	0.00	866.66																
Nov-11	MR81	0.00	866.66																
Mar-11	MR80	0.00	866.66																
Mar-11	MR79	0.00	866.66																
2010					20.20	749.26					678.84	583.48	215.5						
Dec-10	MR78	0.00	866.66																
Dec-10	MT6																-	926.06	
Dec-10	AD1 (PS)	338.39	866.66											0.00	926.96		-	926.06	
Oct-10	PR6	0.00	528.27																
Sep-10	MR77	0.00	528.27																
Jun-10	MR76	0.00	528.27																
2009					28.20	783.16					326.15	215.5	215.5						
Dec-09	TR59	0.00	528.27																
Aug-09	RN5	0.00	528.27											-	926.96		-	926.96	
Jun-09	SL11	0.00	528.27				116.7	300.03						0.00	926.96		-	926.96	
May-09	TR58	0.00	528.27																
Mar-09	TR57	0.00	528.27											0.00	926.96				
Jan-09	MR75	1.26	528.27											+1.26	926.96				
2008					25.90	754.96					326.15	215.5	215.5						
Aug-08	MR74	0.00	527.01											0.00	925.70				
Jun-08	MR73	0.00	527.01											0.00	925.70				
May-08	TR56	0.00	527.01											0.00	925.70				
Feb-08	TR55	WD																	
2007					58.60	729.06					326.15	215.5	215.5						
Oct-07	SL10	0.00	527.01				5							0.00	925.70		-	922.16	
Jul-07	TR54	0.00	527.01											0.00	925.70				
Jul-07	SL9	0.00	527.01											0.00	925.70		0.00	922.16	
Dec-06					38.60	613.17					326.15	215.5	215.5						
2005					48.57	57													

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		Decision Forms		ARR		Findings			ARR			Decision Forms		Findings				
Date	Revision	Acres Dist.	Total Dist.		Acres Dist.	Total	P I	P II	P III		P I	P II	P III	+/-	Total		+/-	Total
Sep-05	TR53	0.00	527.01											0.00	925.70			
Aug-05	MR71	0.00	527.01															
May-05	MR69	0.21	527.01															
May-05	MR70	0.00	526.80															
Feb-05	MR68	0.00	526.80															
Jan-05	TR52	1.50	526.80											0.00	925.70			
2004					21.57	526					326.15	215.5	215.5					
Nov-04	MR67	0.00	525.30											0.00	925.70			
Aug-04	TR51	0.00	525.30															
Mar-04	MR66	0.00	525.30															
Feb-04	MR65	0.00	525.30															
2003					40.11													
Dec-03	TR50	0.00	525.30											0.00	925.70			
Dec-03	TR49	0.00	525.30															
Oct-03	TR48	0.00	525.30															
Sep-03	MR64	0.00	525.30															
Mar-03	RN4	0.00	525.30											0.00	925.70			922.18
2002					30.83													
Nov-02	TR47	0.00	525.30															
Nov-02	SL8	0.00	525.30				85.64							0.00	925.70	-	-	-
Jul-02	MR63	0.00	525.30															
Jul-02	MR62	0.00	525.30															
May-02	MR61	0.00	525.30															
Apr-02	MR60	0.00	525.30															
Apr-02	MR59	0.00	525.30															
Apr-02	MR58	0.00	525.30															
Apr-02	MR57	0.00	525.30											0.00	925.70			
Jan-02	MR56	0.00	525.30															
Jan-02	MR54	0.00	525.30											0.00	925.70			
Jan-02	MR55	0.00	525.30											0.00	925.70			
2001					38.20						-	-	-					
Dec-01	SL7	-209.20	525.30					134.9	134.9					-209.20	925.70	-215.5	-	-
Dec-01	MR53	0.00	734.50											0.00	1,134.90			
Dec-01	MR52	0.00	734.50											0.00	1,134.90			
Oct-01	MR51	0.00	734.50											0.00	1,134.90			
Sep-01	TR45	0.00	734.50															
Aug-01	TR46	0.00	734.50															
Jul-01	MR50	0.00	734.50											0.00	1,134.90			
Jul-01	MR49	0.00	734.50											0.00	1,134.90			
Jul-01	MR48	0.00	734.50											0.00	1,134.90			
May-01	MR47	0.00	734.50											0.00	1,134.90			
May-01	TR44	0.00	734.50															
Mar-01	TR43	0.00	734.50															
Feb-01	MR46	0.00	734.50											0.00	1,134.90			
Jan-01	MT4																	-
2000					8.20													
Dec-00	TR42	0.00	734.50															
Dec-00	TR41	0.00	734.50															
Dec-00	MR45	0.00	734.50											0.00	1,134.90			
Aug-00	MR44	0.00	734.50											0.00	1,134.90			
Apr-00	PR5	353.50	734.50											476.00	1,134.90	476.00	-	-
1999					50.82													
Dec-99	MR43	0.00	381.00											0.00	658.90			
Aug-99	TR39	0.00	381.00															
Jul-99	SL6	0.00	381.00				43.4							0.00	658.90	-	-	-
May-99	MR42	0.00	381.00											0.00	658.90			
Apr-99	TR40	0.00	381.00															
1998					22.82													
Dec-98	TR37	0.00	381.00															
Nov-98	TR38	0.00	381.00															
Nov-98	TR36	0.00	381.00											0.00	658.90			
Sep-98	MR41	0.00	381.00											0.00	658.90			
Apr-98	MR40	0.00	381.00											0.00	658.90			
Apr-98	MR39	0.00	381.00											0.00	658.90			
Mar-98	RN3		No dec. form													0.00	658.90	
Jan-98	SL5	0.00	381.00				67.4							0.00	658.90			
1997					30.96													
Dec-97	MR38	0.00	381.00											0.00	658.90			
Nov-97	TR35	0.00	381.00											0.00	754.40			
Jun-97	MR37	0.00	547.40											-	-			
Apr-97	MR36	0.00	0.00											-	-			
Mar-97	TR34	0.00	0.00											0.00	0.00			
Feb-97	TR33	0.00	0.00											0.00	0.00			
1996					16.68													
Dec-96	TR32	0.00	0.00											0.00	0.00			
Oct-96	PR4	100.43	547.35											100.70	644.90	100.70	658.90	
Sep-96	MR35	4.80	-											-	-			
Aug-96	MR34	0.00	-											-	-			
May-96	SL4		No dec. form				126.1							-	-	-	-	-
May-96	TR28	0.00	-											0.00	-			
May-96	MR33	0.00	-											-	-			
Mar-96	TR31	0.00	-											0.00	-			
Mar-96	TR30	0.00	-											0.00	-			
Jan-96	TR29	0.00	-											-	-			
1995					42.90													
Nov-95	MT3															-		646.60
Nov-95	TR24	0.00	-											0.00	-			
Nov-95	MR32	0.00	-											-	-			
Oct-95	MR31	0.00	-											0.00	-			
Sep-95																		

New Horizon - Permitting Actions for Acreage Tracking

			Disturbed Acreages					Bond Released Acres							Permitted Acres						
			Decision Forms			ARR		Findings				ARR			Decision Forms			Findings			
Date	Revision		Acres Dist.	Total Dist.		Acres Dist.		Total	P I	P II		P III	P I		P II	P III		+/-	Total	+/-	Total
May-95	MR28		0.00	-										0.00	-						
May-95	TR25		0.00	-										0.00	-						
Mar-95	MR27		0.00	-										0.00	-						
Jan-95	MR26		0.00	-										0.00	-						
Jan-95	TR23		0.00	-																	
1994					74.83																
Dec-94	TR22		0.00	-																	
Dec-94	SL3		0.00	-			215.5							0.00	-	-	-				
Sep-94	TR20		0.00	-																	
Sep-94	TR19		0.00	-																	
Sep-94	MR25			No dec. from																	
Aug-94	MR24		0.00	-										0.00	-						
Aug-94	TR21		0.00	-																	
Jul-94	MR23		0.00	-										0.00	-						
Jun-94	PR3																646.50				
May-94	TR18		0.00	-										0.00	-						
Jan-94	SL2			No dec. form			14.2(NF)	14.2(NF)	14.2(NF)												
Jan-94	MR22		0.00	-										0.00	-						
1993					74.37																
Dec-93	TR17		0.00	-										0.00	-						
Oct-93	TR16		WD																		
Sep-93	MR21		0.00	-										0.00	-						
Aug-93	MR20		0.00	-										0.00	-						
Jul-93	MR19		0.00	-										0.00	-						
Jul-93	TR15		0.00	-										0.00	-						
Apr-93	RN-2															-	646.50				
Feb-93	TR-10		2.20	-										0.00	-						
Dec-92																					
Dec-91					2.60																
May-91	MT2																646.50				
Dec-90					0.00																
Jul-89	SL1						55.6	55.6	55.6					-	-	-	-				
Feb-89	PR2		219.90	365.60												219.90	646.50				
May-88	RN1			145.70												0.00	426.60				
Apr-87	PR1															6.60	426.60				
Dec-86	TC																				
Dec-85	TC																				
Dec-84	TC																				
Mar-83	Issuance		170.00													393.00	393.00				

(NF) No Findings document were found for this revision
" - " means not reported
The colors are coordinated to show inconsitancies in acreage tracking.