



pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION



Bureau of Radiation Protection

Appalachian Compact LLRW Disposal Data Calendar Year 2020

Low-Level Waste Advisory Committee Meeting
October 1, 2021

Tom Wolf, Governor

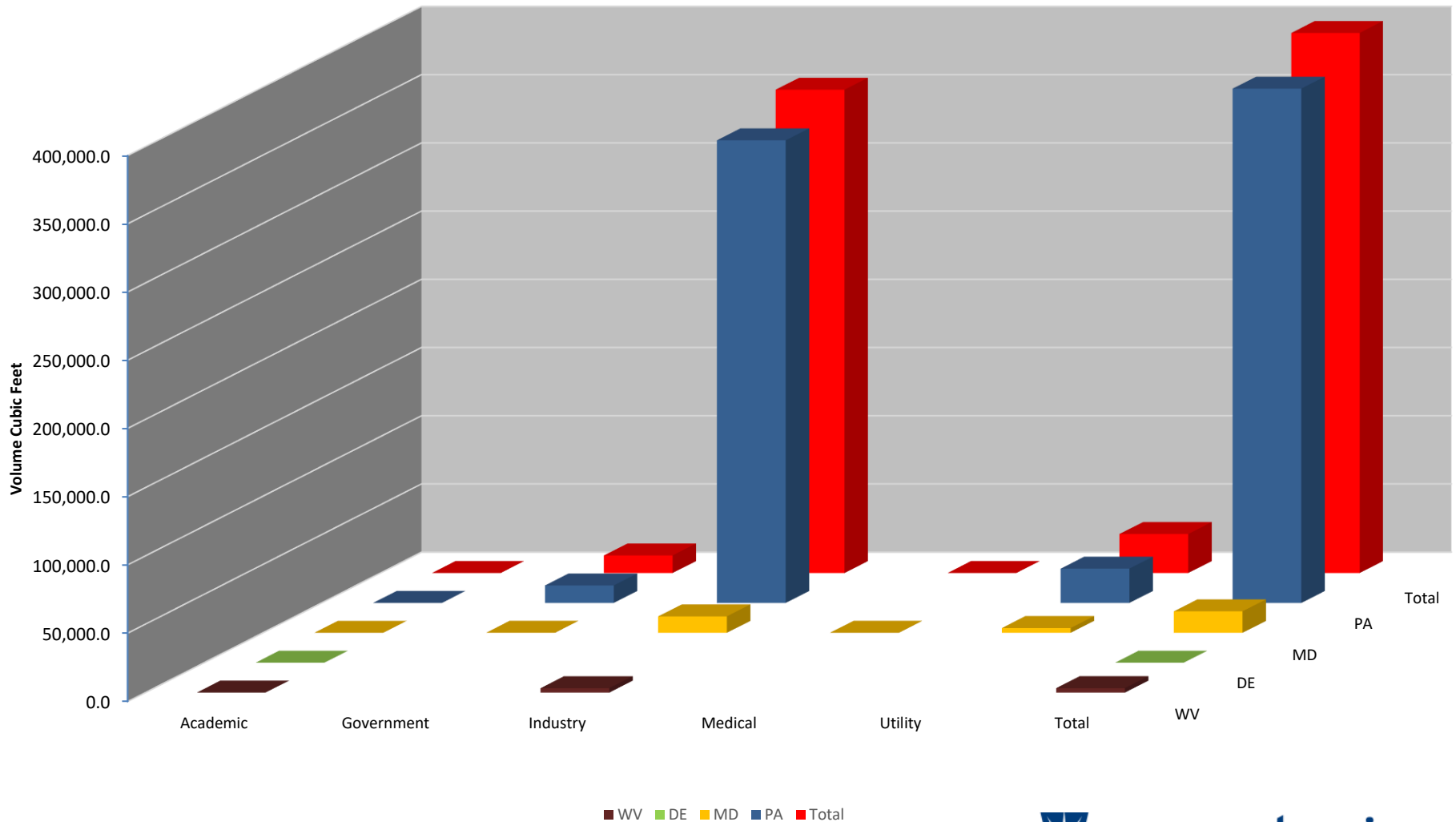
Patrick McDonnell, Secretary

Appalachian Compact Disposed LLRW Volume by State and Facility Type - 2020

Facility Type/State	WV	DE	MD	PA	Total
Academic	22	3	11	24	59
Government	0	0	100	12,783	12,883
Industry	3,240	0	12,028	339,018	354,285
Medical	0	0	64	0	64
Utility	0	0	3,506	25,091	28,597
Total	3,262	3	15,709	376,915	395,889

Volume is in cubic feet. This data is for LLRW disposal at EnergySolutions in Clive, Utah, and Waste Control Specialists in Andrews, Texas, for the calendar year 2020.

Appalachian Compact Disposed LLRW Volume by State and Facility Type - 2020

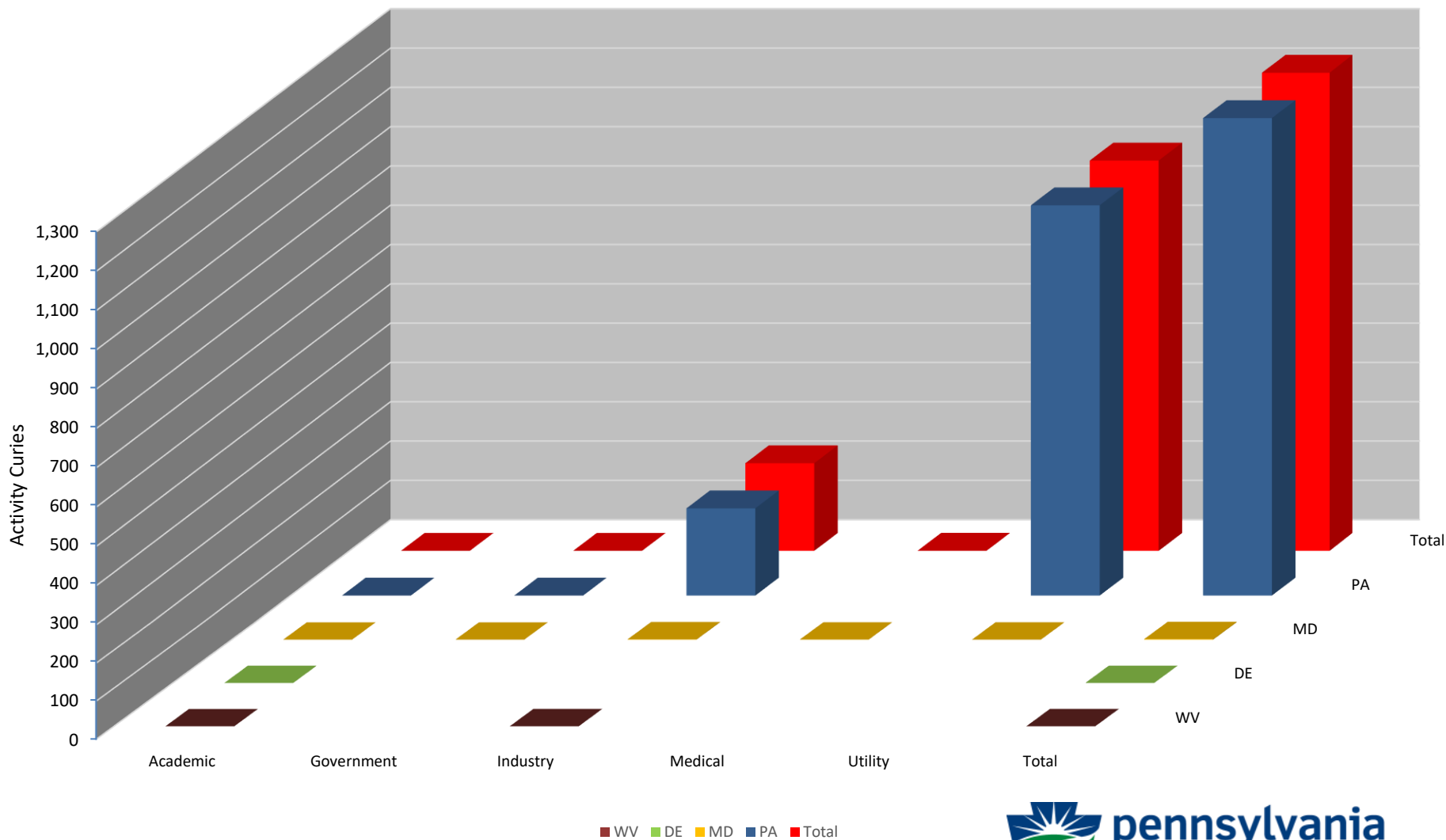


Appalachian Compact Disposed LLRW Activity by State and Facility Type - 2020

Facility Type/State	WV	DE	MD	PA	Total
Academic	<1	<1	<1	<1	0.069
Government	0	0	<1	<1	0.063
Industry	<1	0	<1	222	223
Medical	0	0	<1	0	0.27
Utility	0	0	<1	993	993
Total	0.172	0.007	1.52	1,215	1,217

Activity is in curies. This data is for LLRW disposal at EnergySolutions in Clive, Utah, and Waste Control Specialists in Andrews, Texas, for the calendar year 2020.

Appalachian Compact Disposed LLRW Activity by State and Facility Type - 2020

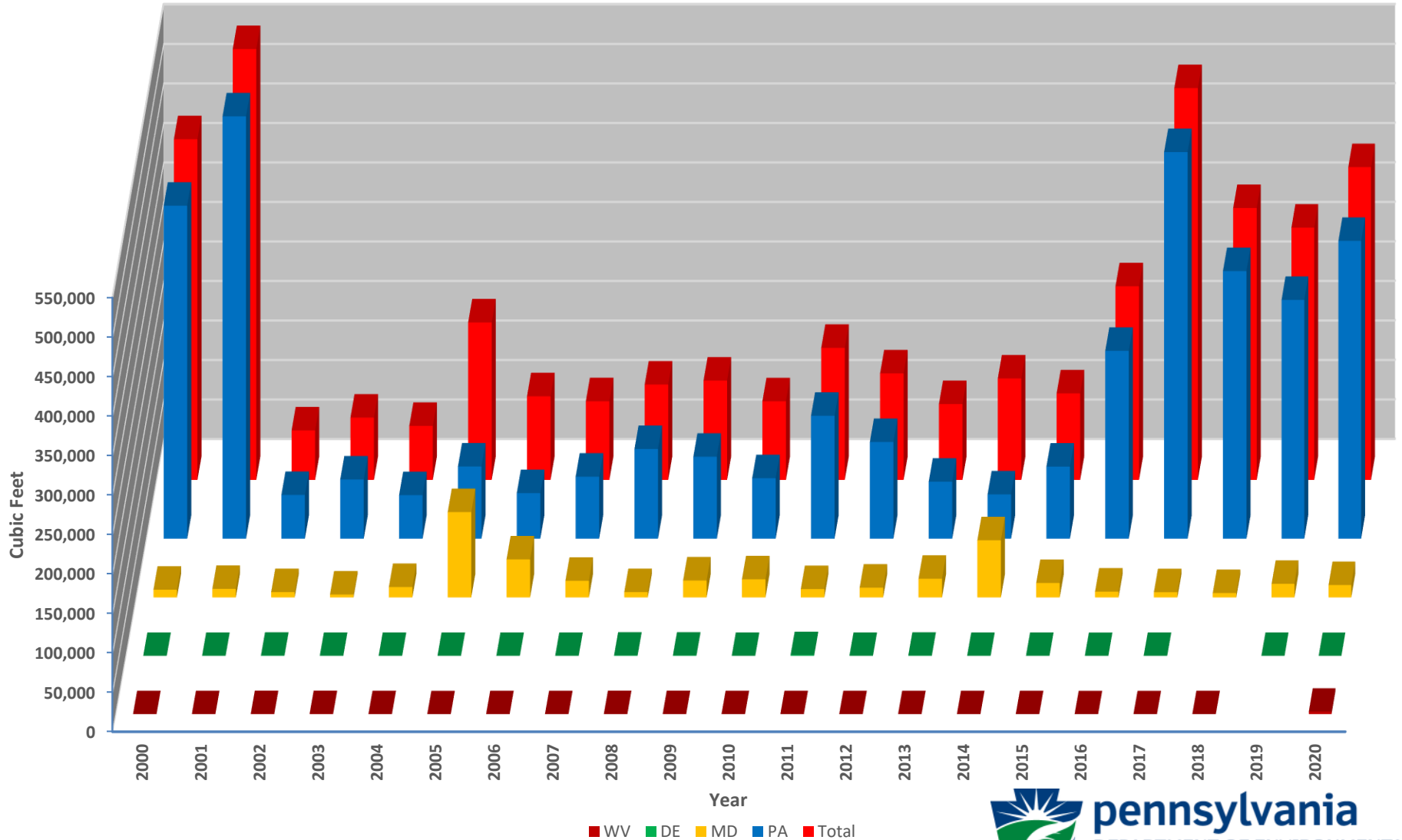


Appalachian Compact Disposed LLRW Volume in Cubic Feet from 2000 to 2020

Year	WV	DE	MD	PA	Total
2000	53	28	9,767	421,398	431,246
2001	44	76	10,760	534,429	545,310
2002	183	366	6,753	55,371	62,674
2003	152	74	3,703	74,901	78,829
2004	35	49	13,178	55,136	68,397
2005	2	74	107,956	91,293	199,326
2006	38	59	48,132	57,628	105,857
2007	49	43	21,016	78,455	99,562
2008	132	415	6,703	113,483	120,733
2009 *	134	431	21,451	103,667	125,684
2010 *	11	29	22,958	76,519	99,518
2011 *	19	1,061	10,569	155,509	167,157
2012 *	21	75	12,364	122,380	134,841
2013 *	45	340	23,597	72,067	96,048
2014* **	25	43	72,334	56,040	128,442
2015* **	19	45	18,203	91,223	109,490
2016* **	2	5	7,351	237,692	245,049
2017* **	1	34	6,588	489,266	495,889
2018* **	17	0	5,498	338,668	344,184
2019* **	0	26	17,193	302,148	319,367
2020* **	3,262	3	15,709	376,915	395,889
Total	4,244	3,275	461,782	3,904,188	Grand Total
					4,373,490

* 2009 to 2013 LLRW volume only includes disposal at EnergySolutions in Clive, Utah. ** 2014 to 2020 includes disposal at EnergySolutions in Clive, Utah, and Waste Control Specialists in Andrews, Texas. Years 1999 to 2008 include disposal at Barnwell, South Carolina, and Energy Solutions, Clive, Utah.

Appalachian Compact Disposed LLRW Volume in Cubic Feet from 2000 to 2020

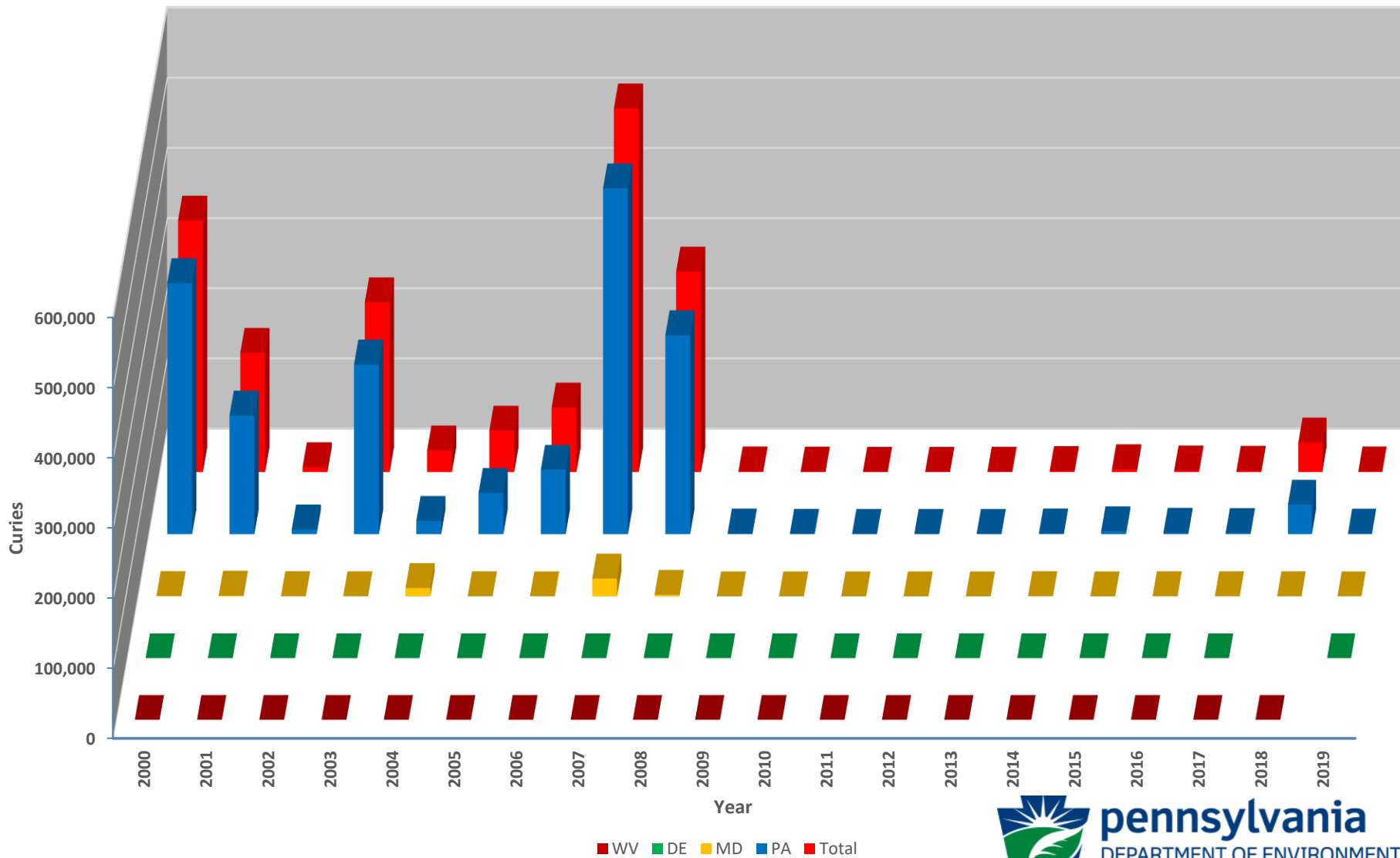


Appalachian Compact Disposed LLRW Activity in Curies from 2000 to 2020

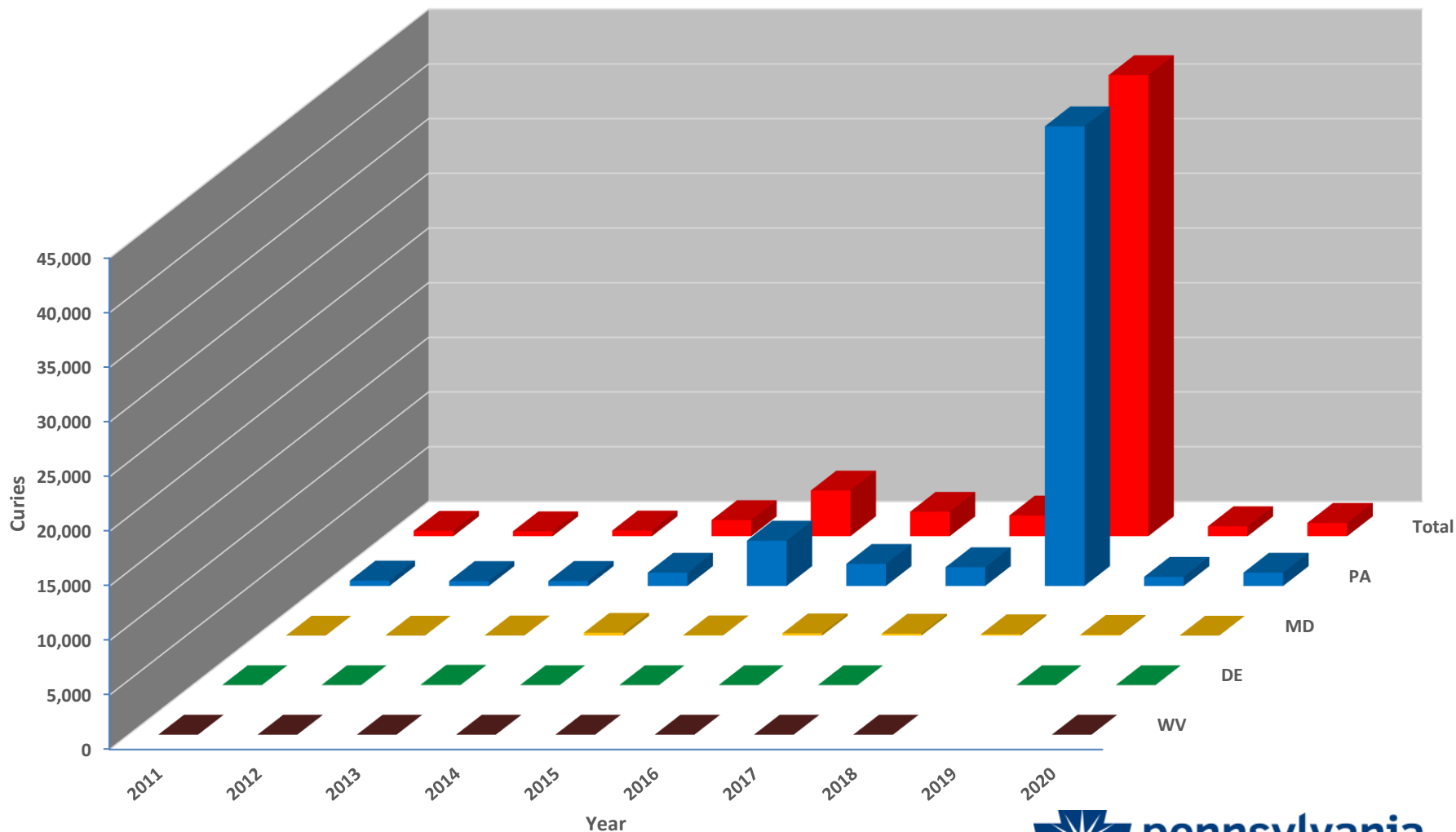
Year	WV	DE	MD	PA	Total
2000	2.2	0.02	484.0	357,624.4	358,110.7
2001	0.03	0.03	903.3	168,919.6	169,822.9
2002	0.1	0.5	244.5	6,777.4	7,022.5
2003	0.2	24.7	166.3	241,649.8	241,840.9
2004	0.8	0.2	11,830.7	18,890.3	30,722.0
2005	0.7	31.3	156.8	58,786.2	58,974.9
2006	0.03	11.9	60.1	91,719.1	91,791.1
2007	0.2	12.9	25,304.7	492,579.3	517,897.0
2008	0.1	12.2	2,181.5	283,328.8	285,522.6
2009 *	0.02	0.5	4.7	1,001.4	1,006.6
2010 *	0.01	0.03	1.4	656.8	658.2
2011 *	0.02	1.0	1.8	492.6	495.5
2012 *	0.003	0.01	2.1	449.3	451.4
2013 *	0.01	45.3	15.7	458.5	519.5
2014 **	0.002	0.01	260.7	1,212.8	1,473.5
2015 **	0.02	0.007	27.8	4,147.3	4,175.2
2016**	0.35	0.014	209	2,020.93	2,230.29
2017**	0.00001	0.0017	178.52	1,714.26	1,892.78
2018**	0.01	0	125.31	42,029.35	42,155.00
2019**	0	0.00263	72.6	837.0	910.0
2020**	0.172	0.00676	1.52	1,215.0	1,217.0
Total	4.98	140.63	42,233	1,776,510	Grand Total
					1,818,890

* 2009 to 2013 LLRW activity only includes disposal at EnergySolutions in Clive, Utah. ** 2014 to 2020 includes disposal at EnergySolutions in Clive, Utah, and Waste Control Specialists in Andrews, Texas. Years 1999 to 2008 include disposal at Barnwell, South Carolina, and EnergySolutions, Clive, Utah.

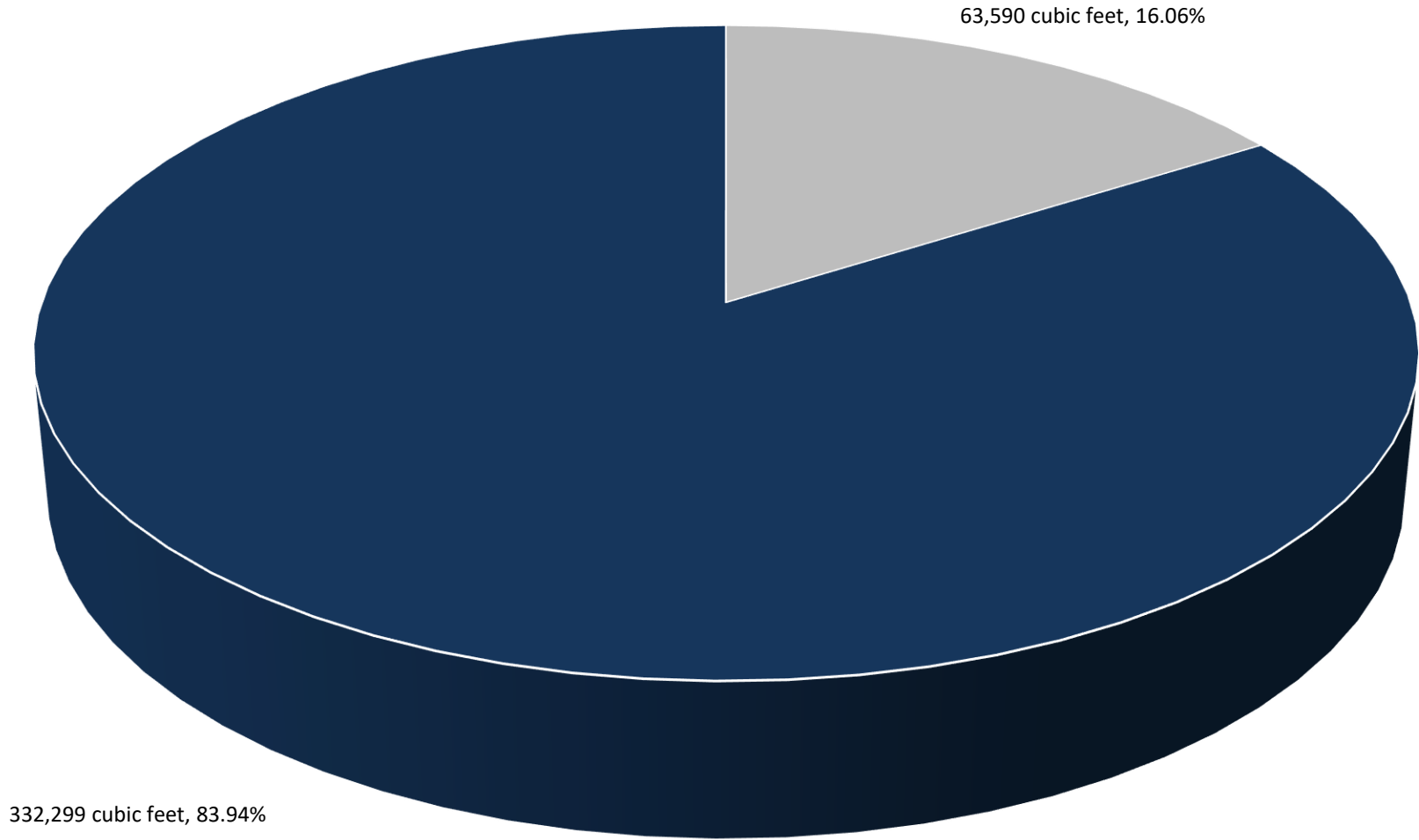
Appalachian Compact Disposed LLRW Activity in Curies from 2000 to 2020



Appalachian Compact Disposed LLRW Activity in Curies from 2011 to 2020

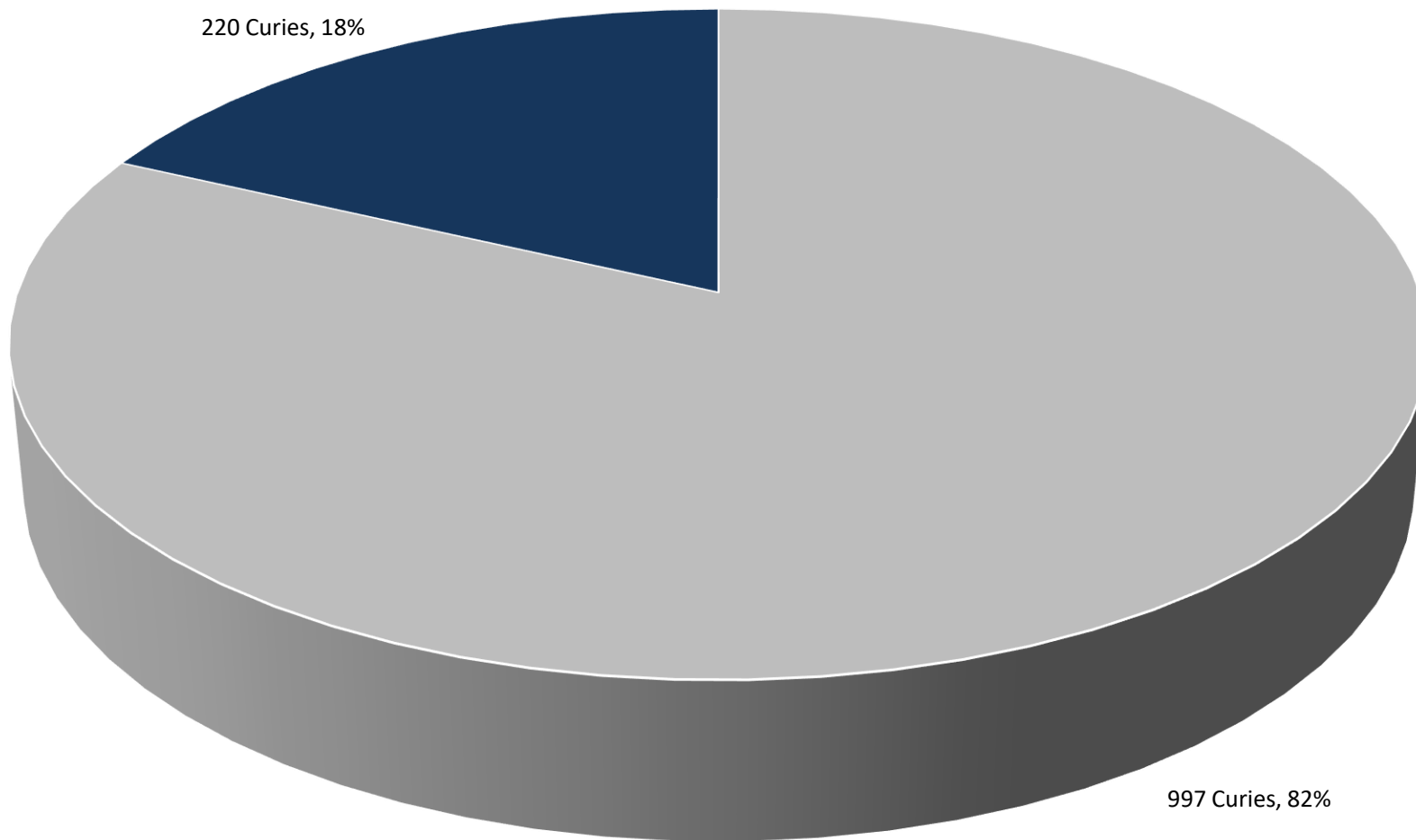


Appalachian Compact Percent Disposed LLRW Volume by Disposal Site - 2020



■ EnergySolutions ■ WCS

Appalachian Compact Percent Disposed LLRW Activity by Disposal Site - 2020



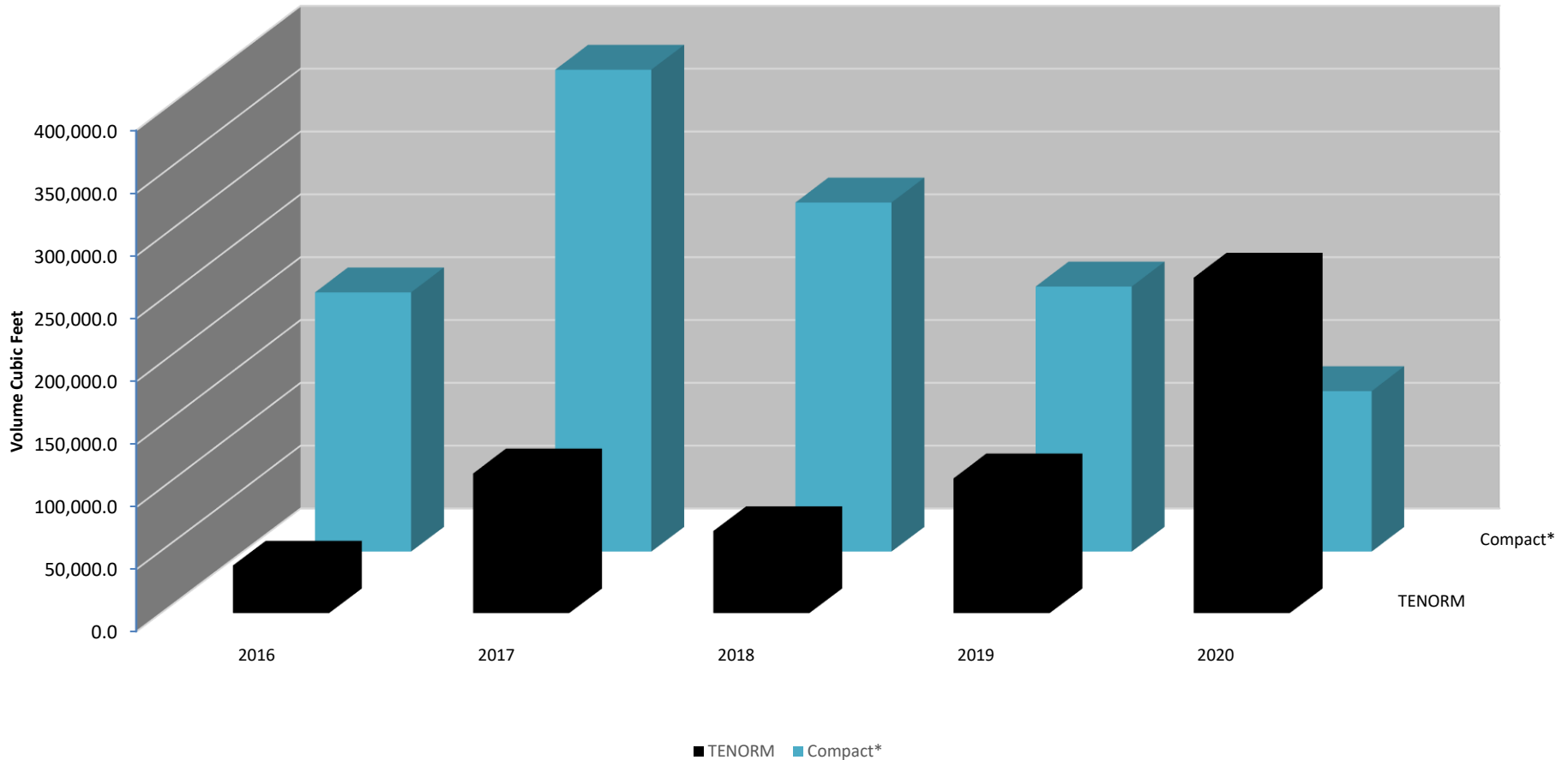
■ EnergySolutions ■ WCS

Disposed Compact LLRW and TENORM 2016 - 2020

	TENORM		LLRW	
Years	Volume (ft ³)	Activity (Ci)	Volume (ft ³)	Activity (Ci)
2016	38,400	0.91	206,649	2,229
2017	112,032	2.73	383,856	1,890
2018	66,048	1.88	278,136	42,153
2019	108,096	2.86	211,271	907
2020	267,880	4.43	128,009	1,213
Total	592,456	12.81	1,207,921	48,392

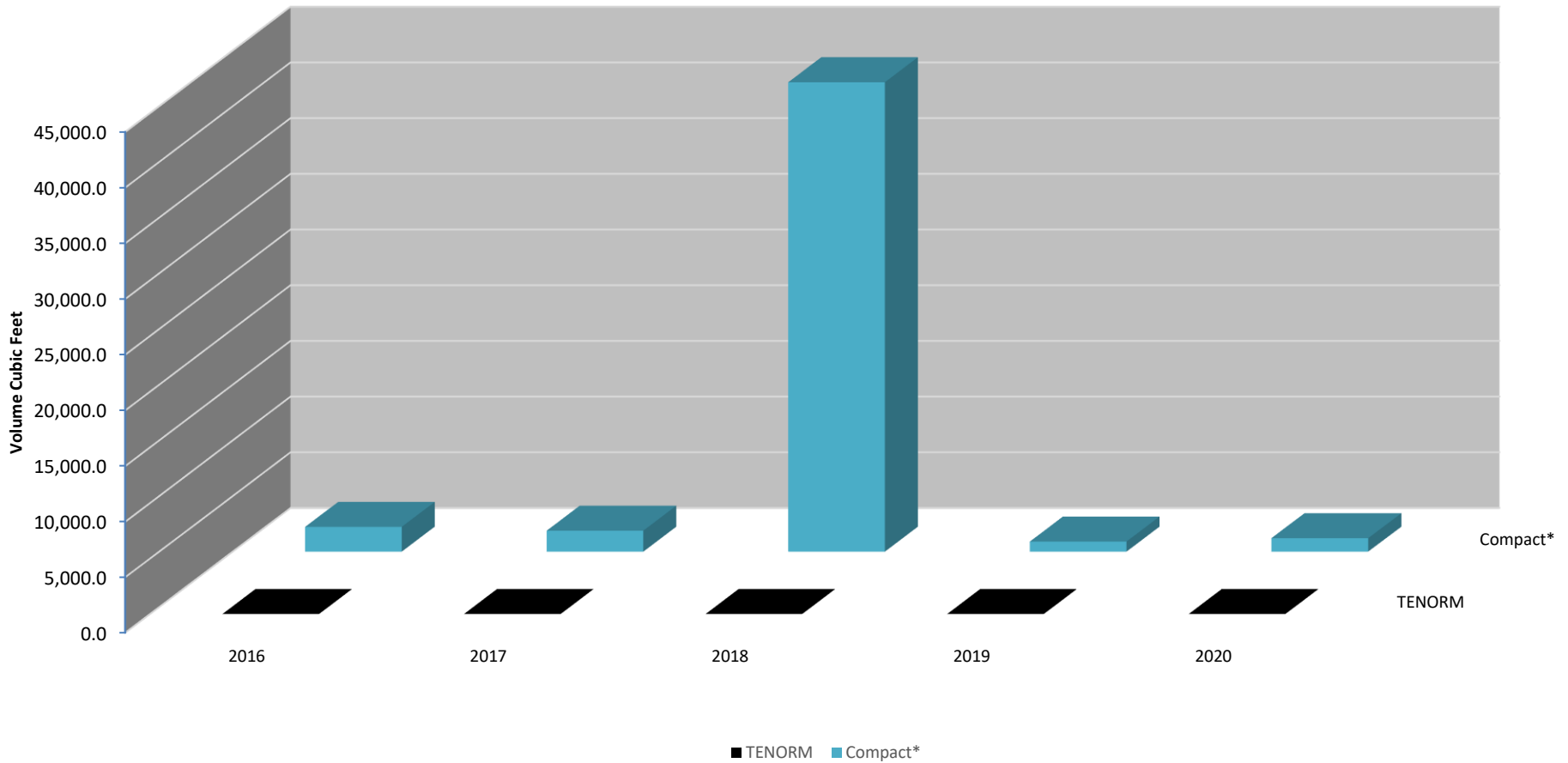
This table separates waste that is considered TENORM and compares the values to the rest of the waste generated within the Compact. It compares both volume and activity.

Disposed Compact LLRW and TENORM by Volume 2016 - 2020



* Waste data is given with TENORM waste that was included in the Compact. This chart separates waste that is considered TENORM and compares the values to the rest of the waste generated within the Compact.

Disposed Compact LLRW and TENORM by Activity 2016 - 2020



* Waste data is given with TENORM waste that was included in the Compact. This chart separates waste that is considered TENORM and compares the values to the rest of the waste generated within the Compact.

Thank you. Questions?

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Bureau of Radiation Protection

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