

Appendix E

VA TRI HISTORICAL TREND

Since its inception, the TRI program has been expanding and evolving, providing more information to the public about the presence and release of toxic and hazardous chemicals in communities. As a result, over the past 28 years, major regulatory changes have occurred that have made the direct historical comparison of releases from 1988 to 2014 difficult and potentially misleading. The information in Appendix E is historical and for general comparison purposes only.

During the early years of the program there were no major reporting changes. From 1988 until 1994 the consistency between reporting sectors and chemicals made comparison straightforward.

The first major change in reporting requirements was the addition of 286 chemicals and chemical categories to the TRI list beginning with reporting year 1995. The addition of chemicals in reporting year 1995 created a new baseline for TRI comparisons. A second major change was the inclusion of seven new non-manufacturing sectors (sectors that had not previously reported) to the TRI facility coverage beginning in the 1998 reporting year. With this change, 1998 became the new baseline for historical comparison. The third major change began with reporting year 2000, when seven chemicals and two chemical categories were added to the TRI chemical list. These chemicals, and chemical categories must be subtracted from reporting year 2000, 2001, and 2002 data to make comparisons to 1998 and 1999 more accurate. A fourth major change for reporting year 2011 was the inclusion of 16 new chemicals to the list of reportable chemicals. Of the 16 new chemicals which were added, 4 of these are classified as Polycyclic Aromatic Compounds (PACs). PACs are Persistent Bio-accumulative Toxins (PBTs) chemicals, and as such, they are likely to remain in the environment for a very long time, are not readily destroyed, and may build up or accumulate in body tissue. Hydrogen Sulfide was added to the list in reporting year 2012 following the lifting of an administrative stay on October 17, 2012. Ortho-Nitrotoluene was added to the list in reporting year 2014 following a final rule published by EPA which became effective on November 29, 2013.

It should be noted beginning with reporting year 2001, lead and lead compounds were re-designated as PBT chemicals, and the threshold for reporting was reduced to 100 pounds. This caused facilities to submit more reports for lead and lead compounds for reporting years 2001 and 2002.

Table E-1 shows the amounts of releases to each media for reporting years 2002 through 2011 (without specified PBTs, or vanadium and vanadium compounds). Facility revisions for previous reporting years were not included in this comparison of on-site releases.

Table E-1. On-Site Releases Comparison from 2002 – 2011 (from Section 5 of Form R)

Media	2002 (pounds)	2003 (pounds)	2004 (pounds)	2005 (pounds)	2006 (pounds)	2007 (pounds)	2008 (pounds)	2009 (pounds)	2010 (pounds)	2011 (pounds)	Percent Change 2002 - 2011
Air	56,923,331	50,962,772	48,124,542	41,167,066	41,273,390	39,390,601	29,770,387	26,946,032	24,617,658	19,972,183	-64.91%
Water	8,262,375	8,199,535	8,681,965	9,880,733	19,258,326	18,322,290	20,284,859	18,301,212	17,687,071	16,714,204	102.29%
Land	5,973,503	5,612,934	5,612,934	4,865,708	4,913,540	4,430,778	2,947,122	3,312,996	3,247,285	2,545,232	-57.39%
Total	71,159,209	64,775,241	62,419,441	55,913,507	65,445,255	62,143,669	53,002,368	48,560,240	42,304,729	39,231,618	-44.87%

Chapter Four of the Virginia 2014 TRI Report covers the reporting period 2012 to 2014, and it includes all chemicals and chemical compounds, and all facility revisions received through January 12, 2016.