

Appendix E

VA TRI HISTORICAL TREND

Since 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. In fact, over the past 25 years, major regulatory changes have occurred that made the direct historical comparison of releases from 1988 to 2011 difficult and potentially misleading. The information in Appendix E is historical and for general comparison 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.¹

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 comparison to 1998 and 1999 more accurate. A fourth major change for reporting year 2011 is the inclusion of 16 new chemicals to the list of reportable chemicals. Of the 16 new chemicals being added 4 of these are classified as Polycyclic Aromatic Compounds (PACs). PACs are PBT 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.

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 G-1 shows the amounts of releases to each media for the reporting years 1998 through 2005 (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 G-1. On-Site Releases Comparison from 1998 – 2005 (from Section 5 of Form R)

| Media | 1998 (pounds) | 1999 (pounds) | 2000 (pounds) | 2001 (pounds) | 2002 (pounds) | 2003 (pounds) | 2004 (pounds) | 2005 (pounds) | Percent Change 1998 - 2005 |
|-------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|------------------|-------------------------------------|
| Air | 63,917,097 | 61,406,080 | 58,848,923 | 57,127,421 | 56,923,331 | 50,962,772 | 48,124,542 | 41,167,066 | -55.26% |
| Water | 6,301,409 | 6,157,115 | 8,190,510 | 7,000,339 | 8,262,375 | 8,199,535 | 8,681,965 | 9,880,733 | 36.23% |
| Land | 4,392,513 | 5,344,373 | 5,955,480 | 6,442,197 | 5,973,503 | 5,612,934 | 5,612,934 | 4,865,708 | 9.73% |
| Total | 74,611,019 | 72,907,568 | 72,994,913 | 70,569,957 | 71,159,209 | 64,775,241 | 62,419,441 | 55,913,507 | -33.44% |

¹ Please refer to the prior year's TRI Report on DEQ SARA III website for prior historical comparison for 1988 – 1997

Chapter Four of the Virginia 2011 TRI Report covers the reporting period 2009 to 2011, and it includes all chemicals and chemical compounds, and all facility revisions received through January 14, 2013.