2014 DEQ Environmental Excellence Conference

Land Program Updates

Jeffery Steers, Director

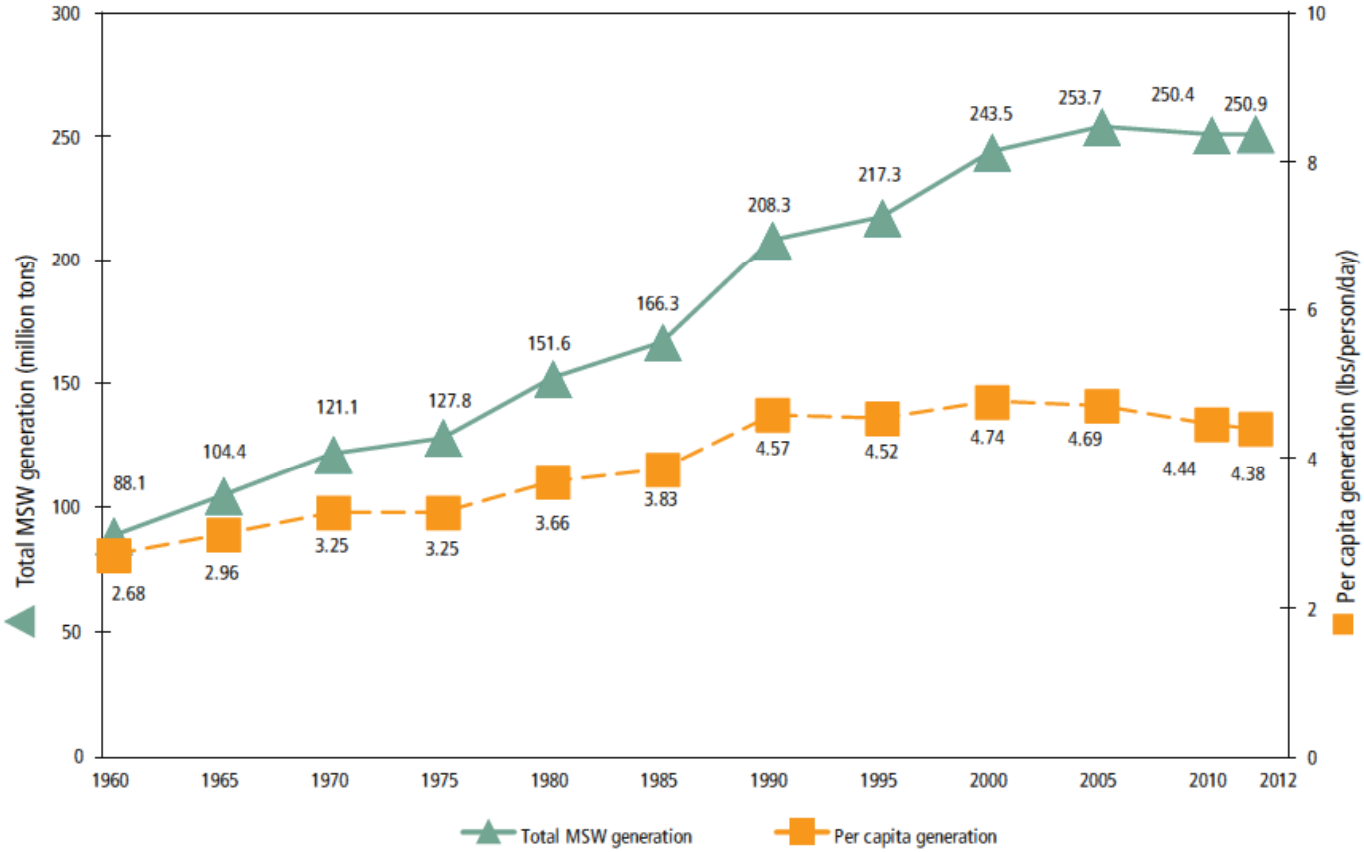
Division of Land Protection & Revitalization

March 12, 2014

Waste Management Trends in the US

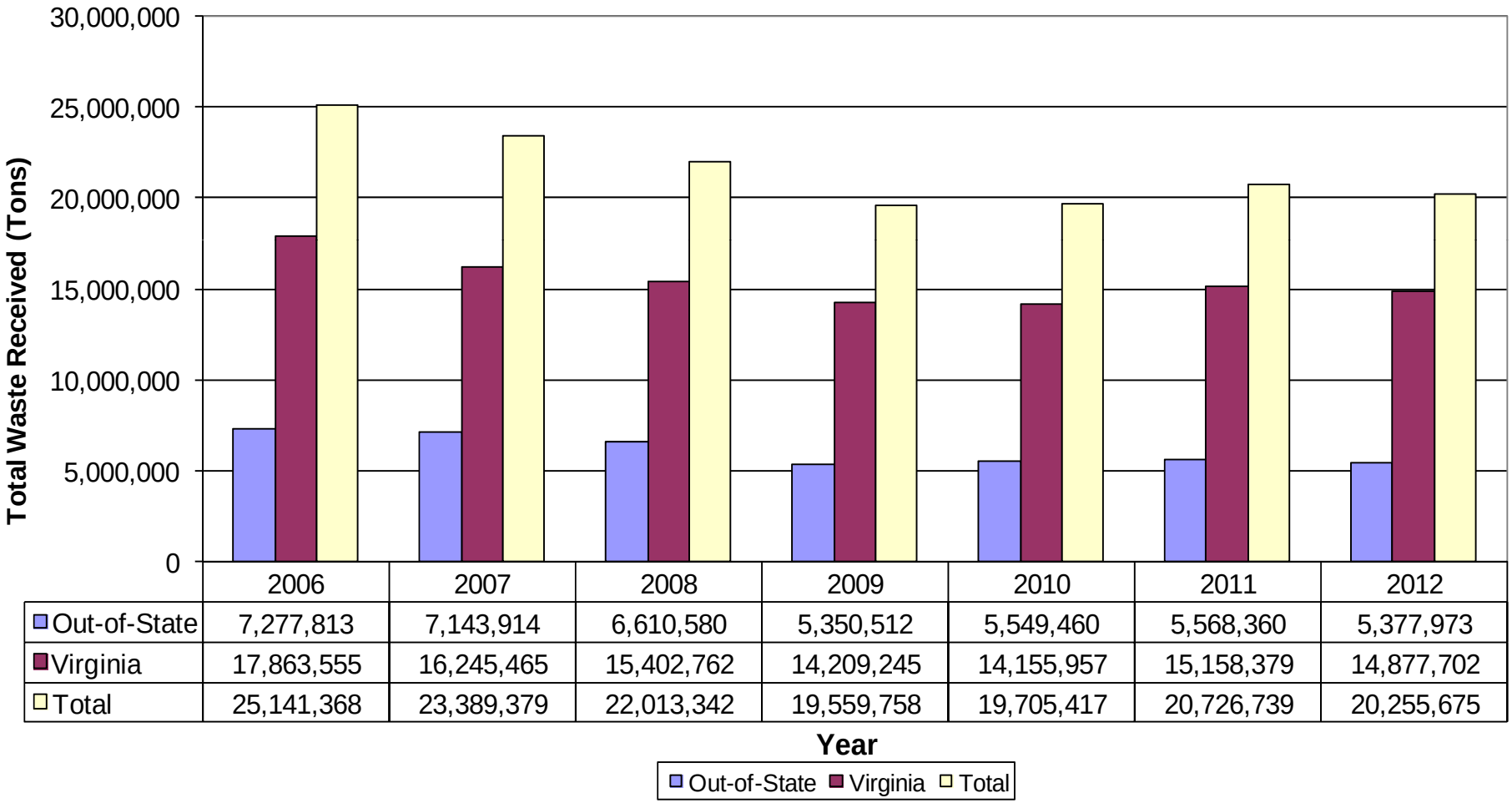
services.

Figure 1. MSW Generation Rates, 1960 to 2012



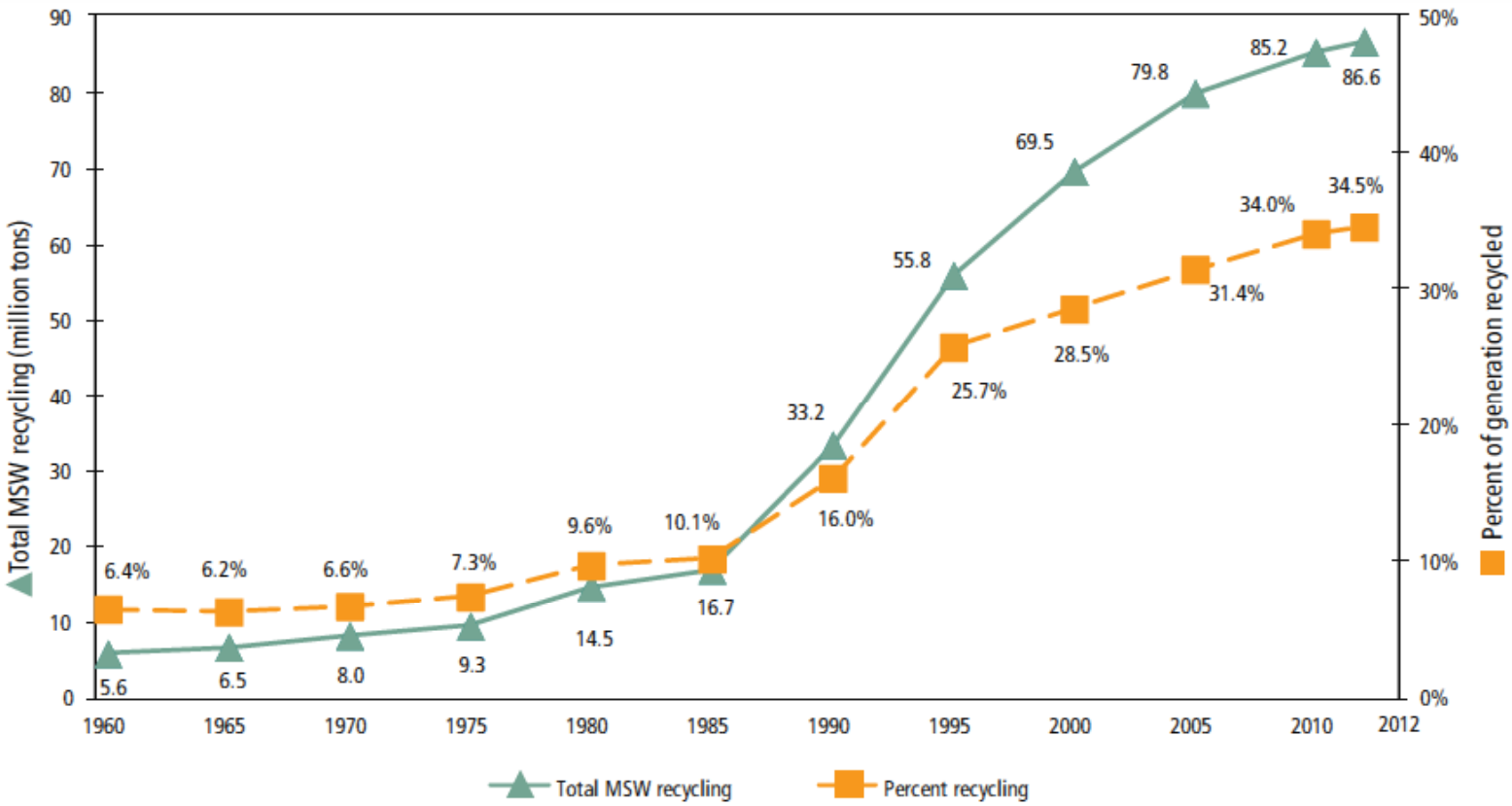
[1] U.S. short tons unless specified.

Waste Managed in Virginia: 2006 - 2012



	2006	2007	2008	2009	2010	2011	2012
Out-of-State	7,277,813	7,143,914	6,610,580	5,350,512	5,549,460	5,568,360	5,377,973
Virginia	17,863,555	16,245,465	15,402,762	14,209,245	14,155,957	15,158,379	14,877,702
Total	25,141,368	23,389,379	22,013,342	19,559,758	19,705,417	20,726,739	20,255,675

National Trends in Recycling



Recycling

- Recycling:
  - Current Rate: 41.5% (2012)
  - Legislative Change Reducing Reporting
    - The first reports submitted pursuant to this section were submitted on April 30, 2013, for the reporting year ending December 31, 2012.
    - Solid Waste Planning Units with a population of 100,000 or less will next report in 2017 for calendar year 2016.
    - Significant Number of units will still report and Department will provide rate based upon those reporting
  - Stakeholder Meeting To Be Held in Fall
    - Will seek input on increasing recycling in Virginia and Guidance on Permitted Facilities

E-Manifest

- October 5, 2012-Hazardous Waste Electronic Manifest Establishment Act
  - The Act requires that the e-Manifest Information Technology (IT) system must be up and running within 3 years after the Act is passed
  - The EPA must issue regulation authorizing use of electronic manifests within one year after the Act is passed
  - The EPA must establish a System Advisory Board within three years after the Act is passed in order to advise the EPA on system performance and user fees
  - Allows EPA to promulgate regulations to collect user fees
  - Effective at same time (EPA to implement until states take over)
- 2013 Information Gathering
  - 3 Stakeholders Meetings including Arlington, Virginia
  - EPA issued 2 Information Requests
- February 7, 2014-EPA issues E-manifest Final Rule
  - Lays out initial legal and policy framework
- Next Steps:
  - System must still be developed
  - Fees must still be determined

Bulb Crushing

- Current Requirements:
  - Crush or break on the site of generation only
  - Safe & controlled manner, minimizing release of mercury
  - Documented procedure in a mechanical unit specifically designed for crushing
  - Provide for containment & filtration of process air flows to remove dusts and vapors containing mercury
- Current regulations are not authorized by EPA
- Status Moving Forward:
  - Stakeholder Meeting on February 12, 2013 to receive input
  - Proposed discussion of Hg standard for Crushing
  - Presented possible proposal to EPA for review and input to see possibility of authorization
  - Expect to have regulatory package in 2014

Solvent-Contaminated Wipes Rule

- Published in the Federal Register on July 31, 2013, and became effective on the Federal level on January 31, 2014.
- Supersedes a 1994 EPA memo which allowed states and Regions to make determinations regarding management of solvent-contaminated wipes.
- Excludes solvent-contaminated wipes from RCRA hazardous waste regulation if certain conditions are met.
- Reusable wipes are not solid and hazardous wastes; however; disposable wipes are solid, but not hazardous wastes.
- DEQ has incorporated the rule by reference into the regulations and they will become effective on March 12, 2014.
- Updated guidance (How Do You Manage Solvent-Contaminated Wipes?) will be posted on the DEQ hazardous waste web page.

Composting

- Composing:
  - Currently 16 Permitted Facilities
  - FDA Proposed Regulation on Use of Certain Compost
    - Applies to compost consisting of post-consumer food waste used on produce
    - Imposes time, temperature, and testing requirements
    - Applies to large farming operations
  - Virginia Composting Council Holding Training at DEQ Offices Throughout Commonwealth
  - Stakeholder Meeting To Be Held in Fall

Non-Hazardous Secondary Material Rule

40 CFR 241

- Rule distinguishes when a NHSM is/is not deemed a solid waste when burned in combustion units → Boiler MACT vs. CISWI
- Categorical non-wastes
  - Scrap tires, resinated wood, coal refuse, and dewatered pulp & paper sludges
- Establishes legitimacy criteria for NHSM = fuel
  - Management as a valuable commodity
  - Have meaningful heating value (> 5,000 Btu/lb)
  - Contain contaminants at levels comparable to traditional fuels
- Outlines procedure to petition EPA for additional non-waste NHSM

http://www.epa.gov/epawaste/nonhaz/define/

Non-Hazardous Secondary Material Rule

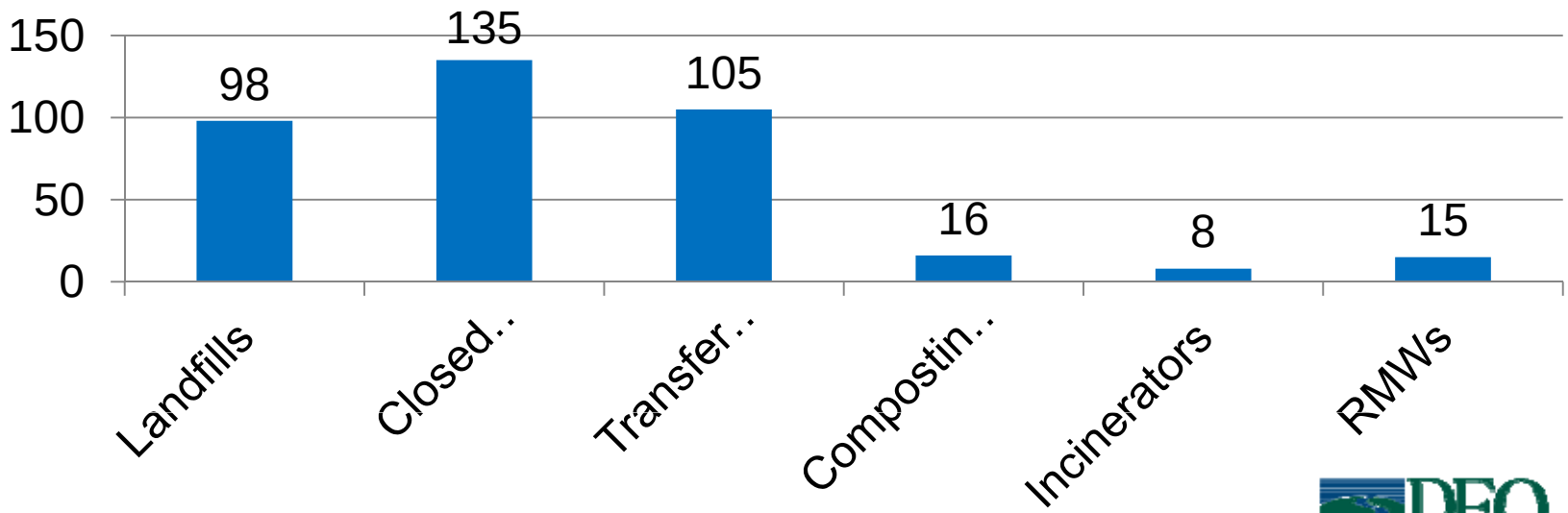
- The Department has provided one comfort level
- One Facility requested to use the following fuels:
  - Carpet-derived fuel
  - Plastics (mainly from agricultural and silvicultural operations)
  - Engineered Fuel
  - Roofing materials (not included in air permit application)
  - Cellulosic biomass-treated (i.e. C&D wood)
  - Tire-derived fuel
  -
- The facility submitted a description of each fuel and additional information was provided to indicate how each NHSM meets the legitimacy criteria.
  - All NHSM to be managed through contractual agreements, stored in fuel bunkers (valuable commodity)
  - All NHSM to be processed to remove contaminants and sized to meet design of the combustion chamber (requirement in addition to legitimacy criteria if NHSM was previously discarded)
  - A table was provided indicating the typical heating content (Btu/lb) of each proposed fuel based on industry data (heating value); and
  - An emission comparison between the proposed NHSM fuels and the traditional fuels based on site-specific emissions (comparable emissions)

Coal Combustion Residuals (CCR/CCB)

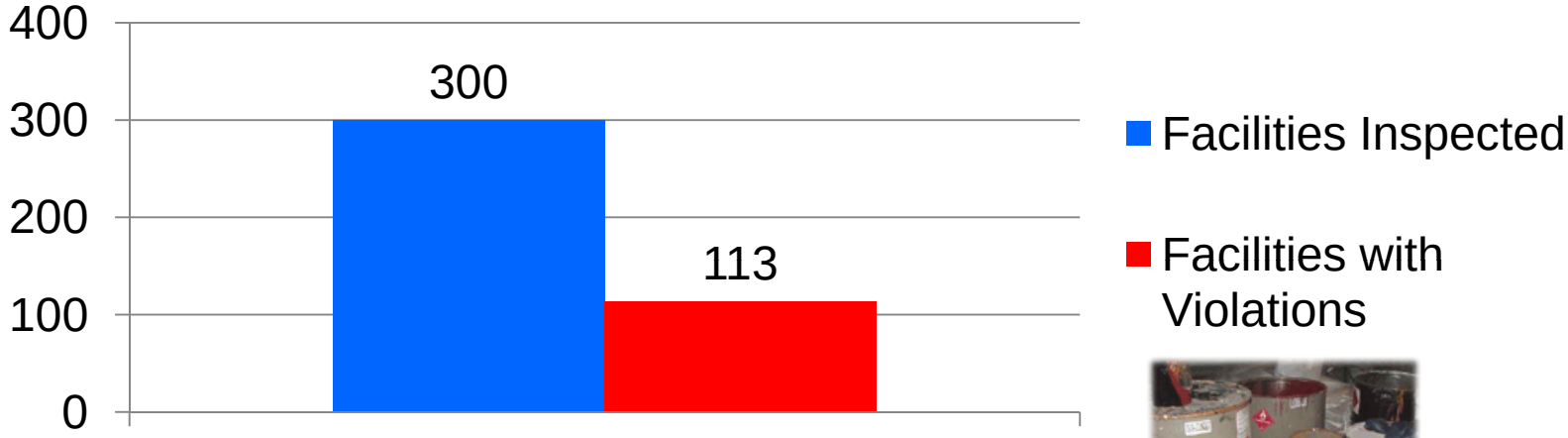
- Proposed Rule on Regulation
  - June 21, 2010
  - Proposal for Subtitle D or Subtitle C
- Lawsuits
  - EPA committed to final rule by Dec 19, 2014
- EPA Evaluating Beneficial Reuses
  - EPA developed methodology for assessment
  - EPA's evaluation concluded that the beneficial use of encapsulated CCRs in concrete and wallboard
  - Unencapsulated Reuse is being evaluated further

Waste Universe

- Hazardous Waste
  - Large Quantity Generators: 318
  - Small Quantity Generators: 4,498
- Solid Waste



Hazardous Waste Compliance



- Continued use of Risk-Based Inspection Strategy
- Uploading Hazardous Waste Sites into Department's GIS

Brownfields & Land Renewal Program

- Issued 47 purchaser comfort letters over last
- Active in facilitating purchase of a number of properties with environmental challenges
- Strategized remedial approaches with buyers and sellers for sites such as pre-reg landfills, abandoned manufacturing facilities, etc
- Staff act as a liaison when needed within agency, EPA, and other state agencies fielding questions and providing technical advice

Ground Water Protection

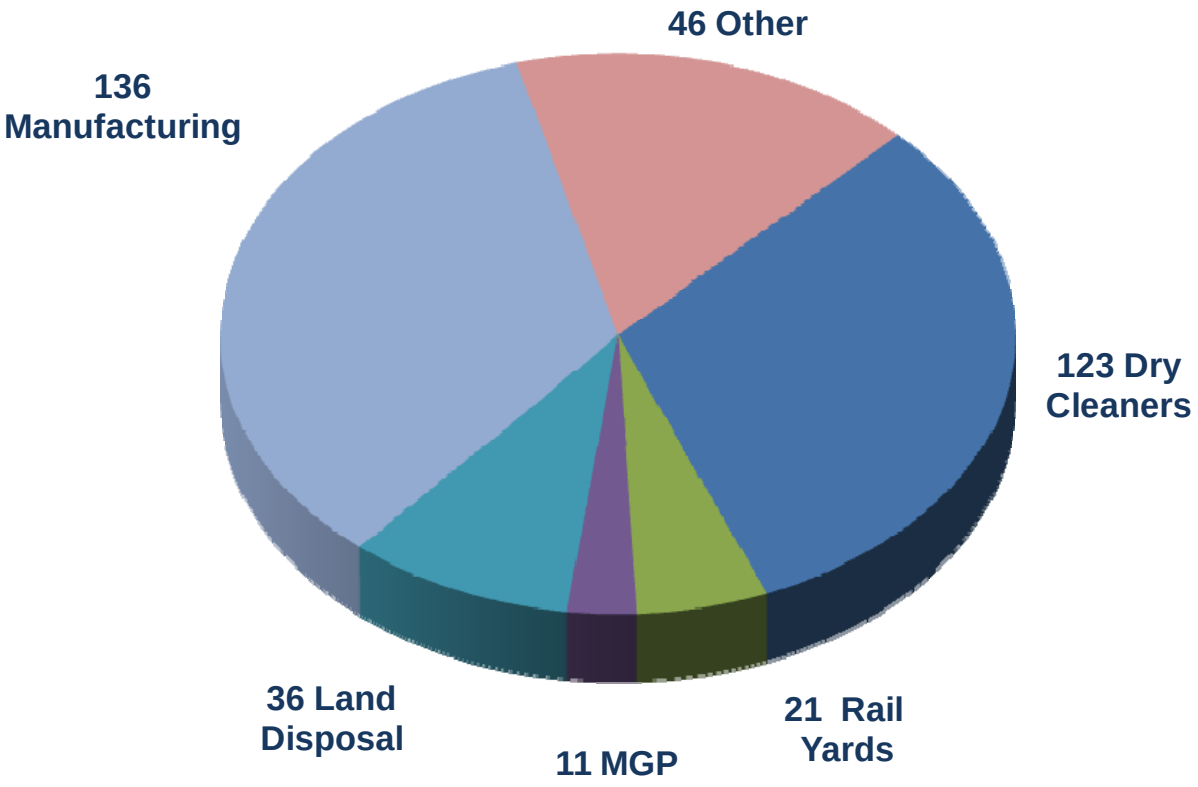
Comprehensive Approach To Ground Water Management in 4 Key Areas

- data collection, management and sharing across DEQ and externally;
- active engagement on responding to and managing unknown source contaminates/plumes in ground water;
- a unified approach to setting ground water protection standards;
- creating internal and external awareness on the past, present and future of ground water.

Voluntary Remediation Program

- Established in 1995
- Non-enforcement, cleanup program that provides volunteer participants the framework to characterize the site, assess risk, remediate and close the site.
- Risk Based endpoints utilization Engineering and Institutional Controls
- Memorandum of Agreement between EPA and DEQ for VRP activities (2001)
  - No federal interest
- 375 sites have enrolled
- 240 sites have been closed

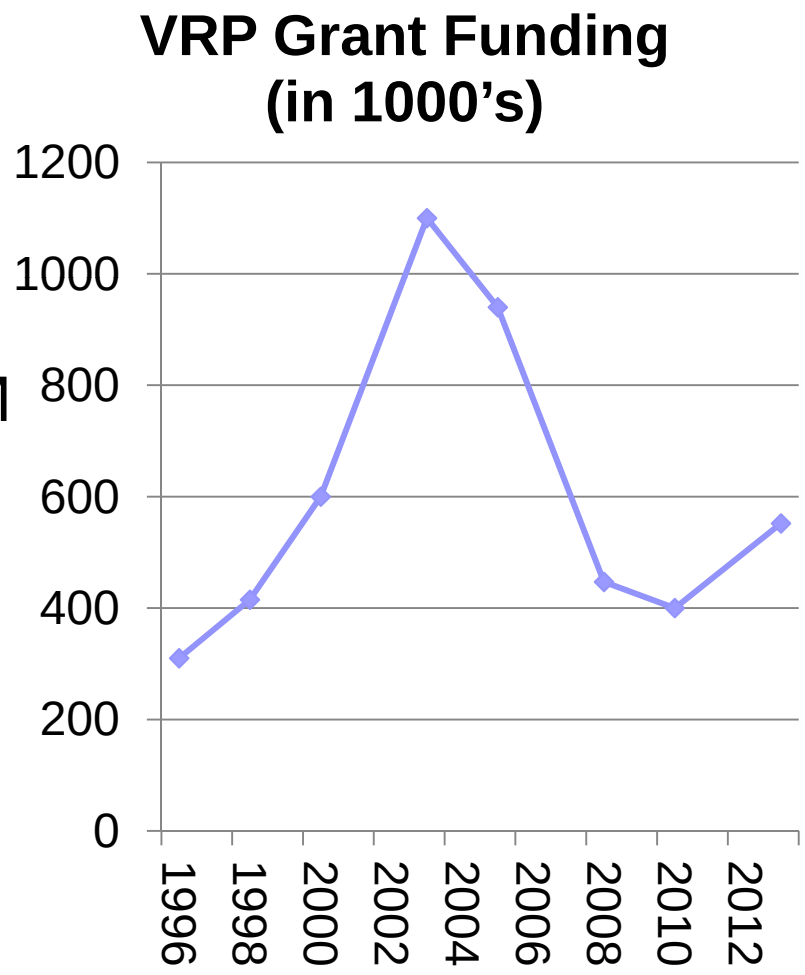
Types of VRP Sites (375 Sites)



Voluntary Remediation Program

- **Funding/staffing**

- 100% federal funded program
  - No DEQ funds allocated to VRP
- Annual competition for $50 MM
  - 130 applicants in FY 13
  - $550,000 last year from EPA
    - 5 VRP staff positions



Questions?

Jeff Steers

804-698-4079

Jeffery.steers@deq.virginia.gov