

Permit Modification Data: Background and Details

This is an appendix to the RCRA “*Permit Modifications Report: Safeguarding the Environment in the Face of Changing Business Needs*” (*Permit Modification Report*)

Purpose:

- Describe modification data used in the report.
- Gives information about the source(s) of the data.

Contents: Background and Sources for the Data

1. RCRAInfo Data
2. General Distribution of Permit Modification Approvals by Type (2011-2013)
3. RCRA Permitting Workloads in 2015
4. Data Associated with the Association of State and Territorial Solid Waste Management Official’s (ASTSWMO’s) Final Report: “*State RCRA Subtitle C Core Hazardous Waste Program Implementation Costs*”
5. National Tally of Permit Modifications Approved during 2011 through 2015
6. Comparison to Initial Permit Issuance and Permit Renewals during 2011 through 2015
7. Comparison of Modifications to the Permit Maintenance Workload of Permitted Facilities
8. Facilities Permitted and Subject to Modifications, Versus Other Regulated Facilities

1. RCRAInfo Data

Source Description:

RCRAInfo is EPA's national hazardous waste database. The RCRAInfo database and web interface is exclusively for the use of EPA employees and State and Territorial environmental agencies. Public access to RCRA hazardous waste facility data can be found on the internet through the use of EPA's Envirofacts Data Warehouse (<http://www.epa.gov/enviro/facts/rcrainfo/search.html>). This data is originally entered through RCRAInfo.

The following RCRAInfo data elements record the status of hazardous waste treatment, storage, and disposal facilities (TSDFs). These data elements were used to provide a portion of the assessments and statistics that support the *Permit Modification Report*.

Data for Hazardous Waste Permit Modifications (Mods):

Permit Event Codes are tracked in RCRAInfo to indicate milestones reached. The permit event codes for mods (including the mod requests OP/PC 230's and mod approvals OP/PC 240's) have not been *required* to be nationally tracked on a consistent basis. As of the development of this document, permit mod event codes are available to use, but are not "mandatory data elements" and the States or Regions enter this data in RCRAInfo at their discretion, since it is not mandatory.

During the development of the *Permit Modification Report*, EPA determined which states consistently used RCRAInfo to track permit mods for the 2011-2013 timeframe. Statistics were then developed based on either RCRAInfo data or on data provided directly from the states. Some states provided separate totals for the mod approvals even if they fully or partially entered data in RCRAInfo. The permit mod data in RCRAInfo is currently difficult to assess for national totals of permit mod approvals by class and a verified list was preferred if available. Additional information on the specific tally of permit mod totals is given in Section "5. National Tally of Permit Modifications Approved during 2011 through 2015."

Data for Initial Permit Issuance and Reissuance (Renewals):

The Permit Event Codes for permit "Final Determinations" (OP/PC 200 and specific status codes) show when a permit was initially issued and when it was subsequently renewed. These event codes are "Mandatory Data Elements" and therefore can be relied on for national analysis. The "Final Permit Effective" event code (OP/PC 205) is used to refine the effective date. See Section 6 "Comparison to Initial Permit Issuance and Permit Renewals during 2011 through 2015" for a further discussion of the information used to determine the initial permits issued and renewed.

Data for Universes/Sets of Facilities:

The principal information used in order to determine the sets or universes for types of facilities are the Legal and Operating Status Codes that describe the *current status of each process unit* (i.e., a container storage unit or an incinerator) at the facility. If one process unit at the facility has the desired criteria for the universe calculation, it is included in the total for the set of facilities. The following universes of facilities are discussed in the sections below:

- "*Permitted: Permit Maintenance Workload*"/ facilities expected to eventually need mods (This is not currently a predefined RCRAInfo universe.)
- "*Actively Regulated TSD Facilities*" are from the "*Federally Regulated TSD Universe (Active TSD Universe)*" (This is a predefined RCRAInfo Universe.)

The facilities that are currently tracked for the permitting GPRA goal have been identified as needing initial controls (like an initial permit or complete closure obligations) or need permit renewals. This is based on multiple data elements and verification with permitting staff. See

Section 2 for more information. Refer to general RCRAInfo documentation for more details on the usage of the data.

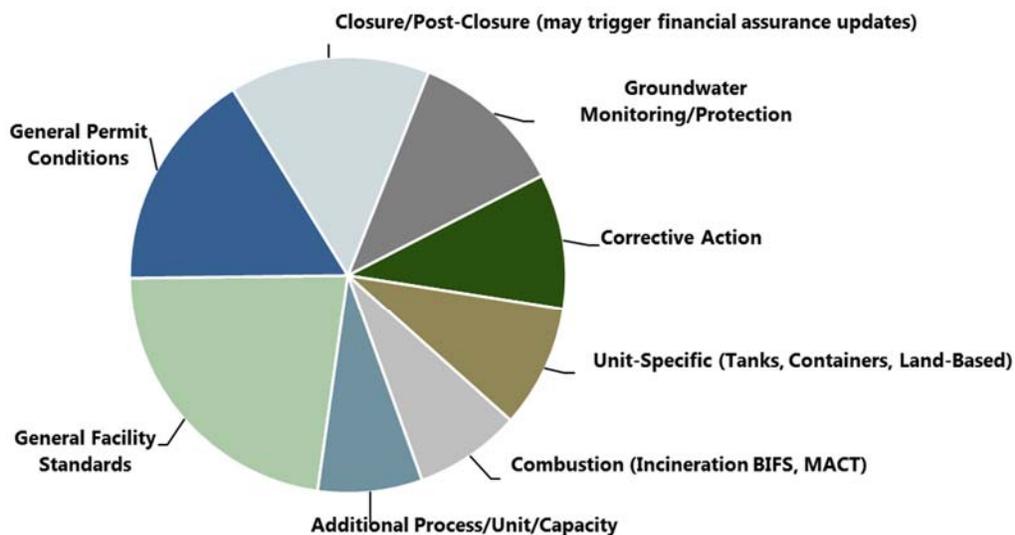
See Section 8 for the calculation of the “Actively Regulated TSD Facilities”/“Federally Regulated TSD Universe (Active TSD Universe)”

2. General Distribution of Permit Modification Approvals by Type (2011-2013)

Chart used in the Permit Modification Report:

This chart is used in Part 1, Section I.B, Exhibit 1.

Exhibit 1. General Distribution of Permit Modification Approvals by Type (2011-2013)



Note: EPA calculated this distribution using data from the RCRAInfo database where the modification type was identified in the code or the notes for "other modifications." This does not reflect data from all states. Modifications were not required to be tracked in RCRAInfo in this timeframe. (Sample size: 788 permit modifications out of 2479). See details about RCRAInfo Data in Appendix 2.

Source Description:

This pie chart is intended to show the *general ratio* of activities involved in the various permit mod approvals, not specific amounts or percentages. The state data that could be relied on for this assessment is only 32% of the national total. It does not include data for all states, nor does it include approvals entered where the activity was not specified in the code type or in the notes. State ratios vary considerably, for example, Texas has a larger percentage of combustion modifications.

Permit mod event codes are not required to be nationally tracked on a consistent basis, it is optional (as also described in Section 1 above). States or Regions that are authorized to implement the permitting programs may enter this data at their discretion.

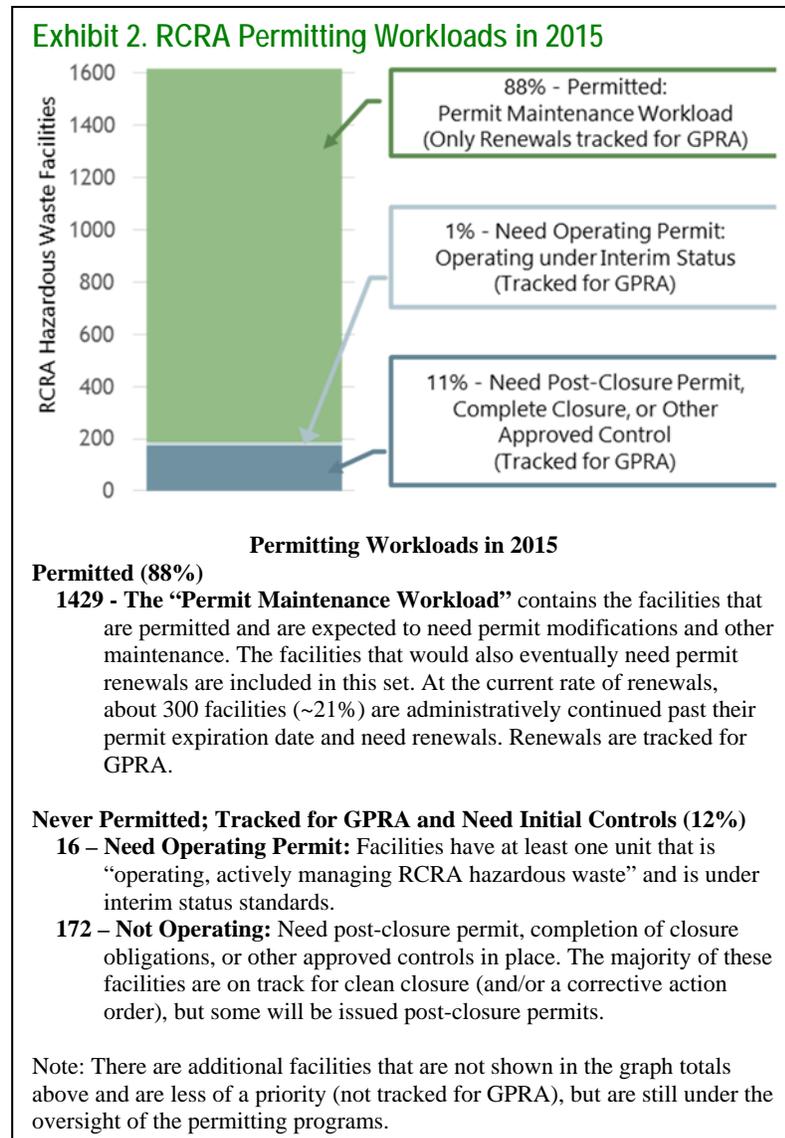
The following are caveats for use of the ratio of permit mod approval types that were entered into RCRAInfo during 2011 through 2013:

- This information should only be used to have a general understanding of the relative ratio of permit mods that are occurring.
- The ratios are developed from the permit mod approval OP/PC 240 series event codes in RCRAInfo with an actual date within the years 2011 through 2013. They do not include those mod approvals that were entered that did not have the mod type specified in the event status code or in the notes field (for those coded as "Other" approvals).
- The totals do not include permit mods that were recorded outside RCRAInfo. Many of the state totals for the mod approvals during 2011 through 2013 were provided directly from the states and did not have the mod types specified.
- The data used in the pie chart includes 788 mod approvals out of the national total of 2479 mod approvals (32%).

3. RCRA Permitting Workloads in 2015

This data is used predominately in Part 1, Section II.A, Exhibit 2, but other references exist.

Data used in the Permit Modification Report:



The data from Exhibit 2 was also summarized in a pie chart in the Executive Summary (page 3) of the *Permit Modification Report*.



Source Description:

This data came from RCRAInfo. See Section “1. RCRAInfo Data” for the background on RCRAInfo data.

A. 1429 - The “Permit Maintenance Workload”

The facilities selected are identified as follows:

According to RCRAInfo, 1,429 facilities (6,245 units) were permitted as of March 10, 2014.

These are the facilities that have at

least one unit that is actively permitted and will need permit maintenance. This number does not include facilities where units are coded as permitted but also coded as the following: clean-closed, referred to CERCLA, completed post-closure care, or are coded as conducting activities that do not require a permit. If not removed from the count, these units would add 400 additional facilities (although generally not active, some of these permits may require some permit maintenance). The vast majority of the permitted facilities that were not included in the 1429 are also coded as clean-closed.

This set of facilities is also represented in Exhibit 10, the mapped sites in Part 1, Section C of the *Permit Modification Report* and are indicated by black dots on the map.

B. 16 – Need Operating Permit and tracked for GPRA

These facilities have at least one unit that was coded in RCRAInfo as “operating, actively managing RCRA hazardous waste” (under the operating status code) and also coded as being under “interim status” standards and are not permitted (according to the legal status code).

This is from GPRA permitting data from RCRAInfo as of May, 2015.

C. 172 – Not Operating and tracked for GPRA

These facilities have managed hazardous waste, never been permitted, and have not completed closure obligations (or other controls) so they essentially need “initial controls” in place and are tracked for GPRA. See the link below for additional information on GPRA credit.

Specifically, these are the facilities that are tracked for the GPRA permitting goal and need “initial controls” for GPRA credit minus the ones that have at least one unit operating under interim status that are counted elsewhere. (This subtracts the 16 identified above under “B.”)

Technically, this set of facilities would be those facilities that are tracked for GPRA and are not operating (under 40 CFR 264 or 256 standards).

This is from GPRA permitting data from RCRAInfo as of May, 2015.

GPRA Tracking

Facilities on the 2014 updated baseline include:

A. Facilities that need an initial control

- Facilities that did not have an initial control on prior GPRA permitting baselines, and
- Facilities not previously tracked and prioritized for the baseline, such as those who indicated they planned to close rather than pursue a permit and they still need initial controls in place. Some facilities in closure were not prioritized for the baseline, although the agency has oversight responsibilities for them (for example, units that converted to less than 90 day storage, but still have RCRA hazardous waste closure requirements when ceasing waste management).

B. Facilities that need a permit renewal (a form of updated control).

- Facilities whose permits are scheduled to expire before the end of FY2018.¹

Additional criteria exists for baseline establishment have case-specific exceptions.

GPRA Accomplishments for Initial Controls in place and Updated Controls

A. Initial “approved controls in place” count as GPRA accomplishments and are met when a facility has been permitted, completed closure obligations, or alternate authority (like the post-closure rule). Cumulatively, over time Initial controls have been put in place at over 20,000 units. This evaluation is primarily based on their legal and operating status codes in RCRAInfo.

B. Updated controls/permit renewals are counted as GPRA accomplishments. Clean-closures can count as accomplishments if the permit is not renewed and it is tracked on the baseline.

There are case-specific exceptions.

¹ In limited cases facilities will qualify for updated control accomplishments that are not permit renewals.

4. Data Associated with the Association of State and Territorial Solid Waste Management Official's (ASTSWMO's) Final Report: "State RCRA Subtitle C Core Hazardous Waste Program Implementation Costs"

This is also referred to as the "2007 ASTSWMO Core Report."

The ASTSWMO report is online at:

http://www.astswmo.org/Files/Policies_and_Publications/Hazardous_Waste/Final%20Report%20-%20RCRA%20Subtitle%20C%20Core%20Project.pdf

This data is used predominately in Part 1 Section II.A Exhibit 3 and also in Section III.A, but other references are in different sections of the report.

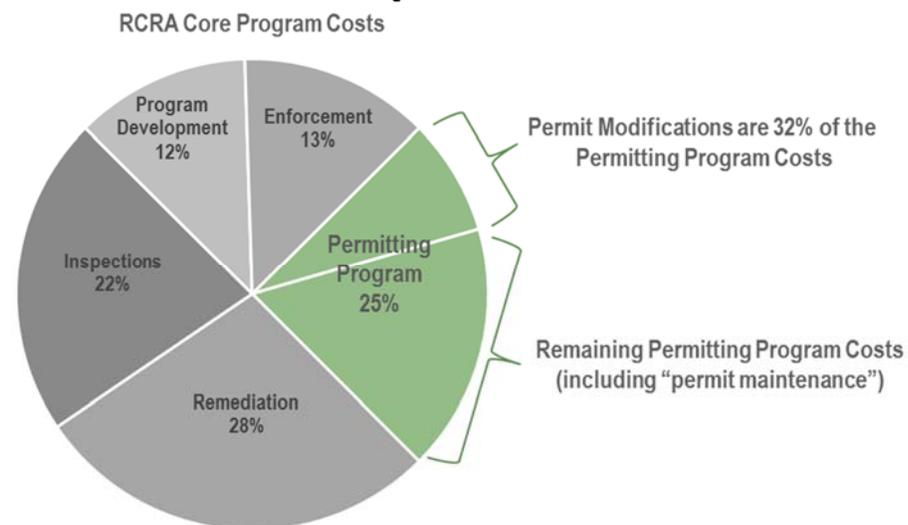
A. Relative RCRA Program Costs in 2007

Data used in the Permit Modification Report:

"The report states that 25% of RCRA core program costs are used to support hazardous waste permitting. Permit modifications represent 32% of the costs for the permitting program.

Since the 2007 report, additional facilities have received their initial permit, thus shifting a greater amount of work towards maintenance (including modifications)."

Exhibit 3: Relative RCRA Program Costs to States in 2007



Source Description:

The "RCRA Core Program Costs" are from Figure 2, page 19 of the ASTSWMO Report. The "Permitting Program Costs" are from Figure 3, page 20 of the ASTSWMO Report.

The figures from the report are quoted in various sections of the *Permit Modification Report*.

The RCRA program cost assessment was based on a 10 state survey.

B. Staff Time to Address Different Mod Classes (Section III.A)

Data used in the Permit Modification Report:

RCRA permit modifications are organized into three classes.²

Class 1 modifications

- Expected Staff Time to Address: 2-25 hours (100 hours or more for ownership changes especially with complex facilities that have multiple owners under one permit)

Class 2 modifications

- Expected Staff Time to Address: 41-119 hours (up to 340 hours in rare cases)

Class 3 modifications

- Expected Staff Time to Address: 59-640 hours (up to 1850 hours in rare cases)

Source Description:

The “Expected Staff Times to Address” the different mod classes is from “Pricing Factors Spreadsheet” that has the same time ranges for staff to address. This was a supporting document for the *2007 ASTSWMO Core Report*. Please refer to the link on the ASTSWMO website at:

http://www.astswmo.org/Files/Policies_and_Publications/Hazardous_Waste/ASTSWMO_CAP_Task_Force-Tables2a-2f-Pricing_Factors_Example-protected-new.xls

The high end of the staff time it can take to address permit mods in the more rare cases (represented in the times in the brackets above - ex 1,850 hours for Class 3) are from Annex1, Permitting in Appendix I of the *2007 ASTSWMO Core Report* (under “Estimation of Work Hours” Page 39).

The usage of the timeframes were discussed at length with the state permit mod workgroup members that also were involved with the development of the *2007 ASTSWMO Core Report*. Limitations on the data prevented further analysis.

² A few states (AL, FL, ME, MN, NY, OH, and SC) use the original “major or minor” permit modification categories in lieu of the three class system introduced in a 1988 rule (53 FR 37912).

5. National Tally of Permit Modifications Approved during 2011 through 2015

This data is used predominately in Part 1, Section III.B, Exhibits 6, 7, and 8 but other references exist.

Mods Approved Per Year				
	Class 1/Minor	Class 2	Class 3/Major	All Mods
2011 Totals	649	82	63	794
2012 Totals	752	79	57	888
2013 Totals	653	81	63	797
Total	2054	242	183	2479
Percentage of All Mods by Class	83%	10%	7%	

Percentage of the More Significant Mods (Class 2, 3, and Major)			
	All Mods	Class 2, 3, and Major	Percent of Total
2011 Totals	794	145	18%
2012 Totals	888	136	15%
2013 Totals	797	144	18%
Total	2479	425	17%
Annual Average	826	142	

Mods Approved 2011 Through 2013 (All) and # Per State				
	Class 1/Minor	Class 2	Class 3/Major	All Classes
States Totals for 3 Years	2054	242	183	2479
Annual Total Per Year Per State/Territory with at least one mod (/49)	14.0	1.6	1.2	16.9
The following states/territories did not have any permit mod approvals in 2011-2013: AK, NH, DC, and these territories GU, MP, and VI. (Some states/territories were working on mods, but none of those states/territories had permit mods recorded as approved in that date range.) NH did not have any facilities that are currently permitted and on a maintenance workload.				

Source Description:

The permitting programs for each state record the permit mods that are approved annually.³ EPA aggregated these permit mod data for years 2011 through 2013 from state and regional sources for 39 states, Washington, D.C., and three US territories. EPA obtained data for an additional eight states⁴ and Puerto Rico from the Agency's national database when it was identified as the best and most accurate resource. Data for the remaining states (Maryland, New Jersey, and Pennsylvania) were statistically extrapolated based on permitting data since EPA could not locate comprehensive data for those states.

Extrapolation Process: Estimates of permit mods in Maryland, New Jersey, and Pennsylvania were extrapolated based on the national average permit mods per permitted facilities. First, EPA multiplied the

³ Per 40 CFR 270.42(i), each environmental program director must maintain a list of all approved modifications and must publish a notice once a year in a state-wide newspaper that the updated list is available for review.

⁴ EPA used RCRAInfo data for the following states: Alabama, Colorado, Georgia, Illinois, Indiana, Nebraska, New York, and South Carolina. Additional states use RCRAInfo to track modifications (22 total), but they provided tallies.

number of permitted⁵ facilities in MD, NJ, and PA by the average number of mods per facility from the other 47 states. This generated an estimated number of permit mods for each of these three states. Then, to estimate the breakdown by permit mod class, EPA multiplied the annual total by the average percentage of mods in each class, as determined based on data from the other 47 states (Class 1/Minor 83%, Class 2 10%, Class 3 /Major 7%). This approach generated average annual numbers of permit mods for each class in each of the three states missing mod data.

Although there may be gaps in the data due to differences in tracking practices, and underreporting of Class 1 permit mods, nevertheless, EPA considers this the data to be the best available nationally.

Sources for State/Territory Permit Mod Approval Totals 2011-2013	
Directly Supplied Tallies from States or Regional Permitting Contacts	43
RCRAInfo Data	9
Extrapolated	3
Total (50 states, 5 Territories)	55
Total with at least One Permit Modification*	49
* The 6 without any modification approvals 2011-2013: NH does not have any permitted facilities in order to have mods, AK did not have any approvals recorded in that timeframe, but at least one mod was being assessed. DC and three territories did not have any permit mods approvals in that time-frame.	

Permit Mod Approval Totals 2011-2013 using RCRAInfo Data	
Total States/Territories with at Least One Permit Modification	49
States/Territories using RCRAInfo data for 2011-2013 totals	9
States using RCRAInfo, but provided tallies for 2011-2013*	13
Total using RCRAInfo to track mods*	22
* There may be data quality issues and other states not listed in this total have entered sparse data that was not intended to be comprehensive.	

States with fewer permitted facilities may experience more variation in the number of permit mod approvals per year. This represents an additional limitation of the three-year sample of data collected from RCRAInfo.

This data set does not count permit mods that were still being assessed at the end of the year and does not count those that were denied or withdrawn.

⁵ The “permitted facilities” are the ones on the permit maintenance workload as described in Exhibit 10. This list omits those permitted facilities that are not expected to have mods (for example, facilities that are clean-closed).

6. Comparison to Initial Permit Issuance and Permit Renewals during 2011 through 2015

This data is used predominately in Part 1 Section III.B Exhibits 7 and 8, but other references are in different sections (Section I.A and others).

Percentage of Substantial Mods to Permit Issuance/Reissuance		
	2011-2013 Totals	Percentage
Initial Permit Issuance	20	2%
Permit Reissuance	350	44%
Substantial Mods: Class 2, 3, Major	425	54%
Total	796	

Ratio of Permit Updates (Reissuance and Mods) to Initial Permit Issuance (2011-2013)		
		Initial Permits 20
Permit Reissuance	350	18 : 1
Permit Mods	2479	124 : 1
All Updates to Permits	2829	141 : 1

Ratio of Permit Mods to Permit Issuance and Reissuance (2011-2013)			
		Permit Mods 2479	Substantial Mods: Class 2, 3, Major 425
Initial Permits	20	124 : 1	21 : 1
Permit Reissuance	350	7 : 1	1.2 : 1

Source and Data Description:

The information was obtained using RCRAInfo data. See Section 1 for the background on the RCRAInfo data.

Initial Permit Issuance and Permit Renewals:

EPA identified initial permits from RCRAInfo data for the permit determinations that occurred during 2011 through 2013 at a facility with no prior permit determination. The renewals are calculated from the permit issuances 2011 through 2013 that followed an initial permit issuance (prior to 2011).

A. Initial permits that did not have a prior permit at facility

20 facilities had their first permit determination in 2011 through 2013.

- This is based on the first occurrence of a Permit Event Code for permit issuance OP/PC 200 (no permit denials included) or a permit effective event code OP/PC 205 for any unit at the facility.
- The ones were removed from the total that indicated it did not have a real permit (a few had event codes that show they had enforceable documents in lieu of a permit) based on multiple other data codes for that facility.

B. Selecting the 2011-2013 initial permit issuance and permit reissuances (assumed to be renewals)

- 370 unique IDs and related unique dates in 2011 through 2013.

The OP/PC200's were sorted to keep unique ID and actual date, does not include OP/PC205 since it would double-count the action.

- This counts a facility each time it has "actual dates" for the permit determination event code. If there are multiple permits issuances at a facility in 2011-2013, it would be counted more than once. (for example, if some units were under a different permit at the same facility).

C. Selecting the 350 permit reissuance 2011 through 2013

Subtract the 20 initial permit issuance from the 370 issuances.

- 350 unique IDs remained after the 20 initial permit issuances subtracted. These are the reissuance/renewals. This method would count permits (like joint permits) separately if they recorded multiple permit determination dates in RCRAInfo for the same facility with differing actual dates during 2011 through 2013 (12 multiples).

RCRAInfo Methodology used to pull and assess the data

A. Initial permits that did not have a prior permit at facility (20):

1. Pulled all of the permit events from a RCRAInfo report called "Comprehensive Permitting Report: Permitting Events" report from Region 3 (for data in all regions).
2. Since it downloads all events, deleted all events except the permit issuance (OP/PC200 OP/PC 205) event codes.
3. Copied the list of all OP/PC200 event codes and OP/PC205 ever entered. Removed the permit denials so just the permit issuances remained.
4. Sorted them by the earliest record.
5. Deleted any duplicates which would leave the earliest record. Those facilities with 2011-2013 "actual dates" for the permit issuance should be the initial permit for the facility for that timeframe.
6. Compared to other sources in order to assess if it was comprehensive (ex. Compared to the permits issued to facilities on the GPRA initial controls part of the baseline)
7. Correction to data: A few entries erroneously used the OP/PC205 to record the effective date of a PC300 and I omitted them from the list. These were detected based on the notes field and by pulling detailed permitting reports.

B. Selecting the 370 initial permit and permit reissuance:

Followed Steps 1-3 above, then

4. Selected only those with dates 2011 through 2013 and copied those to a separate file.
5. Eliminated records with duplicate facility IDs and dates for each record with a unique date. A facility is counted more than once if there is a separate permit determination date for the record.

C. Selecting the 350 permit reissuance

Subtract the 20 initial permit issuance (Process "A" above) from the reissuances that were all performed during the 2011-2013 timeframe (Process "B" above).

Data on permit issuance is from RCRAInfo as of Nov 7, 2014

7. Comparison of Modifications to the Permit Maintenance Workload of Permitted Facilities

This data is used predominately in Part 1 Section III.B Exhibit 9, but other references for the collective totals are in different sections.

Data used in the Permit Modification Report:

Exhibit 9: Permit Modification Approvals by Region (2011-2013)

	Region 1	Region 2	Region 3	Region 4	Region 5	Region 6	Region 7	Region 8	Region 9	Region 10	Total
Number of Modifications (Mods) 2011-2013	39	139	203	241	518	488	161	244	199	247	2479
Permitted Facilities	54	97	134	365	195	262	86	58	134	44	1429
Mods per Permitted Facilities 2011-2013	0.7	1.4	1.5	0.7	2.7	1.9	1.9	4.2	1.5	5.6	1.7
Annual Mods Per Permitted Facilities	0.2	0.5	0.5	0.2	0.9	0.6	0.6	1.4	0.5	1.9	0.6

Source and Data Description:

The information was obtained using RCRAInfo data. See Section 1 for the background on the RCRAInfo data.

Number of Modifications 2011-2013:

The method for quantifying the number of Mods was discussed in “5. National Tally of Permit Modifications Approved during 2011 through 2015” This uses the same data and totals, but this one divides them in the EPA Regions.

National Total: 2479

Permitted Facilities: This refers to the specific permitting facilities that would make up the permit maintenance workload which is also used for Exhibits 2 and 10. This uses the same data and totals, but this one divides them between the EPA Regions. See the more detailed explanation of the permitted facilities in Section 8 below.

National Total: 1429

Mods per Permitted Facilities 2011-2013: This is the calculation of the mods in the first row divided by the number of permitted facilities on the second row. There is a large variety between different facilities. This is not an appropriate number to apply nationally for an exact average since many facilities have a much larger average of mods and many facilities have a much lower according to case-specific situations.

National Result: 1.7 Mods per permitted facility.

Annual Mods Per Permitted Facilities: This is the calculation of the average mods approved during one year divided by the permitted facilities (total mods divided by 3 then divided per the number of permitted facilities). There is a large variety between different facilities. This is not an appropriate number to apply nationally for an exact average since many facilities have a much larger average of mods and many facilities have a much lower according to case-specific situations.

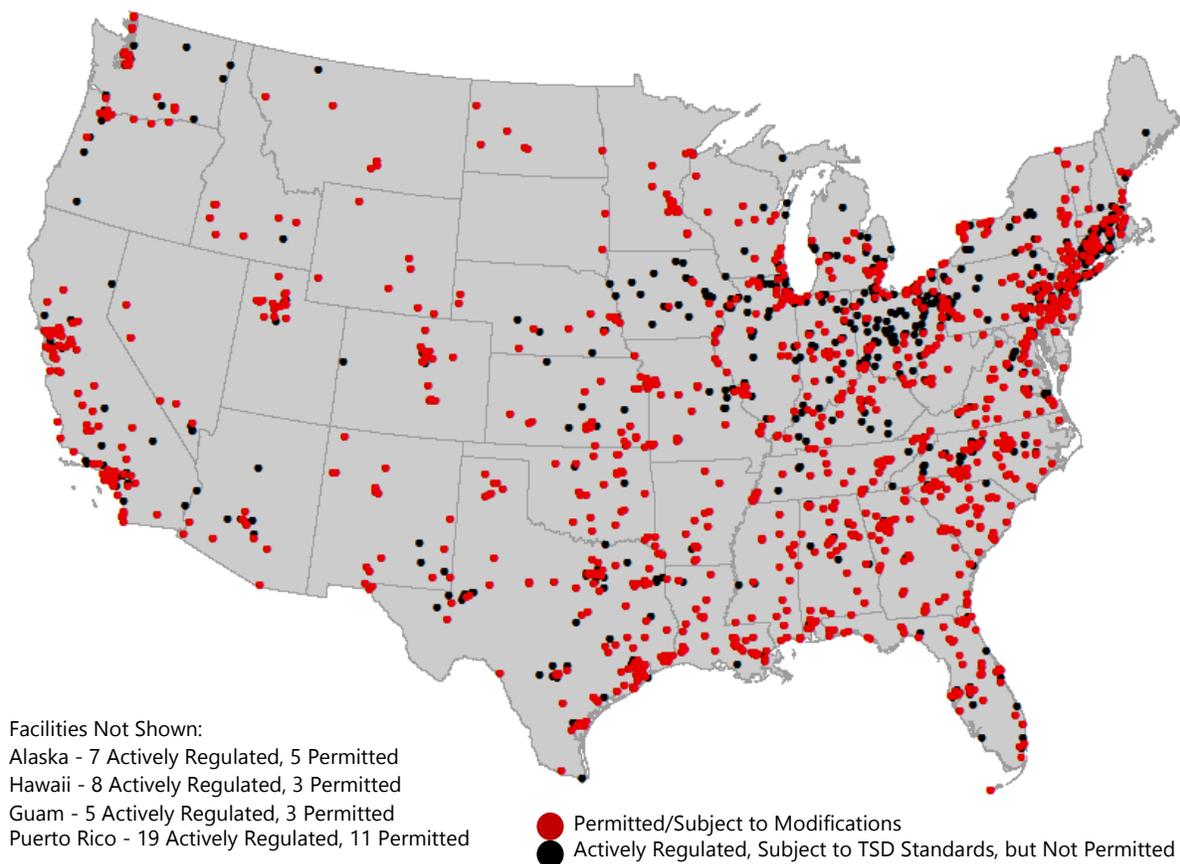
National Result: 0.6 Mods per permitted facility.

8. Facilities Permitted and Subject to Modifications, Versus Other Regulated Facilities RCRA Permitting Workloads in 2015

This data is used predominately in Part1, Section III.C, but other references are in different sections.

Data used in the Permit Modification Report:

Exhibit 10: Facilities Permitted and Subject to Modifications, Versus Other Regulated Facilities



Source Description:

The information was obtained using RCRAInfo data. See Section 1 for the background on the RCRAInfo data.

All of the facilities above are in a universe of facilities subject to the regulations for standards for owners and operators of hazardous waste treatment storage, and disposal facilities⁶⁾ and the regulations are implemented through permits and orders. This does not include all oversight facilities.

A. The list of facilities that were described as “actively regulated TSD facilities” are from this calculated universe in RCRAInfo (and a correction to add all permitted facilities):

RCRAInfo Universe Title and Definition:

“Federally Regulated TSD Universe (Active TSD Universe)”

“This universe includes TSDFs (treatment, storage, and disposal facilities) subject to federal

⁶ Some permitted facilities (95) are not calculated in the TSDF universe in RCRAInfo since the permits are continued for facility-wide corrective action and the units clean-closed (and a few other anomalies).

RCRA TSDF (or authorized State Hazardous Waste Program) regulations, permits, and orders. Federally Regulated TSDFs include units that are classified under a permit; classified under a 3008(h), 3013, or 7003 Order; referred for corrective action; or identified as being operated illegally. These units are still regulated under RCRA even if waste is no longer, or not yet, on site. A site is considered a federally regulated TSDF until all its TSD units have been verified as having completed clean closure or post-closure care, or have been referred to CERCLA, or Superfund.”

Some permitted facilities (95) are not calculated in this universe in RCRAInfo since the permits are continued for facility-wide corrective action and the units are clean-closed (and a few other anomalies that did not include the “permitted facilities” in “B” below).

There were 2,129 in the universe above in RCRAInfo as of Jan 2014. When the 95 are added that were permitted, it equals the 2,224.

B. Permitted Facilities: Permit Maintenance Workload (calculated for the purposes of this report)

According to RCRAInfo, 1,429 facilities (6,245 units) were permitted as of March 10, 2014 and would be expected to be on the permit maintenance workload based on the following criteria:

These are the facilities that have at least one unit that is permitted (according to the legal status codes for operating permit (PI) and post-closure permit (PC) and not terminated (PT)). In order to select the ones that are anticipated to need permit maintenance, facilities with all units that had the following specific operating status codes were removed. The permit maintenance workload (calculated for the *Permit Modification Report*) does not include facilities where units are permitted but are also coded as the following: clean-closed, have been referred to CERCLA, completed post-closure care, or are coded as conducting activities that do not require a permit. This removal of facilities with those operating status codes (listed directly above) eliminated 400 facilities from the total coded as permitted (the vast majority were clean-closed). Please note that some of the facilities omitted may require some permit maintenance, although they are not generally active.

C. Facilities in the “Regulated TSDF Universe” that are not Permitted (795)

This is calculated from the following facility lists:

*A. The universe titled Federally Regulated TSDF Universe (Active TSDF Universe) 2129
Adjusted to include all permitted facilities 2224*

Minus

B. permitted facilities. 1429

= 795

Some facilities (95) were permitted, but are not in the Federally Regulated TSDF Universe. The number was adjusted for those 95 since the larger number in the graph includes all permit that need renewals, permit mods, or other maintenance.

D. Oversight Facilities

There are facilities that are not in the Federally Regulated TSDF Universe (Active TSDF Universe), but

have not completed closure/post-closure obligations and may require some oversight although they are not “actively regulated” as described in “A” above. For example, some units have converted to less than 90-day storage, but will have TSD closure requirements when they cease waste management.

E. Mapped Locations:

Permitted/Active TSDFs Facilities Process Steps – December 2014

1. Downloaded the National Facilities .csv file from Envirofacts website.
 - a. <http://www.epa.gov/enviro/facts/datadownloads.html>
 - b. Select “Combined” file.
2. Imported .csv file into Microsoft Access database.
3. Imported Permitted Facilities list into Access database, containing EPA ID and Permit Name fields.
4. Created a look-up table from the Envirofacts EZ Query system, that contains both the EPA ID (“PGM_SYS_ID”) and the Registry ID.
5. Created a query that looks at the EPA IDs from the Permitted Facilities list, links to Registry ID, and pulls in relevant location information for each facility.
6. Any Registry IDs not found (because they were not listed in the RCRAInfo lookup table) were looked up individually in the Envirofacts EZ Query website, then queried against the database. These typically fell in Puerto Rico.
7. Any EPA IDs that do not have a corresponding Registry ID were looked up in data received by IEC for other EPA projects. These facilities will have a location, but no information on the accuracy or reference point. The Location_Source field indicates where the data came from.
8. Any Lat/Longs that were missing in the Envirofacts database were looked up in data received by IEC for other EPA projects. If we were still missing lat/longs, we used the address to create a point from Google Maps.
9. Once the tables were complete, the Lat/Long information was used to create point shapefiles in ArcGIS, which were symbolized in different colors to create a map.
10. Additional columns were added to the Excel files to indicate which locations were in a RCRA 2011 corrective action sites file.
11. EPA later replaced some coordinates that were collected from Envirofacts and used the ones that were previously developed/assessed by EPA. These are understood to be better if they are different from Envirofacts.