



OFFICE OF INSPECTOR GENERAL

Catalyst for Improving the Environment

Evaluation Report

EPA's Management of Interim Status Permitting Needs Improvement to Ensure Continued Progress

Report No. 2007-P-00005

December 4, 2006



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Abbreviations

EPA	U.S. Environmental Protection Agency
GPRA	Government Performance Results Act
OIG	Office of Inspector General
OSW	Office of Solid Waste
PAA	Permitting and Corrective Action Program Area Analysis
RCRA	Resource Conservation and Recovery Act
RCRAInfo	Resource Conservation and Recovery Act Information System
TSDs	Treatment, Storage, and Disposal Facilities

Cover photo: US Filter Westates (or “Westates”) is an interim status carbon regeneration facility located on the Colorado River Indian Reservation near Parker, Arizona. US Filter Westates recently changed its name to U.S. Filter Ionpure (EPA photo).



At a Glance

Catalyst for Improving the Environment

Why We Did This Review

This review was conducted to evaluate the effectiveness of the U.S. Environmental Protection Agency's (EPA's) (1) efforts to address the regulation of hazardous waste units granted interim status under the Resource Conservation and Recovery Act (RCRA), and (2) information management system (RCRAInfo) in tracking permit information for interim status units.

Background

Under Subtitle C of RCRA, hazardous waste facility units that perform treatment, storage, and disposal activities must receive permits prior to operation. When new hazardous waste statutes or regulations are implemented, units that already exist may continue operating in a condition known as interim status by notifying EPA of their intent and supplying basic information. Units may remain in interim status until issuance or denial of a permit.

For further information, contact our Office of Congressional and Public Liaison at (202) 566-2391.

To view the full report, click on the following link:
www.epa.gov/oig/reports/2007/20061204-2007-P-00005.pdf

EPA's Management of Interim Status Permitting Needs Improvement to Ensure Continued Progress

What We Found

Interim status is a temporary designation, but some units have existed for as many as 25 years without formal issuance or denial of a permit, or other regulatory controls. Under the Government Performance and Results Act (GPRA), EPA has a RCRA National Permitting Goal to ensure that all units at hazardous waste facilities have "controls in place." EPA includes interim status units in this goal, and the Agency's data indicate that it has made progress in ensuring controls are in place at interim status units. As of 2005, EPA had attained the "controls in place" designation for 89 percent of RCRA hazardous waste facilities.

However, EPA's continued progress may be compromised because (1) the Agency has not sufficiently documented some changes to the baseline it uses to measure progress; (2) EPA does not prioritize its National Permitting Goal activities according to the potential risks posed by hazardous waste facilities or units, including the amount of time a unit may have been operating without required controls; (3) EPA does not monitor the creation of "new" interim status units in its reporting and tracking system (RCRAInfo); and (4) RCRAInfo lacks other system controls to protect data integrity and data quality, which may lead to the loss of historical information needed to track permit status. Despite data quality problems, RCRAInfo data are available for public use without appropriate disclaimers.

What We Recommend

In order to ensure valid progress in achieving "controls in place" at interim status units, we recommend that the Assistant Administrator for Solid Waste and Emergency Response:

- Implement a process to document changes to the GPRA National Permitting Goal baseline.
- Review State GPRA National Permitting Goal projections for 2008 and 2011 to identify opportunities for prioritizing facilities based on risk, including time in interim status.
- Oversee the designation of "new" interim status units in RCRAInfo.
- Implement RCRAInfo system controls to ensure data integrity and improve data quality.
- Provide a disclaimer on data released publicly from RCRAInfo until data quality controls are in place.

The Agency generally concurred with our recommendations.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, D.C. 20460

OFFICE OF
INSPECTOR GENERAL

December 4, 2006

MEMORANDUM

SUBJECT: EPA's Management of Interim Status Permitting Needs
Improvement to Ensure Continued Progress
Report No. 2007-P-00005

TO: Susan Parker Bodine
Assistant Administrator for Solid Waste and Emergency Response

This is our report on the subject evaluation conducted by the Office of Inspector General (OIG) of the U.S. Environmental Protection Agency (EPA). This report contains findings that describe the problems the OIG has identified and corrective actions the OIG recommends. This report represents the opinion of the OIG and does not necessarily represent the final EPA position. Final determinations on matters in this report will be made by EPA managers in accordance with the established resolutions procedures.

The estimated cost of this report – calculated by multiplying the project's staff days by the applicable daily full cost billing rates in effect at the time – is \$480,000.

Action Required

In accordance with EPA Manual 2750, you are required to provide a written response to this report within 90 calendar days. Your response should include a corrective action plan for agreed upon actions, including milestone dates. We have no objections to the further release of this report to the public. This report will be available at <http://www.epa.gov/oig>. If you or your staff have any questions regarding this report, please contact Carolyn Copper at (202) 566-0829 or copper.carolyn@epa.gov, or Steve Hanna at (415) 947-4527 or hanna.steve@epa.gov.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill A. Roderick", is written over a horizontal line.

Bill A. Roderick
Acting Inspector General

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Chapter 1

Introduction

Purpose

This report focuses on efforts of the U.S. Environmental Protection Agency (EPA) to address the regulation of hazardous waste units granted interim status under Subtitle C of the Resource Conservation and Recovery Act (RCRA). We addressed the following questions:

- How effectively has EPA addressed the management of interim status units?
- How effective is EPA's information management system in tracking permit information for interim status units?

Background

Subtitle C of RCRA regulates the identification, generation, transportation, and disposal of hazardous waste. States implement RCRA Subtitle C programs with EPA oversight, except for Alaska and Iowa, where EPA administers the program. In 2003, over 1,700 treatment, storage, and disposal (TSD) facilities managed over 40 million tons of hazardous waste. Hazardous waste includes metals such as lead, cadmium, and chromium; and organic solvents such as xylene and toluene.

Hazardous waste facilities are subject to permitting requirements. A hazardous waste management facility contains a single or multiple TSD units, each of which must have a permit for operation. Obtaining a RCRA permit requires public participation and technical review by State agencies or EPA. With some exceptions, RCRA permits are good for 10 years and then require renewal. The RCRA permit process consists of two parts:

- Part A - This application requires basic facility information, proposed activities, and the types of hazardous waste managed.
- Part B - This application consists of detailed site information that the State or EPA extensively reviews before approving or denying. The review may take several years to complete, and includes public notice and comment.

EPA tracks permit progress in the RCRAInfo database, which EPA maintains. However, States have direct access and primary responsibility for inputting permit data.

If a hazardous waste unit is already in operation when new legislation or regulation governing the unit comes into effect, the unit can operate in “interim status.” To obtain interim status, an owner or operator of a unit first files Part A of the permit application, followed by Part B when requested by the State or EPA. Under current regulations, interim status TSD units may continue operations without a full permit as long as they comply with general facility and TSD unit-specific standards. Land disposal units must also certify to the State or EPA that they comply with groundwater monitoring and financial assurance requirements.

Although interim status is a temporary designation, units have remained in that status for many years without issuance or denial of a permit, or the implementation of other regulatory controls. The average time in interim status is approximately 17 years, and the longest current time is 25 years.

Scope and Methodology

We performed this evaluation in accordance with the *Government Auditing Standards*, issued by the Comptroller General of the United States. We conducted fieldwork between May 2005 and April 2006. Our evaluation included analysis of all units ever in interim status. This included over 14,000 hazardous waste units and a smaller subset of these units, approximately 4,500 operating and post-closure interim status units, which EPA has targeted through the Government Performance Results Act (GPRA) National Permitting Goal. EPA’s Office of Solid Waste (OSW), within the Office of Solid Waste and Emergency Response, supplied electronic data from RCRAInfo. The RCRAInfo data included the facility identifier and name, unit, initial and current legal and operating status codes, and details on the facility and unit GPRA National Permitting Goal status.

To address whether EPA’s management of interim status units was effective, we reviewed key regulations, documents, reports, and EPA Webpages relating to the management and oversight of interim status units, including:

- 40 CFR 264 and 265
- EPA Annual and Strategic Plans
- EPA Regional Strategic Plans
- EPA Regional Beginning of Year Plans and Management Performance Agreements
- RCRA Implementation Plans
- RCRA Orientation Manual
- RCRAInfo Comprehensive Permitting Reports
- RCRAInfo Reports about meeting the GPRA Goal
- Government Accountability Office Reports
- Prior EPA OIG Reports

We analyzed permitting data for interim status TSD units included in the GPRA National Permitting Goal (approximately 4,500 units), including the year initially

in interim status and length of time in interim status. We reviewed EPA's reported progress under the National Permitting Goal and the composition of the baseline of this goal.

To address whether RCRAInfo is effective at tracking permit information, we performed extensive analyses of RCRAInfo data to evaluate internal system controls and data quality, supplemented by comprehensive permitting reports generated from RCRAInfo. We reviewed the recommendations in the *Permitting and Corrective Action Program Area Analysis (PAA)*¹ to identify the unsupported legal and operating status code combinations. In evaluating internal system controls, we analyzed the ability of RCRAInfo to (1) track historical changes to data, and (2) ensure that data in the system have values within accepted ranges.

For both objectives, we supplemented the analyses of documentary evidence with interviews of staff and managers from the following organizations:

- OSW
- EPA's Office of Enforcement and Compliance Assurance
- EPA Regions 6, 8, 9, and 10
- Selected State environmental regulatory agencies (Colorado, Connecticut, New Mexico, Texas, and Washington)

We selected States to interview that had made either more or less progress in permitting or establishing controls for interim status units. By extension, we interviewed regions where these States were located. During interviews, we discussed EPA's efforts to address interim status units, the development of the GPRA goal and the baseline, and RCRAInfo and its use as a management tool.

Data Quality

Our analyses were hampered by poor data quality. According to EPA, data for units on the GPRA baseline (about 4,500) were more accurate than data for all the units that had ever been in interim status (about 14,000). Interim status units on the GPRA baseline are a subset of units ever having been in interim status. Despite using the GPRA baseline data, we still encountered data quality problems. These problems are described in our report.

Prior Audit/Evaluation Coverage

In a 2004 OIG report,² we reported that the State of Idaho had neglected permitting interim status units at Idaho's National Environmental and Engineering Laboratory.

¹ The PAA is a collaborative report developed by States and EPA to reassess and improve information management within RCRAInfo. The PAA was released in July 2005.

² *Review of EPA's Response to Petition Seeking Withdrawal of Authorization for Idaho's Hazardous Waste Program*, Report No. 2004-P-00006, February 5, 2004.

Chapter 2

Implementation of the GPRA National Permitting Goal Needs Improvement to Ensure Continued Progress

We found challenges that potentially compromise the validity of EPA's reported progress at achieving its GPRA National Permitting Goal. EPA established its National Permitting Goal to achieve a "controls in place" designation at RCRA facilities, including interim status facilities. However, EPA did not have a system control in RCRAInfo to document the changes to the GPRA baseline. EPA does not prioritize achieving "controls in place" for interim status units based on their potential risks, including time in interim status. There is no documentation or review to validate the creation of new interim status units.

Development of the GPRA National Permitting Goal

In 1997, EPA formalized efforts to prevent releases of hazardous waste from TSD units, such as those in interim status, by establishing a National Permitting Goal as part of GPRA. EPA's initial GPRA goal was to have 80 percent of all RCRA baseline facilities achieve an approved "controls in place" designation by 2005.

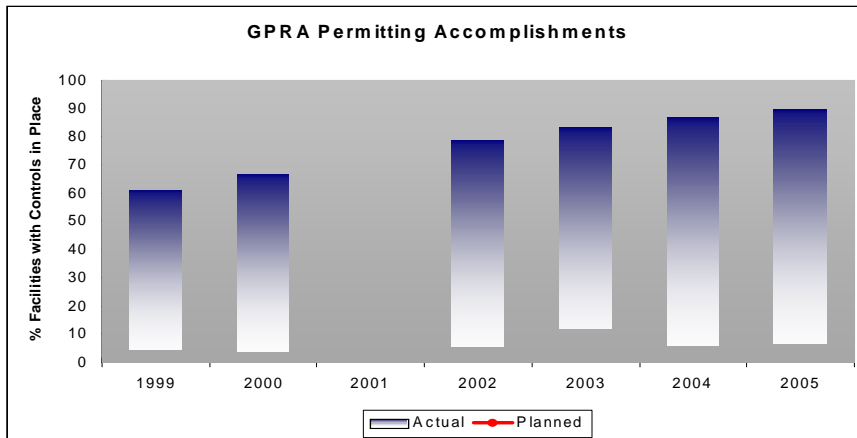
Achieving this "controls in place" designation means that there are measures in place to ensure the prevention of a hazardous waste release. A hazardous waste TSD facility obtains the "controls in place" designation when all of its units have a control in place. This designation is based on the combination of a unit's legal and operational status (see Appendices A and B).

Roughly half (approximately 340) of the remaining interim status units without "controls in place" are still operating. A unit may attain a control in place designation by obtaining a permit or other regulatory controls recognized by EPA.

EPA Reports Progress with the GPRA National Permitting Goal

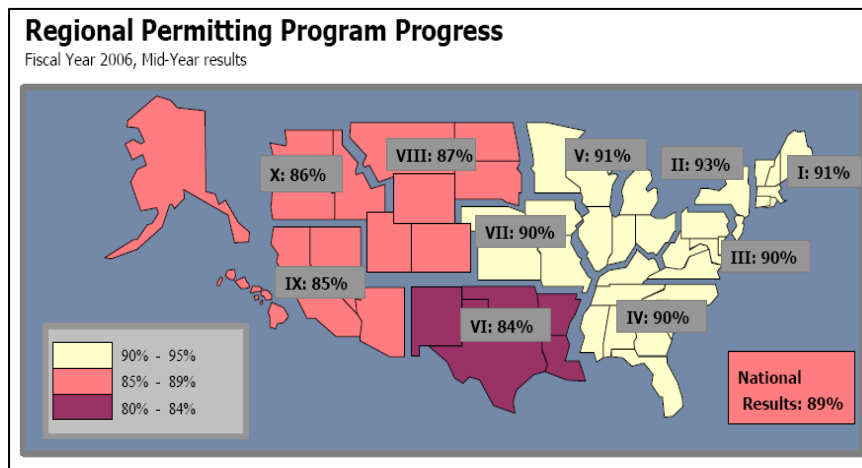
In 1999, EPA began formally tracking and reporting progress on the National Permitting Goal in its annual performance report. As shown in Figure 2-1, EPA reported consistently meeting or exceeding its annual GPRA National Permitting Goal targets. EPA reported meeting the 2005 GPRA goal on schedule.

Figure 2-1. RCRA National Permitting Goal Accomplishments (Source: OIG analysis of EPA data)



Furthermore, as shown in Figure 2-2, States and EPA attained “controls in place” at 89 percent of RCRA hazardous waste facilities.

Figure 2-2. RCRA Permitting Progress (Source: EPA)



Currently, EPA’s GPRA goal is to have 95 percent of RCRA baseline facilities achieve an approved “controls in place” designation by 2008.

Undocumented Changes to the GPRA Baseline May Affect EPA’s Reported GPRA Progress

EPA defined the GPRA baseline of RCRA facilities in 1997, and began formally measuring progress against this baseline in 1999. The number of TSD facilities on the original GPRA baseline decreased in 2000 and 2001, but then remained constant through 2005. Table 2-1 shows reductions to the GPRA baseline and the corresponding number of facilities with “controls in place” needed to meet the GPRA goal for that year. Between 1999 and 2001, EPA reported an increase in progress towards its goal, although the total number of GPRA facilities required to achieve the goal decreased.

Table 2-1. Baseline Reductions (Source: EPA)

YEAR	BASELINE	GOAL	FACILITIES REQUIRED TO ACHIEVE GOAL
1999	3,380	61.0%	2062
2000	2,900	67.0%	1943
2001	2,750	68.0%	1870
2002	2,750	75.8%	2085

OSW did not have a system control in RCRAInfo to document why the changes occurred. According to OSW staff, changes in the baseline resulted from a nationwide effort to update data to determine if the facilities fit GPRA baseline criteria. Because the baseline is used to measure progress towards the GPRA goal, documentation is necessary to identify the reasons for adding or removing units so that progress can be validated. Insufficient documentation of changes in the GPRA baseline potentially compromises the validity of EPA’s reported progress.

In response to our review, EPA has modified its process and indicated it will now document changes to the baseline in RCRAInfo. Beginning in 2006, EPA instituted a system to track removals of facilities from the baseline. If a facility is removed from the baseline, the facility will have an "R" (removed) designation noted in its RCRAInfo entry, and a reason for the removal will be included in the notes section/comment field.

Risk-Based Prioritization of Interim Status Units Would Be Consistent With Other EPA Approaches

While EPA’s RCRA corrective action goal³ prioritizes actions based on risk, EPA does not prioritize achieving “controls in place” for interim status units based on their potential risks. These potential risks include the amount of time units have been operating without “controls in place.” Consequently, progress in getting “controls in place” at units that pose the greatest risk to human health and the environment is unclear.

We found no indication that EPA prioritizes units based on their time in interim status, or that EPA determines when too much time has elapsed for units in interim status. For example, 88 percent of the existing interim status units on the GPRA baseline have been in that status longer than the maximum permit length of 10 years. EPA indicated that the length of time in interim status is not by itself a meaningful measure of success for all units. However, because interim status is

³ The RCRA corrective action goal ensures that responsible parties who have had a release from their hazardous waste facility timely investigate and clean up the release. The goal ensures that releases that present the greatest risk to human health and the environment are dealt with first. The corrective action goal prioritizes sites using the National Corrective Action Prioritization System, which ranks sites as high, medium, or low priority based on the potential for human exposure and groundwater contamination.

intended to be a temporary state, failure to acknowledge, monitor, and apply reasonable criteria to the amount of time units have been in interim status could lead to perceptions that permitting and/or getting “controls in place” at interim status units is not a priority for States or EPA.

EPA indicated that States have finalized their specific projected accomplishments for the 2008 National Permitting Goal and are currently finalizing their projections for 2011. As a result, EPA stated it could not feasibly implement a risk prioritization mechanism at this time. In the past EPA has not reviewed State GPRA permitting projections to determine if higher-risk facilities are being prioritized, however EPA has plans to do so in the future.

Creation of Interim Status Units Needs Additional Oversight

Documentation for the reason a unit obtained interim status cannot be determined from RCRAInfo. New interim status units have been designated every year since 1980. Given the emphasis placed on achieving controls at existing interim status units, any new interim status designation in RCRAInfo should require oversight by EPA. During interviews with States and regions, we discovered that they were generally not aware of the new interim status units in their jurisdiction, entered into RCRAInfo. While at least one of the four EPA regions we spoke with appears to closely monitor and control the creation of new interim status units, there is no national review of new interim status designations to ensure these are appropriate actions under the RCRA program.

Recommendations

We recommend that the Assistant Administrator for Solid Waste and Emergency Response:

- 2-1 Improve the accuracy of GPRA National Permitting Goal measurement by defining and implementing criteria for changes to the baseline.
- 2-2 Review current State GPRA National Permitting Goal projections for 2008 and 2011 to identify any opportunities for prioritizing facilities based on risk, including time in interim status.
- 2-3 Improve oversight of new interim status units by (1) implementing a national level review to validate new interim status designations, and (2) documenting the reason for interim status in RCRAInfo.

Agency Comments and OIG Evaluation

The Agency agreed with our recommendations. The Agency agreed to clarify the criteria for baseline changes and to describe when baseline changes are acceptable. The Agency will continue to track all unit baseline changes in

RCRAInfo for the 2008 baseline. The Agency agreed to work with States during their annual planning process to identify opportunities for prioritizing facilities that have not met the risk-based goal criteria. The Agency also agreed to make changes to RCRAInfo, Version 4, to identify conditions that must be satisfied prior to entering interim status codes and to require comments/notes in RCRAInfo for unusual cases. Finally, the Agency agreed to create a report for program managers to identify new interim status units. The Agency will assess the validity of any new interim status units at the end of 2008. In its 90-day response to the report, the Agency will need to provide a corrective action plan and milestone dates for agreed upon actions.

The Agency disagreed with our conclusion that insufficient documentation of baseline changes potentially compromises permitting progress. However, we continue to believe that insufficient documentation compromises EPA's ability to validate reported progress.

Chapter 3

RCRAInfo Improvements Needed to Effectively Track and Validate Permitting Progress

RCRAInfo is not fully effective in tracking permit information because RCRAInfo lacks some controls to ensure data integrity and data quality. The lack of data integrity and data quality are due to the ability to overwrite legal and operating status codes, and the lack of system controls to prevent incorrect data from being entered into RCRAInfo. This potentially compromises EPA's ability to validate its progress on the National Permitting Goal. Despite data quality problems, RCRAInfo data are made available for public use and reporting without appropriate disclaimers.

RCRAInfo Lacks System Controls to Prevent Data Loss and Protect Data Integrity

RCRAInfo lacks system controls needed to protect data integrity⁴ and prevent data loss. The lack of these controls could lead to the corruption of historical records, and could potentially compromise EPA's ability to reliably track or ensure accurate reporting of its progress on the National Permitting Goal.

During our review, we received multiple data sets from EPA listing all TSD units that had ever been in interim status. From these data sets, we extracted and analyzed data for interim status units on the GPRA baseline. We found that each set of data contained units not in the other sets. RCRAInfo does not currently require that historical records be maintained. If historical data were preserved, a later data set should contain all information in the earlier set.

We also found that legal and operating status codes and effective dates were modified for a small number of records. According to EPA, it is possible to (1) overwrite legal and operating status and initial effective dates in RCRAInfo, and (2) wipe out prior RCRAInfo entries. We uncovered one case of data overwriting at a Federal facility in interim status. As of October 2004, interim status units at this facility were listed as part of all units ever in interim status. However, data extracted for the facility in November 2004 did not show the units as ever having been in interim status. Additional analyses of the October 2004 and January 2005 Comprehensive Permitting Reports for this facility showed that the October 2004 legal code of "interim status" was overwritten with the legal code of "permitted." The overwriting eliminated any history in RCRAInfo that these units were ever in interim status.

⁴ Integrity refers to data not changing so the historical record is preserved.

Additional RCRAInfo Data Quality Concerns

We found the following data quality issues, which are described in detail below: (1) unsupported legal and operating status code combinations, (2) illogical code sequences, (3) effective dates prior to the enactment of RCRA, and (4) Part A and Part B dates that are missing or out of order. Addressing weaknesses in RCRAInfo system controls will improve data quality and the valid measurement of progress on the GPRA National Permitting Goal.

Unsupported Status Codes

Unsupported status codes are code combinations that EPA has determined do not support typical program operations, and therefore are not appropriate for entry into RCRAInfo, except perhaps with explanation. The PAA listed various legal and operating status code combinations as unsupported by typical program operations, and generally not valid for use. We found over 60 occurrences of unsupported legal and operating status code combinations for interim status and permitted units on the GPRA baseline (see Appendix B for unsupported codes). These occurrences include over 30 units designated as having “controls in place,” which makes the designation of “controls in place” questionable for these units.

Illogical Sequences

Illogical sequences of status codes are those that logically should not occur. Examples of illogical sequences of legal and operating codes include changing (1) from a legal status of permitted to interim status, (2) from a legal status of either permitted or interim status to a legal status of non-notifier or never regulated, or (3) from interim status operating to permitted before construction. We found approximately 100 illogical sequences of legal and operating status codes for units on the GPRA baseline.

Pre-RCRA Effective Dates

Interim status effective dates prior to the enactment of RCRA are another example of poor data quality. An effective date is when a unit’s legal and operating status became effective. RCRA requirements determine legal and operational status. While RCRA regulations for hazardous waste were not effective until 1980, we found approximately 100 occurrences of effective dates prior to 1980. Poor data quality compromises the ability to track permitting goal accomplishments.

Part A and Part B Data Quality Concerns

As described earlier, the RCRA permit application process consists of two parts – Part A and B. Although the Part B process follows Part A, EPA’s data show that 25 percent of interim status units listed Part B dates that preceded Part A dates.

In addition, only 36 percent of the units in interim status had information for both the Part A and Part B dates. Effective tracking of interim status units requires an actual date for the Part A application and a “call in” and “received date” for the Part B application. Without these dates, it is difficult to determine how long it takes to get an interim status unit permitted.

RCRAInfo Data Released to the Public Without Needed Cautions on Data Quality

RCRAInfo data are available to the public through EPA’s Envirofacts Data Warehouse and the Right to Know Network without cautions or disclaimers about data quality. EPA staff are working to prevent inactive facility data from populating Envirofacts and are evaluating options to address data quality. These include making needed modifications to RCRAInfo, creating reports to identify errors, and/or providing caveats for data accessible by the public.

Recommendations

We recommend that the Assistant Administrator for Solid Waste and Emergency Response:

- 3-1 Implement system controls to ensure that permit information in RCRAInfo cannot be modified unless a history of the modification and its rationale is also created.
- 3-2 Improve the current and future quality of RCRAInfo data by:
 - 3-2.1 Generating reports that identify unsupported legal and operating status codes, illogical sequences of status codes, entries with dates prior to the inception of RCRA, and missing mandatory data elements such as Part A and Part B call-in and received dates; and correcting entries as needed.
 - 3-2.2 Implementing control mechanisms that would prevent these types of incorrect data entries in the future.
- 3-3 Provide a caution or disclaimer on data released publicly from RCRAInfo, until data quality controls are put in place.

Agency Comments and OIG Evaluation

The Agency agreed with our recommendations. The Agency agreed to maintain unit level history to provide a better historical view of changes. The Agency also agreed to develop reports to allow RCRAInfo users to verify that data are correct and complete. The Agency agreed to provide disclaimer language for RCRAInfo that is available in Envirofacts.

EPA also agreed to release data only on active facilities to Envirofacts. In its 90-day response to the report, the Agency will need to provide a corrective action plan and milestone dates for agreed upon actions.

The Agency disagreed with our conclusion that the lack of some data quality and integrity controls in RCRAInfo potentially compromises EPA's continued permitting progress on the GPRA National Permitting Goal. However, we continue to believe that the potential for incorrect data entry could potentially compromise EPA's reporting on progress.

Status of Recommendations and Potential Monetary Benefits

RECOMMENDATIONS						POTENTIAL MONETARY BENEFITS (in \$000s)	
Rec. No.	Page No.	Subject	Status ¹	Action Official	Planned Completion Date	Claimed Amount	Agreed To Amount
2-1	7	Improve the accuracy of the GPR National Permitting Goal, as a measure of progress, by defining and implementing criteria for changes to the baseline.	O	Assistant Administrator for Solid Waste and Emergency Response			
2-2	7	Review State GPR National Permitting Goal commitments for 2008 and 2011 to identify any opportunities for prioritizing facilities based on risk or time in interim status.	O	Assistant Administrator for Solid Waste and Emergency Response			
2-3	7	Improve oversight of new interim status units by (1) implementing a national level review to validate the use of the interim status designation for new units, and (2) documenting the reason for interim status in RCRAInfo.	O	Assistant Administrator for Solid Waste and Emergency Response			
3-1	11	Implement system controls to ensure that permit information in RCRAInfo cannot be modified unless a history of the modification and its rationale is also created.	O	Assistant Administrator for Solid Waste and Emergency Response			
3-2	11	Improve the current and future quality of RCRAInfo data by:	O	Assistant Administrator for Solid Waste and Emergency Response			
3-2.1	11	Generating reports that identify incorrect data values associated with unsupported status codes, illogical sequences of status codes, entries with dates prior to the inception of RCRA, and missing mandatory data elements such as Part A and Part B call-in and received dates; and correcting entries as needed.	O	Assistant Administrator for Solid Waste and Emergency Response			
3-2.2	11	Implement control mechanisms that would prevent these types of incorrect data entries in the future.	O	Assistant Administrator for Solid Waste and Emergency Response			
3-3	11	Provide a caution or disclaimer on data that is released publicly from RCRAInfo, until data quality controls are put in place	O	Assistant Administrator for Solid Waste and Emergency Response			

¹ O = recommendation is open with agreed-to corrective actions pending
 C = recommendation is closed with all agreed-to actions completed
 U = recommendation is undecided with resolution efforts in progress

How is the Permitting Goal for GPRA Met?⁵

The following lists contain the most common situations that indicate accomplishment of the GPRA goal:

1. For a unit in the operating permit baseline, approved controls in place means:

- a. An operating permit has been issued for the unit, or an existing permit at the facility has been modified so that the unit in question is considered permitted.
- b. The unit has achieved clean closure, as verified by the lead regulatory agency (the unit was on the operating track, but closed instead).
- c. The unit closed before being issued an operating permit, and approved post-closure controls, as discussed in 2(c) and 2(d) below, are being met.
- d. The unit never managed hazardous waste (the unit does not have closure obligations).
- e. The unit is proposed and has not yet been built (the unit will need a permit issued before it is built and manages hazardous waste).
- f. The unit has been accepted by the Superfund program (Federal or State equivalent) for remediation.

2. For a unit in the post-closure baseline, approved controls in place means:

- a. A post-closure permit has been issued for the unit, or an existing permit at the facility has been modified so that the unit in question is subject to the post-closure permitting standards.
- b. The unit has achieved clean closure, as verified by the lead regulatory agency.
- c. The unit has properly closed with waste in place, as verified by the lead regulatory agency, and an approved post-closure plan, or similar enforceable document (such as a consent order), covers appropriate post-closure obligations including part 264 subpart F groundwater monitoring requirements (similar to the part of the post-closure rule that deals with alternate authorities in lieu of permits).

As mentioned previously, this list describes only the most common situations where the GPRA goal of safe waste management is met.

⁵ 2005 GPRA goal criteria. This page has since been revised for the GPRA 2008 goal.

Unique situations will arise that are not captured by this list. Therefore, other controls in place that prevent dangerous releases to air, soil, and ground water will also be considered on a case-by-case basis by the region or Headquarters.

(amended 7-19-01)

Baseline units have to be under control for the facility to be under control

A hazardous waste facility in the GPRA Operating Permit Baseline Universe is considered to have met the GPRA goal when all units identified as part of this baseline have approved controls in place. Likewise, a hazardous waste facility on the GPRA Post-Closure Baseline Universe is considered to have met the GPRA goal when all units identified as part of this baseline universe have approved controls in place.

Criteria to be in the GPRA operating and post-closure baselines

The GPRA Operating Permit Baseline includes only those hazardous waste facilities which had at least one unit that had or needed an operating permit as of 10/1/97. This baseline universe excludes units that needed an operating permit prior to 10/1/97, but the permits were subsequently terminated or expired and the unit(s) clean closed prior to 10/1/97 or were in the closure workload at that time, or did not need a permit prior to or on 10/1/97.

The GPRA Post-Closure Baseline includes any hazardous waste facilities that had at least one land disposal unit that ceased operating before 10/1/97 and had not clean-closed or was not in the operating or closure workload.

Legal and Operating Status Code Matrix

Achieving “controls in place” is determined based on legal and operational status codes indicated in the matrix below. In this matrix, the colors indicate if the combination of codes has achieved a “controls in place” designation as defined by EPA. A description of controls is provided in Appendix A. Most of the units have “controls in place” by being permitted operating units, permitted clean closed units, or interim status units that are clean closed. The boxes with checks indicate that the codes must be verified before the controls designation is accepted. (See page 17 for a list of legal and operating status codes.)

Legal and Operating Status Codes Matrix

		OPERATING CODES														
		OP	CN	UC	BC	IN	CC	CP	CO	DC	CA	SF	CV	CR	AB	PF
L E G A L C O D E S	PI	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Green	Red	Red
	PC	Red	Red	Red	Red	Green	Red	Green	Green	Green	Green	Green	Green	Red	Red	Red
	PT	Green	Green	Green	Green	Green	Green	✓	Green	Green	Green	Green	Green	Green	Green	Green
	PR	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
	IS	Green	Green	Green	Green	Green	Green	✓	Green	Green	Green	Green	Green	Green	Red	Red
	LI	Green	Green	Green	Green	Green	Green	✓	Green	Green	Green	Green	Green	Green	Red	Red
	IT	Green	Green	Green	Green	Green	Green	✓	Green	Green	Green	Green	Green	Green	Red	Red
	TA	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	PM	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	LP	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	NN	Green	Green	Green	Green	Red	Green	✓	Green	Green	Green	Green	Green	Green	Red	Red
	RQ	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red
	DL	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Red
	RD	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	EM	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	SR	Green	Green	Green	Green	Green	Green	Red	Red	Red	Red	Red	Red	Red	Red	Red
	NR	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Red	Green	Red

Green = controls in place; Red = unsupported/non-typical program operation⁶; ✓ = verification required

⁶ OSW has advised that some unsupported legal and operating status codes will be accepted into RCRAInfo as “strange but true” depending on the situation.

Legal and Operating Status Codes

LEGAL STATUS CODES	
PI	Operating Permit Issued
PC	Post-Closure Permitted
PT	Permit Terminated/Permit Expired, Not Continued
PR	Proposed
IS	Interim Status
LI	Loss of Interim Status
IT	Interim Status Terminated
TA	Temporary Authorization
PM	Pre-Mod Authorization
LP	Loss of Pre-Mod Authorization
NN	Non-Notifier/Illegal
RQ	Requested but Not Approved
DL	Delisted
RD	Research, Development, and Demonstration Permit
EM	Emergency Permit
SR	State Regulated
NR	Never Regulated as a TSD
RU	Permit by Rule

OPERATING STATUS CODES	
OP	Operating, Actively Managing RCRA-Regulated Waste
CN	Constructed, Not Yet Managing Hazardous Waste
UC	Under Construction
BC	Before Construction
IN	Inactive/Closing, Not Yet RCRA Closed
CC	Clean Closed
CP	Closed with Waste in Place
CO	Completed Post-Closure Care
DC	Delay of Closure
CA	Referred to Corrective Action for Closure
SF	Referred to CERCLA
CV	Converted but Not RCRA Closed
CR	Conducting Activities not Requiring a Permit
AB	Abandoned
PF	Protective Filer

Agency Response and OIG Comments

October 18, 2006

MEMORANDUM

SUBJECT: Comments on Draft Evaluation Report “EPA’s Management of Interim Status Permitting Needs Improvement to Ensure Continued Progress”
Assignment No. 2005-1259

FROM: Susan Parker Bodine/s/
Assistant Administrator

TO: Bill A. Roderick
Acting Inspector General

Thank you for the opportunity to comment on the draft report. Your September 27, 2006 memorandum requested that we respond to the findings and recommendations, comment on the factual accuracy of the draft report, and indicate concurrence or non-concurrence.

Attached are our comments on the draft report, as well as our response to your recommendations. If your staff has any questions on the comments, please contact Vern Myers (703) 308-8660 in the Office of Solid Waste.

Attachments:

- I. Response to OIG Draft Recommendations
- II. Comments on Evaluation Report Content
- III. GPRA Permitting Baseline Criteria

Chapter 2 - Conclusion:

Interim status units continue to exist for many years without formal issuance or denial of a permit. EPA reported progress in achieving controls in place at interim status facilities through the GPRA National Permitting Goal. However, insufficient documentation of changes in the GPRA baseline potentially compromises progress. In addition, EPA does not prioritize its National Permitting Goal activities based on potential risks posed by units that lack controls. Further, new interim status units are reported in RCRAInfo every year without a clearly identified reason, lack of full awareness of new designations, and lack of national oversight.

Agency Response to Conclusion:

1. We acknowledge that some interim status facilities have remained in interim status a long time without a permit, but the length of time in interim status is not by itself a meaningful measure of success for all units, since some units can meet their regulatory conclusion and retain interim status. With the post-closure rule, for example, some units will remain in interim status yet have achieved their regulatory goal.

OIG Response

We agree that the length of time a unit is in interim status is not by itself a meaningful measure of success for units. Time in interim status is one of many possible risk criteria. We believe that the length of time an interim status unit exists without controls to prevent releases (i.e., not meeting the GPRA goal criteria) is a meaningful indicator of potential risk; the report was revised to clarify this point.

2. We disagree with the statement that claims “insufficient documentation of changes in the GPRA baseline potentially compromises progress.”
- Many facilities achieved approved controls in place during the initial tracking period regardless of the level of baseline documentation. The sentence on page 7 directly before Table 2-1 is not accurate (“Between 1999 and 2002, EPA reported an increase in progress towards their goal, although the number of facilities addressed decreased”). During this three year period of tracking the goal, hundreds of accomplishments were recorded. These accomplishments took place independent of the reduction in the baseline.
 - In 1999 and 2000, there were very intensive efforts in the regions and states to assess the facilities in the permitting track to determine if each unit belonged on the baseline (Table 2-1 does not recognize that the baseline was still being corrected during these years). This was the first time that the program had a goal that required this level of scrutiny at the unit level, for each facility on the permitting track. Much of the unit-specific data was of questionable quality (again, we had generally not tracked data at the unit level in our data systems) and as the data was improved, many units were added or removed based on the updated unit status. This was the primary reason for the decline in the baseline totals. Since there are about 10,000 baseline units, this was a long process and many corrections were made to the facility status recorded in RCRAInfo. Many baseline changes resulted. The baseline stabilized in 2001 and

remained constant through the 2005 reporting cycle (which Table 2-1 should note). Please note that facilities removed from the baseline didn't meet the GPRA baseline criteria at the time of removal because they were not on the permitting track, but some had in fact met the GPRA goal or "under approved control" (e.g., the units clean-closed prior to 10-1-97). Please see Attachment III for the baseline establishment criteria. This information is also at the bottom of this web site: <http://www.epa.gov/epaoswer/hazwaste/permit/apprcntr.htm> .

OIG Response

We believe the ability to validate EPA's reported permitting progress is impacted by insufficient documentation of changes made to the GPRA baseline in 1999, 2000, and 2001. Due to insufficient documentation, we were unable to recreate the original baseline and confirm which units or facilities were removed from or added to the baseline. We have revised the final report to clarify our point that insufficient documentation of changes to the baseline challenges EPA's ability to validate GPRA progress. In addition, we revised the report to identify that in 2002 the number of GPRA baseline facilities did not decrease from the 2001 baseline figure of 2,750 facilities, and that the number of baseline facilities became constant in 2001. Finally, we believe that report content preceding Table 2-1, adequately discusses the baseline changes due to a nationwide data cleanup effort, and no further changes are needed.

3. We agree that the GPRA permitting goal criteria do not by themselves prioritize which facilities to permit based on risk or time in interim status. However, separate from the GPRA permitting goal criteria, we have generally prioritized facilities for permitting. We believe there is a general prioritization scheme appropriate to the level of risk for different unit types. This is described below:
 - The program has prioritized facility progress based on the nature of the unit/facility. For example, most land disposal facilities have been permitted. In addition, EPA's 1994 combustion strategy gave higher priority to those facilities for which a final permit decision would result in the greatest environmental benefit or the greatest reduction in overall risk to the public. We note that a number of the units that are now identified as needing initial controls are boilers that combust hazardous waste. We generally considered these units to be of a lower priority relative to other combustion sources because they are not commercial units and because the boiler and industrial furnace regulations for interim status boilers require compliance with emissions limitations (thus, to a large extent, these units have controls in place under interim status).
 - For closed/post-closure units, corrective action acts as a surrogate prioritization, since facilities with closed units that are considered to be major threats would be categorized as a corrective action priority.
 - Regardless of the GPRA permitting goal criteria, the program has and is continuing to address the units that pose a greater risk, according to the data that show that storage units (which generally pose less of an environmental risk) are by far the most numerous unit type that have not met the goal criteria. In addition, the program has made substantial progress in getting all of the different facility types under control in

the past several years. EPA and the states are on track to meet the 2008 GPRA goal of having 95% of the baseline facilities under approved controls. At that time, the vast majority of the facilities will be under control, including those considered to be a higher environmental risk and those facilities that have been in interim status a long time.

OIG Response

As we reported, the GPRA National Permitting goal lacks a risk prioritization scheme. Based on the Agency's response, EPA appears to rely on professional judgment in determining whether they have applied risk-based prioritization criteria to interim status units. We believe more can be done; there is an opportunity to prioritize the remaining interim status high-risk units that do not meet the GPRA goal criteria by working with States to identify higher-risk units for priority handling. The report was revised to clarify that time in interim status is one of many possible criteria for determining risk.

OIG's Recommendation 2-1:

Improve the accuracy of the GPRA National Permitting Goal, as a measure of progress, by defining and implementing criteria for changes to the baseline.

Agency Response:

We will clarify the criteria for the baseline to describe when baseline changes are acceptable. The baseline criteria have been posted on the web for several years and were recently revised for the 2008 baseline update. (See the end of this web site: <http://www.epa.gov/epaoswer/hazwaste/permit/apprecontr.htm>). This information is also in Attachment III. As noted in the draft report, we have also tracked all unit baseline changes in RCRAInfo for the new 2008 baseline.

OIG's Recommendation 2-2

Review State GPRA National Permitting Goal commitments for 2008 and 2011 to identify any opportunities for prioritizing facilities based on risk or time in interim status.

Agency Response:

We will work with states during the annual planning process to identify opportunities for prioritizing facilities that have not met the goal criteria based on risk. As noted previously, we do not believe "time in interim status" by itself is a meaningful criterion for prioritizing which units present the highest risks. The program will review the out-year projections for the rest of the facilities that have not yet met the goal criteria in order to identify facilities that should be prioritized.

OIG Response:

We will modify the report so that it is clearer that time in interim status is one of many possible criteria for determining risk.

OIG's Recommendation 2-3

Improve oversight of new interim status units by (1) implementing a national level review to validate new interim status designations, and (2) documenting the reason for interim status in RCRAInfo.

EPA Response:

We have plans to make changes in RCRAInfo Version 4 to identify conditions that must be satisfied prior to entering interim status codes. This is planned to be available toward the end of 2007. The person entering the data in RCRAInfo will have to agree to and select one of the standard conditions that would cause interim status to be applied to the unit before the interim status code can be saved. RCRAInfo will also require the person entering the data to provide comments/notes for unusual cases if the standard conditions do not apply (for example, if a unit group split into 2 units that both require interim status). OSW will create a report that can be used by program managers to identify new interim status designations. New interim status designations are infrequent, but it is important for program managers to be aware of new interim status designations that have been entered into RCRAInfo. At the end of 2008, we will look at new interim status designations in RCRAInfo and assess their validity.

OIG's Chapter 3 Conclusions

RCRAInfo is not fully effective in tracking permit information. This is because RCRAInfo lacks some controls to ensure data integrity and data quality. This potentially compromises EPA's ability to ensure its continued progress on the National Permitting Goal. The lack of data integrity and data quality are due to the ability to overwrite legal and operating status codes, and the lack of system controls to prevent incorrect data from being entered into RCRAInfo. Despite data quality problems, RCRAInfo data are made available for public use and reporting without appropriate disclaimers.

EPA Response:

We do not agree that data issues in RCRAInfo are of sufficient magnitude to compromise EPA's ability to ensure its continued progress on the National Permitting Goal. RCRAInfo currently allows the person entering the data into the system to overwrite legal and operating status codes to provide an updated status of the facility. While overwriting a status code would remove the record of the previous entry and prevent EPA from having a historical record of that status change, it does give an accurate picture of the current status of the facility and therefore, whether it is or is not under control. At the same time, OSW has had a long-standing process to identify and address the data needs in the different program areas in which we capture RCRA hazardous waste data. The permitting (including interim status) and corrective action program areas were recently addressed in the WIN/Informed Program Area Analysis (PPA). The results from that analysis will be implemented in Version 4 (V4) of RCRAInfo, which is planned to be available toward the end of 2007, and the issue of historical records will be addressed in the revision.

OIG Response

The data quality and integrity issues observed in RCRAInfo potentially compromise EPA's continued permitting progress under GPRA. Without additional system controls, the potential for incorrect data entry exists. Overwriting permitting data compromises a unit's historical record in RCRAInfo and creates opportunities for incorrect data entry. Because overwriting could be used to confer a control in place status (i.e., meeting the GPRA goal criteria), and the historical permitting information is deleted, RCRAInfo cannot be relied on to determine the unit's prior status.

OIG's Recommendation 3-1

Implement appropriate system controls to ensure that permit information in RCRAInfo cannot be modified unless a history of the modification and its rationale is also created.

EPA Response:

Based on the requirements that came out of the PAA and the agreement by the V4 Design Team, we will be maintaining history at the unit level so as to provide a better historical view of the unit.

OIG's Recommendation 3-2

Implement mechanisms to improve the current and future quality of RCRAInfo data by:

Recommendation 3-2.1

Generating reports that identify unsupported legal and operating status codes; illogical sequences of status codes; entries with dates prior to the inception of RCRA; and missing mandatory data elements such as Part A and Part B call-in and received dates, and correct entries as needed.

Recommendation 3-2.2

Implement control mechanisms that would prevent these types of incorrect data entries in the future.

EPA Response:

The V4 Design team will be developing reports to allow users to view their data and verify that their data is correct and complete. RCRAInfo's standard is to provide the best possible choices for data entry through lookup tables and pick lists on the data entry screens. Implementers will be able to determine which, if any, of their data needs to be corrected.

OIG's Recommendation 3-3

Provide a caution or disclaimer on data released publicly from RCRAInfo, until data quality controls are put in place.

EPA Response:

We will provide disclaimer language for RCRAInfo information that is available in Envirofacts. We have mitigated this problem by limiting the data that are released in the default reports in Envirofacts to data on the active facilities.

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