

United States Environmental Protection Agency Office of Enforcement and Compliance Assurance

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Office of Solid Waste and Emergency Response

Assessment of the National Enforcement Strategy for RCRA Corrective Action (NESCA)

INTRODUCTION

On April 27, 2010, EPA issued the "National Enforcement Strategy for RCRA Corrective Action" (NESCA) to promote and communicate nationally consistent enforcement and compliance assurance principles, practices, and tools to help EPA and the states achieve the 2020 Corrective Action Goal (2020 CA Goal). This goal is to construct cleanup remedies at 95% of the 3,747 facilities in the 2020 Corrective Action Universe of facilities (the 2020 CA Universe) by the year 2020.

In the strategy, EPA announced that after 18 months of implementation, EPA and its state partners would assess the contribution of NESCA in achieving progress toward the 2020 CA Goal. As part of the assessment, EPA committed to communicate successes and limitations of NESCA, make necessary modifications to NESCA, and develop additional tools and guidance documents, as appropriate, to help achieve the 2020 CA Goal. EPA affirmed this commitment again in 2011 as part of Action 13 in the Agency's Integrated Cleanup Initiative, a three-year strategy to identify and implement improvements to the Agency's land cleanup programs.

The Office of Site Remediation Enforcement (OSRE) and the Office of Resource Conservation and Recovery (ORCR) worked with the Regions and states to conduct an assessment of NESCA. EPA found that NESCA has been helpful in moving facilities further along the cleanup pipeline toward remedy construction. Based on data reviewed, in fiscal years (FY) 2010 and 2011, Regions issued more enforcement orders than in any year since 1999. Regions and states indicated that there is generally more consideration of enforcement and compliance assurance tools to address contamination at Resource Conservation and Recovery Act (RCRA) corrective action facilities during work planning and other meetings. Based on the assessment, EPA intends to continue implementation of NESCA and has identified specific next steps as described in this document.

BACKGROUND

Enforcement tools have long played an important role in getting corrective action facilities cleaned up. Over the years, EPA has issued several enforcement guidance documents to streamline the corrective action process, maximize program flexibility, expedite cleanup, and

improve compliance with financial assurance obligations to ensure that funds are available for cleanup.¹

EPA established the 2020 CA Goal as part of a long-range vision for the corrective action program, which included expanding the universe of facilities subject to goals established under the Government Performance and Results Act (GPRA). NESCA provides a comprehensive enforcement approach to help achieve the 2020 CA Goal, as well as the Agency's ongoing corrective action environmental indicator (EI) goals for 2020 for current human exposures under control and migration of contaminated ground water under control. The five components of NESCA are:

- 1. Identify and prioritize facilities for corrective action enforcement and provide factors to consider when targeting facilities for enforcement;
- 2. Emphasize the need for robust communication and coordination between Regions and states and provide advice on improving such interactions;
- 3. Provide guidance on how to address some of the special considerations that arise in corrective action enforcement, including use of "streamlined" orders, dealing with companies having financial difficulties, use of authorities under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) at RCRA corrective action facilities, establishing and enforcing institutional controls, and increasing the transparency of enforcement efforts;
- 4. Discuss the importance of training and outline future training efforts; and
- 5. Discuss improved measures to capture both federal and state enforcement accomplishments.

NESCA is designed to complement other tools, such as compliance assistance, to help facilities achieve and remain in compliance with RCRA corrective action requirements. NESCA is intended to help:

- Ensure facility accountability;
- Provide a level playing field among regulated facilities;
- Promote open and consistent communication among EPA, states, regulated facilities, the public, and other stakeholders;
- Promote better use of enforcement and compliance tools available to EPA and states to address enforcement and compliance issues;
- Provide opportunities for consistent joint EPA/state enforcement activities incorporating shared approaches among the regulators in prioritizing and targeting for enforcement; and
- Provide opportunities for enforcement actions using authorities found in statutes other than RCRA or in combination with RCRA, such as joint RCRA/CERCLA orders.

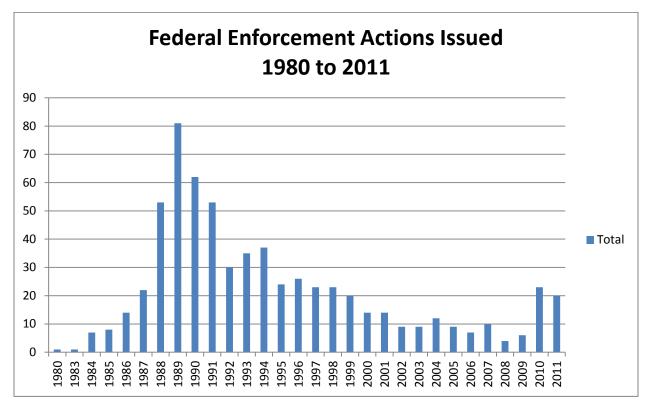
¹ See, e.g., "Enforcement Approaches for Expediting RCRA Corrective Action" (Jan. 2001); "Interim Guidance on Financial Responsibility for Facilities Subject to RCRA Corrective Action" (Sept. 30, 2003); and "Results-Based Approach and Tailored Oversight Guidance for Facilities Subject to Corrective Action under Subtitle C of the Resource Conservation and Recovery Act" (Sept. 2004). For a complete listing of policy and guidance documents regarding RCRA corrective action visit http://cfpub.epa.gov/compliance/resources/policies/cleanup/rcra.

ASSESSMENT PLAN

The assessment of NESCA was conducted in three stages. The first stage involved an internal analysis of corrective action enforcement data from the RCRA Information (RCRAInfo) database and the Integrated Compliance Information System (ICIS). The second stage involved soliciting feedback from program implementers to identify and select a set of issues that impact the implementation of NESCA. In this stage, discussions with the Regions and states during national meetings and conference calls were critical. In the third stage, the NESCA assessment team prepared a written summary of the assessment focus areas and developed recommendations for future action.

ANALYSIS OF CORRECTIVE ACTION ENFORCEMENT DATA

From the beginning of FY 1980 to the end of FY 2011, our data indicate that EPA has issued 657 corrective action orders at 492 facilities. The following graph shows the number of enforcement orders reported in RCRAInfo from 1980-2009. For FY 2010, the primary data source for these numbers was information gathered during conference calls between Headquarters and each Region. For FY 2011, the primary data source for these numbers was information gathered from ICIS.



FY 1980-2009 Data Source: RCRAInfo. Data Pull 12/30/2011. FY 2010 based on regional feedback. FY 2011 Data Source: ICIS. Data Pull 12/30/2011.

For the 492 facilities where corrective action orders have been issued:

- 304 facilities have met remedy construction (61.8% of facilities in the 2020 CA Universe that were issued orders);
- 419 have met the groundwater EI (85.2% of facilities in the 2020 CA Universe that were issued orders); and
- 329 have met the human exposures EI (66.9% of facilities in the 2020 CA Universe that were issued orders).

For the 3,747 facilities in the 2020 CA Universe, by the end of fiscal year 2011:

- 1,563 facilities have met remedy construction (41.7% of the 2020 CA Universe);
- 2,507 facilities have met the groundwater EI (66.9% of the 2020 CA Universe); and
- 2,870 facilities have met the human exposures EI (76.6% of the 2020 CA Universe).

When the data for these two groups are compared, it appears that the facilities subject to corrective action orders have achieved remedy construction and met the groundwater environmental indicator goals at a higher rate than the overall 2020 CA Universe of facilities. Many factors may be contributing to this result, but it likely is due in part to the fact that EPA issued most of these corrective action orders many years ago (during the late 1980s and early 1990s), and the long-term results of those early efforts are now becoming clear. During that time, EPA focused its efforts in the corrective action program on that subset of the universe of facilities that were identified as posing the highest risk. In addition, most states were not authorized for corrective action whereas today, 42 states and the territory of Guam are authorized for corrective action.

ASSESSMENT FOCUS AREAS

EPA identified the following twelve areas, discussed in further detail below, to evaluate:

- (1) RCRA authorities;
- (2) Enforceable instruments;
- (3) Targeting;
- (4) Environmental justice;

(5) States;

- (6) Communication and coordination;
- (7) Financial assurance;
- (8) Use of CERCLA authorities;
- (9) Training;
- (10) Measuring progress and results;
- (11) Scope of the NESCA universe of facilities; and
- (12) Resources.

1. Use of RCRA Authorities

As explained above, in FYs 2010 and 2011, there was a notable increase in the number of enforcement orders issued. Some Regions also reported that NESCA prompted them to consider using creative enforcement approaches, as well as to discuss the use of enforcement more often during discussions with states. In several cases, new orders were issued to implement remedies or to include financial assurance requirements because previous orders did not include such provisions. During FYs 2010 and 2011, EPA issued orders that addressed corrective action under the following authorities:

- RCRA Section 3008(a) 1
- RCRA Section 3008(h) 23
- RCRA Section 3013 7
- RCRA Section 7003 8
- RCRA Section 7003/CERCLA Section 106 1
- CERCLA Sections 104, 106, 107 & 122 1
- CERCLA Section 106 1
- CERCLA Section 122 1

Generally, work is progressing at the facilities under these orders, delays are limited and compliance is high. Since the facilities that were issued such orders were at various stages of the cleanup pipeline, the complete impact of these orders will not be apparent for several years.

2. Enforceable Mechanisms

NESCA encourages the use of enforceable mechanisms, such as orders and permits, as appropriate, to address delays in corrective action projects. Where an enforceable mechanism is created, NESCA encourages Regions and states to include enforceable language (i.e., clear deadlines and clear statements regarding corrective action process and deliverables). NESCA also encourages use of appropriate enforcement tools when there is a violation of either a federal or state permit or order, including schedules in work plans, financial assurance, or other requirements contained in documents attached to a permit or order and/or incorporated by reference.

3. Targeting

Each Region was asked to identify five to ten facilities to target for corrective action enforcement in FY 2011. During that year, Regions completed 20 corrective action enforcement actions, five of which were at facilities that were not in the 2020 CA Universe. In FY 2010, Regions completed 23 corrective action enforcement actions, eight of which were at facilities that were not in the 2020 CA Universe.

The assessment found that Regions generally did not adhere to the framework provided in NESCA for assessing, targeting and prioritizing facilities for

enforcement. Prioritization generally was not applicable because there were so few EPA-lead facilities identified. Regions did use some of the factors identified in NESCA in targeting facilities for enforcement, but certain aspects of the framework could not be applied without conducting inspections or file reviews. In addition, identifying facilities at which cleanup is not proceeding at an acceptable pace is difficult because site visits to determine compliance with corrective action obligations may not be consistently reported in national databases. Only one of the 43 orders issued during FYs 2010 and 2011 was to address non-compliance, and it was issued under the Mineral Processing National Enforcement Initiative to a facility that was not in the 2020 CA Universe. The rest of the orders that were issued during that time period required investigation and cleanup activities.

4. Environmental Justice Considerations

Within the NESCA framework for assessing, targeting and prioritizing facilities for corrective action enforcement, NESCA encouraged Regions to focus attention on identifying and addressing disproportionate impacts on minority, low-income, tribal and other vulnerable populations. NESCA recognized that many Regions have their own environmental justice (EJ) mapping tools and that there was no national requirement to use any specific tool for priority setting or reporting.

During the assessment, EPA learned that the EPA-lead portion of the 2020 CA Universe is small, and EJ is usually a component of those facilities addressed. However, Regions generally focus attention on facilities that may present or are presenting a major threat to human health or the environment, irrespective of whether the facility was in an EJ community. When a facility is located in an EJ community, Regions generally engage in enhanced community outreach and involvement. As an example, Region 4 reported devoting a significant amount of resources to conducting such outreach activities at facilities in EJ communities.

5. States

Forty-two states and the territory of Guam are currently authorized for RCRA corrective action. In authorized states, with the exception of EPA-lead corrective action facilities under a federal permit or federal corrective action order, it is generally expected that the state will be the enforcement lead for all corrective action activities. Although states were not expected to adhere to the framework provided in NESCA for assessing, targeting and prioritizing facilities for enforcement, Regions and authorized states were encouraged to begin implementing NESCA immediately.

Since NESCA was issued, a few Regions reported receiving one or two referrals of facilities in the 2020 CA Universe from their states. This practice continues on a caseby-case basis as determined by the state in consultation with the Region. Although an increase in meetings between Regions and states cannot be attributed to NESCA, EPA has concluded that implementation of NESCA has generally resulted in increased discussion of enforcement options at corrective action facilities not making significant progress toward cleanup. EPA believes that it is important to continue such discussions with states, as well as within the Agency.

6. Communication and Coordination

NESCA recognized the importance of communication and coordination among all Headquarters, Regional and state offices addressing corrective action issues. Although the existing working relationship between the Regions and their respective states was generally unchanged after the introduction of NESCA, the strategy appeared to contribute to a heightened awareness and increased discussion of using enforcement as a tool to reach the 2020 CA Goal, both within Regions and between Regions and their states.

NESCA also contributed to the development of the "Best Practices to Enhance Coordination in the RCRA Program," issued by the Office of Enforcement and Compliance Assurance (OECA) and the Office of Solid Waste and Emergency Response (OSWER) on February 22, 2012, which provides recommended practices to improve regional coordination among the permitting, corrective action, enforcement, compliance assurance, and legal components of the RCRA program, *see* http://www.epa.gov/enforcement/cleanup/documents/policies/rcra/coor-rcraprogram-11.pdf. This memorandum acknowledges the importance of coordination within EPA and between EPA and the states.

7. Financial Assurance

Financial issues, such as bankruptcy or financial distress of companies, are some of the most challenging issues regulators must address. Some Regions reported that, after NESCA issuance, they added stronger financial assurance provisions or added financial assurance for the first time by: (1) issuing orders covering work in progress; or (2) revising existing orders to include financial assurance provisions where an order was in place but had no financial assurance requirements.

8. Use of CERCLA

Authorities pursuant to RCRA and the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA, commonly known as Superfund) may be used effectively to address a contaminated facility with equally protective results.² NESCA identified several advantages of CERCLA, including broader information gathering authority, additional responsible parties liable for cleanup, use of the Trust Fund, cost recovery, and use of special accounts. EPA found widespread interest among regulators in increasing use of CERCLA authorities at RCRA facilities. As stated in the authorities section above, use of CERCLA authorities at RCRA facilities occurred at 4 facilities in FYs 2010 and 2011.

² See, e.g., OSWER/OECA Memorandum, *Coordination Between RCRA Corrective Action and Closure and CERCLA Site Activities* (Sept. 24, 1996); and OECA/DOJ Memorandum, *Use of CERCLA § 106 to Address Endangerments That May Also Be Addressed Under Other Environmental Statutes* (Jan. 18, 2001).

9. Training

NESCA recognized the need for training and capacity building within the Regions and states to use compliance monitoring and enforcement, as appropriate, to achieve the 2020 CA Goal. EPA made a concerted effort to provide training during the first 18 months of the strategy's implementation. For example, EPA hosted a workshop in conjunction with the Association of State and Territorial Solid Waste Management Officials (ASTSWMO) annual meeting in the fall of 2010 to highlight ways in which the enforcement and permitting programs can work together to ensure cleanup objectives are met. Additionally, to help implement NESCA, RCRA corrective action enforcement modules were presented at the following events: the RCRA Enforcement Practitioners training courses held at Headquarters in February 2010 and in some Regions (Region 4 in June 2010, Region 3 in February 2011, and Region 7 in December 2011); and in the ORCR sponsored "RCRA Corrective Action Training: Strategies for Meeting the 2020 Vision" held in each Region during FYs 2009 and 2010.

NESCA also recognized the need for continued training in financial assurance mechanisms and cost estimation. In 2010, EPA launched a web-based tool accessible to all Regions and states called the Financial Responsibility Enforcement Tool (FRET). FRET provides regulators assistance in evaluating compliance of financial assurance submissions as well as serving as a compilation of financial assurance, cost estimating, bankruptcy, and other financial resources. To give an introduction to the tool and demonstrate its use, EPA provided two webinars, open to all states and territories, and delivered a workshop at the ASTSWMO mid-year meeting in April 2011.

10. Measuring Progress and Results

NESCA acknowledged that "[t]o truly account for the impact [of NESCA] on attaining the 2020 CA Goal, EPA and the states need to be able to measure their combined enforcement efforts." After NESCA was issued, the GPRA target for volume of contaminated media addressed (VCMA) was established. In fiscal year 2011, RCRA corrective action orders addressed three million cubic yards of contaminated media. In fiscal year 2011, the number of corrective action orders was also reported in OECA's annual accomplishments.

11. Scope of the NESCA Universe

Regions and states use enforcement authorities to compel investigation and cleanup at some RCRA facilities that are not in the 2020 CA Universe of facilities. The principles, practices and tools discussed in NESCA also can be used to address facilities not in the 2020 CA Universe of facilities. During the strategic planning process, EPA may add or remove facilities from the 2020 CA Universe that it reports on for GPRA purposes. To date, EPA has not made significant changes to the overall

number of facilities in this universe except at the beginning of the three year GPRA cycles. The next such cycle begins in FY 2014.

12. Resources

OSWER provides each Region with a corrective action budget that is intended to be used for all aspects of corrective action, including compliance monitoring and enforcement. Regions are also responsible for distributing money to their state and tribal partners through RCRA State and Tribal Assistance Grants (STAG), and states have to match one third of STAG funds to implement their RCRA program. OSRE has a small corrective action budget, which comes from OECA's Environmental Program and Management funds.

In a July 2011 report, the Government Accountability Office (GAO) concluded that significant progress has been made in the corrective action program, but "… resource constraints, the size and cost of the program's remaining workload, and projected federal and state budget cuts are leading EPA and state regulators to question whether this rate of progress can be sustained."³ GAO recommended that EPA develop an assessment of the Agency's remaining corrective action workload, determine the extent to which the Agency has the resources it needs to meet the 2020 CA Goals⁴, and take steps to either reallocate its resources to the program, or revise the goals. EPA is conducting that assessment in response to GAO's recommendation.

NEXT STEPS

Based on the feedback received and findings made during the assessment, EPA recommends the following actions to be implemented in the next 18 months:

- Increase emphasis on communication and coordination within EPA and with state partners
 - Implement "Best Practices to Enhance Coordination in the RCRA Program" document, dated February 22, 2012, as appropriate (e.g., have compliance assurance and enforcement staff and facility managers coordinate with permit writers to promote enforceable permit conditions).
 - Emphasize coordination between each Region and Headquarters and between EPA and the states.
 - Promote the appropriate use of CERCLA authority at RCRA facilities.

³ GAO, "Early Goals Have Been Met in EPA's Corrective Action Program, but Resource and Technical Challenges will Constrain Future Progress," GAO-11-514 at 34 (Aug. 25, 2011) *available at* http://www.gao.gov/products/GAO-11-514.

⁴ GAO's reference to the Agency's "2020 Goals" includes the goal to complete construction of remedies, which is referred to as "the 2020 CA Goal" in this document, as well as goals for meeting two environmental indicators, i.e., controlling human exposures to contaminants at 95% of the 2020 baseline facilities, and controlling the migration of contaminated groundwater at 95 percent of the 2020 baseline facilities.

> Explore opportunities for compliance monitoring

- Explore development of new compliance measures that are consistent with and measure progress toward the Agency's goals for the 2020 CA Universe.
- Explore development of a corrective action module as part of the RCRA inspector training effort that is being led by OECA's Office of Compliance, with assistance from states, Regions and other Headquarters offices, and deliver such training.
- Review and evaluate how EPA and the states are tracking compliance schedules, cleanup progress and substantial non-compliance at facilities under an order or permit.
- Develop guidance for corrective action to address deficient deliverables submitted by owners/operators conducting cleanup at corrective action facilities.
- Explore ways to incorporate electronic reporting and other technology into corrective action activities to improve compliance.

> Increase State Role in Corrective Action Compliance Monitoring and Enforcement

- Emphasize advantages of conducting compliance monitoring activities to states during meetings and conference calls and provide training where appropriate.
- Collaborate with states to identify focus areas to improve compliance monitoring and enforcement.

CONCLUSION

Monitoring compliance and conducting enforcement where appropriate are important activities to help get facilities cleaned up and ensure that human health and the environment are protected. NESCA's initial focus was on issuance of enforcement orders for investigation and cleanup activities.

To ensure accountability in the corrective action program, the next step in this effort should also focus on monitoring compliance. EPA and state regulators should assess the facilities in their universe to determine if meaningful progress along the corrective action pipeline is being made. If this assessment reveals that certain facilities in their universe are not accomplishing investigations or cleanups at an acceptable pace, appropriate action should be taken and documented. Headquarters will continue to assist Regions and states in their compliance monitoring and enforcement efforts.

Information on NESCA is available at http://www.epa.gov/compliance/cleanup/rcra/corraction/index.html

DISCLAIMER

This assessment report is intended to inform policy decisions and to provide increased transparency to NESCA implementation. It does not provide legal advice, have any legally binding effect, or expressly or implicitly create, expand, or limit any legal rights, obligations, responsibilities, or benefits from any person. This document is not intended as a substitute for reading the statute or the guidance documents described above.