

### U.S. Environmental Protection Agency Office of Enforcement and Compliance Assurance

### Compliance Monitoring Strategy for the Resource Conservation and Recovery Act Subtitle C Core Program

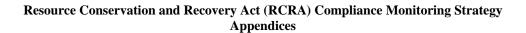
### **Appendices**

| 3  |
|----|
| 5  |
| 7  |
| 9  |
| 13 |
| 15 |
| 21 |
| 25 |
|    |
| 33 |
|    |

Appendix A and B were developed for this RCRA Compliance Monitoring Strategy (CMS) to aid Readers.

Appendices C-H are *verbatim* copies of OECA documents originally produced for other purposes. This information is provided solely for the Reader's convenience. **Readers should refer to the original source documents, cited in each Appendix, regarding substantive matters or for contact information.** 

Most of the documents cited in the *CMS* and these Appendices are available on the Internet; and Internet addresses (or hyperlinks) are provided. Certain documents, however, were developed for Agency personnel, and are posted only on EPA's Intranet. Where possible, Intranet documents have been included in these Appendices. Authorized states may consult their respective Regional RCRA contact persons regarding information in Intranet documents that have not been appended to this *CMS*.



This page intentionally blank.

# **Appendix A**

### **Acronyms and Generic Terms**

This RCRA Compliance Monitoring Strategy uses the following acronyms:

| plunce wolltoring strategy uses the following actoriyms.     |
|--|
| Annual Commitment System                                     |
| Budget Automated System                                      |
| Biennial Reporting   |
| Corrective Action Compliance Evaluation                      |
| OECA, OC, Compliance Assistance and Sector Programs Division |
| Case Development Inspection                                  |
| Compliance Environmental Inspection                          |
| Conditionally Exempt Small Quantity Generator                |
| Compliance Schedule Evaluation                               |
| High Priority Violator                                       |
| Inspection Conclusion Data Sheet                             |
| Integrated Compliance Information System                     |
| Focused Compliance Inspection                                |
| OECA Federal Facilities Enforcement Office                   |
| Financial Record Review                                      |
| Follow-up Inspection   |
| Groundwater Monitoring Evaluation                            |
| Government Performance Results Act                           |
| Large Quantity Generator                                     |
| National Program Managers Guidance                           |
| Operation and Maintenance Inspection                         |
| EPA's Office of Enforcement and Compliance Assurance         |
| OECA Office of Compliance                                    |
| Online Tracking Information System                           |
| Resource Conservation and Recovery Act                       |
| Small Quantity Generator                                     |
| Significant Non-Compliance                                   |
| State Review Framework                                       |
| Treatment, Storage and Disposal Facility                     |
| Underground Storage Tank (RCRA Subtitle I)                   |
|  |

For the reader's convenience, this *CMS* also uses certain generic terms. These terms are not legally defined terms or official Agency nomenclature.

- "Coverage" means how frequently Regions, or states, inspect the regulated universe.
- "National areas of focus" or "national focus areas" mean OECA National Priorities and Federal Facility Integrated Strategies (as distinguished from the ongoing RCRA Core Program).

# Appendix A

- "Other RCRA Handlers" means Used Oil Facilities, Universal Waste Handlers, entities involved in reclamation of Hazardous Secondary Materials, and any other type of facility, operation, entity or handler subject to Subtitle C other than a Generator, Transporter, or Treatment, Storage, and Disposal facility (TSDF).
- "Universe" means the array of RCRA-regulated facilities, operations, and handlers subject to inspection.

# Appendix B

### **References**

Most of the resources listed below are available to Regions, states, and the public on the Internet. A few documents, however, are available only to EPA personnel via the Agency's Intranet. See note on cover page.

#### **General Information**

Biennial Reports - http://www.epa.gov/osw/inforesources/data/biennialreport/index.htm

Annual Enforcement and Compliance Reporting Plans - http://intranet.epa.gov/oeca/oc/etdd/reporting/index.html

National Priorities - http://epa.gov/compliance/data/planning/priorities/index.html#priorities

RCRA Subtitle D - www.epa.gov/epawaste/nonhaz/index.htm

State Review Framework - www.epa-otis.gov/otis/stateframework.html

Watch List - www.epa-otis.gov/watchlist

#### Guidance / Memoranda

Guidance for RCRA Core LQG Pilot Projects (Alternative Plans / State Flexibility Plans) <a href="http://www.epa.gov/compliance/resources/policies/monitoring/rcra/fy08rcraguidancelqgproject.pdf">http://www.epa.gov/compliance/resources/policies/monitoring/rcra/fy08rcraguidancelqgproject.pdf</a>

Guidance on the Use of Section 7003 of RCRA (Oct. 12, 1997)

http://intranet.epa.gov/oeca/ore/rcra/ise/documents/tab5.pdf, or

http://www.epa.gov/compliance/resources/policies/cleanup/rcra/971020.pdf.

Hazardous Waste Civil Enforcement Response Policy (Dec. 2003).

http://www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf (or Appendix H to this CMS.)

National Program Managers Guidance (FY2010)

http://www.epa.gov/ocfo/npmguidance/index.htm

Performance Based Strategies for OECA's National Priorities FY2008-2010

http://intranet.epa.gov/oeca/oc/npmas/priorities/index.html.

RCRA Inspection Manual (Revised, Nov. 1998)

http://www.epa.gov/compliance/resources/policies/civil/rcra/rcrarevinspman-rpt.pdf.

RCRA State Oversight Inspection Guide (Dec. 1987)

http://www.epa.gov/Compliance/resources/policies/rcra/rcrastosinspgu-rpt.pdf

Review of RCRA Inspection Report Practices (2007)

http://intranet/epa.gov/compliance/oc/caspd (or Appendix F to this CMS.)

Role of the EPA Inspector in Providing Compliance Assistance During Inspections (June 25, 2003).

http://kodiak.r07.epa.gov/intranet/enviroprograms/role\_of\_inspector.pdf

This page intentionally blank.

**Appendix C** 

#### Compliance Monitoring Tools and Activities<sup>1</sup>

All regional programs should conduct appropriate compliance monitoring activities, which include all regulatory agency activities to determine whether an individual facility or a group of facilities (geographical, by sector, or by corporate structure) are in compliance with environmental laws and regulations, as well as enforcement orders and settlement agreements. EPA documents and files compliance determinations using various methods (e.g., databases, inspection reports, etc.). Compliance monitoring activities occur before and until the point when either compliance is determined or an actual violation is identified. Review and oversight of authorized state, local and Tribal compliance assurance and enforcement programs continues throughout the year. As in the past, the National Enforcement Investigations Center (NEIC) will continue to support ongoing projects for commitments made in previous years, including case preparation and enforcement support.

EPA strongly encourages efforts to provide field inspectors with technology that will improve their capacity to collect, share, and report information. Regional managers and staff should utilize the Field Activity Compliance Technology Strategy to guide their efforts to utilize hardware and software to collect compliance monitoring data by automating specific workflow processes for the specific programs.

Examples of important compliance monitoring activities include:

#### Inspector support

- Training to fulfill the requirements of EPA Order 3500.1, and other applicable Orders (1440.1, 1440.2, etc.).
- Implementing the OC guidance, Final National Policy, Role of the Inspector in Providing Compliance Assistance During Inspections, June 25, 2003.
- Issuing and tracking federal credentials to state and tribal compliance inspectors pursuant to the September 30, 2004 memorandum entitled *Guidance for Issuing Federal EPA Inspector Credentials to Authorize Employees of State/Tribal Governments to Conduct Inspections on Behalf of EPA* and the August 5, 2005 memorandum *Process for Requesting EPA Credentials for State/Tribal Inspectors Conducting Inspections on EPA's Behalf* to ensure inspectors are appropriately trained and credentialed.

#### Monitoring planning and execution

- Developing compliance monitoring plans in conjunction with OECA and states that include targeting and information gathering techniques.
- Creating a viable field presence and deterrent by conducting compliance inspections, evaluations, surveillance, and civil investigations (including sampling as necessary), in all the environmental media programs (authorized and non-authorized).
- Responding to tips, complaints, and referrals from private citizens, other governmental entities, and nongovernmental organizations.
- Identifying potential environmental crimes through the civil compliance monitoring program, and referring to Regional criminal investigation division (CID) area offices.

<sup>&</sup>lt;sup>1</sup> **Source:** This text is copied verbatim from the FY2010 *National Program Managers Guidance*, at 12-14. http://www.epa.gov/ocfo/npmguidance/index.htm.

<sup>&</sup>lt;sup>2</sup> Editor's Note: This statement in the National Program Managers Guidance refers to Training and Development for Compliance Inspectors/Field Investigators (June 29, 1988), <a href="http://intranet.epa.gov/oeca/oc/campd/inspector/training/3500.html">http://intranet.epa.gov/oeca/oc/campd/inspector/training/3500.html</a>. In 2002, OECA updated the 1988 Order with one entitled Training and Development for Individuals Who Lead Compliance Inspections/Field Investigations, <a href="http://intranet.epa.gov/ohr/rmpolicy/ads/orders/3500\_1A1.pdf">http://intranet.epa.gov/ohr/rmpolicy/ads/orders/3500\_1A1.pdf</a>. As of July 2009, OECA was developing an update to the 2002 Order.

**Appendix C** 

#### Data collection, review, and reporting

- Performing compliance data collection, reporting, analysis, evaluation, and management.
- Reviewing and evaluating self-reported data and records, environmental permits, and other technical information relating to compliance with environmental laws and regulations.
- Maintaining compliance files and managing compliance records.
- Preparing reports and entering compliance findings and inspection results into
- Reporting Government Performance and Results Act (GPRA) outcomes of on-site inspections and evaluations into ICIS for the Inspection Conclusion Data Sheet (ICDS) and proposed Expedited Settlement Orders, and by analyzing and evaluating the outcomes of compliance monitoring activities.

#### Program coordination/review/oversight/support

- Ensuring that the implementation of state, local and Tribal programs are in accordance with statutory requirements and EPA policy.
- Identifying, tracking, and coordinating with state, tribal, and local environmental agencies those violators that are, or should be designated as, Significant Noncompliers, High Priority Violators, or Watch List facilities.
- Developing, negotiating, or overseeing state or tribal compliance and enforcement grants.
- Providing training, assistance, support, and oversight of state, local and tribal programs.
- Performing compliance screens for various headquarters and/or state/tribal programs such as Performance Track.<sup>3</sup>
- Conducting reviews under the State Review Framework (SRF).

End

\_

<sup>&</sup>lt;sup>3</sup> Editor's Note: The Performance Track program ended in Spring 2009.

**Appendix D** 

### **Types of RCRA Inspections**

Editor's Note: RCRAInfo, the database of record, recognizes the following types of RCRA inspections.<sup>4</sup>

#### **CAC** Corrective Action Compliance Evaluation

An evaluation of a site's compliance with the corrective action requirements of a permit or an order. When a CAC is conducted as part of another inspection type (CEI, GME, etc.), a separate entry for a CAC should be conducted for the CAC component.

#### **CAV** Compliance Assistance Visit

The compliance assistance activity that a Region or State conducts at a specific site to assist the site in achieving compliance as outlined in the OECA Operating Principles (URL: http://www.epa.gov/compliance/resources/policieis/planning/state/oprin-integ-mem.pdf). A CAV evaluation does not include evaluation events that would otherwise qualify as another type of evaluation such as a CEI or OAM evaluation or conducted under the auspices of a confidentiality agreement via a small business or local government assistance program (sometimes referred to as an amnesty program). However, this CAV activity code would include technical site-specific compliance assistance not considered "interpretive technical assistance." CAVs are conducted without the threat of enforcement. Therefore, CAVs cannot be linked to violations or enforcement actions.

#### **CDI** Case Development Inspection

A CDI is an on-site inspection conducted for the sole purpose of gathering additional information that supports the evidence (i.e., samples, on-site record review, interview, etc.) for a potential or pending enforcement case. A CDI is performed only after an initial evaluation has resulted in the observation of potential violations.

#### **CEI** Compliance Evaluation Inspection

A CEI evaluation is primarily an on-site evaluation of the compliance status of the site with regard to all applicable RCRA Regulations and Permits (with the exception of groundwater monitoring and financial assurance requirements). Although portions of a CEI evaluation may routinely be conducted in an agency office setting, such "office" evaluations are considered an integral part of a CEI in terms of completing an evaluation. The overall evaluation of a site's compliance status may take place over multiple days necessitating multiple site visits and activities. The entire set of activities and associated effort is considered a single CEI.

<sup>&</sup>lt;sup>4</sup> **Source:** These inspection descriptions were copied *verbatim* from RCRAInfo, *Nationally Defined Values for Evaluation Type*, https://rcrainfo.epa.gov/.

## **Appendix D**

The major function of a CEI is an overall review of the site's performance. The inspection includes an on-site examination of records and other documents maintained by the site and an evaluation of the site's compliance with all applicable requirements and adequate sampling, when necessary. Where appropriate, it includes groundwater monitoring assessment outlines or plans, closure/post-closure plans, contingency plan reviews, waste analysis plan reviews, and preparedness and prevention plan reviews. Specifically excluded from the CEI type of evaluation are financial assurance requirements and inspections of groundwater monitoring systems. A review of financial assurance requirements is most often conducted by "agency experts", and appropriately coded as a Financial Record Review (FRR) evaluation. Inspections of groundwater monitoring systems are coded as either a GME or OAM.

### **CSE** Compliance Schedule Evaluation

An evaluation conducted to verify compliance with an enforceable compliance schedule associated with a formal enforcement action. When a CSE is conducted as part of another inspection type (CEI, GME, etc.), a separate CSE entry should be made in RCRAInfo for the CSE component.

#### FCI Focused Compliance Inspection

An FCI is an on-site inspection that addresses only a specific portion or Subpart of the RCRA regulations or authorized State regulations/programs. Some examples of an FCI are a Subpart CC inspection, BIF inspection, Universal Waste Rule inspection, closure verification inspection, training inspections, etc.

Nationally defined Focus Areas must be used with this evaluation type to further define the specific scope of the FCI.

#### FRR Financial Record Review

An extensive detailed review of a site's compliance with financial responsibility requirements. Financial Record Reviews are conducted in the Agency office and not on-site.

### FSD Facility Self Disclosure

Indication that a site has self-disclosed the existence of a violation and/or performed an audit and has submitted the information as appropriate to the State or EPA.

#### **FUI** Follow-Up Inspection

A partial on-site inspection conducted to verify the status of violations cited during a previous evaluation. An FUI code value should only be used if the effort involved, or the extent of areas inspected, are insufficient to qualify as one of the more comprehensive evaluation types. includes inspections following up to formal/informal actions where on enforceable compliance schedule has been established. Does not include any inspections involving an enforceable compliance schedule associated with a formal enforcement action. When an FUI inspection is conducted as part of another inspection type (CEI, GME, etc.), a separate FUI entry should be made in RCRAInfo for the FUI component. Please note that new violations may be cited as a result of an FUI evaluation, and those new violations would be linked to the FUI.

## **Appendix D**

#### **GME** Groundwater Monitoring Evaluation

A detailed evaluation of the adequacy of the design and operation of a site's groundwater monitoring system as per EPA's Final RCRA Compliance Groundwater Monitoring Evaluation Guidance Document. Evaluation of the groundwater monitoring system design should be conducted by a hydrogeologist and includes the review of the owner/operator's characterization of the hydrogeology beneath hazardous waste management units, monitoring well placement and depth/spacing, and well design and construction. It is essential that the GME ensure that the owner/operator has designed an adequate groundwater monitoring system. In addition, an integral part of the GME is the review of the operation of the groundwater monitoring system through an evaluation of the owner/operator's sampling and analysis plan and its implementation. GMEs should be scheduled, to the maximum extent possible, to coincide with owner/operator sampling events to permit the field evaluation of sampling techniques. Inspectors should collect splits or conduct EPA/State sampling as a random check of groundwater quality data at any wells that may have indicated releases to support enforcement of corrective action.

A comparison of EPA/State and owner/operator analytical results can be used to assess laboratory accuracy and establish the reliability of owner/operator submitted data. A GME should encompass everything covered in the CEI for groundwater monitoring facilities. In addition, GMEs should include:

- a. a detailed investigation of the engineering features and effectiveness of the groundwater monitoring system;
- b. a detailed review of the site's groundwater sampling and analysis plan;
- c. re-calculation of statistics at detection monitoring facilities to ensure that the site should not be in assessment;
- d. detailed examination of the site's assessment monitoring plan and field implementation;
- e. re-evaluation of groundwater flow direction; and
- f. a substantial amount of samp[ling].

#### LBN Land Ban Restrictions Inspection

An inspection of land disposal restriction requirements. Where Land-Ban is inspected in conjunction with another inspection type (CEI, CME, etc.), a separate Handler Evaluation form should be submitted reporting the Land-Ban component.

Note: This code is not available for new data entry.

#### NR No 3007 Information Request Received

Agency conducted an in-agency office review and determined a failure to respond to a 3007 information request.

#### NRR Non-financial Record Review

An evaluation conducted in the Agency office involving a detailed review of non-financial records.

# **Appendix D**

#### **OAM** Operation and Maintenance Inspection

The Operation and Maintenance Inspection is a periodic inspection of how well a groundwater monitoring system continues to function once it is considered well designed. The inspection focuses on the condition of wells and sampling devices. Evaluation of well recovery notes, turbidity of water, total depth, depth to water, etc. should be made and compared to historic data. Sampling devices should be tested and if necessary pulled and visually inspected. The findings of an O&M inspection will indicate whether case development is warranted and/or will serve to focus future GMEs. The inspector should be experienced in evaluation of groundwater monitoring systems, e.g., hydrogeologist. This inspection can include sampling.

#### SNN No Longer a Significant Non-Complier (SNC)

A determination has been made to remove the SNC designation for a site.

Note: Entry of an SNN record is required to remove a site from being an SNC.

Business Rule: If an SNY and an SNN record are entered by the same agency on the same day, the site will remain an SNC unless the SNY record has "Site should not be a SNC" as the first words in the SNY record's NOTES field.

#### SNY A Significant Non-Complier (SNC)

A determination has been made to designate a site as an SNC using guidelines as set forth in the current version of the Hazardous Waste Civil Enforcement Response Policy (ERP).

An SNC is a site that has caused actual exposure or a substantial likelihood of exposure to hazardous waste or hazardous waste constituents; is a chronic or recalcitrant violator; or deviates substantially from the terms of a permit, order, agreement or from RCRA statutory or regulatory requirements.

In evaluating whether there has been actual or likely exposure to hazardous waste or hazardous waste constituents, implementers should consider both environmental and human health concerns. However, environmental impact or a substantial likelihood of impact alone is sufficient to cause a violator to be an SNC, particularly when the environmental media affected require special protection (e.g., wetlands or sources of underground drinking water). Additionally, when deciding whether a violator meets this criterion, implementers should consider the potential exposure of workers to hazardous waste or hazardous waste constituents.

Further, although consideration should be given to compliance status with other environmental statutes and regulations, an SNC in RCRAInfo should be linked to all applicable violations that contributed to the SNC designation, where appropriate. Although there are benefits to doing so, linkage of SNY determination to specific RCRA violations that contributed to the SNC determination is optional.

Note: It is important to enter the SNY designation promptly upon designation.

Business Rule: If an SNY and SNN record are entered by the same agency on the same day, the site will remain an SNC unless the SNY record has "Site should not be a SNC" as the first words in the SNY record's NOTES field.

\*End of Report\*

# Appendix E

### **Oversight Inspections**<sup>5</sup>

A federal oversight inspection evaluates the quality of the state inspection/evaluation program and the state inspector training program by reviewing and evaluating the findings of state inspections and evaluations. Oversight inspections identify strengths and weaknesses of state programs and develop mutually agreed upon commitments by the states and EPA to correct problems. When regions conduct oversight inspections, they should follow these guidelines:

- Only experienced EPA personnel should be used to conduct oversight inspections.
- The overall goal of oversight is to improve the state (and regional) compliance and enforcement program.
- Oversight should be tailored to fit state performance/capability, once it has been documented.
- EPA should observe procedures the state inspector follows or does not follow (e.g., credentials, purpose of inspection, entry conference, interview, field observations, record reviews, CBI procedures, exit interview, etc.).
- The EPA inspector should determine whether the state inspector:
  - 1. Follows state inspection and monitoring procedures
  - 2. Detects potential violations, especially SNCs, and gathers evidence to support violations
  - 3. Has adequate training and guidance
  - 4. Has adequate safety equipment and field equipment
  - 5. Has informed the facility of the subject regulations
- EPA should coach/inform the state inspector of potential concerns observed or discovered through questioning the state inspector <u>after</u> the oversight inspection is completed, and report findings and observations to regional managers by preparing a separate oversight inspection report for each oversight inspection so that any issues observed can be addressed in discussions with state managers and/or during the SRF review process. Regions can utilize the procedures described in more detail in the RCRA State Oversight Inspection Guide, dated December, 1987 for conducting oversight inspections and for preparing inspection reports: <a href="http://www.epa.gov/Compliance/resources/policies/civil/rcra/rcrastosinspgu-rpt.pdf">http://www.epa.gov/Compliance/resources/policies/civil/rcra/rcrastosinspgu-rpt.pdf</a>.
- EPA oversight of state performance should be consistent with the following principles from the August 25, 1986, Barnes memo entitled, "Revised Policy Framework for State/EPA Enforcement Agreements."
  - a. Both positive and negative findings should be identified.
  - b. EPA should provide technical assistance and training when needed.
  - c. EPA action to correct problems should vary, depending on the nature and impact of the problem and if it reflects a single or multiple incidents.
  - d. The States should be given an opportunity to formally comment on EPA's performance relating to commitments made by EPA to the state, e.g., provide training, assist with sampling, provide equipment, etc.
  - e. Regions should provide all information to the states that is available on their performance.
  - f. The Region should report to the state on progress toward commitments made to that state.
  - g. EPA should give states sufficient opportunity to correct identified problems

<sup>&</sup>lt;sup>5</sup> **Source:** This text is copied *verbatim* from the FY2010 *National Program Managers Guidance*, at 14-16, <a href="http://www.epa.gov/ocfo/npmguidance/index.htm">http://www.epa.gov/ocfo/npmguidance/index.htm</a>.

# Appendix E

- h. EPA should use oversight inspections as a means of transferring successful regional and state approaches from one state to another.
- i. Where state performance fails to conduct quality inspections or evaluations, EPA may:
  (a) suggest changes in state procedures; (b) suggest changes in the state use of resources or training of staff;
  (c) provide technical assistance; and/or (d) increase the number of oversight inspections and/or require submittal of information on remedial activities.

It is expected that the regions, for each program, will conduct a number of these activities in any fiscal year. The specific combination of activities will depend upon the availability of intra- and extramural resources, and working agreements made between state and tribal governments.

Compliance monitoring does NOT include: 1) preparation of Notice of Violations (NOVs), warning letters, and administrative or judicial complaints, and 2) development of evidence and other information where a violation has already been determined to have occurred. Instead, these activities fall under the civil and criminal enforcement programs.

Appendix F

### Review of RCRA Inspection Report Practices<sup>6</sup>

#### **Background**

As part of an activity related to the Foundries Initiative, the Office of Compliance, Compliance Assistance & Sector Programs Division (CASPD) requested RCRA inspection reports from a number of Regions. Over 80 inspection reports covering 69 facilities were received from Regions 1, 3, 4, 5, 7, and 10. These inspection reports covered inspections conducted by the Regional staff, Regional and State staff together, and by staff of authorized States. In addition, CASPD obtained another 45 inspection reports covering multi-media inspections conducted by NEIC primarily at chemical production facilities.

The primary activity associated with these reports was an analysis to determine common areas of non-compliance. However, the review also provided an opportunity to see how inspections are conducted and documented across the country and also provided useful insight into the diversity of styles and information included in inspection reports. Additionally, CASPD has had discussions with inspectors from Regions 6 and 10 and has reviewed documents from those regions, (such as Region 10's, "Report Contents: the 5W 's," <a href="http://www.epa.gov/region10/offices/oea/ieu/manual/inspet06.htm">http://www.epa.gov/region10/offices/oea/ieu/manual/inspet06.htm</a>), along with other RCRA guidance documents, such as the Revised RCRA Inspection Manual (1998) (http://www.epa.gov/compliance/resources/policies/civil/rcra/rcrarevinspman-rpt.pdf).

These discussions and document reviews have provided the basis for some recommendations, summarized in this document, which may be useful for RCRA core inspections and for "best practices" regarding RCRA inspection reports. Also included is a "model" inspection report outline that lists all of the elements essential to a good inspection report. The information in this document is an augmented "distillation" from several existing sources including: the Revised RCRA Inspection Manual; RCRAInfo guidance concerning "evaluation"/inspection types; and ICIS requirements. The recommendations provided are to be used in addition to the memorandum from Michael Alushin, dated April 18, 2002, "Practices to Follow and Avoid When Conducting Compliance Inspections," (<a href="http://intranet.epa.gov/oeca/oc/campd/inspector/referenc/inspectpractice.pdf">http://intranet.epa.gov/oeca/oc/campd/inspector/referenc/inspectpractice.pdf</a>).

### **Examples of Good Report Qualities and "Best Practices"**

From analysis of the RCRA Foundries and NEIC inspections, many excellent examples of desirable inspection report qualities emerged, including some inspection report "best practices." For example, an important inspection report quality contained in some of the reports (which should be included in all reports) was the <u>purpose</u> of the inspection. Was it part of a national priority initiative; follow-up to a previous inspection; or due to a tip or complaint? Additionally, there were some practices observed that indicate a need for a more common understanding of terminology and areas where improvement could occur. Report quality varied even within a Region or between Regions and States.

<sup>&</sup>lt;sup>6</sup> **Source**: <a href="http://intranet.epa.gov/oeca/oc/resources/caspd/RCRAinspmodeltoolfnl.pdf">http://intranet.epa.gov/oeca/oc/resources/caspd/RCRAinspmodeltoolfnl.pdf</a>, or <a href="http://intranet.epa.gov/oeca/oc/caspd/index.html">http://intranet.epa.gov/oeca/oc/caspd/index.html</a>. This document is copied *verbatim*, *except* that it omits a chart (included in the on-line version) which describes the various types of RCRA inspections. Appendix D provides the current descriptions for RCRA inspections.

# Appendix F

Several reports also included excellent narrative descriptions. Positive attributes observed included: descriptions organized by facility/process/inspection area; detailed references to applicable regulatory areas (including specific regulatory language); thorough descriptions of waste issues, including locations, processes, and/or facility components, conditions present, container sizes and amounts; and excellent documentation such as photographs and photo logs which provided observation dates and times.

Inspection reports should be written so that a person unfamiliar with the facility can understand how the plant is organized; against what standards it was inspected; and what waste streams were identified, how they were determined, and how those streams are handled by the facility. The type of inspection and the type of facility (i.e., a brass foundry) should be identified and SIC or NAICs codes and RCRA permit numbers should be provided. If possible, sizes or amounts of pollutants that may be associated with potential noncompliance should be given. Providing this information makes it easier to determine measurable outcomes from inspections. The following is an actual example from the foundry inspection reports' analysis of a summary that demonstrates how information related to amounts of pollutants can be included in the inspection report.

"There were a number of containers of hazardous waste at the facility that were not properly labeled. The following was observed:

- In the paint booth bunker; one 55-gallon container of paint waste (D001). The container was approximately 1/3 full (see Photo 7 in Attachment 2).
- Ninety day storage area; one full 30 gallon container of waste mineral spirits (D001; see Attachment 6) with an illegible label.
- Outside the 90-day storage area there were two 50-gallon containers with "Hazardous Waste" on the label, but with no risk label and contents unknown. Facility was unsure of contents as the containers had been on site prior to facility ownership transfer. One was rusted through and leaking and appeared to be half full. Material appeared to be a mixture of paint waste and solvents.
- In the galvanizing room; one 3x8x5 foot tank about 2/3 full of zinc ammonia chloride solution. No labels were affixed. This waste is being evaporated before addition of clay-like material and is then shipped off as hazardous waste."

This example could be further strengthened to develop an even more supportable enforcement case by adding additional information. For example:

- "Paint booth bunker 1A (Photo 1) contained three 55-gallon drums of paint waste (D001, F003; see Attachment 1 for the facility's hazardous waste determination). One of the drums (Photos 2, 3 and 4) was not labeled with the words "hazardous waste", the contents of the container or with the initial date of accumulation. The unlabeled drum was approximately 1/3 full.
- The ninety day storage area at the south end of Building F1 (See facility map Attachment 2) contained one full 30 gallon container of waste mineral spirits (D001; see Attachment 3 for the facility's hazardous waste determination). The container had an illegible label (Photo 9).
- Outside the ninety day storage area at the south end of Building F1 there were two 55-gallon containers labeled "Hazardous Waste" (Photo 12). According to Mr. Ted Smith, Environmental Manager, and Ms. Jane Rogers, F1 Operator, the exact contents of the drums were unknown.

Mr. Smith stated that the drums were generated during start up of the tar still unit several years ago (see Process Description Attachment 11) and the decision was made to dispose of them this week. The facility has collected samples of each of these drums and sent them off-site for testing. The work order and lab receipt are included as Attachment 7. The facility asked the lab to run only TCLP benzene on the waste, however, based upon the inputs to the unit (Attachment 11); the compliance inspector believes the facility should run TCLP VOC's and TCLP RCRA 8 metals for a complete hazardous waste determination. The facility agreed to run these additional tests and will share

# Appendix F

the results with the region. The black drum seen in Photo 12 was rusted and appeared to be leaking (Photo 13). The stained area was on concrete and covered approximately 8 square feet (Photo 14). The facility overpacked the drum and used absorbent to remove the spilled material (Photo 15). The spent absorbent was placed into the overpacked drum and will be disposed following hazardous waste determination. The facility labeled the drums 'Tar Still waste - pending analysis' with today's date during the inspection."

In addition, inspection reports should document that all required procedures (such as presenting credentials) have been followed. All persons present during the inspection should be identified, to the extent possible. Most inspection reports did this. Using a cover sheet containing this information is especially helpful. Reports should also contain references to attachments used to substantiate the report's findings (such as photos, manifests, parts of hazardous waste determination/analysis.) Including a list of these attachments in the report is also useful.

Guidance concerning requirements for inspection reports may be found in the <u>Revised RCRA Inspection Manual (http://www.epa.gov/compliance/resources/policies/civil/rcra/rcrarevinspman-rpt.pdf</u>). Additional information may be found in Region 10's Investigations & Engineering Unit's "(Inspection) <u>Report Contents: The 5W's</u>" (http://www.epa.gov/region10/offices/oea/ieu/manual/inspct06.htm).

#### **Areas Needing Improvement**

The analysis also highlighted some areas where improvement could be attained. For example, there is a need for consistent terminology regarding inspection (evaluation) types. Some reports used the wrong acronym to designate the inspection type, or identified the inspection as one type when it was really another. Terminology has recently been revised for input into RCRAInfo, so inspection reports should use the acronym for inspection (evaluation) type and its corresponding definition that is consistent with the latest version of RCRAInfo. (See "Inspection Evaluation Type" table.)

Additionally, not all inspection reports contained the essential information needed to justify enforcement action/inaction. For example, some reports do not state the <u>purpose</u> of the inspection; such as it was conducted as part of a national priority focus, or was conducted in response to a tip and complaint. Inspection reports should contain at least the information required to be entered into RCRAInfo (and ICIS for Federal inspections). Also, inspection reports <u>should</u> include all the necessary information from which to determine whether a violation has <u>been committed</u>, but <u>should not actually state that a violation has occurred</u>. Simply stating the facts, such as "containers are not labeled," or "a Contingency Plan is missing essential elements," allows this determination to be made. <u>Stating the regulatory language or referencing the regulatory citation of the requirements should be done;</u> again, <u>without drawing a conclusion</u>. For example: "All containers of hazardous waste must be stored as required by 40 CFR 262.34(d)(2) [see 40 CFR 265.173(a)]. Five absorbent pads (12 by 12 inches, each) used as rags were found in a bucket with no lid in the quality control laboratory. These pads are shipped off as hazardous waste because they cannot be landfilled."

Another area where improvement is desired is in providing information concerning the amounts and types of pollutants addressed or discovered that may be associated with non-compliance. Increasingly, we must demonstrate our successes in terms of things which can be measured. Identifying the amounts of wastes or pollutants that are related to noncompliance, or identifying reductions that occur because of our activities is extremely important for demonstrating how our actions benefit the public and protect the environment. Therefore, identification of wastes and/or pollutants potentially reduced by our actions or involved in potential noncompliance is an essential component of a thorough inspection report.

The pages following the Recommendations section contain information that may provide assistance in determining what information should be contained in the inspection report in general and also for particular types of



RCRA facilities. Included are: a "Model" RCRA Inspection Report Outline; a list of "Recommended Areas of Inspection Focus for Specific Types of RCRA Entities;" and a list of Inspection (Evaluation) Types to assist with determining the inspection type that is consistent with RCRAInfo and ICIS terminology.

### **Recommendations**

In addition to the requirements delineated in the Revised RCRA Inspection Manual and the April 2002 "Practices to Follow and Avoid When Conducting Compliance Inspections" memorandum, the following are recommendations based on our analysis and review.

#### Regions should:

- Review their processes and those of states to ensure quality inspections and inspection reports. This addresses one of the elements of the State Review Framework.
- Develop a template or use an existing one that meets all the essential elements of the "Model" Inspection Report Outline, and any other needs of the program.
- Develop a Standard Operating Procedure (SOP) or adjust the inspection SOP if necessary, to meet program needs, including periodic review of inspection reports or approval of inspection reports by manager.

# Appendix F

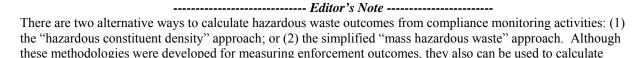
| "MODEL" RCRA INSPECTION REPORT OUTLINE                  |   |  |  |  |  |
|---|---|--|--|--|--|
| Report Heading  | Inspection of (Region X Inspection of Acme Bulletin Board Company, for example).  |  |  |  |  |
| Date/Time(s) of Inspection                              | Day, year and time for the inspection.  |  |  |  |  |
| Type & Purpose of<br>Inspection                         | What t <u>ype</u> of inspection was it? (i.e. Case Development Inspection, Compliance Evaluation Inspection, etc.) What was the purpose of the inspection? (Why was inspection conducted?) For example, "Inspection was part of <i>x</i> priority and was conducted to determine compliance with generator standards;" or, "Inspection was the result of a 'tip and complaint.'"  |  |  |  |  |
| Facility Information                                    | Region. Facility name, address, telephone number. Name of Facility Representative(s), including title (position) and telephone number. Type of facility (including <u>SIC or NAICS code</u> and <u>RCRA Identification number</u> ).  |  |  |  |  |
| Inspection<br>Participants                              | Names and affiliations of all members of inspection team and facility participants.   |  |  |  |  |
| Opening Conference                                      | To whom were credentials shown; who was present (names, titles or positions), what was discussed; specific arrangements; entry granted or denied.   |  |  |  |  |
| Facility Description                                    | What was the facility like, including processes, RCRA-related activities, wastes generated, treated, stored, etc.   |  |  |  |  |
| Site History  | Compliance history and history of facility site location to extent known or ascertainable.  |  |  |  |  |
| Inspection Narrative                                    | Description of the field inspection events and observations. Where did you go? What did you see/do? What records were reviewed, copied, taken? Where were records kept and who was in charge of them? What selection method was used to select records reviewed? Which records were used? Were samples taken? Of what? Were there splits? Were photos taken to document the conditions observed? [If documentation is provided elsewhere (attachments, for example), it should be referenced here.]   |  |  |  |  |
| Compliance<br>Concerns/Deficiencies                     | Regulatory citation; nature of problem; size and quantities of areas concerned (for example, "5 fifty gallon drums."). <b>Do not use</b> the word <b>"violation</b> ," or draw enforcement conclusions, but do state what problems were observed and how this relates to regulatory requirements. For example: "40 CFR 262.34(a)(3) requires that containers of hazardous waste that are accumulated on-site be marked with the words "hazardous waste. At the time of the inspection the hazardous waste storage area contained five "super sacks" (holding approximately 10 cubic yards each) of baghouse dust from the electric arc furnace. The baghouse dust from the electric arc furnace has tested characteristically hazardous for cadmium and/or chromium. None of these sacks were labeled "hazardous waste," or marked with the accumulation start date." |  |  |  |  |
| Actions Taken By<br>Facility Related to<br>Deficiencies | For example: verified compliance with previously issued enforcement action; corrected recordkeeping deficiencies; completed a notification or report; corrected monitoring deficiencies; requested a permit application; implemented new or improved management practices or procedures; improved pollutant identification (e.g. labeling, manifesting, storage, etc); reduced pollution (e.g. use reduction, industrial process change, emissions or discharge change, etc.) (Specify the pollutant(s) and amounts reduced)  |  |  |  |  |
| Compliance<br>Assistance                                | Although not required, if assistance materials are provided, state what was provided and whether it was general or site-specific.   |  |  |  |  |
| Attachments   | List and describe all documentation including photographs, drawings, receipts, notices, etc.  |  |  |  |  |
| Date and Signature                                      | Make sure the report is signed and dated.   |  |  |  |  |

# Appendix F

| FOR GENERATORS                              |  |  |  |  |  |  |  |
|---|--|--|--|--|--|--|--|
| General Standards For Generators            | Parts 262.10 – 262.12.   |  |  |  |  |  |  |
|   | Describe compliance with these standards.  |  |  |  |  |  |  |
| The Manifest                                | Parts 262.20 – 262.23. Establish existence of manifest records; assess adequacy with respect to regulatory requirements.   |  |  |  |  |  |  |
| Pre-Transport Requirements                  | Parts 262.30 – 262.34 . Review packaging, labeling, marking and placarding procedures for compliance with the regulations; establish compliance with accumulation time restrictions.   |  |  |  |  |  |  |
| Recordkeeping and Reporting                 | Parts 262.40 – 262.43. Establish existence of annual reports and additional reports.   |  |  |  |  |  |  |
| Special Conditions                          | Parts 262.50 – 262.51. Inspect for reports of international shipments of waste, and proper notification of the Administrator.  |  |  |  |  |  |  |
| Standards for Universal Waste<br>Management | Part 273. Inspect for proper management of universal waste including: batteries, not covered elsewhere; recalled pesticides; mercury-containing equipment; and hazardous waste lamps.  |  |  |  |  |  |  |
| Standard for the Management of Used Oil     | Part 279. Inspect for compliance with used oil standards including: standards for used oil generators; standards for used oil collection centers and aggregation points; standards for used oil transporter and transfer facilities; standards for used oil processors and re-refiners; restrictions on burning for energy recovery; used oil fuel marketing; and use as a dust suppressant. |  |  |  |  |  |  |
| FOR TRANSPORTERS                            | ***  |  |  |  |  |  |  |
| General                                     | Parts 263.10 – 263.12. Ensure that the transporter has obtained an EPA ID number and only stores waste at transfer facilities fewer than 10 days   |  |  |  |  |  |  |
| Manifest System and Recordkeeping           | Parts 263.20 – 263.22. Establish existence of manifest records and compliance with manifest procedures.  |  |  |  |  |  |  |
| Hazardous Waste Discharges                  | Parts 263.30 – 263.31. Ensure that transporter is aware of responsibilities under these sections. Check to see if any discharge reports have been made to the Department of Transportation as required by these regulations.   |  |  |  |  |  |  |
| FOR TSDFs                                   |  |  |  |  |  |  |  |
| General Facility Standards                  | Parts 264/5.10 – 264/5.18. Describe compliance with standards.   |  |  |  |  |  |  |
| Preparedness & Prevention                   | Parts 264/5.30 – 264/5.37. Check for required equipment and arrangements with local authorities.   |  |  |  |  |  |  |
| Contingency Plan & Emergency Procedures     | Parts 264/5.50 – 264/5. 56. Check records and procedures for conformance with requirements of this section.  |  |  |  |  |  |  |
| Manifest System, Recordkeeping, & Reporting | Parts 264/5.70 – 264/5.77. Establish existence of manifest records, operating record, annual report, and unmanifested waste report. Assess conformance with regulatory requirements  |  |  |  |  |  |  |
| Groundwater Monitoring                      | Parts 264/5.90 - 264.99 or 265.94. Examine ground-water monitoring plan and review results of sampling analysis  |  |  |  |  |  |  |
| Corrective Action Program                   | Parts 264.100 – 101. Review status of corrective action program)   |  |  |  |  |  |  |
| Closure and Post Closure                    | Parts 264/5.110 - 264/5.120 (Review closure and post-closure   |  |  |  |  |  |  |
|   | plans for adequacy with respect to regulatory requirements   |  |  |  |  |  |  |
| Facility Specific Standards                 | Parts 264/5.170 - 264.603 or 265.445 and Parts 264/5.1100 - 1102. Depending upon the type of facility being inspected, establish compliance with the appropriate regulatory standard.  |  |  |  |  |  |  |
| Permit Conditions                           | For permitted facilities, review violations of specific permit conditions or schedules of compliance.  |  |  |  |  |  |  |

**Appendix G** 

### **Calculating Hazardous Waste Outcomes**



compliance monitoring outcomes.
Hazardous Constituent Density Approach

This methodology requires one to calculate the *density of hazardous constituents* within the hazardous waste affected by the Region's (or state's) intervention. This methodology is used in the *Case Conclusion Data Sheet Training Booklet* (2004), available at <a href="https://www.epa.gov/compliance/resources/publications/data/tools/ccds.pdf">www.epa.gov/compliance/resources/publications/data/tools/ccds.pdf</a>.

• Mass Hazardous Waste Approach

This methodology counts the *entire mass of hazardous waste* addressed by the Region's (or state's) intervention, instead of requiring calculation of the *density* of hazardous *constituents* within the waste. This methodology was established by OECA's *Revised Instructions for Reporting RCRA Cases for FY08 End-of-Year Reporting (EOY)*, issued October 8, 2008, which is copied in full below.

#### **Examples of Outcome Measures and Reports**

**Inspection:** The Region (or State) inspected the ABC Chemical Co. The Region/State found that:

- The company had not properly handled ten 55-gallon drums of F001 solvent waste, containing methylene chloride; and
- Three hazardous waste streams, which together generated an estimated 50 tons of hazardous waste, were not properly identified or handled.

### "Hazardous Constituent Density" Approach 1/

#### **Calculation:**

The Region/State used the **density of methlyene chloride** to estimate the amount of material in pounds that had not been properly handled.

### **Outcome Measure:**

 $10 \text{ drums } F001 \times 55 \text{ gal/drum} \times 11.149 \text{ lbs./gal} = 6.132 \text{ lbs. of } F001$ 

#### **Outcome Report:**

As a result of the Region's/State's inspection, 6,132 pounds of F001 waste that were not being handled properly at the time of inspection and, therefore, were at-risk of improper treatment will now be handled properly.

#### **Calculation:**

The Region/State used the **total weight of the hazardous waste** (using the approximate weight of water) to estimate the amount of material in pounds that had not been properly handled.

### **Outcome Measure:**

 $10 \text{ drums} \times 55 \text{ gal/drum} \times 8 \text{ lbs./gal} =$ ~4,400 lbs. of hazardous waste (or 2.2 tons)

"Mass Hazardous Waste" Approach

3 waste streams generating 50 tons of hazardous waste **Outcome Report:** 

As a result of the Region's/State's inspection:

- Approx. 2.2 tons of hazardous waste that were not being handled properly at the time of inspection and, therefore, were at-risk of improper treatment or disposal will now be handled properly.
- Waste streams accounting for an estimated 50 tons of waste not previously identified are now identified and will be handled properly.

<sup>1</sup> Adapted from Example 1. Hazardous Waste Treatment (Direct), Chapter 7, Case Conclusion Data Sheet Training Booklet.

|  | End | of | Editor | S | Note |  |
|--|-----|----|--------|---|------|--|
|--|-----|----|--------|---|------|--|

# Appendix G

### Revised Instructions for Reporting RCRA Cases for FY08 End-of-Year Reporting (EOY)<sup>7</sup>

These are new guidelines for reporting RCRA environmental benefits when injunctive relief will result in direct pollutant reductions. The OECA Environmental Outcome Reporting Management Committee (EORMC) has proposed a new methodology for calculating direct benefits for RCRA cases, by creating a new pilot reporting category that will be used instead of "pounds of pollutants reduced, treated, or eliminated." The new pilot reporting category, "Estimated pounds of hazardous waste treated, minimized or properly disposed of" and guidance on the new approach are described below. The new methodology will count the entire mass of the hazardous waste addressed by the enforcement action, but still allows for the reporting of specific hazardous constituents in the RCRA waste (although thru a manual process). Identifying specific pollutant constituents allows OECA to better characterize pollutant reduction risks in its efforts to enhance environmental outcome reporting.

This new pilot category will only include RCRA cases in FY08, but the Management Committee will consider how cases under other statutes, particularly CERCLA, with similar remedies should also be included through the revised guidance for FY09. The new approach is not an opportunity to reassess existing RCRA cases with preventative benefits for the purpose of getting credit *instead* for direct benefits. In addition, volume of contaminated media (VCMA) reported amounts for RCRA will continue to be counted as cubic yards of contaminated soil or aquifer cleaned.

HQ has generated a list of the FY08 RCRA cases with direct benefits currently in ICIS and is providing next steps for the regions to complete in modifying their ICIS data. The ICIS data entry deadline is **October 10, 2008**. Information on the EOY reporting schedule is available at: <a href="http://intranet.epa.gov/oeca/oc/etdd/reporting/fy2008/index.html">http://intranet.epa.gov/oeca/oc/etdd/reporting/fy2008/index.html</a>.

If you have specific questions or concerns on calculating environmental benefits, please contact Donna Inman, at 202-564-2511, <a href="mailto:inman.donna@epa.gov">inman.donna@epa.gov</a>. For ICIS data entry questions, please contact, David Sprague, at 202-564-4103; <a href="mailto:sprague.david@epa.gov">sprague.david@epa.gov</a>. For RCRA specific questions, call Ann Stephanos, at 202-564-4006; <a href="mailto:stephanos.ann@epa.gov">stephanos.ann@epa.gov</a>.

#### **New Direct Benefits Reporting Category for RCRA**

| Title             | Estimated pounds of hazardous waste treated, minimized or properly disposed of |  |  |  |  |
|-------------------|--|--|--|--|--|
| Complying actions | Direct   |  |  |  |  |
|                   | - Waste Treatment  |  |  |  |  |
|                   | - Waste Minimization   |  |  |  |  |
|                   | Annual   |  |  |  |  |
|                   | - first full year of implementing the complying action(s) for <b>ongoing</b>   |  |  |  |  |
|                   | operations   |  |  |  |  |
|                   | - total amount of waste to be addressed divided by number of years to complete |  |  |  |  |
|                   | closure action   |  |  |  |  |
| Pollutant Name    | Hazardous waste  |  |  |  |  |
| Units             | Pounds   |  |  |  |  |

<sup>&</sup>lt;sup>7</sup> This text is copied *verbatim*.

-

# **Appendix G**

All RCRA cases addressing hazardous waste that would have previously been reported as "pounds of pollutants reduced, treated, or eliminated" will now be reported under the new pilot category. To implement this change, the Regions should select "Hazardous waste" as the "pollutant" from the ICIS drop down menu. The Regions will also report hazardous constituent information manually, as described below.

Note: No workaround changes are required for RCRA Subtitle C cases where storage and disposal complying action types for preventative benefits have previously been reported. ICIS entries for these actions should remain as currently exist.

#### **Complying Actions**

In some instances, what are typically considered storage or disposal <u>preventative</u> complying actions actually result in stopping "an ongoing release of hazardous waste or preventing an otherwise inevitable release. In these instances only, OECA believes the complying action results in a direct environmental benefit. However, "storage change" and "disposal change" complying action types are allowed for preventative benefits only. As a result, the complying action types which must be entered in ICIS for the new pilot reporting category are "waste treatment" and "waste minimization." These complying actions are currently available for cases under RCRA §§ 3002, 3003, & 3004 and are explained in the current CCDS guidance. Similar types of waste treatment and waste minimization complying actions may also be required in a RCRA § 7003 case; however, they are not currently available in ICIS for § 7003 cases. As explained below, OECA has developed a workaround for reporting waste treatment and waste minimization complying actions for § 7003 cases

#### Workaround for entering RCRA §7003 direct benefits in ICIS:

Currently, ICIS only allows in-situ and ex-situ treatment, removal of contaminated medium and containment complying actions for RCRA § 7003 cases. However, many § 7003 cases achieve the same direct environmental benefits by requiring the same types of complying actions as cases under RCRA §§ 3002, 3003, & 3004 – waste treatment and waste minimization. In order to report direct benefits for RCRA Subtitle C actions occurring under RCRA §7003 authority, the regions must include §3002, §3003 or §3004 as the secondary law in its ICIS entry and enter "waste treatment" or "waste minimization" as the complying action type.

#### Revising existing RCRA §3002, §3003 or §3004 entries

You will not need to change the complying action types in ICIS if you have entered waste treatment or waste minimization for cases with a primary or secondary law/section of RCRA §3002, §3003 or §3004. However, you must determine whether constituent pollutant names and amounts have been entered. If you previously entered "Hazardous waste" as the pollutant name and the total waste amount in pounds, no further changes are necessary. Otherwise, you must follow the ICIS data entry and manual reporting steps below.

**Appendix G** 

#### **Reporting Guidelines**

#### ICIS Data Entry:

- 1- enter complying action type: **Waste Treatment or Waste Minimization** (and estimated cost of complying action)
- 2- enter estimated total pounds of RCRA regulated waste as follows:
  - a. Pollutant Name = Hazardous waste

If specific pollutant names are currently entered in ICIS, you must:

- i. delete the individual constituent names and amounts
- ii. enter "Hazardous waste" as the pollutant name and estimated total amount.

NOTE: Any RCRA amounts which are not listed as "Hazardous waste" will not be counted in the appropriate "Pounds of hazardous waste treated, minimized or properly disposed of" category. Specific constituent amount(s) will be collected manually (see manual reporting below).

b. Unit of Measure = Pounds

(NOTE: must convert/report total estimated hazardous waste amount in pounds)

c. Destination Media = land, soil or water (ground).

#### Manual Reporting

Enter in the appropriate worksheet of the EOY reporting workbook the estimated pounds of toxic constituents, if known. The toxic constituent amounts are the pounds of specific pollutants in the hazardous waste that have been calculated In your EOY certification, please identify those RCRA cases where an authority is used in ICIS that was not cited in the enforcement action so that we can note this issue on the ECHO website as a known data quality issue.

## **Appendix H**

### Guidance for State Alternative Plans (Flexibility Plans) For RCRA LQG Compliance Monitoring<sup>8</sup>

In the Resource Conservation and Recovery Act (RCRA) program requirements section of the Office of Enforcement and Compliance Assurance's (OECA's) FY08 National Program Managers' (NPM) Guidance, there is a requirement that each state inspect at least 20% of its large quantity generator (LQG) universe. The NPM guidance stated that the 2005 National Biennial Reporting System (BRS) universe should be used to calculate the 20% number for inspections. The Regions (after consultation with headquarters) have allowed the states to use a universe other than the 2005 BRS universe if they believe the alternative data more accurately portrays the LQG universe of the state 10. The NPM guidance also provides for pilot projects where states may seek approval for flexibility from the requirement in RCRA02.s to inspect at least 20% of the LQGs in order to improve the outcomes 11 of their compliance assurance activities. This guidance provides the details for submitting pilot project plans to EPA for approval.

### **Procedures for Alternative Approaches**

For states that choose an alternative approach to the standard requirement to inspect at least 20% of their LQG universe, a **brief** written plan must be developed and submitted to the Region. If a state chooses one of the pre-approved alternatives (described below) and follows the requirements for developing the written plan, the plan should be approved by the Region without much, if any, need for negotiation (there may be special circumstances or conditions

<sup>&</sup>lt;sup>8</sup> Editor's Note: This policy, entitled Guidance for FY08 RCRA Core LQG Pilot Projects, was posted on-line in 2007, <a href="http://www.epa.gov/compliance/resources/policies/monitoring/rcra/fy08rcraguidancelqgproject.pdf">http://www.epa.gov/compliance/resources/policies/monitoring/rcra/fy08rcraguidancelqgproject.pdf</a>. In 2007, EPA used the National Biennial Reporting System (BRS) for determining a state's LQG universe. EPA now uses the Biennial Report (BR) for this purpose.

<sup>&</sup>lt;sup>9</sup> This guidance deals only with LQGs and not treatment storage and/or disposal facilities (TSDFs). While some LQGs may also be TSDFs the coverage commitments are separate. An inspection at a facility that is a TSDF and LQG counts as only one inspection for the total RCRA inspection count but when discussing the coverage of the TSDF universe or LQG universe, a facility that falls in both universes is counted in both universes for coverage purposes. Outcomes of the inspections should be attributed to the appropriate portion of the facility (TSDF or LQG). Since the requirements for each universe are reviewed separately this is not double counting the number of inspections nor is it double counting any of the outcomes.

<sup>&</sup>lt;sup>10</sup> An example of an approved alternative for the universe is to use facilities that appear in two or three of the last three BRS cycle. The idea of this approach is to focus the 20% coverage on the "stable" BRS universe of LQGs and use the remainder of inspection resources to inspect other handler types. Using Alabama as an example, there were 234 LQGs in the 2005 BRS (20% of 234 or 47 facilities). There were only 172 facilities that were in each of the last three BRS cycles. Twenty percent of 172 is 35, so Alabama could direct up to the resources that would have gone to 12 more LQGs to inspect facilities other than LQGs.

<sup>&</sup>lt;sup>11</sup> EPA is trying to move from using only output based measures to output and outcome based measures for its programs. For OECA this means trying to move from output based measures (i.e., numbers of inspections) to outcome based measures (i.e., increased understanding, changes in environmental management practices, pollution eliminated, reduced or treated) to better describe the benefits of its compliance and enforcement programs.

# **Appendix H**

where additional information is needed for the Region to approve a state submittal). If a state chooses an alternative that is not one of the pre-approved alternatives contained in this guidance, the proposal should be submitted to the Region under the proposal process for Element 13 of the State Review Framework (SRF). The Region will consult with headquarters before granting approval to the state for its alternative plan submitted under Element 13 of the SRF. If the alternative plan is one of the pre-approved alternatives, consultation with headquarters is not required but a copy of the plan should still be sent to headquarters. This will help in preparing a national report at the end of the year. In all cases, the actual commitments for inspections conducted in lieu of the LQG inspections should be captured in the notes field of EPA's Budget Automation System<sup>12</sup> (LQG inspection commitments are captured as normal in the system).

NOTE: For any proposed alternative, it is fully expected that the level of inspection resources will remain the same. Inspection resources should not decrease although they may be directed to different targets and may be coordinated more closely with other resources such as compliance assistance or compliance incentive resources.

### The written plan should include:

- 1) a general description of the state's universe of regulated generators,
- 2) the number of Comprehensive Evaluation Inspections (CEIs) at LQGs that would have been required under the standard approach,
- 3) the issue(s)/problem(s) as the state sees it with continuing the standard approach, and/or opportunities available under the alternative approach,
- 4) the planned mix of inspections under the alternative approach (what types and how many of each type of facilities will be inspected and how many of each inspection types will be conducted),
- 5) if applicable, a description of how inspections will be used in combination with other tools (compliance assistance, pollution prevention, compliance incentives, etc),
- 6) the expected improved benefits or outcomes the state expects to realize from implementing the alternative approach including a projection of the expected outcomes, and
- 7) a measurement plan that details what benefits/outcomes the state plans to measure<sup>13</sup> and how it will collect and report the information to EPA,

<sup>&</sup>lt;sup>12</sup> EPA's Office of the Chief Financial Officer (OCFO) uses BAS to house resource (\$/FTE) and performance (Annual Performance Goals and Performance Measures) information within the Agency-wide strategic planning framework (Goals, Objectives, Sub-objectives and Strategic Targets). In other words, it houses the commitments for the Annual Commitment System (ACS). Each Region has a contact for data entry into BAS.

<sup>&</sup>lt;sup>13</sup> Outcomes should be collected for the LQGs in addition to the alternative inspections.

# **Appendix H**

#### Plan Submittal

For plans that follow one of the pre-approved alternatives, the plan should be submitted to the Region for review to ensure that all of the elements are appropriately captured in the plan.<sup>14</sup> The Region will forward copies of the plan to OECA.<sup>15</sup>

If a state wishes to pursue an alternative that is not one of the pre-approved alternatives, the state submittal should be sent to the Region as formal request under Element 13 of the SRF. All of the elements of the plan should still be included in the state's submittal and the Region after consultation with OECA, will approve the plan or negotiate an alternative plan with the state. If an alternative plan can not be agreed upon by mid-September then it is expected that the state will follow the standard approach (inspect 20% of the LQG universe) for the Federal fiscal year.

### Written Plan Details

- 1) Description of the state's known universe This description should include the known number of each type of generator (provide the source(s) of the information). The universe information should also provide to the extent possible, information on quantities of waste generated in the state. At the very least, the most recent BRS data can be used, but if the state collects this information through other means, that data may be used as well or in place of the BRS data. This information will help in describing the size and benefits/outcomes of the program.
- 2) Baseline Using BRS<sup>16</sup> or another agreed upon database (one that accurately identifies the current number of generators) identify the number of inspections (CEIs) that the state would have had to conduct to meet the standard approach of inspecting 20% of the LQG universe each year. If a data source other than BRS is used, the Region and state should consider how to handle one time LQGs (e.g., waste generated as the result of the clean up of contaminated sites) and periodic LQGs (e.g., sources that under normal operations do not generate enough waste to be an LQG but periodically have turn arounds where the facility or portions of the facility are shut down for maintenance and/or repair and

<sup>&</sup>lt;sup>14</sup> Submittal should be electronic or electronic and hardcopy.

<sup>&</sup>lt;sup>15</sup> Copies of the state's alternative plan should be sent electronically from the Region to <u>ripp.tom@epa.gov</u> in the Office of Compliance (OC).

<sup>&</sup>lt;sup>16</sup> BRS includes a count of "LQGs" and "non-LQGs." An "LQG" facility is a facility that met the requirements for large quantity generator status during the time period the report covers and at the time the facility submitted the report. A "non-LQG" facility is one which met the requirement for large quantity generator status during the time period the report covers but no longer met those requirements at the time the facility submitted the report. For calculating the 20% requirement, only the LQGs are used but in counting the total waste generated, both the LQG and non-LQG amounts of waste are used.

# **Appendix H**

generate large amounts of waste as a result of that activity) that should be identified in BRS but may not be identified in other data sources.

3) Problem statement - The state should develop a problem statement that describes the problems being missed by the standard approach.

Example problem statement: The state is confident that most/all of the waste streams have been properly identified at all of its largest LQGs and while there may be violations at some of these LQGs they are generally minor, involve a small percentage of the waste at the facility and likely would not have led to waste being shipped offsite to a non-TSD facility. Therefore, while continually inspecting these LQGs confirms that most/all of their generated wastes are being handled properly, there are small quantity generators (SQGs) that are generating more wastes than some of the LQGs but they are inspected less frequently (some are not inspected not at all). The state has anecdotal evidence that certain SQGs do not properly identify all of their waste resulting in hazardous waste being shipped to sites not permitted to treat or dispose of the hazardous waste causing contamination that will need to be cleaned up. The state expects this quantity to be larger and pose a greater risk to human health and the environment than the types of violations and quantities of improperly handled wastes found at the LQGs in the state.

- 4) Planned mix of inspections This is essentially the replacement for the commitment to inspect 20% of the LQG universe and while this is a projection, the information reviewed in this element will help show that the state's overall level of effort for inspections does not decrease and the information will be captured in EPA's BAS as part of the commitments and will be used in developing a national report and in Element 1 of the State Review Framework (SRF) reviews that describe the universe of inspections planned/conducted.
- 5) Mix of tools If applicable, describe how the alternative approach for inspections will be used in conjunction with assistance or incentive approaches to try to maximize outcomes. For example, compliance assistance visits for an industry sector followed by targeted inspections or promotion of self audit or small business policies followed by inspections. This section should also describe the types of inspections the state plans on conducting if they are going to be something other than CEIs.
- 6) Expected outcomes A qualitative description of the outcomes the state expects to achieve by adopting this alternative approach compared to what the state would expect by following the standard approach.

Example: Under the standard approach, it is the state's experience that since the LQGs are inspected frequently, they have only minor violations that are easily corrected and involve only small quantities of waste. Out of the 874,749 tons of waste reported in

## **Appendix H**

BRS, the state estimates that only a few tons will be handled improperly and that any drums with missing labels will be correctly identified before being shipped off site. Under the alternative approach the state expects to identify a number of generators that did not report themselves as LQGs but are in fact LQGs and that the waste generated by these facilities have not been handled properly and the state expects the quantity identified as being handled improperly to far exceed the amount of waste improperly handled by any LQGs identified with violations. The state will also end up with a more complete LQG universe.

7) Measurement plan – A description of the quantitative measures the state will collect and report and how it intends to collect/document the outcomes. For example, the state will document the amount of waste a facility generates, the amount of waste identified as not being handled properly at the time of an inspection but corrected at the time of inspection, the amount corrected as a result of follow up enforcement actions, the amount that will now be managed properly because of the implementation of environmental management practices that ensure compliance, the amount not properly identified as hazardous waste that will now be handled properly, etc. The plan should also include a description of any other ways the state may follow up to collect outcome measures along with where it will keep the data (state database, RCRAInfo, etc) and how it plans to report the outcomes to the Region (e.g., brief quarterly reports to be discussed during the normal quarterly calls the state holds with the Region and a complete written end of year report submitted to the Region).

#### **Year-end Reporting**

At the end of the year, an analysis of the alternative approach (did it meet expectations, if outcomes haven't been realized yet, a projection of the outcomes, recommendations that the alternative approach be continued, altered or discontinued, etc) should be conducted and the results reported to the Region. The report should cover the elements submitted in the written plan. The Region will forward all reports to OECA so that a national report on the outcomes of the core program can be generated. The end of year report should be submitted to the Region by the end of October and the Region should forward copies of the report to OECA as soon as they receive it so that a national report for RCRA can be developed by the end of December.

### **Pre-Approved alternatives**

Any state which chooses to follow one of the following alternatives will have their pilot approved without the need for detailed negotiations (states are allowed to add additional information to these pre-approved alternatives but may not delete any provisions contain in these alternatives without going through the approval process previously described).

For those states that choose one of the following plans, during the negotiation for the annual commitments between the EPA Regions and Headquarters, they only need to identify

# **Appendix H**

what option they are selecting, the numbers of LQG inspections and alternative inspections (identified by each type of facility to be inspected, SQG, CESQG etc. as applies) and agree to collect the identified outcomes and perform a year end analysis of the benefits/outcomes from implementing the alternative approach. To assist in the end of year analysis and reporting, the state should then follow up with a written plan containing the information requested above.

### Alternative 1 – The 80% Approach

States would use the latest National BRS report (or other agreed upon alternative) to identify the number of LQGs and the amount of waste generated by the LQGs and "non-LQGs." Instead of inspecting at least 20% of the LQG universe, a state choosing this option would inspect LQGs that account for at least 80% of the waste generate by the LQGs and "non-LQGs" listed in Exhibit 1.1 of the National Analysis which can be found at http://www.epa.gov/epaoswer/hazwaste/data/br05/national05.pdf, and then with the remaining resources that would have gone to inspecting other LOGs, the state may target inspections to try to maximize outcomes described in its plan. There would be at least two outcomes for LQGs from this alternative. One would be reported as amount of waste generated by the facilities where no violations were found and were therefore being handled properly at the time of inspection (use BRS numbers to generate this). The second outcome would be amount of waste that was not being handled properly by facilities at the time of inspection that will now be handled properly when the facility returns to compliance. This same outcome information could also be collected and reported for the other entities inspected in lieu of the LQGs under this alternative.

For example, according to the 2005 BRS, Alabama had 234 LOGs meaning that they would have to inspect 47 LQGs to meet the current requirement. According to Exhibit 1.1 in the 2005 BRS national report, the total waste generated by the 235 LOGs and Non-LOGs<sup>17</sup> was 874,749 tons. Eighty percent of that is 699,799 tons. The top four facilities in Alabama accounted for 707,692 tons. This means that Alabama could direct up to 43 of its 47 inspections to facilities other than LQGs.

#### Outcome measures for Alternative 1

The LQGs inspected should be put into perspective of the state's overall universe. Additionally, the outcomes should relate to the amount of waste being handled properly. For example, for Alabama, <sup>18</sup> the state inspected four LQGs accounting for 81% of the waste generate by LQGs in the state. At three facilities that according to the 2005 BRS, generated a total of

<sup>&</sup>lt;sup>17</sup> According to the 2005 BRS national report, Alabama had 234 LQGs and 1 non-LQG for a total of 235 generators. The 234 number is used for the current LQG universe but the total number is used for the amount of waste generated.  $^{\rm 18}$  The noncompliance data for Alabama is made up for illustrative purposes.

# **Appendix H**

673,518 tons of hazardous waste (77% of the BRS waste) no significant violations were identified at the time of the inspection) and at one facility that according to the 2005 BRS, generated a total of 34,174 tons of hazardous waste (4% of the BRS waste) the state found that 3 streams of waste were not identified and those streams generate an estimated 50 additional tons of waste which were not properly handled. Additionally, the state identified 8 drums (approximately 1.75 tons) of hazardous waste which were not properly marked and at risk for not being handled properly. No violations were identified at the remainder of the facility, so there is no evidence that the rest of the 34,174 tons of waste were handled improperly. This could be summed up as: Out of the four facilities accounting for 707,692 tons (81%) of the waste generated by LQGs in Alabama in the 2005 BRS, no violations were identified for facility operations that account for approximately 707,690 tons, 1.75 tons were not being handled properly at the time of inspection and therefore at risk of improper treatment or disposal but will now be handled properly, and waste streams accounting for an estimated 50 tons of waste not previously identified are now identified and will be handled properly as a result of the State's actions.

The other generators/handlers inspected in lieu of the LQGs (plus any other inspections the State may want to count) additional outcome measures should be collected and be put into perspective regarding the portion of the universe and amount of waste that they accounted for (to the extent that information is easily available) but in any event, the direct outcomes of how much waste was being handled properly and how much waste was not should be collected in a similar manner to the LQGs.

Continuing the above example for Alabama, for the 43 inspections, 20 SQGs, 10 CESQGs, 8 transporters and 5 potential non-notifiers were inspected. Then go on to describe for example, the amounts of wastes generated/handled by each category, what was confirmed to be handled properly, what was not being handled properly, whether or not the generators were identified correctly (e.g., 16 of the SQGs were confirmed to be SQGs with no significant violations and together they generated 34 tons of hazardous waste in the last year, four of the inspected SGQs were determined to be LQGs generating 300 tons of waste which was not being sent to a permitted TSD facility but they only reported and properly handled 15 tons of waste, and 3 of the potential non-notifiers were identified to be SQGs generating 8 tons of waste which was not being sent to a permitted TSD), etc.

Outcome examples used in Alternative 1 should be used in the remaining alternatives unless the state identifies additional outcome measures to use.

### **Alternative 2 - The Greater Than 5 Ton BRS Approach**

The largest possible small quantity generator (SQG) can generate 12 metric tons (long tons) or 13.2 english (short tons). This means that some LQGs can actually generate less waste

# **Appendix H**

than some SGQs since a facility can be an LQG because it had one month where it generated over one metric ton of waste. The idea under this option is to allow for flexibility in the middle of the range of where a facility could be and SQG or an LQG. For Alabama, the 2005 BRS "List of Reported RCRA Sites" file (located at:

http://www.epa.gov/epaoswer/hazwaste/data/br05/index.htm) shows that of the 234 LQG facilities, 206 of them generated greater than 5 tons of waste. That means 42 (20% of 206 = 42) would need to be inspected to meet the target of inspecting at least 20% of the LQG universe, leaving flexibility inspections at other handler types equivalent to the resources that would have gone to inspecting five LQGs. This approach can be applied to the full 2005 BRS universe or the "stable" BRS universe.

### **Alternative 3 – The Straight Trade-off Approach**

The straight trade off approach (This replaces the 2:1 requirement that existed in the FY 2007 NPM guidance) – This is a straight cut of up to 50% from the requirement to inspect at least 20% of the LQG universe. In other words, inspect at least 10% of the BRS LQG universe. For Alabama this means inspecting 24 LQGs (at least 10% of the 234 universe), and then Alabama could direct the freed up resources (23 inspections if we assume that each substitute inspection takes as much resources as an LQG inspection) to facilities other than LQGs. Again the idea is that the level of effort for inspections (personnel and/or \$) should remain the same. So if the each of the alternative facilities inspected only took half the time it takes to inspect the average LQG then Alabama would inspect 46 other facilities (2:1 trade-off).

# Appendix I

### **Hazardous Waste Civil Enforcement Response Policy (Dec. 2003)**

See separate pdf document – or <a href="http://www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf">http://www.epa.gov/compliance/resources/policies/civil/rcra/finalerp1203.pdf</a>



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

### OCT 1 7 2012

OFFICE OF ENFORCEMENT AND COMPLIANCE ASSURANCE

### **MEMORANDUM**

SUBJECT:

Flexibility Implementation Guidance for the Resource Conservation and

Recovery Act Compliance Monitoring Strategy

FROM:

Edward J. Messina, Director /

Monitoring, Assistance, and Media Programs Division

Office of Compliance

TO:

Regional RCRA Enforcement Directors

I am pleased to announce the availability of the *Flexibility Implementation* guidance as Appendix J to the *Compliance Monitoring Strategy for the Resource Conservation and Recovery Act (RCRA) Subtitle C Program (RCRA CMS)*. Appendix J provides implementation guidance to the states and EPA regions for flexibilities identified in the RCRA CMS. This guidance will help ensure even applicability of the requirements across the states and EPA regions. The guidance provides:

- Directions for alternative inspections at post closure treatment storage and disposal facilities (TSDFs);
- Basic region/state program criteria for using the large quantity generator (LQG) and operating TSDF flexibilities;
- Reference to the LQG flexibility (Appendix H to the RCRA CMS);
- Directions and additional criteria for substituting focused compliance inspections (FCIs) in lieu of compliance evaluation inspections (CEIs) at operating TSDFs; and
- Directions for tracking any chosen flexibility in: 1) the annual commitment system's database, the budget automated system (BAS); and 2) RCRAInfo.

If you have any questions regarding the RCRA CMS or this Appendix to the RCRA CMS, please contact Tom Ripp of my staff at (202) 564-7003.

#### Attachment

cc: RCRA Enforcement Managers Rosemarie Kelley, OCE Diana Saenz Julie Simpson, OC Emily Chow, OC Tom Ripp, OC

### Appendix J

### Flexibility Implementation

### Background

The EPA Compliance Monitoring Strategy for the Resource Conservation and Recovery Act (RCRA) Subtitle C Program (CMS) offers specific flexibilities for conducting RCRA core program inspections to:

- Improve compliance assurance outcomes;
- Help identify non-notifiers/non-reporters and develop a more complete and better defined RCRA universe;
- · Locate and address currently unknown sources of potential environmental risks; and
- Potentially reduce the cost per inspection.

The areas of flexibility allowed by the CMS include:

- Substituting groundwater monitoring evaluation (GME) and/or operations and maintenance (OAM) inspections for compliance evaluation inspections (CEIs) at postclosure treatment, storage and disposal facilities (TSDFs) (GME/OAM flexibility for post-closure TSDFs);
- Substituting CEIs at large quantity generators (LQG) with inspections at other types of RCRA regulated facilities (LQG flexibility); this flexibility is covered in more detail in Appendix H of the CMS; and
- Substituting focused compliance inspections (FCIs) for CEIs at operating TSDFs<sup>1</sup> that have good track records of compliance (FCI/CEI flexibility at operating TSDFs).

In general, the CMS flexibilities allow states to redirect some compliance monitoring resources from traditional CEI activities at routinely inspected facilities to inspections that may address more pressing needs or areas of interest. Recognizing that this diversion of resources may pose some risk of not finding some potential violations, or not finding potential violations as quickly at LQGs and TSDFs, the EPA regions, in reviewing state program requests for flexibility, should consider all of the criteria described in this appendix in order to evaluate a state's ability to effectively utilize any of the flexibilities.

By evaluating the adequacy of state programs according to these criteria, the EPA regions can minimize the risk of state programs missing potentially significant violations should the regions approve use of flexibility. In turn, the use of flexibility will allow state programs to focus on areas of compliance that may not have been a core program priority, but, nevertheless, may pose potentially significant threats to human health and the environment.

<sup>&</sup>lt;sup>1</sup> The CMS contemplated allowing FCIs in lieu of CEIs at LQGs but that was rejected do to the infrequent inspections at LQGs.

For example, verification that previous state program reviews have determined that the state program routinely conducts thorough inspections should minimize risk of the state missing significant violations at LQGs and TSDFs when utilizing CMS flexibility.

This appendix provides CMS flexibilities review and implementation guidance to the regions and states to help ensure consistency across the regions.

### In particular, this appendix:

- Discusses implementation of the GME/OAM flexibility for post-closure TSDFs;
- Discusses criteria for evaluating state RCRA programs to determine if those programs can effectively use the LQG flexibility and FCI/CEI flexibility at operating TSDFs;
- Provides implementation guidance/criteria for LQG and TSDF flexibility;
- Provides guidance for tracking which states are using alternative LQG universe and/or the FCI/CEI flexibility for operating TSDFs;
- Provides guidance for those states using the FCI/CEI flexibility at operating TSDFs to track at which TSDFs the authorized state program has determined an FCI is an appropriate alternative inspection; and
- Discusses flexibility tracking.

### **GME/OAM Flexibility for Post Closure TSDFs**

States/regions are allowed to implement an alternate inspection plan that varies in type of inspection and frequency of inspection from the normal CEI inspection frequency as detailed below when the TSDF meets the requirements listed below. Because this flexibility provides a common-sense approach to conducting inspections with limited resources, EPA does not consider this a flexibility that needs prior approval from the region. Specifically, states may implement this flexibility without prior notification to, or approval by, their EPA region.

The CMS notes that the federal RCRA statute mandates "thorough" inspections of TSDFs.<sup>2</sup> Furthermore, the CMS identifies the minimum inspection elements for TSDFs, some of which include various recordkeeping requirements, site security, and financial responsibility.<sup>3</sup> Generally, a "thorough" inspection is performed via a CEI which is an evaluation of all aspects of a facility's compliance with applicable regulations and, in the case of TSDFs, the permit.

At TSDFs that are no longer receiving waste but have land-based units that preclude clean closure of the site, many of the normal CEI inspection items for TSDFs are not applicable (e.g., manifests, contingency plans, personnel training, and waste storage requirements). However, there are still significant regulatory requirements that must be met. The purpose of this guidance is to identify an approved alternative inspection methodology for TSDFs that are no longer receiving waste to assure the RCRA statutory requirement for a "thorough" inspection is met and

<sup>&</sup>lt;sup>2</sup> CMS Section III.B.3.

<sup>&</sup>lt;sup>3</sup> CMS Section III.B.4

to comply with the CMS guidance that TSDFs no longer in the operating universe have their compliance requirements evaluated at least every three years.<sup>4</sup>

This alternative applies only to "post-closure TSDFs" which, for the purposes of this document only, means a TSDF that meets all of the following:

- 1) Has no units receiving waste;
- 2) Has met all closure requirements of 40 CFR Part 264/265 and the permit;
- 3) Has received closure certification from the appropriate regulatory agency (the state agency in authorized states or the EPA in unauthorized states);
- 4) Has begun the post-closure monitoring period; and
- 5) Is in substantial compliance with all post-closure monitoring and permit requirements (i.e., is not SNC).

In general, on-site GME/OAM evaluations at post-closure TSDFs are performed approximately every three years. To establish a CEI baseline, during years one through three of the post-closure monitoring period, the regulatory agency shall perform on-site CEIs each year at post-closure TSDFs. The CEIs will, in all cases, evaluate compliance with:

- The site security requirements of 264/265.117;
- The financial assurance requirements of 264/265.145; and
- The permit.

In addition, and as applicable to the site, the CEIs will evaluate compliance with the requirements of:

- 40 CFR 264/265.228 for surface impoundments;
- 264/265.258 for waste piles;
- 264/265.280 for land treatment;
- 264/265.310 for landfills;
- 264.603 for miscellaneous units;
- 264/265.1102 for containment buildings; and
- 264/265.1202 for hazardous waste munitions and explosives storage units.

These CEIs will be separate evaluations from any GME/OAM evaluations that may be performed.

At facilities that are in substantial compliance with their post-closure maintenance and monitoring requirements, it seems most cost-effective in both personnel time and costs that the physical areas of compliance be evaluated at the same time regulatory agency personnel are on site for the GME/OAM evaluation, rather than having two site visits—one for the CEI every three years and another for the GME/OAM evaluation. Therefore, during years 4 through 30 of the post-closure monitoring period, the regulatory agency may incorporate the requirements

<sup>&</sup>lt;sup>4</sup> CMS Section III.B.3.

identified above into GME/OAM evaluations, provided those elements are thoroughly evaluated and included within the written GME/OAM report.

If the regulatory agency elects to not incorporate the CEI elements into the GME/OAM evaluation during years 4 through 30, then in accordance with CMS Section III.B.3., an on-site CEI to evaluate those elements must be performed by the regulatory agency a minimum of every three years.

The regulatory agency shall revert to separate CEI evaluations in accordance with CMS Section III.B.3. if the facility is determined to be a significant noncomplier (SNC). After the regulatory agency has changed the RCRAInfo status to indicate that the facility is no longer SNC (the code for that in RCRAInfo is SNN), the combined inspections may resume.

# Basic Region/State Program Criteria for Using the LQG and FCI/CEI at Operating TSDF Flexibilities

The CMS notes that the federal RCRA statute mandates "thorough" inspections of TSDFs. Furthermore, the CMS identifies the minimum inspection elements for TSDFs, some of which include various recordkeeping requirements, site security, and financial responsibility. Generally, a "thorough" inspection is performed via a CEI which is an evaluation of all aspects of a facility's compliance with applicable regulations and, in the case of TSDFs, the permit. The CMS also specifies inspection frequency and minimum inspection elements for LQGs, and notes that OECA's National Program Managers Guidance (NPMG) specifies that inspections of LQGs "generally should be CEIs."

As mentioned in the CMS, the Office of Enforcement and Compliance Assurance (OECA) wants to promote national consistency in program implementation while allowing sufficient flexibility to improve protection of human health and the environment. To this end, OECA has developed the following criteria for the EPA regions to consider when evaluating a state program request to use CMS flexibilities. While the evaluation of a state's request for flexibility may rely on information from previous routine state program reviews, the flexibility evaluation is independent of those reviews since additional factors must be considered that may not have been covered in the routine reviews. To reduce administrative burden, a state should time its request for flexibility to coincide with annual routine planning discussions.

The following areas must be considered by the EPA regions before allowing a state to utilize CMS flexibility:

<sup>&</sup>lt;sup>5</sup> CMS Section III.B.3.

<sup>&</sup>lt;sup>6</sup> CMS Section III.B.4

<sup>&</sup>lt;sup>7</sup> CMS Section III.C.1.b.

- The state must maintain its authorized RCRA program.
  - The region must be kept apprised of significant changes made to the state program (e.g., staffing, resource levels), as last authorized, and the region and state must agree that these changes do not adversely impact the effective operation of the program.
- The state must maintain a quality RCRA compliance monitoring program that routinely:
  - o Fulfills statutory, regulatory, and program grant obligations; and
    - Prepares timely inspection reports that include all applicable elements identified in the RCRA inspector's manual (e.g., narrative information, checklists, and documentary support).
- The state program must have achieved satisfactory results from EPA and must not have been apprised of any performance issues during any formal and informal oversight activities including:
  - o SRF review;
  - o Annual reviews, if applicable;
  - o Oversight inspections, if applicable;
  - Other state program monitoring activities such as regularly scheduled conference calls or meetings (e.g., these routine calls have not identified any issues in the state's program or that any issues are being satisfactorily addressed).

The EPA regions and states should have routine discussions about state program performance. Whenever a region identifies performance concerns, the region should work closely with that state to promptly resolve those concerns. State program performance deficiencies should not be first identified when a state requests flexibility, and performance concerns should not be raised exclusively during formal reviews such as the SRF, because these formal reviews are infrequent and limited in scope (e.g., the SRF does not directly address inspection quality). The occurrence of routine informal discussions between regions and states can be an important factor in evaluating a state's request to use CMS flexibility.

In addition to meeting the above criteria, a state program that is requesting use of a CMS flexibility must submit a brief written request (plan) to the EPA region (preferably, in advance of annual region/state planning discussions) that includes a brief summary of the rationale for utilizing the flexibility and a description of how the flexibility will be implemented during the year. At the end of the year, the state program must also submit a brief year-end report that summarizes outcomes and lessons learned from using the flexibility (more details are provided in Appendix H to the CMS).

It should be noted that flexibility is not renewed automatically every year. For example, if a state program meets the criteria for approval by an EPA region, but the state has not submitted

the required plan for the upcoming year, or report for any previous year and provides no explanation, then it is expected that the region will revoke the state's use of flexibility until the deficiencies are corrected and the region is assured that the state will meet the requirements for submitting a plan and a year-end report. Because the year-end report should identify benefits achieved by use of a flexibility, as well as any lessons learned, the region should request additional information if there are questions about whether or not the flexibility is achieving the desired results or, after notification to the state, revoke its authority for use of flexibility.

### LQG Flexibility

This flexibility (described in detail in Appendix H to the CMS) allows state programs to reduce the minimum number of annual CEIs conducted at LQGs, and to use unconsumed compliance monitoring resources to conduct inspections at other facilities (e.g., SQGs, CESQGs, etc.). This flexibility includes three (3) pre-approved approaches and the option for a state to propose an alternative approach that must be approved by EPA prior to implementation. This flexibility applies only to a state's obligation for LQG compliance monitoring and not to TSDFs; it also does not generally apply to other compliance assurance activities (e.g., enforcement, compliance assistance, or incentives). If a state requests utilization of a pre-approved approach, the region may approve the state's request and corresponding required plan without consulting OECA. If a state requests utilization of an alternative approach, the region must consult with OECA before approving the state request and plan.

The three pre-approved alternative approaches are:

- The 80% Approach;
- The Greater Than 5 Tons BRS Approach; and
- The Straight Trade-Off Approach<sup>8</sup>.

If a state uses this flexibility (either pre-approved approach or an alternative approach), the state must document the outcomes of using that approach and review and report the results to the regions who will then forward copies to OECA. It is expected that if use of this flexibility does not achieve desired outcomes, the state will reassess its approach and either return to the standard 20 percent LQG inspection requirement or, in consultation with the region, select another approach.

### FCI/CEI Flexibility for Operating TSDFs

This flexibility allows FCIs to be conducted in lieu of CEIs at operating TSDFs with "good track records of compliance." Since the RCRA statute requires that "thorough inspections" be completed with a minimum frequency at TSDFs, this guidance establishes criteria to ensure that FCIs conducted in lieu of CEIs at TSDFs are "thorough" but does not change the frequency at which inspections must be conducted.

<sup>&</sup>lt;sup>8</sup> Refer to Appendix H, Guidance for State Alternative Plans (Flexibility Plans) for RCRA LQG Compliance Monitoring, where these alternatives are discussed in detail.

A CEI is typically an on-site evaluation of the compliance status of a facility with regard to all applicable RCRA regulations and permit requirements. The major objective of a CEI is to gain an overall assessment of facility compliance (see the description on pages 27 - 28 of the CMS). Although portions of a CEI may be conducted off-site in an office-based setting (e.g., financial records review), such "office" evaluations can be an integral part of a CEI. As a rule, however, CEIs are very time consuming and require a significant allocation of compliance monitoring resources.

An FCI is an on-site inspection that evaluates some (but not all) specific RCRA and/or authorized state regulations (e.g., Subpart CC of 40 CFR Part 264, BIF, or Universal Waste) and permit conditions. For the purposes of this flexibility, an FCI must focus on any significant changes implemented at a TSDF since the previous inspection. Inspectors must also evaluate all hazardous waste determinations made by the facility, waste profiles provided to the facility by generators, and be satisfied that the inspection is sufficiently thorough. If the inspector is not convinced that a FCI will be sufficient to meet the thorough inspection requirement, the inspector must then proceed with a CEI inspection. It is important to note that an FCI may not be sufficient, and a CEI may be required, when a facility makes significant plant-wide changes in multiple processes, operating procedures, wastes produced, etc.

For the purposes of this flexibility, an FCI, when considered with previous CEI inspections at the facility, is considered a thorough inspection if the following criteria are met:

### State Program Criteria.

Refer to the <u>Basic State Program Criteria for Utilization of the LQG and FCI/CEI TSDF</u> <u>Flexibilities</u> in this appendix.

#### TSDF Criteria.

As stated in the CMS, once a region/state has become adequately familiar with a TSDF, and has established that the facility has a good track record of compliance, an FCI may be substituted for a CEI by the region/state provided the following criteria are met:

- At least two CEIs (meeting the description on pages 27 28 of the CMS) must have already been conducted at a facility before an FCI can be substituted for a CEI.
- The facility must not have received a formal enforcement action as a result of the most recent CEI.
- The facility must not be identified as a current significant non-complier (SNC).
   An FCI may be allowed at a facility where there is injunctive relief, such as a Consent Order or another formal mechanism, in place to address prior violations.

#### FCI Criteria - Frequency.

When used in conjunction with CEIs, FCIs can be an important component of an efficient and effective compliance monitoring program. It is important that a region/state maintain adequate

familiarity with a TSDF through the measured use of FCIs. As such, an FCI may only be substituted for a CEI when the following criteria are met:

- FCIs may only be substituted for CEIs twice consecutively.
- A CEI must be conducted following renewal of a facility permit.
- A CEI must be conducted following the change of a facility owner or operator.
- A CEI must be conducted following a significant change in process, operating procedure, production, or the wastes generated or managed at a facility, etc.

### FCI Criteria - Minimum Inspection Elements.

When an FCI is conducted at a TSDF in lieu of a CEI, the FCI shall, at a minimum:

- Determine if financial assurance requirements are met;
- Determine if all waste streams have been identified and properly characterized, and all hazardous waste streams are being handled properly;
- Evaluate facility operations to determine if any process changes have occurred at the facility since the last inspection that would affect hazardous waste management practices;
- Spot check facility compliance with the regulations and permit requirements for those areas that have not changed.

### **Flexibility Tracking**

### Alternate Universe for LQGs.

Because the generator universe can change on a monthly basis, and because there are no requirements for generators to notify EPA of changes in their status to EPA, OECA recognizes that the universe data for generators contained in RCRAInfo may not be up-to-date or accurate. Therefore, as a default, the most recent Biennial Report is used to determine the LQG universe for the Annual Commitment System (ACS) and State Review Framework (SRF) coverage purposes. If the state wishes to use what it believes is a more accurate universe, and the region agrees, the region must report this to OECA by using the comment field in the Budget Automation System (BAS) when entering ACS bids for the next fiscal year. The region should identify the state that is using the alternate universe number and identify what the alternate number is.

#### Post-Closure TSDFs.

Currently, there are no special tracking requirements for post-closure TSDFs. RCRAInfo already has the capability of identifying which TSDFs are post-closure.

### LQG Flexibility.

#### **ACS Tracking:**

If a region allows a state to use this flexibility, the region must enter the following into the comment field in BAS when the region enters its bid for the RCRA02.s measure:

- The state that will be using flexibility;
- The option that the state chose (one of the preapproved or a state developed alternative); and
- The projection of LQG and other facility inspections (numbers and types of facilities) that the state will conduct in lieu of the standard 20 percent of the LQG universe.

Additionally, the region must forward a copy of the state's plan to the chief of the Pesticides, Wastes and Toxics Branch (PWTB) in the Monitoring, Assistance, and Media Programs Division (MAMPD) in the Office of Compliance. At the end of the year, the region must forward a copy of the state's end of year report to PWTB.

### RCRAInfo Tracking.

The region/state using this flexibility shall use the commitment utility link in RCRAInfo. The commitment should be identified as "LQG flexibility facility." Then, any facility identified in the LQG flexibility plan as being inspected in lieu of an LQG for the LQG ACS commitment should be linked to this commitment when the inspection is entered into RCRAInfo. For more information on adding and linking commitments, please see the RCRAInfo help menu (found at the top right hand corner of the main menu).

### FCI/CEI at Operating TSDF Flexibility

### **ACS Tracking:**

If a region or authorized state is allowed to use this flexibility, the region must identify the state in the comment field of BAS when it enters the bid for the RCRA01.s measure. Additionally, the state must identify all the TSDFs that meet the requirements for allowing an FCI in place of a CEI which the state intends to inspect. The state will manually report these facilities to the region and the region will forward the list to PWTB.

#### RCRAInfo Tracking:

The region/state using this flexibility shall use the commitment utility link in RCRAInfo. The commitment should be identified as "TSDF flexibility facility." Then any facility identified in the TSDF flexibility plan as being inspected with an FCI in lieu of a CEI for the TSDF ACS commitment should be linked to this commitment when the inspection is entered into RCRAInfo. For more information on adding and linking commitments, please see the RCRAInfo help menu (found at the top right hand corner of the main menu).