

Guidance for RCRA Core LQG Pilot Projects

In the Resource Conservation and Recovery Act (RCRA) program requirements section of the Office of Enforcement and Compliance Assurance's (OECA's) 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.¹ 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 state². 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 outcomes³ 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 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

¹ 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.

² 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.

³ 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.

conducted in lieu of the LQG inspections should be captured in the notes field of EPA's Budget Automation System⁴ (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 measure⁵ and how it will collect and report the information to EPA,

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.⁶ The Region will forward copies of the plan to OECA.⁷

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.

⁴ 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.

⁵ Outcomes should be collected for the LQGs in addition to the alternative inspections.

⁶ Submittal should be electronic or electronic and hardcopy.

⁷ Copies of the state's alternative plan should be sent electronically from the Region to ripp.tom@epa.gov in the Office of Compliance (OC).

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 BRS⁸ 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 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.

⁸ 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.

- 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 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 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 LQGs, 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 LQGs 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 LQGs and Non-LQGs⁹ 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,¹⁰ the state inspected four LQGs accounting for 81% of the waste generated by LQGs in the state. At three facilities that according to the 2005 BRS, generated a total of 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 SQGs 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,

⁹ 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.

¹⁰ The noncompliance data for Alabama is made up for illustrative purposes.

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 than some SQGs 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).