



Connecticut Department
of
ENERGY &
ENVIRONMENTAL
PROTECTION

GUIDELINES FOR PERFORMING A RCRA COMPLIANCE ASSISTANCE AUDIT FOR RCRA GENERATORS

PRE-AUDIT

All requests for a RCRA compliance assistance audit must be pre-approved by the compliance assistance coordinator. The compliance assistance coordinator will determine if the business is eligible for an audit. Businesses that are not eligible include TSDFs, businesses with outstanding enforcement actions (Field NOV, NOV, orders, court actions, etc), and business that have been placed on the fiscal year's RCRA commitment list. There could also be other site specific or case-by-case reasons.

Note: In some cases the district supervisor may replace the business on the RCRA commitment list with another generator so that the business requesting the audit can be eligible.

Prior to informing the company that they are eligible to participate in the RCRA Compliance Assistance Audit Program, the compliance assistance coordinator (coordinator) must check to see if the business is eligible.

If the business is not eligible due to an outstanding enforcement action, the coordinator will contact the person that requested the Compliance Assistance Audit and explain the reason. The coordinator will explain that they will be eligible once the enforcement action has been closed.

If the business is not eligible because it is on the RCRA commitment list, the coordinator will contact the person that requested the Compliance Assistance Audit and explain that they can't be fit into this year's schedule and to please make a request the following year.

In order to determine if the business is eligible for a Compliance Assistance Audit, the coordinator will check RCRAINFO to determine if the business has any outstanding enforcement actions. The coordinator will also check with the district supervisor. When checking RCRAINFO, the coordinator will make note the business's generator status, date of the last RCRA inspection, and name of the person who conducted the inspection. The eligible business will then be assigned to staff for an audit.

ELIGIBLE PARTICIPANTS

The person assigned the compliance assistance audit should do the following:

Contact the person requesting the audit to determine the type of assistance that is requested. Compliance assistance requests could be simple review of a specific regulatory requirement such as evaluation of the business's emergency response plan, use of generator treatment processes, or it could be a complete on-site audit of all RCRA requirements (similar to our CEI) .

During this initial discussion have the business contact describe their site activity (manufacturer, service sector, job shop, hospital, etc), a brief explanation of the processes (machining, painting, electroplating, etc), and description of their waste management systems such as containers, tanks, evaporator, etc. The amount of information will be dependent on the type of assistance they are requesting.

Make an appointment to go to the site. Explain the audit process, types of employees that you would like to speak with during the on-site audit, and approximate amount of time you will spend on-site. The types of employees could include the wastewater treatment operator, production manager, safety officer, maintenance employees. Also inform the contact that you would like to have all relevant RCRA documents available for review during the on-site audit. Depending on the type of audit requested, these documents could include hazardous waste manifests, bill of lading, invoices; waste profile information; emergency response plan; employee training records, training manual/documents, job descriptions, and inspection records. Also request that a copy of a floor plan be available (the site's evacuation map may be adequate).

Prior to visiting the site, you may want to review past inspection reports and the DEEP manifest database to see the types and volumes of waste generated and the frequency that the waste is shipped off-site.

INITIAL MEETING

Upon arrival provide an in-briefing. Welcome any other employees to sit in on the in-briefing, especially those that could contribute firsthand knowledge of the processes and waste management practices applicable to the type of assistance that is requested. Discuss your understanding of the audit requested, the steps involved with conducting the audit, and how any follow-up will be handled.

Note: Also explain that if high priority violations or violations that demonstrate a significant threat to human health and the environment are observed, that DEEP reserves the right to take an appropriate enforcement action.

Collect basic background information about the company such as the date established, number of employees and shifts, property ownership, water supply, water and air discharges, ground water monitoring wells, waste minimization program.

Have the contact describe the company's processes, including building and ground maintenance, replacement of spent lamps and electronic equipment, and remediation waste if applicable. Ask a lot of questions. The contact may not be aware of all the process steps that employees follow so use your experience to offer suggestions. For example, the contact may say that the company uses a solvent for degreasing but may not know that the solvent is used both in a dip tank, on leased shop rags, and disposable wipes.

Request a copy of a floor plan noting process areas, hazardous waste storage areas (containers, tanks, evaporators, distillation systems, wastewater treatment systems, etc) and satellite storage containers. This can be used during the tour to orient you. Request two copies, one can be used to write on during the tour and one can be used for the report. If a detailed floor plan has not been developed, use a copy of the building's evacuation route floor plan.

THE TOUR

Note: the following section goes into the procedures for conducting a complete site audit. However, many of those steps are also applicable for auditing specific regulatory requirements. For example, in order to evaluate a business's contingency plan, you must know the processes, chemicals used in those processes, and the physical location of the process within the building.

TAKE NOTES!

For each discrepancy observed during the tour, take the time to describe the discrepancy and then explain how to correct it. If the discrepancy is fixable at the time, such as container not labeled or open, have it corrected before you move on.

Make sure to wear appropriate clothing (ie. no shorts, tank tops, sneakers, etc.) Wear safety boots/shoes, bring safety glasses with side shields, have hardhat available in vehicle. Miscellaneous safety equipment such as gloves, coveralls, and hearing protection may be needed. Some companies will supply some of the safety equipment such as ear plugs and hardhats.

Take a tour of the facility (both inside and out) focusing on processes (especially those that generate waste), satellite storage areas, container and tank waste storage areas, and visit storage areas where virgin/process chemicals are kept. Also check trash cans, loading docks, waste water treatment system, air pollution control devices, maintenance areas, process chemical storage areas. Also make note of any floor drains. When in the

maintenance department check the chemical storage cabinet. Sometimes maintenance employees use solvent based aerosol cleaning products that the contact is not aware of. When touring outdoor areas check emission control system waste collection devices, dumpsters, and any containers. Also (if applicable) check catch basins located near loading docks and outdoor container and tank storage, and inspect any groundwater monitoring wells. Also during the tour check the inspection tags on fire extinguishers to see if they are up to date.

Note: It may not be necessary to do a site wide tour in all cases. The tour should be limited to the areas/processes that are related to the reason for the compliance assistance audit. For example, if the business is requesting guidance for compliance with the RCRA container inspection requirements, the tour might only involve a tour of the hazardous waste and emergency response equipment storage areas.

During the tour, make note of the types of chemicals that are used in each of the processes and the types of waste that come from the processes. Some processes can generate many waste streams. For example, a fabric coating process (solvent based) can generate residual coating, solvent on wipes from cleaning the knives, liquid solvent and solvent wipes from cleaning the tray or pump, and contaminated debris such as spill residue. Used oil could also be generated when servicing the coater's gear boxes and hydraulic systems. Air emissions generated from the curing ovens might discharge through an emission control system that itself generates a waste.

Find out how each of the wastes is handled. It may be helpful to ask the operator of the process for a description of the process steps (process start up, process runs, and process shut down). Check waste collection containers/tanks in the process area for proper labeling that describes the type of waste and the words "hazardous waste". See that the container is properly closed and dated if applicable. Also look in trash cans in the process areas.

Note: small quantity generators are prohibited from using an open top tank

Check waste management areas and waste treatment processes such as container or tank storage areas, wastewater treatment systems, evaporators, compactors, distillation units, etc. Make note of the device's labeling, containment systems, plumbing, etc. Also inspect emergency response equipment and spill kits. If the business stores or treats ignitable or reactive waste check for proper signage and distance from the property line. If they have incompatible wastes or materials in the same storage area, check for means for providing separation. Determine if the secondary containment systems have adequate capacity and impervious to the types of waste stored.

If during the tour the contact is unsure of an answer to a process or waste generation question, employees on the floor can be a source of information.

RECORD REVIEW

Review paperwork applicable to the generator status. Review personnel training last since many of the employees needing RCRA training are identified in the emergency response plan and on the inspection logs. Review the following:

Note: The following is only applicable to small and large quantity generators. For conditionally exempt small quantity generators, the audit would in most cases be limited to on-site waste management practices, waste determinations, and records of off-site shipment.

Contingency plan (Emergency Action Plan, Integrated Emergency Action Plan, etc.). For large quantity generators review the written contingency plan. Make note of the name of each employee in the plan (primary and alternate coordinator, spill team or responders), evacuation routes and alarm description, emergency equipment list and description of the equipment's capabilities. Evaluate the plan to determine if it addresses each of the waste types that are generated and that the emergency equipment is suitable for the waste types. If the equipment list uses generic descriptions such as "rubber gloves" or "respirator", have the contact change the list to reflect the specific type of equipment available. For example, "rubber gloves" are most likely nitrile, butyl, or vinyl and "respirator" is most likely an air purifying respirator. If the plan lists air purifying respirator, make sure that the plan also identifies the types of cartridges available. If the contact is not certain what type of protective equipment is available, the shop supervisor, process employee, or purchasing department can provide the information. Take the time to collect the information so that it can be placed in the contingency plan.

Check to see if the plan was sent to the local authorities. Also record the date of the most recent revision and the name of the preparer of the plan. Take note of the employees names in the plan for review of their training.

For small quantity generators, check to see if emergency information is posted. The information should be posted near telephones and it is also good to have the information posted in the work spaces. The posting should include the name and phone number of the emergency coordinator, number for the fire department, and locations of emergency response equipment. Frequently, businesses will put this information on their emergency evacuation map. If the business has not prepared an evacuation map, suggest that one is done that includes the emergency information.

Inspection program. Review the last three years of inspection logs and check the inspection schedule. Many times the inspection schedule is part of the inspection log. Check to see that the schedule includes all relevant items (containment system, container/tank conditions, spills, labeling, incompatibles, spill kits or emergency equipment). Review the inspection logs for weekly (or daily for tanks and monthly for

emergency equipment) entries, name of person doing the inspection, date and time of the inspection, notation of observations, and descriptions of any corrective action taken (if applicable). Take note of the name of the employee(s) that conducts the inspections for review of their training.

If you find that the inspection log is deficient, offer suggestions on how to correct it and/or give the contact a copy of the inspection log that's in the DEEP Small Quantity Generator Guidance Book.

Shipping records. Review at least three years of shipping records (hazardous waste manifests, invoices, and bill of lading). Check that off-site shipments of each of the waste types observed during the site tour are documented. This review applies to both RCRA hazardous waste and non-hazardous waste. Note the volumes shipped, waste description, waste code, transporter, and receiving facility from each document. Also note if any discrepancies were recorded on the shipping document. Make a list summarizing the monthly volumes of each waste type shipped off-site.

If the business is shipping certain waste(s) as 'recyclable material excluded from RCRA' to a non-TSDF business, then gather information on the amount and frequency shipped, description of the material, process that generates the waste, name and address of the receiving facility, and any "documentation of claims" that the recyclable material is excluded from RCRA

Certain universal wastes can be transported without the use of a shipping document. For example if the business hires an electrical contractor, the contractor can take the spent lamps without using shipping records. Also, businesses that purchase lamps from some retailers, such as Home Depot, Lowes, Electric Supply Warehouse, can return the spent lamps to the retailer. In these cases get an estimate of the amount of waste from the contact. Maintenance employees are also a good resource for this information.

Waste determinations. Make a note of all the waste types observed during the tour (RCRA waste, state regulated waste, non-RCRA waste, excluded recyclable materials, etc). Check waste determination documentation for accuracy. Waste determination documents could be waste profile sheets from the receiving facility, internally prepared waste profile documents, analytical testing, hazardous waste manifests, shipping invoices, recycling agreements, etc. For used oil, the total halogen test is frequently recorded on the shipping document.

Check to see that the waste determination information accurately describes the waste that you observed during the process tour. Make note of any waste that is lacking a waste determination or that is shipped to a facility that is not a permitted TSDF. For example,

collect detailed information for wastes that are shipped to other business where there is a claim that the waste is excluded from RCRA due to recycling, reuse, or other exclusions.

If the business is lacking waste determinations for the wastes shipped to a permitted TSDF, have the contact call the TSDF for a copy of the waste profile sheet. It is not uncommon for the TSDF or transporter to fax the document at the time of the request. If the business does not have total halogen testing for their used oil, have the contact call the transporter for a copy. Remember that under the Federal Used Oil Regulation it is the transporter's responsibility to test for total halogen.

If the business is lacking a waste determination (including improperly discarded waste), assist the business with proper classification of the waste. Have the business prepare a document that describes the waste. You may have to re-visit the process that generated the waste to gather detailed information about the purpose of the process (i.e. manufacturing a product, cleaning incident to manufacturing, etc), chemicals used in the process, and by-products that come out of the process that are not themselves the product that is being manufactured.

Training program. Each employee that has duties involving hazardous waste is required to be trained. The training should include the primary and alternate emergency coordinator, spill response team, RCRA manager, forklift operators that move containers of waste, waste treatment operators (evaporator, distillation systems, etc), shipping workers, etc. For large quantity generators, review the written training program, manual, computer program, or other documents used to describe the training. Make sure that the training includes the site's contingency plan. Training can be in-house, off-site contractor, on-site contractor, computer self training modules, safety and health meetings, combination of any. Check to see that the training adequately covers the employee's waste management duties and types of waste generated/managed by the business.

From your notes, check that each employee that has waste related duties receives annual training relevant to those duties. Check the last three years of training records for each of those employees.

Review the employee job descriptions. There should be one description for each different type of position that handles/manages RCRA compliance and waste management. The job description should include a description of the duties, education required for the position, and on-going education.

For small quantity generator's training, documentation is not required. During the site tour question employees to determine if they know how to handle/manage the waste and know what to do in the event of an emergency. Also, have the site contact describe how employees are informed/trained regarding waste management and emergency response.

If the contact describes key employees, then speak with those employees. Small quantity generators are not required to prepare job descriptions or written contingency plan.

THE OUTBRIEFING

Welcome any employee to the out briefing. Briefly describe the processes and waste management activities that you observed/reviewed. This way if anything was missed during the tour it can be discussed at this time. Discuss your observations (both good and bad). Offer suggestions that might help reduce the likelihood of accidents. Such as using funnels that have secured/closed lids, using prefabricated spill pallets, use of chemicals/materials that are less toxic or dangerous.

Discuss each discrepancy even if you had already discussed it at the time it was observed. Explain why the discrepancy is a violation of the regulations and describe how to correct the discrepancy. If possible, have the discrepancy corrected at the time observed. For discrepancies that take more time to correct, discuss a time frame for correcting the discrepancy. Explain that the discrepancies must be corrected within 90-days. If not corrected within 90-days, the business/discrepancies will be passed on to the district supervisor for follow up.

Explain that 30-days following the site visit the business will be mailed a copy of the inspection report. The report will describe (in detail) your observations applicable to the type of audit that was conducted. Any discrepancy observed will be described along with the corrective action taken prior to mailing the report. If the business doesn't or can't correct the discrepancies within 30-days, a "draft copy" of the report will be mailed. The draft copy should be used by the business as a guide for correcting any outstanding discrepancies. Explain that you can work with the business for an additional 60-days to correct any outstanding discrepancies. If any discrepancies require greater than 90-days to correct, such as closure of a storage area, have the business submit documentation explaining the reason for the additional time along with a time frame for correcting the discrepancy

At the close of the out briefing ask/make sure that the contact understands what was discussed and their obligations. Provide handouts, fact sheets and guidance documents. You can also provide DEEPs web site (www.ct.gov/deep/hhw) where these documents and fact sheets can be found.

Note: Also explain that if during the inspection you observe high priority violations or violations that demonstrate a significant threat to human health and the environment, or the business fails to correct discrepancies in a timely manner, the DEEP reserves the right to take an enforcement action.

POST INSPECTION

If there were no discrepancies or there were discrepancies that were corrected within 30-days of the site visit, prepared your report as explained in “preparing the 30-day report” below.

If the business can't correct the discrepancies at the time of the site visit, work with them for 90-days from the day of the site visit. If needed, make return visit. If the business is slow to respond, make repeated phone calls, and periodically stop by. Encourage them to make the corrections. If the discrepancies have not been corrected within 30-days following the site visit, prepare your report as explained in “preparing the draft report” below. If the business needs additional time beyond the 90-days to correct the discrepancy, have the business submit documentation explaining the reason for the delay and to propose a schedule for correcting the discrepancy.

Preparing the 30-day report. Business that had no discrepancies or the discrepancies were corrected at the time of the audit or within 30-days of the audit will receive a final report. If the audit is a full CEI type of inspection, use the appropriate checklist for their generator status. If the audit is only of a specific regulatory requirement, prepare a memo style report. Make sure that each page of the checklist or memo style report is watermarked with the words “*compliance assistance audit*”. Complete the report within 30-days of the site visit and mail a copy to the business contact. Enter the audit in RCRA Info as a CAV.

Preparing the draft report. Business that can't correct the discrepancies within 30-days of the site audit will be mailed a draft report. If the audit is a full CEI type of inspection, use the appropriate checklist for their generator status. If the audit is only of a specific regulatory requirement, prepare a memo style report. Make sure that each page of the checklist or memo style report is watermarked with the words “*draft compliance assistance audit*”. Complete the report within 30-days of the site visit and mail a copy to the business contact. Enter the audit in RCRA Info as a CAV. Do not send a copy of the report to the file room at this time.

Continue to work with the business for the next 60-days to correct any outstanding discrepancies. At the end of the 60-days, prepare the final report. Using the previously prepared “draft compliance assistance audit” report, document any changes/corrections the business made. This could include a proposed compliance schedule for discrepancies that take longer than 90-days to correct. Also describe any changes/corrections that the business had not made or addressed. At the end of the 90-days (or sooner if applicable), water mark each page of your final report “*compliance assistance audit*” and mail a copy

of the report and any attachments to the business contact. At this point, a copy is sent to the file room.

If there are outstanding discrepancies that went unaddressed or the business provided a compliance schedule, forward a copy of the report (with a brief explanation of the outstanding issues) to the district supervisor.