

Self-Reporting of RCRA Violations at Iowa State University

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Abstract: In July 1999, the Department of Environmental Health & Safety at Iowa State University (ISU) identified a situation that was in violation of several hazardous waste rules. As both a Large Quantity Generator and a permitted Treatment Storage and Disposal Facility, Iowa State University decided it was necessary to self-report non-compliance to regulatory officials. Events leading to discovery of this situation and corrective action taken were voluntarily reported both verbally and in writing to Region VII of the Environmental Protection Agency (EPA).

This paper will provide an overview of events that lead to non-compliance, discovery of violations and how self-reporting was initiated. The EPA response to the violations as well as ISUs corrective actions is presented.

Introduction

In the span of 30 years, compliance strategies at colleges and universities have evolved to meet the changing and ever increasing challenge of local, state and federal regulations. Today most institutions have well staffed compliance offices, established environmental, health and safety policies and systematic methods of disseminating information to their campuses. Inarguably, institutions of higher learning have made great strides to “raise the bar” of institutional management regarding environmental issues.

While much progress has been made, the complexity of regulations and the decentralized nature of academic institutions often lead to instances of noncompliance. This is evidenced by the number of violations identified by the Environmental Protection Agency (EPA) at colleges and universities nationwide. Based on the results of such inspections, several regions of the EPA have announced compliance initiatives directed at institutions of higher learning. The cost of noncompliance, in fines, supplemental environmental projects and negative press, has been considerable and has resulted in sweeping changes at targeted institutions. News of inspections and their ramifications have prompted colleges and universities across the country to evaluate their compliance status and make necessary changes.

In December 1995, the EPA announced a policy statement that was designed to encourage all regulated entities to systematically identify, report and correct violations of environmental laws. Commonly called the “Audit Policy”, this initiative used the incentive of waived or substantially reduced fines to promote voluntary compliance. Amended in April 2000, the Audit Policy’s ultimate goal is to increase protection of human health and the environment. The EPA acknowledges that, due to limited agency resources, nationwide compliance can only be achieved with cooperation and active participation of the regulated community. Considering the cost of noncompliance, the Audit Policy is a compliance strategy colleges and universities must now give careful consideration. Self-disclosure is an opportunity for the academic community to minimize environmental liability and improve protection of the environment while maintaining a positive image in the news media.

In August 1999, Iowa State University discovered several violations of the Resource Conservation and Recovery Act (RCRA). The violations were determined to be significant enough that they could not be corrected without advice from the EPA. Iowa State University decided to take advantage of the Audit Policy and self-disclose the violations to Region VII of the EPA. This paper will summarize how the violations were identified, the self-disclosure process and the corrective actions taken. The response and actions taken by the EPA will also be addressed.

Identification of the Problem

Iowa State University, an Iowa Board of Regents institution, routinely cooperates with the University of Iowa and the University of Northern Iowa in matters of environmental compliance. One aspect of this cooperation that has proven to be of mutual benefit is the sharing of EPA inspection results. The University of Iowa was inspected by the EPA July 26 – 28, 1999, and provided Iowa State University with a list of compliance issues which surfaced during the visit. The list was reviewed to determine if any similar violations were possible at Iowa State University.

A review of the inspection experience at the University of Iowa revealed an unusual situation in which noncompliance occurred. An outside vendor serviced several parts washers on the University of Iowa campus. As a large quantity generator, a uniform hazardous waste manifest and land disposal restriction notice should have accompanied each shipment of spent solvent. The vendor prepared documentation assuming each building on campus was a conditionally exempt small quantity generator. Since conditionally exempt small quantity generators are not required to complete a uniform hazardous waste manifest for shipments of spent parts washer solvent, a violation of RCRA rules occurred. Although the vendor caused the error, the waste generator is responsible for completing the waste shipment documents and is therefore responsible for the violation.

Staff from the ISU Department of Environmental Health and Safety (EH&S) requested a list of all parts washers serviced by outside vendors from the Purchasing Department. Three parts washers were identified. EH&S staff believed that the possibility of a situation similar to that at the University of Iowa was unlikely because the parts washer issue had been addressed several years ago. At that time, a university purchasing agent contacted EH&S to ask if vendor service to a parts washer was acceptable. Since EH&S selected a product offered by the vendor that did not meet the definition of hazardous, the assumption was made that parts washing operations were in compliance with RCRA regulations.

A visit to each of the locations using parts washers revealed that two of three parts washers were now using a cheaper, hazardous washer fluid. In addition, the vendor was assigning waste codes to the nonhazardous washer fluid. Paperwork prepared by the vendor at each location declared that ISU was a conditionally exempt small quantity generator. Three campus locations that were initially determined to generate unregulated waste streams evolved over time into RCRA hazardous waste generators. It was obvious that a change in washer fluid created hazardous waste in two locations, but the question remained why the vendor added waste codes to the nonhazardous washer fluid. The vendor indicated that their experience at other locations led them to assume the ISU waste was hazardous too.

Determination of Violations

It was obvious to everyone involved that violations of the RCRA rules had occurred. The only real question was how many. A review of the Code of Federal Regulations revealed the violations listed in Table 1. An effort to identify all possible violations was not made; however, a cursory review of the regulations indicated that the potential liability associated with the University's parts washers was considerable.

Table 1
RCRA Violations and Applicable Regulatory Citations

RCRA Violation	Regulatory Citation
Hazardous Waste Determination	40 CFR 262.11
Use Of A Waste Manifest	40 CFR 262.20, 262.21, 262.22, 262.23
Recordkeeping	40 CFR 262.40
Biennial Reporting	40 CFR 262.41
Exception Reporting	40 CFR 262.42
Land Disposal Restrictions	40 CFR 268.7

This exercise demonstrated how one error could result in many violations. Considering that noncompliance occurred at three locations, this single mistake had the potential of becoming 27 citations.

Decision to Self-Report

The decision to self-report was made primarily because there was no remedy for the situation. The waste was gone, there were contracts to prove that the situation had existed for several years and it was impossible to legally generate the necessary paperwork. The only way ISU could return to a compliant operation was to report the situation, correct the problem and ensure compliance in the future.

Correcting the problem without reporting was never considered. Even with satisfactory remedies, the lack of records would eventually be revealed in an inspection, resulting in a notice of violation and possible fines. In addition, the parts washer vendor was required to file an Unmanifested Waste Report with the Regional Administrator of the EPA. The complex reporting requirements of RCRA assured that the EPA would be notified; however, self-reporting provided ISU an opportunity to explain to the regulators how the problem occurred and what was done to correct it. Self-disclosure also had the added benefit of maintaining the University's credibility with regulators and the general public.

Reporting

Self-disclosure of the violations was initiated with a telephone call to the RCRA Enforcement & State Programs Branch (RESP) of the EPA Region VII offices. Surprisingly, representatives of the EPA attempted to identify reasons why the rules had not been violated. On the advice of the EPA, samples were collected from each of the parts washers for analysis to confirm whether the waste streams were indeed hazardous. ISU was instructed to contact the RESP office again after analytical results were received.

Several weeks later, the analytical results indicated that wastes from two of the three parts washers in question were hazardous. This information was verbally reported to the EPA, and ISU was instructed to explain in writing the entire situation including analysis results and measures taken to remedy the situation. A detailed account was prepared and submitted to the EPA. In the report, ISU emphasized that the waste was shipped to a permitted facility under contract. This was done to ensure that the EPA realized that this instance of noncompliance did not result in harm to human health or the environment and that ISU did not receive economic gain from the situation.

Corrective Action

The root cause of the violation was determined to be the decentralization of compliance efforts. When EH&S initially approved the use of a parts washer vendor, no mechanism was put in place to ensure future compliance. Gradual changes in parts washer use and service occurred without regulatory review and evolved into RCRA violations. It was determined that EH&S must maintain some control of parts washers to ensure compliance. A review of invoices also indicated that the parts washers were serviced far more frequently than required based on use. EH&S decided to use this opportunity to control costs as well as maintain compliance.

All contracts with parts washer vendors were cancelled. A nonhazardous (high flash point) solvent was purchased for use in the parts washers. All parts washer service on the ISU campus is now performed by EH&S staff. In addition to ensuring RCRA compliance, service visits conducted by EH&S staff ensure that safety issues such as ventilation and fusible links are addressed. Cost to departments using parts washers has dropped significantly because EH&S changes the solvent based on use rather than time. Analytical results on spent solvent indicate that this waste stream is now non-hazardous; however, it is petroleum based so the waste is bulked with other hazardous waste streams and shipped for fuel blending. A summary of corrective actions was included with the report to the EPA.

Regulatory Results

Although the incident occurred in late July 1999, and was verbally reported to the EPA in August, a written report was not sent until September 16, 1999. The delay was due to the time required to obtain analytical results and confirm the hazardous waste determination. A letter was received back from the EPA on September 27, 1999, acknowledging receipt of the ISU report. It cited two RCRA regulations (40 CFR 262.11 and 40 CFR 262.20) and acknowledged that although rules had been violated, the waste had been disposed of properly. As is often the case with an environmental issue, the letter closed with "at this time no further action is required."

The resolution of this situation is comparable to that at the University of Iowa where the EPA initially identified a similar problem. While both instances of noncompliance did not result in enforcement action by the EPA, ISU believes self-reporting was a necessary step towards compliance. Self-reporting allowed ISU to move past historical mistakes and ensure compliance in the future. Based on the positive outcome of this situation, ISU will consider self-reporting in the future if the need arises.

Summary

Based on the results of an EPA inspection at the University of Iowa, Iowa State University conducted a limited facility audit to determine if facility parts washers were in compliance with RCRA regulations. Three parts washers were identified where current operating practices were determined to be in violation. The situation was reported both verbally and in writing to the EPA. ISU was able to resolve the situation with the EPA without fines or other penalties.