

THE PRACTICAL OUTFALL OF DOE COMPLIANCE AGREEMENTS

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ABSTRACT

Perhaps the significant regulatory issue facing the Department of Energy (DOE or the Department) is the compliant treatment, storage, and disposal of mixed (radioactive and hazardous) waste. Since DOE's By-Product Rulemaking in 1987, when the Department acknowledged that the Resource Conservation and Recovery Act (RCRA) applied to the hazardous component of mixed waste, DOE has repeatedly communicated to the Environmental Protection Agency (EPA) and host States that, for mixed waste, DOE is not always able to strictly comply with RCRA standards and that bringing treatment on-line in an expeditious manner is proving very difficult.

One of the most effective methods used between DOE and its regulators to address mixed waste management issues is the negotiation of compliance agreements. These agreements establish formal milestones for bringing DOE sites into compliance. The milestones are not completed without overcoming technical roadblocks and a struggle for funding. However, agreements can establish technically attainable compliance methods that take into account the special problems radiation introduces into RCRA waste management.

Compliance agreements help promote a cooperative relationship within the Department and between DOE and its regulators in that all parties have reached agreement and have a stake in attaining the same goal. Where agreements exist, mixed waste compliance efforts can proceed in a situation where all parties have a full understanding of each other's needs and expectations.

INTRODUCTION

The Department of Energy (DOE or the Department) has not had an easy time adjusting to Resource Conservation and Recovery Act (RCRA) hazardous waste regulation. The treatment, storage, and disposal of mixed waste (radioactive and hazardous) are particularly problematic. The RCRA Land Disposal Restrictions (LDR) prohibit mixed waste storage, yet there is insufficient treatment capacity, and no transuranic mixed waste (TRUMW) or high level mixed waste (HLMW) disposal facility currently operating. For these difficult issues, DOE opts to work cooperatively with regulators from the Environmental Protection Agency (EPA) and host States rather than enter litigation. The mechanism DOE and its regulators use is enforceable compliance agreements/orders. The agreements establish achievable milestones that DOE must meet to avoid enforcement actions.

RCRA REGULATION OF DOE WASTE

Industry in general used the years 1976 to 1980 to prepare itself for the implementation of RCRA hazardous waste regulations. However, it wasn't until 1984 that DOE acknowledged that RCRA was applicable to its non-radioactive waste operations. After 1984, DOE continued to resist the idea that RCRA may apply to its radioactive waste operations. DOE believed that in concentrating on the waste's main hazard (radiation), DOE was meeting its main regulatory responsibility -- compliance with the Atomic Energy Act (AEA).

In May 1987, DOE came out with its "By-Product Rulemaking." In this rulemaking, DOE acknowledged RCRA applies to the hazardous components of mixed waste. This was a major change of course for the DOE weapons complex. Unfortunately, since DOE did not acknowledge RCRA applicability at the time regulations were promulgated, the opportunity to comment on the law and regulations passed

without DOE seeking appropriate language for its mixed waste streams.

When DOE acknowledged RCRA applicability a great deal of attention was focused on waste management issues since that time. The result of this effort is that DOE has a better understanding of its waste management program and makes waste management decisions taking RCRA consequences into account.

While DOE actively seeks physical and administrative compliance with RCRA, strict compliance in the mixed waste environment is resource intensive and requires special expertise and cooperative effort.

TOWARD COMPLIANCE

Because DOE didn't get into the RCRA game early, it is playing catch-up. The regulators realize this, but still pressure DOE to bridge the compliance gap more quickly than DOE finds technically practical. DOE is moving on several fronts to systematically address compliance issues.

In seeking a responsible approach, DOE has established an Assistant Secretary for Environmental Restoration and Waste Management who directs the program and makes clean up a high priority. The Assistant Secretary has established a Five Year Plan to set out cleanup and waste operations with participation from the public. DOE is forced to prioritize compliance actions because all actions cannot be taken at once -- either because resources are lacking or because it may make more sense to wait for improved technology rather than take immediate action (In some cases, current waste treatment processes would only generate more waste).

DOE is seeking a Programmatic Environmental Impact Statement (PEIS) for environmental restoration and waste management actions. This PEIS is to determine whether DOE

should have central, regional, or site specific treatment, storage, or disposal of waste.

DOE is evaluating its waste streams; some are being eliminated or reduced.

DOE is exploring the potential use of commercial waste storage and treatment. Private industry may be able to help DOE achieve compliance quicker or cheaper than could DOE alone.

COMPLIANCE OBSTACLES

Many obstacles to mixed waste compliance exist. First, the As Low As Reasonably Achievable (ALARA) principle is often in conflict with RCRA requirements. Isolating workers and the environment from radiation has always been a central radiation protection practice. However, RCRA requires more active management and monitoring of waste. Examples:

- RCRA satellite accumulation requires wastes to be kept at or near the point of waste generation, and under the control of the operator of the process, while the ALARA principle would suggest isolating the waste to protect the operator.
- The LDR calls for expeditious waste treatment, but if the waste contains short-lived isotopes, ALARA (and common sense) dictate that decay should be allowed to occur before handling the waste.
- Approved analytical methods do not take radiation hazards into account -- sample sizes, multiple samples, sampling frequency, and labor intensive procedures are all ALARA concerns.
- Aisle space, frequent inspection, and labeling requirements lead to more exposure.

RCRA requires that the chemical hazards of waste be determined. However, the characterization of DOE's mixed waste backlog falls short in meeting this requirement. Part of the problem, unfortunately, is that laboratory support to do mixed waste analysis is limited, and expensive.

Mixed waste treatment capacity is not available. There is a public outcry against incinerators. Some on-site treatment units DOE has used in years past cannot be readily upgraded to meet RCRA standards. It will take time to fully resolve the treatment capacity issue. Treatment facilities will need to be designed, pilot scale tests conducted, funding sought, and facilities built before waste actually gets treated. There is no quick fix on the horizon.

The Waste Isolation Pilot Plant (WIPP) will be the repository for TRUMW, and it will not be operational for at least several years. Likewise, a disposal option for HLMW is not available. While the same obstacles do not exist for mixed Low Level Waste (LLW), landfill design must now take into account both RCRA and LLW landfill standards. As previously mentioned, mixed waste treatment capacity required under RCRA's LDR is not available to treat the backlog of stored waste; therefore, DOE has no option but to continue to store mixed waste in view of the LDR storage prohibition.

DOE has shifted some control from its field offices and centralized it at headquarters. But since regulations in each State can be different, headquarters faces a challenge dealing with the subtleties of the regulations.

There is the budget problem. DOE must anticipate years ahead of time what it will need money for. Requests for special

response funds to deal with unexpected requirements are seldom honored.

These obstacles precipitate the action of negotiating compliance agreements with the regulators to remedy issues.

COMPLIANCE AGREEMENTS -- WHAT ARE THEY?

Compliance agreements are legally binding documents entered into voluntarily by the parties involved. The agreements discuss the compliance issues at hand, the parties involved, the commitments made, the schedule for meeting the commitments, and the effects of not complying with the compliance order. They may also include language protecting the parties involved, e.g., exclusions for DOE contractors, limits on further enforcement action, and change provisions.

WHY ARE COMPLIANCE AGREEMENTS NECESSARY?

Basically, compliance agreements are necessary because they are more desirable than the remaining alternative...unilateral regulatory actions and litigation. DOE is now pursuing changes to RCRA by providing input during the RCRA reauthorization process. Also, EPA has promised mixed waste regulations that address radiation issues, but still has not issued them. However, compliance agreements will still be necessary for those issues not resolved through RCRA reauthorization or future mixed waste regulations.

While the regulator has the responsibility to enforce, compliance can be achieved more quickly by avoiding formal court actions. Fines may motivate others, but in the case of DOE, fines resulting from enforcement actions could redirect money away from the waste clean up efforts that require attention. This would be spending money in a manner other than that desired by the public.

POSITIVE AND NEGATIVE OUTFALL OF COMPLIANCE AGREEMENTS

While agreements may be necessary, they do have consequences that range from positive to burdensome. Some of these consequences are mentioned below.

The result for the regulator is that an enforceable commitment to comply within a set time frame has been extracted from DOE. In addition, the regulator may have influenced the priority of the work, and the manner in which it is to be accomplished. The regulator may also have included certain requirements that are not from the regulations. This is a way to achieve whatever high priorities a regulator may have.

Technical and legal issues are discussed during agreement negotiations. There is a lot of give and take in the negotiation process, with neither side getting all it wants, but all sides eventually getting what they need. The final agreement can be looked upon as a package deal. The result is that DOE has attained as much protection as possible and has only made commitments that it expects can be met. Most importantly, as long as the agreement provisions are met, the waste is no longer considered to be in a state of non-compliance.

The DOE negotiating team is usually made up of site and DOE-HQ personnel, but sometimes the Department of Justice also participates. These people are lawyers, technical and regulatory experts, and program office representatives. Compliance Agreements are legal documents. Therefore, for technical reviewers and negotiators to be effective, they have to gain a basic understanding of the legal issues. The DOE

negotiating team meets frequently on its own to propose changes to the draft agreement, discuss regulator comments, and consider strategies that may improve follow-up negotiations. These meetings are usually 3 hour conference calls.

Agreement negotiations do the following:

- Communicate the extent of a site's compliance problem to all parties (this may clear up misunderstandings and misconceptions and allow all parties to work from a common base level of knowledge),
- Establish the needs of the parties (e.g., assuage Governor or special interest groups by the regulator interjecting the public's priorities into DOE's planning schedules, maintaining flexibility in case of future budgetary or technology changes), and
- Establish topics that are best avoided (e.g., admitting wrongdoing or setting undesirable precedents).

Agreement negotiations are proper mechanisms to discuss problem areas, such as alternative but equivalent compliance strategies that take radiation hazards into account. For instance, where ALARA is a concern for routine inspections, remote monitoring may be discussed as an appropriate alternative to manned inspections. Through discussion of compliance issues EPA and the States have begun to realize that eliminating DOE's obstacles to compliance is a shared problem and that their input and cooperation are essential to achieving compliance.

The result of a successfully negotiated compliance agreement is a mutually agreed upon course of action that all parties want to see succeed. There is a common goal and all parties

are accountable to the public to achieve that goal. Because of the joint commitment to success, when technical difficulties are encountered, new compliance dates or solutions may be able to be established within the framework of the existing agreement. This would avoid repeating the same arguments and allows solutions to be quickly reached. Working toward a common goal makes DOE and the regulator allies and, therefore, changes their relationship from adversarial to cooperative.

To implement a compliance agreement an organization is needed just to track milestones and submilestones and prepare required submittals. (Milestones are very visible to the regulator and public). Choosing and applying appropriate treatment technologies may have to be expedited to satisfy milestones. Requiring expedited action will often be burdensome, yet it is an effective mechanism that demonstrates commitment and allows an atmosphere of understanding and cooperation between DOE and the regulator.

A PLAN FOR THE FUTURE

As a means for improving the Department's management of enforceable agreements, DOE is establishing a "Forum for Agreements". Both Headquarters and the Field Offices will be represented at the Forum which is expected to convene two or three times per year. The Forum will enhance DOE understanding of the environmental enforcement program and its implications on DOE operations, provide the opportunity to discuss lessons learned, develop negotiation skills, and discuss site-specific environmental compliance plans and programs.