

WHITE PAPER SUBMITTED TO DOE/NTP

The following is a copy of the “white paper” that was submitted to the DOE/NTPA from the contractors Packaging Management Council.

E.1 DOE PACKAGING MANAGEMENT COUNCIL

Standardized Criteria for Packaging Supplier Evaluations

E.2 BACKGROUND

Multiple DOE Contractors are performing redundant supplier evaluations for the procurement of packaging used for the shipment of DOT regulated hazardous materials including wastes.

Some of these shipments are not DOT regulated per se (i.e., may be below the DOT definition of RAM), but are sensitive shipments due to public concerns related to i.e., radioactive waste. The latter shipments may have additional packaging requirements such as disposal site package requirements, vibration, and stabilization of package contents. Recent PAAA violations and fines at DOE facilities were due to inadequate supplier evaluations for waste packages. As an example of packaging issues: the Fernauld incident in Kingman Arizona involved a shipment of radioactive waste that was not DOT regulated RAM, yet when the container leaked due to a combination of package (vibration) and solidification agent failure, the entire DOE complex was affected and the incident almost stopped the DOE radioactive waste disposal process. Operational impacts to DOE facilities would have been significant. This has resulted in an increased demand for assurance of qualified suppliers of containers.

There is no current standardization of the supplier evaluation process, or qualification standards for individuals performing these evaluations. In addition, the audits are generally geared toward specific containers needed by a DOE facility and do not include complex-wide needs.

Some suppliers may require a lot of oversight in the manufacturing process to ensure quality requirements are met. This oversight is necessary since many of the manufacturers are relatively small companies and significant deterioration in product quality has been observed in the period of a few months due to loss of qualified staff. A qualified company may be disqualified 4 months later, or may be qualified for one type of container and not another. A number of DOE sites have “resident” quality inspectors overseeing and approving the quality of containers manufactured. Some of the “inspectors could also be “shared”. DOE facilities that cannot “afford” this type of oversight may be at risk.

In addition, supplier qualification is generally only good for a specific manufacturing location since quality controls vary, in many cases significantly, from location to location.

Testing requirements also should be standardized since many tests are performed only if specified (and paid for) by the DOE the facility.

Need For Standardization

Standardization is needed to reduce redundancy in the process *and to provide consistency across the DOE complex, thus reducing liability.*

Recommendations

- It is recommended that DOE endorse the development of a standardized process for performing supplier evaluations and container procurement.
- *It is further recommended that DOE support routine supplier evaluations for selected vendors since significant changes in package quality can occur within a short period of time (over a few months) due to management and qualified staff (i.e., welders, QA staff) changes in the small companies that typically manufacture the specialty packages (Type containers, Type B containers, 4x4x7 Steel boxes, soft-sided containers).*
- *As a cost savings to the complex, it is recommended that DOE support routine audits performed by audit teams from various sites.*
- *It is recommended that DOE specify minimum recommended specification and testing requirements for containers, in particular waste containers.*
- *It is recommended that DOE support shared inspectors who “mark” DOE “accepted” containers to allow use by other DOE facilities.*
- *It is recommended that DOE develop package criteria to meet all DOE facility package needs such as the need for containers that provide long-term storage prior to ultimate shipment (years of storage in some cases)*

Qualifications

Individuals performing packaging supplier evaluation should be qualified as an auditor to a recognized standard, and should involve Subject Matter Experts who are trained and knowledgeable in the DOT hazardous materials regulations, *and other package requirements such as disposal site, facility-specific or long-term storage of nuclear material requirements.*

Sharing of information

A list of evaluated packaging suppliers or manufacturers, *at specific manufacturing locations, along with the package types they are qualified for,* is needed and should be placed on a qualified supplier’s list (QSL) *as well as SQIG.*

Benefits

- Reduced travel costs
- Consolidation
- Reduced redundancy of effort
- Consistency across the DOE complex*
- Reduced liability to DOE in using suspect products*
- OSL

Path Forward

It is recommended that the DOE/NTP develop a Management Plan to identify the path forward. The Management plan should include elements of a centralized packaging supplier evaluation program that includes a consensus listing of evaluated packaging suppliers, using the DOE MCEP as its model.

Contractors Survey

The DOE/NTP Packaging Management Council performed a survey of the major DOE Sites to gather data to better understand how packaging supplier evaluations are performed across the complex. Data from the results of that survey were used to establish this white paper and the justification for a centralized or common methodology for performing packaging supplier evaluations.

Summary

The current methodology for DOE Contractors performing packaging supplier evaluations is fragmented, non-coordinated, and non-integrated. A centralized process for performing these evaluations will reduce the overall effort to the DOE complex for performing these activities.