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Internal Letter

Rockwell International

Date · April 18, 1989

No. · WCP8-35

TO (Name, Organization, Internal Address)
· Those Listed

FROM (Name, Organization, Internal Address, Phone)
· C. D. Bretzke
· Waste Compl. & Plng.
· Building 750
· X7291

SUBJECT · ADMINISTRATIVE PLAN FOR OFFSITE SHIPMENT OF HAZARDOUS WASTE

This plan will provide an approved written record of the procedure to be used for shipping hazardous waste offsite for treatment/disposal. The primary purposes of this plan are to assure that all HS&E and Traffic concerns are addressed and that responsibilities for sampling, analyzing, and preparing shipments of hazardous wastes are clearly defined. This plan covers all nonradioactive hazardous/toxic and recycle liquids (excluding water recycle) and all nonradioactive solid hazardous/toxic waste.

Liquids

1. Each drum of liquid waste from anywhere other than a "no-risk" building (see Attachment #1) will have a gamma analysis to screen for plutonium, uranium and "exotic" isotopes. If anything is found above minimum detectable activity limits, the drum will be resampled. If the second analysis shows nothing above minimum detectable activity limits, a sample of the drum can be shipped to an offsite or onsite laboratory for plutonium and/or uranium analysis. If the second analysis identifies something above the minimum detectable limits, the following actions will be taken:

   a) Waste Operations (WO) will notify HS&E
   b) WO will notify the generator through a reject report
   c) WO, HS&E, generator will evaluate the finding
   d) the generator will develop a recurrence control action
   e) the drum will be analyzed by the onsite Analytical Labortory or considered low-level mixed waste and moved to the appropriate storage area.

2. The HS&E Laboratories will supply WO with a current list of the Minimum Detectable Activity (MDAs) for all gamma analyses. WO will compare the results of each analysis with the MDAs to determine if there is a detectable radioactivity. If the MDAs change, the HS&E Laboratory will provide WO with an updated list.

3. Each drum of liquid waste from anywhere other than a "no-risk" building will have an analytical analysis for plutonium and/or uranium (see Attachment #1) content. If the plutonium or uranium content is less than 0.01 pCi/g (including the error associated with the analysis), the drum of waste is considered nonradioactive and can be shipped offsite for treatment/disposal. If the plutonium or uranium content is greater than 0.01 pCi/g (including the error associated with the analysis) the following actions will be taken:

   a) If the error associated with the analysis caused the sample to be greater than 0.01 pCi/g, the drum will be reanalyzed. If the results

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of the second analysis (and new error) is less than 0.01 pCi/g, the drum is considered nonradioactive. If the results of the second analysis (and new error) is greater than 0.01 pCi/g it will be resampled or it is considered low-level mixed waste and will follow steps defined in 1.a - 1.d.

b) If the sample is greater than 0.01 pCi/g without adding the error associated with analysis, the drum resamled is considered low-level mixed waste and will follow steps defined in 1.a - 1.d.

4. The Analytical Laboratory (onsite or offsite) will provide Waste Operations the error associated with each sample. Waste Operations will add the error to the laboratory analysis to determine the level of radioactivity.

Solids

1. Radioactivity levels of capacitors containing polychlorinated biphenyls (PCBs) that are totally sealed will be determined by use of surface contamination surveys.

2. Radioactivity levels of solid wastes (combustibles, metal, glass, dirt, etc.) Waste Operations needs guidance from HS&E.

Semi-Solids

1. (Cleanup of new liquid spill outdoors), take a composite sample of 20% of the drums and analyze onsite for gross alpha content. If the analysis is less than 0.01 pCi/g (including the error associated with the analysis) the entire lot of drums are considered nonradioactive.

2. Miscellaneous (paint, electro-chemical milling sludge, etc.) Waste Operations needs guidance from HS&E.

Waste Operations	Traffic
General Laboratories	HS&E

Distribution

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G. L. Potter

ATTACHMENT A

Buildings for which no plutonium or uranium will end up in the waste and sampling is not necessary on a container-by-container basis:

331A	T452C	020	129	555
428B	T452D	060	130	556
T112A	T452E	061	131	558
T121A	T452G	100	250	661
T334B	T690A	111	333	662
T371A	T690B	112	335	663
T371C	T690C	113	428	675
T371D	T690D	114	429	900
T371F	T690E	115	442	920
T371G	T690F	119	443	931
T441A	T690G	120	549	987
T442A	T690H	121	551	988
T452A	T690M	124	552	933
T452B		127	553	995
		128	554	

Buildings from which all liquid wastes will have to be sampled for uranium contamination:

331	445	881 Maintenance
334	452	883
440	460	886
441	850	889
444	865	

Buildings from which all liquid wastes will have to be sampled for plutonium contamination:

371
374
700 complex
900 complex

Buildings from which all liquid wastes will have to be sampled for plutonium and uranium contamination:

123
125
559
664
881 Labs
371 Labs
All material from J. A. Jones

To: Those Listed
From: Rick Lawton

RE: Revision to HS&E Manual Chapter 21.01, "Guidelines for Disposition of Waste Liquids, Sludges, and Semi-solids"

Attached please find a preliminary draft of the revised HS&E Manual Chapter 21.01. Your review and comment on this draft is requested by July 10,1989. A "redlined" markup of your copy is adequate.

As many of you now know, the Department of Energy, Albuquerque Operations Office set a new standard for radioactivity in waste to be shipped offsite. The new standard is no detectable activity for Pu, Am, and U. An analysis of warehouse petroleum products and other waste forms has been conducted and is ongoing to try and define our abilities to detect "zero" activity. This has resulted in the test described in the revised Chapter.

The revised Chapter no longer is titled "Waste Processing", since that is no longer an appropriate function of HS&E or the HS&E Manual. This now simply discusses a method for determining with confidence whether or not a material contains detectable radioactivity. Soft waste is not included since there is no practical method to sample soft waste. A system of administrative controls will have to be developed for the control of radioactivity in soft waste. Solid waste, such as capacitors, are also not addressed at this time. These solid wastes will need to be evaluated by smearing or direct reading and tests will have to be develped for those.

Please send your marked up drafts to Farrel Hobbs of Environmental Management in Building 250. If you have any questions, call Farrel at x 7006.

Tim Elmont
Dwayne Hunter
Kathy Haagland
Mark Peters
Rick Roberts
Jim Lnagsted
Deanne Bretzke
Bob Baker
Billy Reynolds
Denny Weier