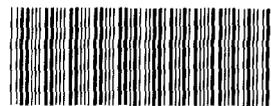


InterOffice Memo

To: S. R. GRACE
From: E.H. WILSON *EHW*
Date: January 21, 1993
Subject: ROLLINS ROTARY REACTOR TECHNOLOGY



000015568

Issue:

Is this technology suitable for consideration in the treatment of ER wastes at RFP?

DOE EM-50 has requested that EG&G RFP take the lead in the effort to assess the best available technology in high temperature treatment. This DOE EM-50 funded effort will occur in two phases;

- o Phase One- Perform a white paper study on BAT for High temperature Technologies. This is \$270K LOE-FY93
- o Phase Two- Perform a test burn at the Deer Park Texas facility using Pu and U surrogates to simulate mixed waste conditions. This is estimated as a \$2000K LOE -FY 94

Discussion:

EG&G feels that this high temperature treatment technology is worthy for consideration at this early stage in the feasibility study process. This high treatment technology has been applied elsewhere to soils, sludge, and organics in liquids.

The operable units that contain these soils and sludge in large quantities are shown in the attached table. These are estimated quantities based on historical data only.

References:

ASI of Albuquerque has submitted a draft Technical Task Plan for OTD EM-50 funding. This TTP and additional information of the Rollins Rotary Reactor were sent to you on 1/20/93.

DOCUMENT CLASSIFICATION
EXEMPT FROM
CLASSIFICATION OFFICE

A-SW-001828

CANDIDATE WASTES FOR HIGH TEMPERATURE TREATMENT		
		1/21/93
OU TITLE	CONTAMINATION in soils and sludges	Soil /Sludge Volumes
OU-1	Pu, AM, VOC, FUEL OIL	69, 787
OU-2	Pu, AM Pu, U, Organics, Metals	328549
OU-3	Pu, Am?	0
OU-4	Organics, nitrates, sulfates, metals, U	68969
OU-5	Nitrates, solvents, metals, Pu, U	269463
OU-6	Nitrates, solvents, metals, Pu,U	553280
OU-7	Solvents, tritium source?	
OU-8	acids, bases, caustics, fluorides. rads	38259
OU-9	acids, bases, caustics, fluorides. rads	125650
OU-10	Oils, VOC, low level rads	207396
OU-11	Chromates ?	347525
OU-12	Organics, caustics, low level rads	8550
OU-13	Fuel oil, caustics	238515
OU-14	VOC, Pu, low level rads	139339
total volume		2325495
NOTES:		
1.) LOW LEVEL RADS WILL BE ACCUMULATED AS PART OF THIS PROCESS IN RESIDUES AND EMISSIONS ASH		
2.) SEPERATION OF RADS WILL BE FRONT END PART OF THIS PROCESS		
3.) THROUGHPUT VOLUMES WILL BE ASSURED TO MAKE UNIT PROCESS COSTS EFFECTIVE.		
4.) SLUDGE INCLUDES SANITARY WASTES, GRANULAR ACTIVATED CARBON, FILTER SOCKS, AND OTHER TREATABILITY STUDY AND INTERIM REMEDIAL ACTION SECONDARY WASTE STREAMS.		