



## Department of Energy

Richland Field Office

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0032942  
Incoming: 9307052

OCT 29 1993

94-RPS-027

Mr. David C. Nylander  
Hanford Project  
State of Washington  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600



Dear Mr. Nylander:

### REQUEST FOR APPROVAL FOR ALTERNATIVE RELEASE DETECTION METHOD FOR SITE SERVICES PETROLEUM UNDERGROUND STORAGE TANKS

This letter is requesting approval for use of an alternative release detection method for petroleum Underground Storage Tanks (USTs) on the Hanford Site. The request pertains to USTs installed between 1980 through 1988, that store more than 2,000 gallons of petroleum products for non-emergency generators.

Washington Administrative Code (WAC) 173-360-345 requires that daily inventory control or other test of equivalent performance be performed on non-emergency petroleum tanks installed between 1980 through 1988, with a volume greater than 2,000 gallons, and that have not been updated to meet the new tank standards. The effective date for implementing WAC 173-360-345 for tanks affected by this request is December 22, 1993. The performance criteria for daily inventory control or other test of equivalent performance as specified in WAC 173-360-345(6)(a), is the ability to detect a release of at least one percent of flow-through, plus 130 gallons on a monthly basis.

Advantages associated with the alternative method include reduced labor costs associated with daily inventory control, and the reporting and response to smaller leaks in a shorter time period. Detecting smaller leaks in a shorter time period should result in reducing the amount of petroleum product leaked to the soil and groundwater and minimize the occurrence of a catastrophic leak.

The proposed alternative method is for using weekly tank gauging with a release detection of one percent flow-through, plus a supplemental volume. The suggested supplemental volume is the maximum volume change in gallons associated with a 1/8-inch tank level change on a weekly basis. The proposed alternative method is expected to be used for a duration of approximately one year since the affected tanks are scheduled to be removed over the next year by construction Project L-044. For your convenience, a table of the affected tanks, tank sizes and suggested supplemental volume for compliance has been provided.

Mr. David C. Nylander  
94-RPS-027

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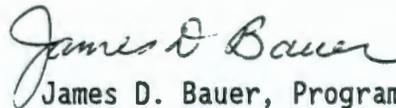
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TANK IDENTIFICATION NUMBER	TANK VOLUME (GALLONS)	MAX 1/8-INCH DEPTH CHANGE (GALLONS)	SUGGESTED SUPPLEMENTAL VOLUME (GALLONS)
1172-8	15,000	20.09	20.0
1172-10	15,000	20.09	20.0
1172-11	6,000	10.48	10.0
2713E-19	4,000	7.44	7.0
2713W-22	4,000	7.44	7.0
2713W-24	4,000	7.44	7.0

Applying the allowable regulatory monthly supplemental volume change of 130 gallons per month on a weekly basis would result in a value of 32.5 gallons per week (130 gallons per month/4 weeks per month). For each tank affected, the suggested supplemental volume change is more stringent than the allowable regulatory limit averaged on a weekly basis.

Should you have any questions, please contact Ms. A. L. Rodriguez on 372-0277.

Sincerely,



James D. Bauer, Program Manager  
Office of Environmental Assurance,  
Permits, and Policy

EAP:ALR

cc: J. J. Luke, WHC  
A. D. Poor, WHC

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Subject: REQUEST FOR APPROVAL FOR ALTERNATIVE RELEASE DETECTION METHOD FOR SITE SERVICES PETROLEUM UNDERGROUND STORAGE TANKS

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