



Department of Energy

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Mr. Toby Michelena
State of Washington
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504

SEP 6 1989



Dear Mr. Michelena:

DISCHARGE OF CHARACTERISTIC WASTES FROM THE 3705 AND 3746D PHOTOGRAPHY FACILITIES

This letter supplies written documentation of an investigation and subsequent decision made by DOE-RL concerning the management of hazardous waste in the Hanford 300 Area.

Samples of liquid effluent from the 3705 and 3746D Photography Facilities indicate that three of the discharges exceeded limits established under Washington Administrative Code (WAC) 173-303-090, "Dangerous Waste Characteristics." These liquid effluents were discharged to the 300 Area Process Sewer System. Discharges to the process sewer are routed to the 300 Area Process Trenches for final disposal.

The liquid effluent samples were collected during the period June to December 1988. The samples were analyzed by Hanford Environmental Health Foundation for two characteristics unique to these wastes, corrosivity and Extraction Procedure (EP) Toxicity for heavy metals.

The results of the grab samples indicated that waste Royalprint Activator and effluent from the C-41 Processor exceeded the WAC 173-303-090 limits for corrosivity and EP Toxicity for silver, respectively. These results are based on a single grab-sample of these effluents. The effluents had not been previously sampled or characterized for dangerous waste parameters.

In addition, the results of the four grab samples of effluent from 3746D silver recovery equipment indicate that this release exceeded the EP Toxicity limits for cadmium and silver. Other characteristics were well below the applicable limits.

Prior to review of the analytical results in March 1989, these effluents were routinely discharged to the 300 Area Process Sewer and Process Trench. Weekly composite samples collected at the 300 Area Process Trench weir box

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show that releases to the trench have been well below WAC 173-303-090 limits for corrosivity and EP Toxic heavy metals. These discharges have not caused a significant impact on the environment.

After a review of the analytical data from the photography shop discharges and the samples taken from the 300 Area trenches, a decision was made that these events did not meet the criteria of immediately reportable releases. After the previous decision was made, this letter was prepared for your agency. This letter contains all of the pertinent information concerning the investigation and the remedial actions that resulted from the study's conclusions.

The three effluents identified are no longer discharged to the 300 Area Process Sewer System. Spent Royalprint Activator is collected for disposal as Dangerous Waste. The C-41 Processor has been modified to prevent generation and discharge of regulated waste. The discharge from the processor has been tested to verify that releases are below the applicable limits. Effluent from the 3746D silver recovery equipment is collected and tested to determine appropriate disposal. Other equipment modifications and changes in operating procedures are being investigated to ensure that releases from the facilities are within applicable limits.

If you have any questions on this matter, please contact Mr. G. M. Bell, DOE-RL, at (509) 376-0680.

Sincerely,



R. A. Holten, Director
Safety and Environment Division

SED:GMB

cc: R. E. Lerch, WHC 
Paul Day, EPA

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