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**Pacific Northwest Laboratory
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IMPACT ASSESSMENT OF ADDITIONAL SAFEGUARDS AND
SECURITY CONTROLS ON SELECTED NUCLIDES

CONTRACT

PROJECT NO.

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Name	Approved	Date
DD Scott	<i>[Signature]</i>	10-11-84
BJ Merrill	<i>[Signature]</i>	10-11-84
RR King	<i>[Signature]</i>	10-11-84

PNL-D-376

Pacific Northwest Laboratories
P.O. Box 999
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Telephone (509) 375-2892
Telex 15-2874

October 11, 1984

Mr. T. R. Fitzsimmons, Assistant Manager
Safety, Safeguards and Quality Assurance
U. S. Department of Energy
Richland Operations Office
Richland, Washington 99352

Dear Mr. Fitzsimmons:

IMPACT ASSESSMENT OF ADDITIONAL SAFEGUARDS AND SECURITY
CONTROLS ON SELECTED NUCLIDES

Ref: Letter, T. R. Fitzsimmons to Contractors, "Additional Safeguards
and Security Controls on Selected Nuclides," dated 9/25/84.

Battelle, Pacific Northwest Laboratory (PNL), has reviewed the current
and projected inventory quantities of the "Selected Nuclides" in the
reference letter and completed a quick assessment of the impacts of
additional safeguards and security controls. The areas that will be
impacted are addressed individually below:

PHYSICAL PROTECTION

No upgrading of the physical protection of facilities is foreseen
under the category quantities described in the reference letter.
Any of the PNL facilities that could reasonably be anticipated to
reach Category II quantities of the selected nuclides are already
Category II facilities.

MEASUREMENT SYSTEMS

PNL is unable to fully address the impacts of measurements for all
of the selected nuclides due to their uniqueness. At the present
time it is unclear how all of the nuclides will be measured.

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Mr. T. R. Fitzsimmons
October 11, 1984
Page - 2

MANUAL REVISIONS

\$ 8 K

PNL-MA-5, Nuclear Materials Management and Safeguards Procedures will need to be revised to cover the additional nuclides. It is anticipated that revisions to a couple of other PNL manuals will be needed, i.e. PNL-MA-6 - Radiation Protection, and PNL-MA-25 - Criticality Safety.

COMPUTER SYSTEM REVISIONS

\$135.00

PNL's accountability program will need to be revised to accommodate two of the selected nuclides (^{234}U and ^{242}Am).

CALCULATIONS FOR EXISTING INVENTORY

\$500.00

PNL will need to calculate the current inventory of ^{241}Am from the decay of the plutonium inventories.

TRAINING

\$ 3 K

All of the Primary and Alternate Material Balance Area Custodians will need to receive additional training.

If you have any further questions, please call Mr. D. D. Scott on 375-2816.

Very truly yours,

A handwritten signature in cursive script that reads "Charles L. Simpson".

Charles L. Simpson, Manager
Human Resources and Support Services

CLS:mt