

Office of Compensation Analysis and Support Program Evaluation Report	Document Number: OCAS-PER-010 Effective Date: 4/13/2007 Revision No. 0
The Effect of Rocky Flats Neutron Dose Reconstruction Project Data	Page 1 of 2
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ISSUE AUTHORIZATION DATE	EFFECTIVE DATE	REV. NO.	DESCRIPTION
4/13/2007	4/13/2007	0	New document to report the impact of data received from the Rocky Flats Plant Neutron Dose Reconstruction Project.

1.0 Description

Neutron doses at Rocky Flats were re-evaluated as part of the Rocky Flats Neutron Dose Reconstruction Project (NDRP). These records were provided to OCAS as part of the individual dosimetry records. The application of the NDRP data to dose reconstructions is described in ORAUT-OTIB-0050, Rev. 00.

2.0 Evaluation

Additional neutron doses resulting from the efforts of the Rocky Flats NDRP made it necessary to evaluate dose reconstructions that were already completed. The NDRP was initiated to re-evaluate some of the original neutron dosimetry results due to issues involving the interpretation of the original neutron films. The cases requiring revision concern workers at the plutonium production facility for the period from 1952 through 1969, when workers were monitored for neutrons using NTA films. The additional neutron dose data may cause an increase or decrease in the assigned external dose resulting in a change in the probability of causation (POC).

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3.0 Resolution/Corrective Action

Guidance on the use of the Rocky Flats NDRP data for dose reconstructions can be found in ORAUT-OTIB-0050 Rev. 00, issued December 13, 2005. All dose reconstructions for the Rocky Flats plant completed after August 31, 2005 already include the NDRP data, but the previously completed claims must be re-evaluated. The ORAU team conducted a query of previously completed claims for the Rocky Flats Plant whose probability of causation was less than 50% and NDRP data was obtained. The query identified 98 such claims. Six of these were subsequently returned to OCAS for other reasons. These will be revised using the NDRP data. Four claims had already been evaluated for a change to lymphoma target organ (OCAS-PER-009) and resulted in a POC greater than 50%.

The remaining 88 claims were re-evaluated using the NDRP data and currently approved procedures. All 88 claims remained below 50% POC. The POC increased in 21 of these cases and decreased in the remaining 67 cases. The decreases were primarily the result of reducing overestimating assumptions previously used. An itemized list has been provided to DOL containing the final evaluation result for each of the 88 claims.

4.0 Reference

- 1) ORAU Team, Technical Information Bulletin: Use of Rocky Flats Neutron Dose Reconstruction Project Data in Dose Reconstructions, ORAUT-OTIB-0050 Rev 00 (12/13/2005).