

Evaluation of 32 Additional INL Claims for the SEC00219 Proposed Class Definition

W.M. Findley and T. D. Taulbee

Introduction

In March 2015, NIOSH presented a Special Exposure Cohort (SEC) recommendation to the Advisory Board on Radiation and Worker Health (ABRWH) for the Idaho National Laboratory following the evaluation of SEC petition 00219. The recommendation was to add a class of workers to the SEC who were potentially exposed to plutonium and other actinides during their employment at the Idaho Chemical Processing Plant (CPP) from January 1963 through December 1974. The ABRWH questioned the ability of NIOSH/DOL/DOE to identify workers who worked at CPP during this time period. Since March, NIOSH has followed up on the availability and completeness of dosimetry records and presented an analysis at both the July 2015 and the November 2015 meetings of the ABRWH. The only remaining issue raised by the ABRWH was the follow-up of the 881 claimants who worked at INL during the 1963 through 1974 time period to determine whether they should be part of the SEC.

By October 2015, NIOSH had reduced the number of claims requiring further follow-up to 7 claims. SC&A identified 11 additional workers that needed follow-up based on their independent analysis. Thus a total of 18 of the 881 workers required further follow-up. The follow-up was required because the dosimetry records for these individuals were incomplete. In the beginning stages of the EEOICPA program, the INL site in agreement with NIOSH and DOL instituted an efficiency measure such that only annual doses were reported if the worker had less than 500 mrem lifetime total exposure. As a result, for workers with little external exposure only annual data was available and the location information was not reported. During this follow-up, the full dosimetry record which includes the location information was requested and received from the site.

In December 2015, NIOSH issued a paper describing the results of the follow-up investigation on the 18 claims which had not been resolved. A total of three claims were not resolved using full dosimetry records and DOL files. Two of those three cases were resolved during a January 2016 data capture trip in which CPP temporary badges were found for two of the three

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unresolved claims. This left just one claims requiring additional follow-up with 880 of 881 claims resolved for CPP dosimetry.

At the March 1, 2016 INL Work Group meeting NIOSH and SC&A were tasked with reviewing “new” claims (claims received since the original 881 claims reviewed were identified in April 2015). Thirty two claims were identified at that time. This report provides the conclusions from the review of those 32 claims. It should also be noted that at the March 23-24, 2016 ABRWH meeting, the portion of the proposed SEC class for those workers were who monitored for external radiation at INL (e.g. at least one film badge or TLD dosimeter) between March 1, 1970 and December 31, 1974 with an aggregate of at least 250 working days was approved.

Methods

During this analysis, a wide range of sources (dosimetry from DOE monitoring files, DOL employment records, Computer Assisted Telephone Interviews (CATIs), bioassay, and visitor badge reports) were reviewed and evaluated. Conclusions on the presence at the Chemical Processing Plant (CPP) during the SEC covered period for each case varied greatly in the level of difficulty to resolve. In some cases direct evidence of monitoring at CPP clearly put the individual at CPP during the covered period and are therefore part of the Special Exposure Cohort. In other cases, a weight of evidence was used since the absence of dosimetry at CPP may not be a clear indicator to some of SEC exclusion. In some cases monitoring at another radiological area at INL during the SEC time period was used to place the worker outside of CPP during the covered period.

Since these workers all had some indication of work at CPP either through the CATI or other sources, hence the uncertainty to begin with, the focus of this evaluation was on verification of monitoring at CPP and the time period involved. Through evaluation, several individuals are considered to be excluded from the SEC as their work at CPP was outside of the SEC time period. Overall, significant investigative work and some professional judgement were used to resolve the status of the follow-up cases.

Results

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The detailed results of the thirty two claims reviewed are provided in Attachment A. A summary table is provided below.

Case Number	Claim Number	Occupation	CPP Dosimetry
1	[redacted]	Pipefitter	Yes
2	[redacted]	Roofer	Yes but outside of SEC period
3	[redacted]	Technical Writer	Yes
4	[redacted]	Sheetmetal Worker	Yes
5	[redacted]	Heavy Equipment	No
6	[redacted]	Engineer	No
7	[redacted]	Mason	Yes
8	[redacted]	Engineer	Yes but outside of SEC period
9	[redacted]	Helper	Yes
10	[redacted]	Material Handler	Yes
11	[redacted]	Engineer	No
12	[redacted]	Painter	No
13	[redacted]	Chemical operator	Yes
14	[redacted]	Reactor operator	No
15	[redacted]	Operator	Yes
16	[redacted]	Operator	Yes
17	[redacted]	Laborer	Yes
18	[redacted]	Project Engineer	No
19	[redacted]	Bus Driver	No
20	[redacted]	Operator	No
21	[redacted]	Mechanic Inspector	Yes but outside of SEC period
22	[redacted]	Time Keeper	Yes
23	[redacted]	Manager	Yes but outside of SEC period
24	[redacted]	Security Guard	Yes but outside of SEC period
25	[redacted]	Electrician	Yes but outside of SEC period
26	[redacted]	QA Engineer	No
27	[redacted]	Reactor operator	Yes but outside of SEC period
28	[redacted]	Ironworker	Yes
29	[redacted]	Project Control	No
30	[redacted]	Electrician	No
31	[redacted]	Telephone Installer	No
32	[redacted]	Maintenance	Yes

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Conclusions

All but one of the thirty two INL claims that were reviewed were deemed to require no additional follow-up to definitively determine whether they should be part of the Special Exposure Cohort. Only claim number [redacted] was considered indeterminate due to the lack of individual dosimeter results.

The other claim ([redacted]) that has not been fully resolved from the original 881 is believed to be the result of a potential error (typographical or other) in the location for the individual. The individual worked out of central facilities and appears on multiple temporary badge reports for SPERT, MTR, and ETR from 1963 through 1966. The claimant's 1967 whole body count lists CPP but the individual was not listed on the CPP temporary badge reports. Since the maximum wear duration of a temporary badge was approximately one month with most being one to two days and occasionally a week, NIOSH is confident that the individual did not work at CPP for 250 days or more even if the WBC location is correct as that would require a minimum of 12 missing temporary badges. The temporary badge rosters appear to be complete based on a comparison with monthly dosimetry reports.

To date 913 claims have been reviewed to determine the efficacy of using external dosimetry to determine inclusion in the Special Exposure Cohort. Overall, NIOSH has come to complete closure on 911 of the 913 (99.9%) reviewed claims. There were no instances found during this review where a claimant worked at CPP without evidence of CPP dosimetry.

References

The primary reference source for each evaluation was the individual's claimant files as provided by the Department of Labor (DOL) and the Department of Energy (DOE).

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Attachment A
External Dosimetry Records for 32 Evaluated INL Claims

[redacted]

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