
Phillip Schofield, Chair, INL/ANL-W Work Group

To the Advisory Board on Radiation and Worker Health

August 26–27, 2020
Background

- SEC Petition 238 enacted through the 83.14 process
- Class definition: energy employees entering the Chemical Processing Plant (CPP) at Idaho National Laboratory (INL) 1975–1980
- Class definition requires at least one external dosimeter specifically associated with CPP
- Presented to the Advisory Board on August 23, 2017
INL/ANL-W Work Group concerns

- External dosimetry requirement similar to SEC-00219 (1963–1970 at CPP)
- Temporary badges not originally included in claimant dosimetry records
- Significant 2016 coding effort by INL/DOE to enter hardcopy records of temporary badges into INL dosimetry indexing system
- Key question: Are the temporary badges correctly included in the claimant dosimetry records for SEC adjudication?
Verification and validation approach

- Identify a group of claimants in NIOSH captured records who are missing temporary badges in previously supplied INL/DOE dosimetry files.
- 37 claimants selected by SC&A, which included 736 individual temporary badges.
- Request updated radiation records from INL/DOE to verify temporary badges are correctly associated with the claimants.
- Secondary resource also considered in V&V, known as NIOSH “hot-linking.”
## Verification and validation results

<table>
<thead>
<tr>
<th>Category</th>
<th>Total number</th>
<th>Percent of SC&amp;A total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Badges identified by SC&amp;A for V&amp;V evaluation</td>
<td>736</td>
<td>N/A</td>
</tr>
<tr>
<td>V&amp;V badges identified by INL/DOE via standard request process</td>
<td>602</td>
<td>82%</td>
</tr>
<tr>
<td>V&amp;V badges identified by NIOSH via the “hot-linking” process</td>
<td>613</td>
<td>83%</td>
</tr>
<tr>
<td>Combination of INL/DOE- and NIOSH-identified V&amp;V badges</td>
<td>682</td>
<td>93%</td>
</tr>
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Key take-aways

- Two of 37 reviewed claims did not contain the V&V badges identified by SC&A in the INL/DOE-provided dosimetry records.
  - SC&A was unable to determine the root cause for the omissions by INL/DOE.
  - NIOSH hot-linking process successfully identified 90% and 100% of the badges for these two cases.

- One additional reviewed claim did not contain the V&V badges due to a mistake in social security number used by INL/DOE (NIOSH “hot-linking” not performed for this claim).

- Thirty-six of 37 reviewed claims contained at least one of the SC&A-identified badges to allow for SEC inclusion.
Conclusion

- Results of V&V study discussed at July 16, 2020, INL/ANL-W Work Group teleconference.
- Work Group determined that the process is sufficient that claimants are unlikely to be inadvertently missed by the class definition.
- Work Group recommendation: The SEC-00238 dosimetry requirement is sufficient and does not need modification.