

SEC-00238: Verification and Validation of Temporary Badges at the Chemical Processing Plant (1975–1980)

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To the Advisory Board on Radiation and
Worker Health

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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

Category	Total number	Percent of SC&A total
Badges identified by SC&A for V&V evaluation	736	N/A
V&V badges identified by INL/DOE via standard request process	602	82%
V&V badges identified by NIOSH via the “hot-linking” process	613	83%
Combination of INL/DOE- and NIOSH-identified V&V badges	682	93%

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.



Questions?