

SEC-00238: Idaho National Laboratory – Chemical Processing Plant – Verification and Validation of Class Definition (1975–1980)

Presented by:
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Introduction and Background SEC Petition-00238

- As part of the 83.14 process, NIOSH presented SEC-00238 to the Advisory Board on July 20, 2017, for the Chemical Processing Plant (1975–1980)
- Proposed Class Definition:

*“All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at the Idaho National Laboratory (INL) in Scoville, Idaho, **and who were monitored for external radiation at the Idaho Chemical Processing Plant (CPP) (e.g., at least one film badge or TLD dosimeter from CPP)** between January 1, 1975 and December 31, 1980 for a number of work days aggregating at least 250 work days, occurring solely under this employment, or in combination with work days within the parameters established for one or more other classes of employees in the Special Exposure Cohort.” [Emphasis added.]*

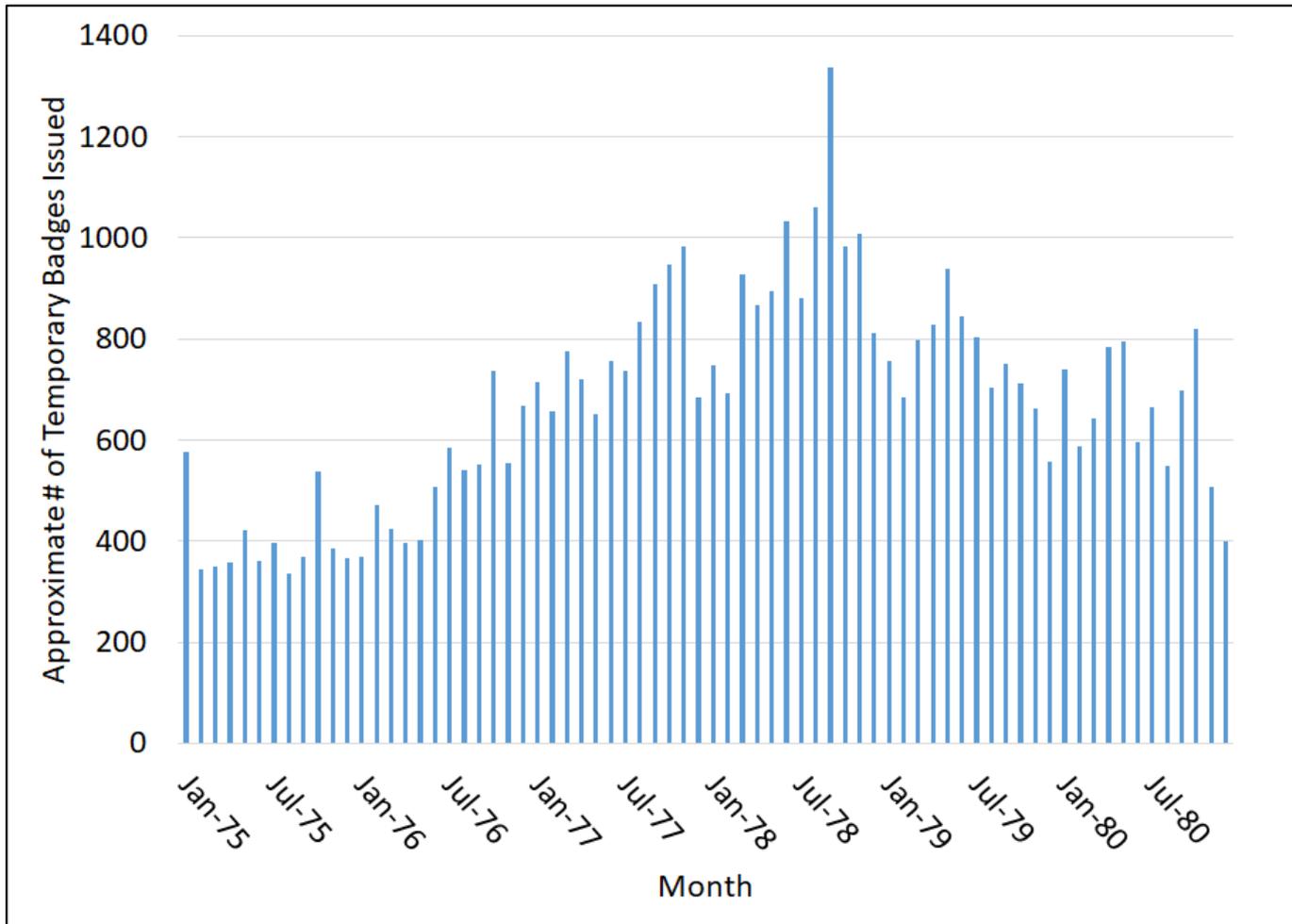
Introduction and Background SEC Petition-00238 (cont.)

- Similar to SEC-00219 for CPP (1963–1970), concerns remained about the requirement for CPP-specific badging
- SC&A was tasked with reviewing badging practices during the 83.14 period (1975–1980) and developing a similar verification and validation (V&V) approach as the SEC-00219 evaluation (delivered February 20, 2018)
 - SC&A 2018 Report Findings 1 and 2: Discovered that temporary badges captured by NIOSH were incomplete but were likely still in hardcopy form at INL.
 - September 2018: NIOSH, in conjunction with SC&A, performed an onsite data capture at INL records facility and captured the hardcopy temporary badges.

V&V Proposal Development: Completeness of Captured Temporary Badges

- Documentation has not been identified that tabulates the number of visitor badges issued in a given dosimetry cycle.
- Evaluation of completeness was restricted to looking for temporal gaps in the captured records.
- Number of captured visitor badges counted based on the issue date of the badge.
- Results did not indicate significant temporal gaps, though significant fluctuation among months was observed.

V&V Proposal Development: Completeness of Captured Temporary Badges (cont.)



V&V Proposal Development: Claimant Selection

- Method of selecting claimants closely mirrors SEC-00219 V&V analysis:
 - Diversity of job classification
 - Total number of temporary badges available for V&V
 - Will require a revised dose reconstruction
 - Potential for 250 days of SEC exposure to be missed if 83.14 temporary badges are not correctly identified

V&V Proposal Development: Claimant Selection (cont.)

- SC&A V&V proposal suggests 30 for updated dosimetry records requests (consistent with SEC-00219):
 - 639 total visitor badges identified among the 30 suggested V&V claims.
 - Job categories included: engineers, administrative personnel, laboratory workers, and various construction trades.
- 7 additional claims (representing 105 total visitor badges) were evaluated as part of the SEC-00219 V&V analysis (1963–1970).
 - Additional claims could be used in this study to augment the 30 suggested claims.
 - Would not require further effort from INL/DOE to perform dosimetry records searches.

Summary of V&V Proposal

- Completeness of temporary badges limited to identification of temporal gaps rather than a monthly comparison of total badges issued and total badges available.
- SC&A has identified 30 claims that are suggested for updated dosimetry records requests (639 total temporary badges for V&V analysis).
- 7 additional claims from the prior SEC-00219 V&V analysis are available for evaluation with no additional records requests required (105 total temporary badges for V&V analysis).
- In total, proposed V&V evaluation would cover 37 claimants and 744 individual temporary badges.

Work Group Recommendations and/or Path Forward

- INL/ANL-W Work Group met via teleconference on March 25, 2019.
- Work Group elected to move forward with the V&V evaluation and records requests from INL/DOE to follow in increments similar to SEC-00219 process.
- Similar cover letter from SEC-00219 to be used in records requests to assure updated searches are performed and avoid INL/DOE mistakenly resending past incomplete dosimetry searches.



Questions?