
Draft

**SC&A EVALUATION OF IDAHO CHEMICAL PROCESSING
PLANT CLASS DEFINITION REQUIRING EVIDENCE OF
EXTERNAL DOSIMETRY (1963–1974)**

Contract Number 211-2014-58081

Revision 1

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Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 2 of 7
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S. COHEN & ASSOCIATES: <i>Technical Support for the Advisory Board on Radiation & Worker Health Review of NIOSH Dose Reconstruction Program</i>	Document No.: Evaluation of CPP Class Definition
	Effective Date: Draft – July 15, 2015
	Revision No. 01 (Draft)
SC&A Evaluation of Idaho Chemical Processing Plant Class Definition Requiring Evidence of External Dosimetry (1963–1974)	Page 2 of 7
Task Manager: _____ Date: _____ John Stiver, MS, CHP	Supersedes: Rev, 0
Project Manager: _____ Date: _____ John Stiver, MS, CHP	Reviewer(s): John Mauro Joseph Fitzgerald John Stiver

Record of Revisions

Revision Number	Effective Date	Description of Revision
0 (Draft)	06/29/2015	Initial issue
1 (Draft)	07/15/2015	Report has been revised to reflect new information on recently discovered supplemental dosimetry records for the Chemical Processing Plant and the revised class definition as presented by NIOSH on July 8, 2015.

The Executive Summary for this report has been reviewed for compliance with the Privacy Act of 1974 (42 U.S.C. § 7348n(3)(A)) and has been cleared for distribution. However, the body of this report is predominantly information protected by the Privacy Act, and therefore not readily available for proactive release. Individuals may obtain this document by submitting a document request to the Designated Federal Official for the Advisory Board on Radiation and Worker Health:

Theodore Katz, Designated Federal Officer, NIOSH, CDC, 1600 Clifton Road, N.E., MS E-20, Atlanta, Georgia 30333, telephone: (513)533-6800, toll free: 1-800-CDC-INFO, e-mail: dcas@cdc.gov.

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Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 3 of 7
----------------------------------	----------------------------	---	---------------------

TABLE OF CONTENTS

Acronyms and Abbreviations4

Executive Summary5

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Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 4 of 7
----------------------------------	----------------------------	---	---------------------

ACRONYMS AND ABBREVIATIONS

ABRWH or Advisory Board	Advisory Board on Radiation and Worker Health
AEC	Atomic Energy Commission
CDC	Centers for Disease Control and Prevention
CFA	Central Facility Area
CFR	<i>Code of Federal Regulations</i>
CPP	Chemical Processing Plant
DCAS	Division of Compensation Analysis and Support (formerly Office of Compensation Analysis and Support (OCAS))
DFO	Designated Federal Officer
INL	Idaho National Laboratory
MTR	Material Test Reactor
NIOSH	National Institute for Occupational Safety and Health
NOCTS	NIOSH OCAS Claims Tracking System
SC&A	S. Cohen & Associates (SC&A, Inc.)
SEC	special exposure cohort
TLD	thermoluminescent dosimeter

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Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 5 of 7
----------------------------------	----------------------------	---	---------------------

EXECUTIVE SUMMARY

The National Institute for Occupational Safety and Health (NIOSH) released the Special Exposure Cohort (SEC) Petition Evaluation Report for SEC-000219 for the Idaho National Laboratory (INL) on March 12, 2015. On March 25, 2015, NIOSH/Division of Compensation Analysis and Support (DCAS) presented the Petition Evaluation Report at the 104th meeting of the Advisory Board on Radiation and Worker Health, which took place in Richland, Washington. NIOSH recommended the following class definition of workers for inclusion to the SEC class:

All employees of the Department of Energy, its predecessor agencies, and their contractors and subcontractors who worked at Idaho National Laboratory in Scoville, Idaho, and 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, 1963 and December 31, 1974 for a number of work days aggregating at least 250 work days, occurring either 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.
(NIOSH 2015a)

At that time, the Advisory Board expressed concern as to the high level of confidence that is required to assure that class definition would not inadvertently exclude claimants who may have been exposed at the Chemical Processing Plant (CPP), but for whom dosimetry records are not available (see ABRWH 2015, pp. 187–210). SC&A was then tasked by the Advisory Board to investigate available dosimetry records in order to assess the validity of the class definition, as proposed by NIOSH. SC&A released their review of the class definition on June 29 (SC&A 2015) and presented their findings to the Work Group on July 8, 2015. At that meeting, NIOSH revised their proposed class definition as follows:

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 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, 1963 and February 28, 1970 or who were monitored for external radiation at INL (e.g., at least one film badge or TLD dosimeter) between March 1, 1970 and December 31, 1974 for a number of work days aggregating at least 250 work days, occurring either 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.
(NIOSH 2015b)

Additionally, NIOSH presented new information recently obtained from the Department of Energy (DOE) regarding dosimetry records at the CPP, which had recently been discovered. These records represent a significant increase in the available monitoring data for CPP workers and affected revisions in the Finding 2 from Rev. 0; however, at the July 8, 2015, INL Work Group meeting, NIOSH indicated that it does not expect to receive the full data set for several weeks. Thus, this report is an interim update to Rev. 0, which was delivered to the Work Group

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Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 6 of 7
----------------------------------	----------------------------	---	---------------------

on June 29, 2015, and is prepared principally to inform the Advisory Board at the July 23, 2015, meeting in Idaho Falls, Idaho. It presents an update to SC&A’s original evaluation (SC&A 2015) of the available records in the context of the requirements of the SEC class definition. After the new data are available and SC&A has reviewed them, we will prepare a final revision (Rev. 2) to this report.

Based on our original review and our assessment of the new data that NIOSH presented at the July 8, 2015, Work Group meeting, SC&A has the following two findings and one observation.

Finding 1: The dosimetry records contained in the NIOSH/OCAS Claims Tracking System (NOCTS) are not sufficient to accurately determine if a given claimant worked at the CPP (and thus qualifies for the SEC) for at least some workers, due to the absence of external dosimetry records designating the area worked.

Finding 2: Based on the evaluation of available claimant records, a portion of the supplementary dosimetry records, and claimant-specific dosimetry recently provided by DOE, SC&A was able to find “at least one” dosimetry badge for all claimants reviewed who had direct evidence of work at the CPP. However, SC&A is not able to evaluate the completeness of the full set of supplemental records until such a time as all CPP-related external monitoring (January 1, 1963–February 28, 1970) and INL external monitoring (March 1, 1970–December 31, 1974) is provided to NIOSH and the Board.

Observation 1: SC&A did not find any evidence that work locations provided in available area dosimetry cycle reports were contradicted by other work location-specific information contained in the claimant records. In nearly every instance, the areas specified in the dosimetry records comported perfectly with alternate information. The only exceptions were for two sampled claimants who submitted bioassay results that indicated “CFA,” while the dosimeter results indicated “MTR” (see Appendix C: C.6 and C.11).

SC&A Recommendation: It is SC&A’s opinion that the probability of a claimant being excluded from the SEC class based on absence of dosimetry records when, in fact, they worked in CPP is low. This is particularly true for Atomic Energy Commission (AEC) and prime contractor employees. However, the complete set of dosimetry records for subcontract and/or construction trades workers has not yet been received from INL. An evaluation of the completeness of these supplemental dosimetry records would appear to be warranted when they become available.

SC&A believes that it would be instructive to conduct focused interviews with intermittent or transient subcontractors and trades workers to help determine if the policy of badging individuals entering relevant areas was universal for all workers and periods. Additionally, it would be pertinent to ascertain what subcontractors supported radiological work activities at CPP (company identity and rosters) as a basis for whatever class definition is defined for the SEC.

Finally, it will be important to validate the DOE records search process through appropriate focused searches of CPP workers who appear to be lacking primary and supplemental records in

Effective Date: July 15, 2015	Revision No.: 1 (Draft)	Document No.: Evaluation of CPP Class Definition	Page No.: 7 of 7
----------------------------------	----------------------------	---	---------------------

the current dataset. This will help assure that all relevant claimants are correctly identified should the full set of dosimetry records be deemed complete.

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