NIOSH Response to "Supplemental SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant"

Response Paper

National Institute for Occupational Safety and Health

June 6, 2025

Joe Guido, CHP
Angela Palau
Pat McCloskey, CHP, CIH
Oak Ridge Associated Universities Team (ORAUT)

Reviewed by
Madeline Cook
Brant Ulsh, Ph.D., CHP
Division of Compensation Analysis and Support (DCAS)

INTRODUCTION

This Response Paper provides the NIOSH responses to the four new observations documented in the *Supplemental SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant* (*Supplemental Review*) [SC&A 2025].

Background

NIOSH completed the SEC-00256 *Pinellas Plant Special Exposure Cohort (SEC) Petition Evaluation Report* (ER) [NIOSH 2021] on October 13, 2021.

To date, SC&A has provided two written reviews related to the Pinellas ER:

1. The first SC&A review was documented in *Interim SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant* [SC&A 2023], which identified 13 observations from evaluation of the ER and the 1990 Tiger Team Assessment [DOE 1990].

   NIOSH responded to these observations in *NIOSH Response to "Interim SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant"* [NIOSH 2023]. The majority of the observations did not require a response. However, to address Observations 2, 3, and 5, NIOSH committed to incorporating new text in the next revision of the technical basis document (TBD) ORAUT-TKBS-0029-5 *Pinellas Plant – Occupational Internal Dose* [ORAUT 2016].

2. The second SC&A review was presented in *Supplemental SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant* [SC&A 2025], which identified four additional observations (numbered 14 through 17). SC&A produced this document as tasked by the Pinellas Work Group (WG) on November 20, 2023 "to evaluate newly received petitioner material, respond to areas of particular WG concern, continue identifying and examining other relevant documents, and issue a review report to supplement the initial review report" [SC&A 2025, PDF p. 7]. In addition to the new observations, SC&A summarized the 13 observations and NIOSH responses presented previously.

SC&A notes that "evaluating the ER remains a moving target with the final decision coming from the Advisory Board in Radiation and Worker Health (ABRWH, "Board"), so it is expected that this [supplemental] report does not represent the final evaluation of the validity of NIOSH's claims in the ER" [SC&A 2025, PDF p. 7].

DISCUSSION

In their *Supplemental Review* [SC&A 2025], SC&A provides four additional observations (numbered 14 through 17).

In addition, Section 5 of the *Supplemental Review* [SC&A 2025] summarizes SC&A's original 13 observations from the *Interim Review Report* [SC&A 2023] and provides the NIOSH responses [NIOSH 2023] to each. SC&A notes "Several of NIOSH's responses relate to commitments to revise the occupational internal dose TBD (ORAUT, 2016); SC&A reserves its further assessments until the revised TBD is available for review" [SC&A 2025, PDF p. 12].

The discussion below responds to each of the new observations (14 through 17) from the *Supplemental Review*. No additional response is provided for Observations 1 through 13, as no additional commentary is provided by SC&A.

SC&A Observation 14: No additional sources of radiation exposure found

SC&A [2025, PDF p. 10] indicates that:

> *SC&A examined other documents since its June 2023 interim review report and has not found any additional sources of radiation exposure or intakes that would require extra monitoring measures be taken other than those that would have been used to monitor for radiation exposure from sources already known to be at Pinellas. Additionally, SC&A reviewed government contracts that could possibly have introduced new or different radiation sources at Pinellas and did not identify any required additional or new monitoring practices...*
>
> **NIOSH Response**: NIOSH concurs. No response required.

SC&A Observation 15: Radiation monitoring is sufficient

SC&A [2025, p. 10] indicates that:

> *…after issuing the interim review report in June 2023, SC&A conducted further research using documents for transuranic radionuclide sampling. SC&A located urinalysis bioassays, air sampling, and environmental sampling for plutonium (Pu)-238 and Pu-239 during the plant's operating period. SC&A analyzed the data from approximately 100 samples for indication of the potential for workers' intakes above normal background exposures and fallout concentrations. This analysis did not indicate elevated sample levels coming out of the stack scrubbers, nor the uptake or the potential for uptake of plutonium or other transuranic radionuclides arising from plant operations.*
>
> **NIOSH Response**: NIOSH concurs. No response required.

SC&A Observation 16: Examination of contracts indicated no additional health physics monitoring required

SC&A [2025, p. 11] indicates that:

> *SC&A did not find anything unusual or likely new to the Pinellas site in these contracts, considering that Pinellas handled tritium and neutron-producing devices routinely as part of its main product line. The documents did not directly address radiation exposures from these projects, but there were no potentially abnormal or unusual external and internal exposure conditions identified that normal Pinellas health physics monitoring would not have covered during standard practices such as the bioassay, external badging, and area contamination/air survey programs.*
>
> **NIOSH Response**: NIOSH concurs. No response required.

SC&A Observation 17: Petitioner documents provide background information

SC&A [2025, PDF p. 17] indicates that:

> *SC&A examined all the documents submitted by the Pinellas Authorized Petitioner Representative. The general impression is that many of them are either nontechnical, do not contain new and relevant information related to dose reconstruction at Pinellas and assessment of the ER, or are duplicates or repetitious. However, some of them give a deeper background understanding of activities at the plant, which can help interpret and clarify other documents and dose reconstruction guidance. SC&A is continuing to look deeper into some of the documents but has not yet identified any that suggest that doses cannot be bounded by the information available to NIOSH for dose reconstruction.*
>
> **NIOSH Response**: NIOSH concurs. No response required.

CONCLUSION

NIOSH concurs with the four observations in *Supplemental SC&A Review of the SEC Petition Evaluation Report for Petition SEC-00256: Pinellas Plant* [SC&A 2025] and notes no response is required.

REFERENCES

DOE [1990]. Tiger Team assessment of the Pinellas Plant. Washington, DC: U.S. Department of Energy, Assistant Secretary for Environment, Safety and Health. DOE/EH-0126, May. [SRDB Ref ID: 46090]

SC&A [2023]. Interim SC&A review of the SEC petition evaluation report for petition SEC-00256: Pinellas Plant 2023 - draft. Arlington, VA: SC&A. SCA-TR-2023-SEC001 Rev. 0, June 16. [SRDB Ref ID: 198062]

SC&A [2025]. Supplemental SC&A review of the SEC petition evaluation report for petition SEC-00256: Pinellas Plant 2025 - draft. Arlington, VA: SC&A. SCA-TR-2025-SEC001 Rev. 0, April 17. [SRDB Ref ID: 206777]

NIOSH [2021]. Special exposure cohort petition evaluation report petition SEC-00256 rev. 0 Pinellas Plant qualified October 20, 2020. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. Petition SEC-00256, October 13. [SRDB Ref ID: 190456]

NIOSH [2023]. NIOSH response to "Interim SC&A review of the SEC petition evaluation report for petition SEC-00256: Pinellas Plant" 2023. Cincinnati, OH: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Institute for Occupational Safety and Health. October 11. [SRDB Ref ID: 199562]

ORAUT [2016]. Pinellas Plant – occupational internal dose. Oak Ridge, TN: Oak Ridge Associated Universities Team. ORAUT-TKBS-0029-5 Rev. 03, July 18. [SRDB Ref ID: 158070]