

Pinellas Plant

ABRWH Transcript Digest

2016–2026

Chronology, speaker-attributed findings, disputed assumptions, and implications for SEC-00256

Central finding

The Pinellas discussion evolved from closure of an older site-profile review into a renewed SEC feasibility dispute. By January 2026, the Work Group no longer treated plutonium, classified operations, monitoring completeness, and missing source-term records as peripheral questions. They had become the central unresolved issues requiring additional review.

Summary

The public ABRWH record shows three distinct phases in the modern Pinellas review. First, in 2016, the Work Group completed a long-running site-profile review centered on tritium, metal tritides, external dosimetry, RTGs, and unresolved record issues. Second, from 2019 through 2023, SEC-00256 qualified and moved through NIOSH evaluation and SC&A's interim review, with NIOSH concluding that dose reconstruction was feasible and SC&A initially reporting no formal findings but 13 observations. Third, the January 2026 Work Group meeting reopened the factual foundation of several earlier assumptions after substantial petitioner evidence was presented.

The sharpest change concerns plutonium. Earlier presentations characterized Pinellas plutonium as triply encapsulated, nondispersible, and not a credible internal-dose source. In 2026, SC&A's Bob Barton told the Work Group that the main question had become whether unencapsulated plutonium was available for worker uptake. The meeting also addressed plutonium bioassays, allegedly missing shipment records, environmental results, classified projects, and whether the available monitoring could support reconstruction.

Bottom-Line Themes

Tritium is comparatively mature, but not every tritium form is automatically resolved. The record repeatedly treats tritium as the principal routine source. Yet metal tritides, organically bound tritium, and special compounds required separate modeling and review.

Plutonium moved from a secondary issue to the central dispute. The 2026 transcript records direct disagreement over encapsulation, bioassay interpretation, air monitoring, possible bulk shipments, and whether plutonium could have been available for uptake.

Monitoring adequacy is not the same as the existence of monitoring. The meetings repeatedly distinguish between having some records and demonstrating that monitoring was complete, representative, timely, and applicable to all potentially exposed workers.

Classification affects evidentiary access and witness completeness. The 2026 Work Group discussed DOE Q-cleared review of classified documents and acknowledged that Pinellas had many classified operations that former workers might not discuss publicly.

The evidentiary record remained open. SC&A called its 2023 review interim because additional petitioner records were still arriving. The 2026 Work Group contemplated further SC&A tasking, NIOSH follow-up, classified-document review, and additional worker interviews.

Chronology of the Modern Pinellas Review

- **February 11, 2016 — Pinellas Work Group:** Review of the revised site profile, closed and open matrix issues, metal-tritide methodology, external dosimetry sensitivity, RTG source assumptions, and record capture.
- **March 23 and August 9, 2016 — Full Board:** Work Group reported progress and closure recommendations. Metal tritides had been a major long-running issue; external dosimetry and RTG questions remained part of the technical discussion.
- **November 30, 2016 — Full Board public comment:** Public testimony challenged whether surrogate-data criteria and metal-tritide issues had been adequately demonstrated in the record.
- **2017–2020:** Pinellas remained in Board status updates while the later SEC petition was developed and qualified.
- **April 2021:** The Board reestablished the Pinellas Work Group as SEC-00256 moved into active evaluation.
- **December 2021:** NIOSH presented the SEC-00256 Evaluation Report and concluded dose reconstruction was feasible.
- **2022:** The Board assigned SC&A to review the Evaluation Report; status updates identified the evaluated period as 1957–1990.

- **November 20, 2023 — Pinellas Work Group:** NIOSH restated its feasibility conclusion. SC&A presented an interim review with no formal findings and 13 observations, while emphasizing that newly submitted petitioner documents had not yet been evaluated.
- **July 23, 2024:** A scheduled Pinellas Work Group meeting was postponed.
- **January 29, 2026 — Pinellas Work Group:** SC&A presented a supplemental review, NIOSH defended feasibility, and petitioners presented extensive new material. The Work Group identified plutonium availability for uptake, monitoring adequacy, classified operations, and missing records as issues requiring additional work.

Meeting-by-Meeting Digest

1. February 11, 2016 — Pinellas Work Group

This meeting was the capstone of an older site-profile review. The Work Group examined the adequacy of NIOSH's revised Pinellas Technical Basis Document, data-capture efforts, stable metal-tritide methodology, organically bound tritium, tritiated water, external-dose detection limits, RTG exposures, and monitoring records.

The transcript shows genuine technical disagreement over whether external dosimeters could reliably detect the relevant photon energies and whether a general detection-limit statement was being applied too broadly. It also records questions about what workers encountered during RTG manufacture and whether fuel arrived already encapsulated and shielded.

Key significance:

- Pinellas reconstructability had already required years of iterative review before SEC-00256.
- Metal tritides were not treated as interchangeable with tritiated water.
- External-dose sensitivity had to be demonstrated for the radiation energies of concern.
- The Work Group relied heavily on assumptions concerning the form and containment of RTG fuel.

Source: February 11, 2016 Pinellas Work Group transcript, especially discussions summarized around pp. 20–24 and the later external-dosimetry/RTG sections.

2. March–August 2016 — Board Closure Phase

At the March and August 2016 Board meetings, the Pinellas Work Group reported that most site-profile issues had been resolved or were moving toward closure. The stable metal-tritide issue was described as a particularly long-running matter. This phase is important because later SEC arguments often rely on conclusions developed during this earlier review.

The 2016 closure record should therefore be read as conditional on the evidence then available. It did not necessarily evaluate later-produced shipment records, additional bioassay material, newly identified environmental results, classified-program evidence, or the broader SEC-00256 record assembled after 2019.

3. 2021–2022 — SEC-00256 Evaluation Begins

After the petition qualified, NIOSH defined the evaluated class as workers employed from August 1, 1957 through December 31, 1990. NIOSH's Evaluation Report treated tritium as the primary internal source and concluded that available data allowed reconstruction of internal and external doses.

NIOSH relied on tritium bioassay, external dosimetry, claimant records, area monitoring, interviews, and bounding approaches for unmonitored workers. Plutonium was characterized as triply encapsulated and nondispersible; plutonium bioassay was described as precautionary rather than evidence of a credible intake pathway.

4. November 20, 2023 — Interim SC&A Review

NIOSH restated the Evaluation Report and its conclusion that reconstruction was feasible. It cited detailed tritium monitoring, external monitoring for the evaluated period, plutonium urine bioassay for RTG workers, area air monitoring, and routine smear surveys.

SC&A reported no formal findings but 13 observations. Crucially, SC&A called the review interim because additional evidence continued to arrive after the analytical cutoff.

Dr. Stephen Ostrow explained that SC&A had stopped collecting material around March 2023 to complete its report, yet new petitioner documents were still arriving and had not been evaluated. He also said SC&A reviewed the Tiger Team report, health-physics incident reports, and former-worker interview notes.

Interpretive significance:

The 2023 absence of formal findings cannot fairly be treated as a final determination on later evidence. SC&A expressly described its review as incomplete in temporal scope and evidentiary intake.

5. January 29, 2026 — The Debate Changes

The January 2026 meeting marks the most consequential shift in the public record. SC&A and NIOSH continued to support feasibility, but Work Group members and petitioners focused the discussion on plutonium, classified operations, missing records, and whether the monitoring record could validate earlier assumptions.

Plutonium bioassay and the earlier encapsulation premise

SC&A reported locating 45 plutonium bioassays from three years and acknowledged that some other results had been rejected by plant health-physics personnel as invalid. SC&A repeated the earlier position that triply encapsulated heat sources were nondispersible and that an internal plutonium methodology was unnecessary.

The Board's concern was not merely whether some bioassays existed. It was how many were performed, whether any were positive, why some were rejected, what population was covered, and whether annual monitoring could detect intermittent or incident-related intakes.

The central question identified by SC&A

SC&A's Bob Barton stated that the Work Group was “zeroing in” on the main issue: whether unencapsulated plutonium was available for uptake by members of the Pinellas worker cohort. He added that tritium had largely been nailed down, but plutonium availability and monitoring adequacy required further examination.

Petitioner evidence and unresolved shipment records

The petitioner presentation asserted that Mound shipment records documented plutonium transfers not accounted for in the Pinellas record, including a 1976 Pu-239 shipment. The presentation argued that Pinellas documentation did not identify the project or use and asked whether additional transfers remained undiscovered.

These were disputed assertions presented during the public meeting, not adopted Board findings. Their importance lies in the evidentiary questions they create: material form, quantity, destination, project, receiving location, worker population, monitoring requirements, and whether the shipment record can be reconciled with Pinellas inventories.

Classification and access

Chair Bradley Clawson explained that several Board members retained DOE Q clearances and could review classified documents, sometimes by traveling to secure locations. He also stated that Pinellas had many classified operations and that workers might not discuss them publicly. The Work Group discussed additional worker interviews and review of classified holdings.

This matters because public silence cannot validate completeness. A classified program can affect source terms, process descriptions, buildings, material forms, worker assignments, incident histories, and monitoring requirements even when its details do not appear in an open transcript.

Path forward

The meeting ended without a final recommendation on SEC-00256. Board members discussed a report to the full Board, additional SC&A tasking, NIOSH follow-up, review of petitioner materials, classified-document access, and possible additional worker interviews.

Speaker-Attributed Positions

Participant	Position reflected in transcripts
NIOSH/DCAS	Dose reconstruction is feasible. Tritium monitoring is extensive; external monitoring exists; unmonitored doses can be bounded; encapsulated plutonium was not a credible internal source; environmental plutonium was consistent with background/fallout rather than plant releases.
SC&A — 2023	No formal findings but 13 observations. Review was explicitly interim because evidence continued to arrive. SC&A examined Tiger Team material, incidents, interviews, and monitoring compliance.
SC&A — 2026	Supplemental review remained consistent with NIOSH feasibility, but Bob Barton identified unencapsulated plutonium availability for uptake as the main unresolved site question.
Chair Bradley Clawson	Expressed long-standing concern that assumptions had been accepted with limited information, emphasized contracts and classified operations, questioned plutonium evidence and monitoring, and supported additional investigation.
Member Nicole Martinez	Asked how classification issues would be handled and whether publicly available information was sufficient.
Member Henry Anderson	Asked whether additional worker interviews would be useful given the age and limits of the documentary record.
Petitioner representatives	Presented evidence concerning plutonium shipments, bioassay results, environmental samples, classified projects, source terms, and missing records; argued that the available record did not support complete reconstruction.

Recurring Evidentiary Questions

Category	Question	Dose-reconstruction consequence
Source term	What radionuclides, chemical forms, quantities, and components were actually present? Were all shipments reconciled to projects and inventories?	Without verified source terms, intake and external-dose models may rest on the wrong isotope, form, quantity, or geometry.
Worker population	Which workers handled, tested, transported, maintained, cleaned, surveyed, or guarded relevant materials and locations?	An incomplete denominator prevents reliable evaluation of monitoring coverage and coworker representativeness.

Category	Question	Dose-reconstruction consequence
Monitoring selection	Who was required to submit bioassay, who actually submitted, and how were missed, rejected, contaminated, or invalid samples handled?	Missing or selective monitoring can conceal episodic or high-consequence exposures.
Representativeness	Can monitored workers validly represent unmonitored workers, maintenance personnel, contractors, security personnel, and workers in classified programs?	A low-dose monitored group cannot automatically bound workers with different tasks or exposure opportunities.
Temporal completeness	Do surviving records cover the full operating period, including startup, incidents, process changes, shutdown, D&D, and remediation?	Later program improvements do not prove earlier monitoring adequacy.
Plutonium pathway	Was all plutonium triply encapsulated, or did any operation involve powder, oxide, ceramic fabrication, damaged sources, decontamination, or exterior contamination?	Encapsulation assumptions determine whether internal dose is dismissed or modeled.
Classification	Did reviewers have access to the underlying classified documents, or only unclassified summaries and derivative descriptions?	Unreviewed classified evidence can prevent independent confirmation of operations and hazards.
Independent validation	Could SC&A and the Board independently test NIOSH assumptions using the same complete underlying evidence?	A conclusion is weaker when it cannot be reproduced or tested by the independent reviewer.

How the Scientific Debate Evolved

2016 — Can the site profile be closed after resolving tritium, tritides, dosimetry sensitivity, and RTG assumptions?

2021–2023 — Does the Tiger Team evidence and available monitoring record permit reconstruction for the SEC class?

2026 — Are the underlying assumptions about plutonium form, shipment history, classified operations, worker coverage, and monitoring completeness factually secure?

That evolution is significant. The debate did not merely accumulate more documents. It moved upstream—from how to apply a model to whether the historical inputs needed by the model had been correctly identified and independently verified.

Board-Ready Synthesis

The transcripts do not yet establish that every Pinellas dose is unreconstructable. They do establish that the feasibility conclusion depends on several contested factual premises: the completeness of monitoring, the representativeness of monitored workers, the containment and material form of plutonium, the reconciliation of shipment and inventory records, and access to classified operational evidence.

The strongest transcript-based argument is therefore not simply that plutonium or classified work existed. It is that the public record now contains enough conflicting evidence to require a documented resolution before the Board can rely

on earlier assumptions. Where the source term, worker population, or monitoring denominator remains uncertain, a bounding model cannot be considered validated merely because it produces a numerical dose.

Suggested Finding for SEC-00256

The Pinellas transcript record shows that the evaluation has progressed beyond a dispute over isolated documents. The unresolved questions now concern the completeness and validity of the historical inputs required for dose reconstruction. Before feasibility can be affirmed, the record should reconcile plutonium shipments and uses, establish the monitored worker population and bioassay coverage, resolve disputed results and rejected samples, identify relevant classified operations and records, and demonstrate that the available evidence can independently support the source terms and exposure pathways used in reconstruction.

Selected Transcript Quotations

November 20, 2023 — Dr. Stephen Ostrow, SC&A, transcript p. 16

SC&A's report was interim because additional petitioner documents were still arriving and had not yet been evaluated.

January 29, 2026 — SC&A presentation, transcript p. 24

SC&A reported locating 45 plutonium bioassays from three years and noted that some other plutonium bioassays had been rejected as invalid.

January 29, 2026 — Bob Barton, SC&A, transcript p. 52

“The main concern is was there unencapsulated plutonium that was available for uptake” by the Pinellas worker cohort.

January 29, 2026 — Chair Bradley Clawson, transcript p. 74

Board members with DOE Q clearances could review classified documents, sometimes at secure locations.

January 29, 2026 — Chair Bradley Clawson, transcript p. 76

Pinellas had “an awful lot of classified operations going on,” and workers might not discuss them.

January 29, 2026 — petitioner presentation, transcript p. 61

The petitioner asserted that a 1976 Pu-239 shipment lacked corresponding Pinellas project or use documentation.

Source Guide

- **February 11, 2016 — Pinellas Work Group transcript:**
<https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2016/wgtr021116.pdf>
- **March 23, 2016 — Advisory Board transcript:** <https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2016/tr032316.pdf>
- **August 9, 2016 — Advisory Board transcript:** <https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2016/tr080916.pdf>
- **November 30, 2016 — Advisory Board transcript:**
<https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2016/tr113016.pdf>
- **April 14–15, 2021 — Advisory Board transcripts:** <https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2021/tr041421-508.pdf> ; <https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2021/tr041521-508.pdf>
- **November 20, 2023 — Pinellas Work Group transcript:**
<https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2023/wgtr112023-508.pdf>
- **January 29, 2026 — Pinellas Work Group transcript:**
<https://www.cdc.gov/niosh/ocas/pdfs/abrwh/2026/wgtr012926-508.pdf>

- **CDC Pinellas Plant meeting and petition page:** <https://www.cdc.gov/niosh/ocas/pinellas.html>

Scope and Cautions

This digest synthesizes the principal public Pinellas-specific proceedings and important Board status discussions from 2016 through January 2026. It is not a word-by-word index of every incidental reference to Pinellas in every Board, subcommittee, or work-group transcript. Speaker assertions are identified as positions or testimony and should not be treated as adopted Board findings unless the Board expressly acted on them. Transcript pagination refers to the printed page number shown in the PDF.

Denise De Garmo, PhD (©2026) Reconstructing Occupational Radiation Exposure: Historical Evidence, Scientific Method and the Reliability of Retrospective Dose Reconstruction: The Pinellas Plant Case Study. Manuscript currently under editorial development