



# SC&A'S Evaluation of ORAUT-TKBS-0016-4, Revision 02, "Mound Plant – Occupational Environmental Dose"

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June 5, 2026



# ORAUT-TKBS-0016-4

ORAUT-TKBS-0016-4, technical basis document (TBD)-4, issued:

- ◆ October 6, 2004: Revision 00
- ◆ March 13, 2009: Revision 00 PC-1
- ◆ February 7, 2013: Revision 01
- ◆ July 2, 2019: Revision 02

# SC&A reviews of TBD-4

- ◆ SC&A previously reviewed TBD-4:
  - Revision 00 in 2006
  - Revision 01 in 2016
  - Identified no primary issues or secondary issues in either review
- ◆ Therefore, SC&A's 2026 review of TBD-4, revision 02, focused on identifying changes made in revision 02 compared to revision 00 concerning:
  - Contents
  - Tables
  - Dose reconstruction (DR) recommendations

# Additions and deletions

- ◆ SC&A reviewed contents of TBD-4, revision 02, and found several sections had been added compared to revision 00:
  - Section 4.1: Introduction
  - Section 4.1.1: Purpose
  - Section 4.1.2: Scope
  - Section 4.1.3: Special Exposure Cohort
  - Section 4.2.7: Assignment of Ambient External Dose
- ◆ Sections 4.1 and 4.3 of TBD-4, revision 00, concerning Dayton Facilities are not retained in revision 02

# SC&A's review of TBD-4, revision 02, contents

- ◆ Compared paragraph by paragraph TBD-4, revision 02, to revision 00:
  - Found only minor editorial changes
  - No changes in content that would impact DR
  - Some wording in section 4.3 concerning uncertainties is slightly different in revision 02 compared to revision 00, but results and summary tables provide same numerical information
- ◆ Recommendations from ORAUT-PROC-0060, revision 01, concerning ambient external dose assignments were incorporated in TBD-4, revision 02
- ◆ Found changes listed in Publication Records on page 3 of TBD-4, revision 02, were included as indicated
- ◆ SC&A identified no findings or observations concerning contents of TBD-4, revision 02

# SC&A's review of tables in TBD-4, revision 02

- ◆ Compared information in tables in TBD-4, revision 02, to tables in revision 00
  - Spot checked some numerical values of the many entries and found values in revision 02 matched those in revision 00
  - Found only minor editorial changes and no changes in content that would impact DR
- ◆ Identified no findings or observations concerning tables in revision 02 of TBD-4

# SC&A's review of dose reconstruction recommendations in TBD-4, revision 02

- ◆ Evaluated DR recommendations in revision 02 and found main DR recommendations in:
  - Table 4-9: Sitewide annual median effluent inhalation intakes
  - Table 4-11: Sitewide maximum annual intakes
  - Table 4-20: Mean and maximum environmental external radiation levels by year
- ◆ DR recommendations in TBD-4 revision 02 did not change compared to revision 00
- ◆ Identified no findings or observations concerning DR recommendations in revision 02 of TBD-4

# Evaluation of commitments to modify TBD-4

There were no previous issues identified concerning TBD-4, revision 00; therefore, there were no commitments by the National Institute for Occupational Safety and Health to modify TBD-4 because of SC&A's 2006 review.

# Conclusions

- ◆ SC&A reviewed TBD-4, revision 02:
  - Contents
  - Tables
  - DR recommendations
- ◆ SC&A did not identify any findings or observations



# Questions?