

**Office of Enterprise Assessments
Assessment of Occupational Injury and Illness
Recordkeeping and Reporting
at the Waste Isolation Pilot Plant**



July 2017

**Office of Worker Safety and Health Assessments
Office of Environment, Safety and Health Assessments
Office of Enterprise Assessments
U.S. Department of Energy**

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ACRONYMS

ADM	Assistant Deputy Manager
AMG	American Medical Group
AU-23	Office of ES&H Reporting and Analysis
CAIRS	Computerized Accident/Incident Reporting System
CBFO	Carlsbad Field Office
CFR	Code of Federal Regulations
CMR	Central Monitoring Room
CRAD	Criteria and Review Approach Document
CRD	Contractor Requirements Document
CY	Calendar Year
DART	Days Away, Restricted or Transferred
DOE	U.S. Department of Energy
EA	Office of Enterprise Assessments
ES&H	Environment, Safety, and Health
LHCP	Licensed Health Care Professional
NWP	Nuclear Waste Partnership, LLC
OFI	Opportunity for Improvement
OII	Occupational Injury and Illness
OSHA	Occupational Safety and Health Administration
TRU	Transuranic
WIPP	Waste Isolation Pilot Plant

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EXECUTIVE SUMMARY

The U.S. Department of Energy (DOE) Office of Worker Safety and Health Assessments, within the independent Office of Enterprise Assessments (EA), conducted an independent assessment of injury and illness reporting and recording by Nuclear Waste Partnership, LLC (NWP), DOE's management and operating contractor at the Waste Isolation Pilot Plant. This assessment, conducted at the request of the DOE Carlsbad Field Office, included an onsite data collection visit on March 13-16, 2017. The objective of this assessment was to evaluate the quality and accuracy of safety performance metric data available to DOE and DOE contractor management for feedback and improvement analysis and decision-making purposes.

EA reviewed NWP's 100 injury and illness case records for calendar years 2016 and 2017, including but not limited to associated incident reports, first reports of injury, forms required by the Occupational Safety and Health Administration (OSHA), and medical records. EA interviewed NWP management and administrative personnel who are integral to the occupational injury and illness (OII) recordkeeping and reporting process, as well as nine NWP employees associated with injury cases. NWP has adequately documented its OII recordkeeping process for classifying OII cases and reporting into the Computerized Accident/Incident Reporting System database.

Overall, the NWP workers interviewed by EA understood their responsibilities for reporting injuries and illness. They received initial training on injury reporting, and expectations were reinforced during various staff and safety meetings. The workers did not express any fear of or actual reprisal for reporting injuries and illness. They also noted that they received very good medical care from the NWP Health Services nurses or from the contract medical provider, American Medical Group. NWP has satisfactory mechanisms in place for reporting of subcontractor worker injuries at WIPP.

However, EA found that the recordkeeping program has not been effectively implemented in all cases and identified three findings warranting senior management attention:

- NWP has not established auditable case files containing information supporting classification decisions for all OIIs or completed injury/illness reports as required.
- NWP did not classify six OIIs as OSHA recordable as required.
- NWP quarterly quality checks have not been effective in ensuring that OII OSHA classifications are accurate, including retrieving missing medical treatment information and ensuring that injury/illness reports are complete as required.

In addition, three deficiencies were noted regarding the timeliness and correct coding of submittals of OII cases into the DOE Computerized Accident/Incident Reporting System.

Collectively, the issues identified during this assessment warrant senior management attention to ensure that the NWP manager can properly certify the information on the OSHA 300A, *Summary of Work-Related Injuries and Illnesses*, is "true, accurate and complete" as required by 29 CFR 1904.

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1.0 PURPOSE

The U.S. Department of Energy (DOE) Office of Worker Safety and Health Assessments, within the independent Office of Enterprise Assessments (EA), conducted an independent assessment of occupational injury and illness (OII) recording and reporting at the Waste Isolation Pilot Plant (WIPP). The purpose of this assessment was to assess the effectiveness of the OII recordkeeping and reporting program implemented by the prime management and operating contractor, Nuclear Waste Partnership, LLC (NWP). This assessment, conducted at the request of the DOE Carlsbad Field Office (CBFO), included an onsite data collection visit on March 13-16, 2017.

2.0 SCOPE

This assessment consisted primarily of a review of OII records from calendar years (CYs) 2016 and 2017 (through March 13, 2017) to assess the effectiveness of some elements of NWP OII recordkeeping procedures.

3.0 BACKGROUND

WIPP is located approximately 30 miles southeast of Carlsbad, New Mexico, within a remote, 16 square mile tract. Project facilities include excavated rooms 2,150 feet underground in an ancient, stable salt formation, as well as various surface structures designed for unloading transporters and transferring drums to the underground rooms. WIPP activities, which include transport container unloading, drum movement, mining, and facility maintenance, involve various potential hazards that need to be effectively controlled, including exposure to external radiation, radiological contamination, and various physical hazards associated with mining activities and facility operations (e.g., subsurface hazards, toxic gases, confined space, machine operations, high-voltage electrical equipment, pressurized systems, and noise).

CBFO provides Federal oversight of WIPP and is responsible for the national transuranic (TRU) waste program. The CBFO mission is to provide safe, compliant, and efficient characterization, transportation, and disposal of defense-related TRU waste. The prime contractor, NWP, is an AECOM-led entity with partner B&W Technical Services Group and major subcontractor AREVA Federal Services. NWP provides day-to-day operation and maintenance services for WIPP.

At the time of the assessment, WIPP was preparing to begin accepting shipments of TRU waste for placement in the mine in April 2017. Waste placement operations had been suspended in February 2014 after two incidents in the mine: a fire involving a salt haul truck, and a radiological release involving a drum of TRU waste.

DOE requires NWP to identify, investigate, classify, record, and report OIIs in accordance with 10 CFR Part 851, *Worker Safety and Health Program*. Specifically, NWP must use the requirements and criteria in 29 CFR Part 1904, *Recording and Reporting Occupational Injuries and Illness*, and DOE Order 231.1B, *Environment, Safety and Health Reporting*, to accurately record OIIs locally and report the recordable cases into the DOE Computerized Accident/Incident Reporting System (CAIRS) database within a prescribed timeframe. CBFO had concerns that NWP may not have been classifying, recording

and reporting some OII as required and requested EA to conduct an independent assessment to ensure NWP OII records are accurate, complete and reflect safety performance.

4.0 METHODOLOGY

The DOE independent oversight program is described in and governed by DOE Order 227.1A, *Independent Oversight Program*. EA implements the independent oversight program through a comprehensive set of internal protocols, operating practices, assessment guides, and process guides. Organizations and programs within DOE use varying terms to document specific assessment results. In this report, EA uses the terms “deficiencies, findings, and opportunities for improvement (OFIs)” as defined in DOE Order 227.1A. In accordance with DOE Order 227.1A, DOE line management and/or contractor organizations must develop and implement corrective action plans for deficiencies identified as findings. Other important deficiencies not meeting the criteria for a finding are also highlighted in the report and summarized in Appendix C. These deficiencies should be addressed consistent with site-specific issues management procedures.

EA conducted this assessment in accordance with the *Plan for the Office of Enterprise Assessments Assessment of Injury and Illness Reporting and Recordkeeping at the Waste Isolation Pilot Plant*, March 2017. Criteria to guide this assessment were selected from objectives OII.1 and OII.2 in EA Criteria and Review Approach Document (CRAD) EA-32-07, *Occupational Injury/Illness Recordkeeping*.

EA reviewed available records associated with the identification, investigation, classification, recording, and reporting of OIIs, including those in NWP injury/illness report files and CAIRS case records. When this review identified a need for more information about a case, EA interviewed individuals with direct knowledge of the case (primarily injured workers), EA also conducted additional interviews that various union and CBFO representatives brought to the attention of EA regarding OII that may not be classified properly. EA used the data from records and interviews to evaluate the effectiveness of the NWP recordkeeping program. The members of the EA assessment team, the Quality Review Board, and EA management responsible for this assessment are listed in Appendix A. A detailed list of the documents reviewed, personnel interviewed, and observations made during this assessment, relevant to the findings and conclusions of this report, is provided in Appendix B. Appendix D summarizes EA’s results of the OII records review.

EA has not conducted a recent assessment of OII recording and reporting at WIPP and thus did not examine any items previously identified for follow-up.

5.0 OCCUPATIONAL INJURY AND ILLNESS RECORDKEEPING AND REPORTING

Objectives:

A procedure is in place to ensure that OIIs of DOE contractor employees are identified, properly classified, and accurately recorded. (CRAD EA-32-07, Objective OII.1, Criteria 1 through 4)

DOE contractor and subcontractor OIIs are accurately classified, and recordable OIIs, as well as work exposure hours, are reflected in CAIRS in a timely manner. (CRAD EA-32-07, Objective OII.2, Criteria 1 through 9)

Criterion:

The organization maintains a formal injury and illness recordkeeping program that outlines the responsibilities and procedures for identifying, reporting, classifying, and documenting OIIs. (10 CFR § 851.11(a)(3)(i), 851.20(a)(3) and (6), 851.23(a)(2), and 851.26(a)(2)-(4))

NWP has five procedures for reporting, investigating, documenting, classifying, and reporting OIIs:

- WP 12-SA3130, *Occupational Injuries and Illnesses*
- WP 12-SA3131, *Occupational Injuries and Illnesses Recordkeeping*
- WP 15-GM.02, *Worker Safety and Health Program Description*
- WP 15-HS.02, *Occupational Health Program*
- WP 15-MD3102, *Event Investigation*.

These procedures were found to show that NWP has documented a satisfactory OII recordkeeping program which adequately addresses the 10 CFR 851 required processes for classification of OII and reporting into the CAIRS database.

Criterion:

CAIRS organization code changes are required to reflect current reporting organizations, including separate organizational codes for contractors and their subcontractors. (DOE Order 231.1B, Attachment 1, Contractor Requirements Document [CRD], Section 2.a. (3))

NWP uses three CAIRS organization codes to report recordable OIIs and work hours: code 0703104, Nuclear Waste Partnership LLC – WIPP; code 0703114, Nuclear Waste Partnership LLC Subcontractor; and 0703109, Santa Fe Protective Services (WIPP). NWP did not request, in coordination with CBFO, that the security operations CAIRS code 0703109 be changed to show that security operations have been under NWP and not Santa Fe Protective Services since October 2012. **(Deficiency)**

NWP reports security operations work hours correctly under CAIRS code 0703109 but incorrectly submits recordable security-related OII cases under CAIRS organization code 0703104 (a service operation code) instead of CAIRS code 0703109 (a security operation code). NWP incorrectly reported two recordable security-related OII cases under the CAIRS service operations code in CY 2016.

(Deficiency) This reporting practice results in inaccurate OII incident rates reported in CAIRS because: (1) CAIRS OII incident rates for security operations would always be reported as zero injuries per 200,000 work hours and may not reflect actual security operations performance; and, (2) if security operations rates are not zero, the OII incident rates found under the NWP CAIRS operation code for service work at WIPP would be higher than actual performance warrants.

Criteria:

Workers are trained to report all injuries and illnesses promptly per the organizational procedure. (10 CFR 851.25(a))

Workers report occupational injuries and illnesses without fear of reprisal. (10 C.F.R. 851.20(a)(6))

When hired, NWP workers receive training on the injury reporting procedure, including the requirement to report injuries to their supervisor and to the Central Monitoring Room (CMR). This reporting expectation is reinforced during staff and safety meetings. The workers interviewed by EA indicated that

they are aware of the requirement to report any injury or illness to the CMR as required by Section 1.1, WP 12-SA3130.

In addition, interviewed workers indicated they did not fear any reprisal for reporting injuries and illness as required. The individuals noted that they received very good medical care from the NWP Health Services nurses, and two individuals noted that they received good care from the medical provider, American Medical Group (AMG), as well. No one noted reprisal for reporting their particular injury case. However, one individual discussed fear of reprisal for talking to EA regarding his case, and indicated at least one other employee had the same concern. The EA interviewer informed the worker that their right to report injuries and discuss the facts with DOE is protected under 10 CFR 851. Before leaving the site, EA briefed NWP management on this concern about potential reprisal.

Criterion:

The OII reporting requirements flow to appropriate subordinate organizations, and sub-tiered contractor records are reported to the DOE computer system (CAIRS). (10 CFR 851.11 and DOE Order 231.1, Attachment 1, CRD, Section 2.a. (1))

NWP has established a mechanism to ensure subcontractor workers' injuries incurred while working at WIPP are reported to NWP representatives overseeing subcontracted work. The CY 2016 and 2017 NWP injury reports indicate that subcontractor cases have been reported, and EA's review of CAIRS indicates that NWP has recorded and reported cases using the subcontractor CAIRS code. Subcontractor data or interviews of subcontractor personnel regarding their OII records was not within the scope of this review.

Criterion:

Personnel with assigned CAIRS/OII recordkeeping responsibility are informed of all contractor and subcontractor injuries and illnesses through established accident/occurrence reporting mechanisms and review of other documentation. (CRAD EA-32-07, Objective OII.2, Criterion 2)

By procedure, injured individuals are to contact the CMR immediately and report to NWP Health Services for evaluation. Managers of injured workers are required to follow up with Health Services and initiate an investigation of the cause of the injuries. Health Services provides injury/illness reports to the Assistant Deputy Manager (ADM) for Industrial Safety and Industrial Hygiene for further investigation and recordkeeping purposes. The ADM meets daily with the Health Services nurses to review and act on any new injury reports received the previous day. According to the Health Services nurse, the nurses receive reports of night shift injuries, as well as injuries for which the fire department emergency medical technicians provided treatment, at the beginning of the next day shift for filing and discussion with the ADM.

EA noted that the CMR log was not used as a source of injury information because, contrary to procedure, Health Services and the CMR are not always informed of an injury or external medical treatment. (See **OFI-NWP-OII-01.**)

Criterion:

Auditable case files are established for each OII containing information supporting classification decisions (10 CFR 851.26(a)(1) and DOE Order 414.1D, Attachment 2, Quality Assurance Criteria, Criterion 4, Management/Documents and Records)

Form EA12SA3130-2-0, *Injury/Illness Report*, is initiated for each injury and illness, and the Health Services office retains the forms in a single file folder by calendar year. NWP maintains a separate case file (folder) for each OII that the Environment, Safety, and Health (ES&H) ADM classifies as recordable and that is reported into the CAIRS database. In these recordable case files, EA noted some associated medical records pertinent to the Occupational Safety and Health Administration (OSHA) classification criteria.

The NWP injury/illness report forms are a central document for injury/illness identification, investigation, recordkeeping classification, and corrective action. However, of the 100 injury/illness reports in CY 2016 and 2017, EA found 39 that did not contain the information required by WP 12-SA3130, *Occupational Injury and Illnesses*. (See **Finding F-NWP-OII-1**.) Because of the incomplete reports and/or missing medical treatment records or medical information regarding injuries, EA could not readily evaluate OSHA case classifications. For example, the emergency room treatment documentation for NWP CAIRS case number 2016027 had not been retrieved, reviewed for information key to the OSHA recordkeeping classification process, and filed.

The case file documentation procedure lacks the rigor necessary to facilitate timely recordkeeping classifications and to help ensure that all information is present for NWP and CBFO quality checks and assessments. (See **OII-NWP-OII-02**.)

Criterion:

Work exposure hours for each assigned reporting organization code are properly accounted for and electronically reported into CAIRS on or before the due date (10th of the month that follows each calendar quarter). (DOE Order 231.1B, Attachment 3, Section 1.e)

NWP CAIRS entry personnel maintain a spreadsheet to document work hours for those organizations that are required to report NWP OIIs into the CAIRS database, including direct hours for NWP and subcontractors working for NWP at WIPP. Reporting of CY 2016 work hours into CAIRS was timely. This work hour documentation was also used to complete OSHA Form 300A Summaries for CY 2015 and 2016. Work hours in CAIRS and on the signed/certified OSHA Form 300A were consistent.

Criteria:

The organization electronically submits initial case reports and updates to the CAIRS database on or before the 15th and the last workday of the month and updated by the 10th of the month that follows each quarter until closed. (DOE Order 231.1B, Attachment 3, Section 1.d)

OIIs are investigated and classified per 29 CFR 1904 criteria, and cases found recordable are documented on the CAIRS Form and on the local OSHA 300 log within seven calendar days. (29 CFR 1904.29(b)(3))

NWP reported four recordable OII into the CAIRS database in CY 2016. EA's review of the CAIRS log for NWP indicated that two of the initial case entries were not recorded locally within seven days and were submitted late (case 2016005 was 239 days late and 2016027 was 9 days late). (**Deficiency**)

The NWP OSHA 300 log and CAIRS log both show that NWP found four cases recordable for CY 2016 and no recordable cases for CY 2017 (through mid-March). None of the reported recordable cases included days away, restricted, or transferred (DART). EA's review of records available for the 100 injury/illness reports, additional medical documentation retrieved during the onsite visit, and interviews with nine injured workers (16 interviews were requested) found five OII cases that should have been

recorded as DART (restricted work) cases, and one case that NWP recorded as “medical treatment only” actually involved restricted work days. (See **Finding F-NWP-OII-02.**) Appendix D summarized these results. During the EA outbrief, CBFO and NWP management stated that they would follow up on the EA cases of interest for which individuals could not be interviewed during the onsite portion of the assessment.

Through interviews with NWP managers and review of case file information, EA found that in some cases, NWP incorrectly applied the OSHA classification criteria for restricted work activity. The classification criteria found in OSHA’s injury and illness recordkeeping standard (29 CFR 1904.7(b)(4)) indicates that an OII case is recordable with restricted work when: (1) the *employer* keeps the employee from performing one or more of the routine functions of his or her job, or from working the full workday that he or she would otherwise have been scheduled to work; or (2) a *physician or other licensed health care professional* (LHCP) recommends that the employee not perform one or more of the routine functions of his or her job, or not work the full workday that he or she would otherwise have been scheduled to work. OSHA defines “routine functions” as work activities the employee regularly performs at least once a week.

EA determined that three of the six incorrectly classified cases resulted when the Health Services LHCP (nurse) established the restrictions by directing the employee to return to work but to avoid certain routine tasks. In three other cases, NWP’s contracted medical provider (AMG) provided similar restrictions. NWP’s practice is to bring injured employees back to work by accommodating issued work restrictions whenever possible. Workplace accommodation is an acceptable case management practice as long as the accommodation does not put the injured employee at risk of exacerbating an injury or interfering with the healing process. However, 29 CFR 1904 still requires these cases to be recorded on the OSHA 300 log as restricted work cases. Allowing the injured employee to carry out “productive” work that includes *some* (but not all) of the employee’s routine work functions does not release the employer from the requirement to record the injury.

For example, if a worker’s routine functions include lifting, carrying equipment, walking, running, stooping, or climbing, and an LHCP issues a restriction that prevents the injured worker from performing one or more of these routine functions, or if NWP restricts an injured worker from performing one or more of these routine functions, the criterion for restricted work activity is met and the case is recordable.

In one of the unrecorded cases, NWP, with corporate resource involvement, authorized workers’ compensation payments for the injury but determined that the case was not OSHA recordable. The decision to process the case as compensable established that the employer considered the injury to be work-related. Given that the case otherwise met OSHA’s criteria for recordability, there was no justification for considering the case to be non-recordable for OSHA recordkeeping purposes.

Criteria:

OII local and CAIRS record discrepancies identified by DOE oversight activities are corrected as directed by DOE reviewing organization. (DOE Order 231.1B, Attachment 3, Section 1.H)

Quarterly quality checks of local OII data and associated CAIRS records to ensure information are thorough, accurate and consistent. (DOE Order 231.1B, Attachment 3, Section 1.f)

A CBFO report, *Surveillance of Nuclear Waste Partnership Occupational Injury and Illness Program*, conducted February 1-4, 2016, found two CAIRS recordable cases that were not updated regarding DART days and three OII cases in CY 2015 that should have been recordable but were not recorded and reported to CAIRS. WIPP Forms (forms used to document corrective actions) to correct these

discrepancies were documented, and a review of the CAIRS database during this assessment found the discrepancies were corrected.

The February 2016 CBFO surveillance report also identified that NWP was not performing documented quarterly quality checks of local and CAIRS OII data as required by DOE Order 231.1B, Attachment 3, Section 1.f. Specifically, this paragraph requires that “documented quality checks of injury and illness information reported to DOE through CAIRS must be conducted at least quarterly to ensure information is *thorough, accurate, and consistent* [emphasis added] with information contained in local records.” NWP initiated quarterly quality checks for CY 2016, which found that the OII cases as originally classified by NWP were accurately reflected in the OSHA 300 log locally and were consistent with those reported into CAIRS. However, the quarterly quality checks did not identify the OII OSHA classification errors summarized above and in Appendix D. (See **Finding F-NWP-OII-03.**)

Criterion:

Personnel with OII recordkeeping responsibilities are properly trained. (10 CFR 851.25c and DOE Order 231.1, Attachment 3, Section 1.i)

The NWP managers responsible for OII recordkeeping have years of experience in this function at several DOE sites and appeared knowledgeable of OSHA classification criteria and requirements. Three individuals have the minimum training required by NWP procedure WP 12-SA3131, Section 2.1.9, to perform recordkeeping and CAIRS entries. This training includes review of the OSHA Recordkeeping Comprehensive Presentation and completion of the online self-paced DOE CAIRS Entry course. The DOE CAIRS manager confirmed the three individuals’ training and access to CAIRS database. Having three qualified individuals provides sufficient backup to perform OII reporting when needed.

However, given NWP’s misapplication of the OSHA classification criteria for OII cases involving medical/work restrictions, EA concluded that personnel and managers with recordkeeping responsibilities did not have sufficient training to adequately fulfill their responsibilities. (See **OII-NWP-OII-03.**)

6.0 FINDINGS

Findings are deficiencies that warrant a high level of attention from management. If left uncorrected, findings could adversely affect the DOE mission, the environment, the safety or health of workers and the public, or national security. DOE line management and/or contractor organizations must develop and implement corrective action plans for EA appraisal findings. Cognizant DOE managers must use site- and program-specific issues management processes and systems developed in accordance with DOE Order 227.1A to manage these corrective action plans and track them to completion. In addition to the findings, deficiencies that did not meet the criteria for a finding are listed in Appendix C, with the expectation from DOE Order 227.1A for site managers to apply their local issues management processes for resolution.

All findings cited here pertain to NWP.

F-NWP-OII-01: NWP does not establish auditable case files containing information supporting classification decisions for all OII as required by 10 CFR 851.26(a)(1); DOE Order 414.1D, Attachment 2; and WP 12-SA3130, *Occupational Injury and Illnesses*.

F-NWP-OII-02: NWP did not correctly investigate and classify six OIIs in accordance with 29 CFR 1904 criteria. (See Appendix D)

F-NWP-OII-03: NWP quarterly quality checks have not been effective in ensuring that OII OSHA classifications are accurate, as required by DOE Order 231.1B, Attachment 3, Section 1.f.

7.0 OPPORTUNITIES FOR IMPROVEMENT

EA identified some OFIs to assist cognizant managers in improving programs and operations. While OFIs may identify potential solutions to findings and deficiencies identified in appraisal reports, they may also address other conditions observed during the appraisal process. EA offers these OFIs only as recommendations for line management's consideration; they do not require formal resolution by management through a corrective action process and are not intended to be prescriptive or mandatory. Rather, they are suggestions that may assist site management in implementing best practices or provide potential solutions to issues identified during the assessment.

All OFIs cited here pertain to NWP.

OFI-NWP-OII-01: Consider revising recordkeeping procedures to require ES&H personnel to review the CMR log or contact the CMR daily as a source of injury information (all injuries are to be immediately reported per procedure to the CMR for logging) to ensure that all injuries are identified, investigated, and classified in a timely manner.

OFI-NWP-OII-02: Consider including additional detailed requirements and information in the OII case file documentation procedure to facilitate timely recordkeeping classifications and allow all information be readily available for NWP and CBFO quality checks and assessments. Specifically, consider using an injury summary and classification rationale form for each injury case. Additional recommended practices by the DOE Office of ES&H Reporting and Analysis (AU-23) for the content of an auditable OII case file include:

- First report of injury (NWP injury/illness report)
- Employee witness statements
- Safety investigation or fact finding meeting results
- Health Services, hospital, emergency room in/out injured person medical record
- Medical diagnosis for related case (from NWP Health Services, hospital/emergency room, contract occupational medical provider, and other medical providers)
- Medical treatment provided
- Prescribed medication
- NWP Health Services and other LHCP source direction on imposed medical/work restrictions
- Corrective actions (WIPP Forms)
- Classification decision rationale (why the case is or is not OSHA recordable) documentation
- DOE Form 5484.3 (DOE *Individual Accident/Incident Report*) when case is OSHA recordable.

OFI-OII-03: Consider providing additional training for personnel with recordkeeping responsibilities, using a recognized OSHA recordkeeping training resource. AU-23 may be a training resource or point of contact for identifying qualified training resources. In addition, OSHA provides online training and recordkeeping advisor resources at <https://www.osha.gov/recordkeeping/>.

Appendix A Supplemental Information

Dates of Assessment

Onsite Assessment: March 13-16, 2017

Office of Enterprise Assessments (EA) Management

Glenn S. Podonsky, Director, Office of Enterprise Assessments
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Site Lead for the Waste Isolation Pilot Plant

Aleem E. Boatright

EA Assessors

Kevin G. Kilp, Team Leader
Terry E. Krietz

Appendix B

Key Documents Reviewed, Interviews, and Observations

Documents Reviewed

- WP 12-SA3130, *Occupational Injuries and Illnesses*, Revision 13, 2/15/17
- WP 12-SA3131, *Occupational Injuries and Illnesses Recordkeeping*, Revision 3, 12/19/14
- WP 15-GM.02, *Worker Safety and Health Program Description*, Revision 11, 11/10/16
- WP 15-HS.02, *Occupational Health Program*, Revision 9, 2/9/16
- WP 15-MD3102, *Event Investigation*, Revision 10, 9/30/15
- NWP Injury/Illness Reports (Form EA12SA3130-2-0, Injury/Illness Report) and associated documents (90 reports for CY 2016; 10 reports for CY 2017)
- OSHA Form 300 Logs for CY 2015 and CY 2016
- OSHA Form 300A Summaries for CY 2015 and CY 2016 (signed certification)
- CAIRS Log for NWP for CY 2015 through CY 2017, retrieved 3/6/17
- CAIRS Organization Codes for CBFO
- DOE Form 5484.3, *Individual Accident/Incident Report* (10 reports for occupational injuries and illnesses NWP classified as recordable in CAIRS for CY 2015 through CY 2017)
- WFs 16-249 / -251 / -252 / -253 / -254 (Corrective Actions associated with CBFO Surveillance on OII Recordkeeping, February 2016)
- WF 15-040 for CAIRS OII Case Number 2015006
- WF 16-353 for CAIS OII Case Number 2016005
- WF 16-1178 for CARIS OII Case Number 2016027
- WF 16-2116 for CAIRS OII Case Number 2016032
- Quarterly CAIRS and Injury/Illness Reporting Quality Assurance Checklists for CY2016
- ES&H Weekly Report, February 26, 2017 – March 4, 2017
- WIPP Industrial Safety Monthly Report, CY 2017 (through February 2017)
- NWP Performance Indicators for First Aids and Recordable Rates, February 2017
- Surveillance of Nuclear Waste Partnership Occupational Injury and Illness Program Report, 2/1-4/16
- Training Video for New Workers and Visitors
- CAIRS Online Training Certificate of Completion
- Emails and note to record regarding incident where a pipe struck an individual's arm

Interviews

CBFO

Deputy Manager
Safety and Health Division Director
Industrial Hygienist (OII recordkeeping subject matter expert)
Facility Representatives (2)

NWP

Deputy Project Manager
Operations Manager
ES&H Manager
ES&H Assistant Deputy Manager, ES&H Programs

ES&H Assistant Deputy Manager, Radiation/Industrial Safety/Industrial Hygiene
Safety Programs Manager
OII Recordkeeping/ CAIRS Entry Specialists (2)
Health Service Nurses (2)
Union President, United Steelworkers Local 12-9477
Union Safety and Health Representative
Human Resources Specialist
Workers (16 workers selected based on OII case information; 9 available for interview during onsite assessment)

Observations

Health Services Morning Meeting with Assistant Deputy Manager for Industrial Safety and Industrial Hygiene
Fact Finding Meeting

Appendix C Deficiencies

Deficiencies that do not meet the criteria for a finding are listed below, with the expectation from DOE Order 227.1A that site managers will apply their local issues management processes for resolution.

All deficiencies cited here pertain to NWP.

- Contrary to DOE Order 231.1B, Attachment 1, Section 2.a(3), NWP did not request, in coordination with CBFO staff, that the DOE CAIRS database management office change the security operations CAIRS code 0703109 to show that WIPP security operations have been under NWP and not Santa Fe Protective Services since October 2012.
- Contrary to DOE Order 231.1B, Attachment 3, Section 1.d, NWP incorrectly submitted two recordable CY 2016 CAIRS cases related to security operations under CAIRS organization code 0703104 (a service operation code) instead of CAIRS organization code 0703109 (a security operation code).
- Contrary to 10 CFR 1904.29(b)(3) and DOE Order 231.1B, Attachment 3, Section 1.d, for two of the four cases NWP reported in 2016, NWP did not record case entries locally within seven days and were submitted late (case 2016005 was 239 days late and 2016027 was 9 days late) into the CAIRS database.

**Appendix D
OII Record Review Results**

Case File Number and Injury Date	NWP Classification	Case Summary and Required Classification
<p>Local Case No. 2017005 Injury date 1/5/17</p>	<p>Not Recordable</p>	<p>A security police officer in training was injured during security physical training. Medical provider issued work restrictions for light duty, with no standing/walking (which is part of the worker's routine functions). Supervisor accommodated restrictions by not assigning worker to gate house duty and limiting work to sedentary work at the Security Operations Center. This work restriction/assignment occurred 1/6-16/17.</p> <p>Required Classification: <u>Recordable DART case with 11 days of restricted work.</u></p>
<p>Local Case No. none assigned Injury date 1/5/17</p>	<p>Not Recordable</p>	<p>A security police officer in training was injured during security physical training (same training session as Case No. 2017005).</p> <p>Injured worker was instructed to go to AMG for evaluation. AMG initially directed the worker not to return to work for 3 days and prescribed medicine, but after discussions between the NWP medical director and AMG, the injured individual was returned to work with work restrictions. However, the injured worker's manager instructed the individual to return to work and did not accommodate medical restrictions. Medical record indicates that the injured worker returned to full duty on 1/11/17.</p> <p>Required Classification: <u>Recordable DART case with 5 days of restricted work.</u></p>

Case File Number and Injury Date	NWP Classification	Case Summary and Required Classification
<p>CAIRS Case No. 2016032</p> <p>Injury date 9/15/16</p>	<p>Recordable; medical treatment only</p>	<p>Security police officer, during annual refresher security physical force training, received injuries due to impacts to the body from instructor. After training, worker was in pain and went to the emergency room and notified CMR. The individual received medical treatment beyond first aid with documented medical restrictions for light duty on 9/16 (no bending/squats/twisting; no lifting over 10 pounds). On 10/7, medical provider changed light duty to no lifting over 20 pounds. On 10/25, the individual returned to full duty.</p> <p>Required Classification: <u>Recordable DART case with 39 days restricted work.</u></p>
<p>Local Case No. 2016026</p> <p>Injury date 8/10/16</p>	<p>Not Recordable</p>	<p>A miner/bolter/underground equipment operator was injured when attempting to remove roof bolts in the underground. Health Services nurse, along with injured worker's manager, agreed to and implemented work restrictions for the injured.</p> <p>Required Classification: <u>Recordable DART case with restricted work.</u></p>
<p>Local Case No. none assigned</p> <p>Injury date 6/4/16</p>	<p>Not recordable</p>	<p>Firefighter slipped while entering an airlock and twisted a knee on a Saturday. Injured firefighter saw Health Services nurse on Monday and was told to apply ice pack and elevate. Health Services nurse gave direction for medical restriction, resulting in firefighter doing paperwork instead of routine work functions (e.g., first responses) for about a week. Health Services evaluation returned firefighter to full duty.</p> <p>Required Classification: <u>Recordable DART case with 7 days restricted work.</u></p>

Case File Number and Injury Date	NWP Classification	Case Summary and Required Classification
<p>Local Case No. none assigned</p> <p>Injury date 1/3/17</p>	<p>Not Recordable</p>	<p>An underground crew supervisor, working with his manager to move some piping, was struck in the arm with a pipe being moved. Supervisor later went to private physician for care unrelated to the event pipe strike incident when the physician saw indications of possible trauma to the same arm and requested an x-ray. An orthopedic physician diagnosed a broken bone where the pipe struck and performed surgery on 1/13/17. The injured supervisor called his manager on the day he found out about the surgery. Health Services was aware of the surgery notification and arranged for workers' compensation payments for the treatments. The injured individual was prescribed medicine and given medical restrictions for light duty and no lifting over 10 pounds. The individual had 10 days away from work and then returned to work with medical restrictions. While NWP authorized workers' compensation claim, NWP has not recorded the case on OSHA 300 log or reported to CAIRS. This case is also reportable to Occurrence Reporting and Processing System (ORPS) due to the bone fracture.</p> <p>Required Classification: <u>Recordable DART case with 10 days away from work and possible restricted work days since about 1/23.</u></p>