Preliminary Hazard Analysis		
PHA #: 032	**BY: Mark Cranston**	**DATE: 3-15-2018**
Description of Work: Administrative functions or program support services involving general office duties and/or field walk downs in non-radiological and/or radiological buffer areas controlled by TOC. Observation activities only, no ladder/scaffold use.		

Safety Case Management (S_CMLI)

☒ TFC-ESHQ-S_CMLI-C-01 Injury and Illness Recordkeeping

1. 10 CFR 851, "Worker Safety and Health Program."
2. 29 CFR 1904, Parts 1904.4 through 1904.11, 1904.29 through 1904.33, 1904.44, and 1904.46, "Recording and Reporting Occupational Injuries and Illnesses."
3. DOE Manual 231.1-1A, "Environment, Safety and Health Reporting," Attachment 2.
   a. Section 3.a - Maintenance of records and performance of self-assessments.
   b. Section 3.b.1 - Record injury/illness on OSHA 300 Log.
   c. Section 3.b.2 - Record injury/illnesses on DOE F 5484.3.
   d. Section 3.b.3 - Report employee's total work hours on DOE F 5484.4.
   e. Section 3.c - Subcontractor recordkeeping requirements.
   f. Section 3.d - Bi-Monthly electronic uploading of CAIRS data.
   g. Section 3.e - Quarterly electronic uploading of work-hours.
   h. Section 3.f - Posting of OSHA Form 300A.
   i. Section 3.g.1 - Maintenance of previous contractor records.
   j. Section 3.g.2 - Record access.
   k. Section 3.g.3 - OSHA 300 Log updating requirements.
   l. Section 3.g.4 - Recordkeeping training requirements.
4. WRPS-0901643, R2, Corrective Action CA-02-02, WRPS-PER-2009-2030, Commitment to Office of River Protection.

☒ TFC-ESHQ-S_CMLI-C-02 Injury and Illness Events

1. 10 CFR 851 "Worker Safety and Health Program."
2. 29 CFR 1904, "Recording and Reporting Occupational Injuries and Illnesses."
   a. Section 35, Subpart D.a.1.
   b. Section 39, Subpart E.
3. DOE N 350.6, "Acceptance of Valid Workers' Compensation Claims."
4. DOE O 231.1, "Environment, Safety and Health Reporting."

Safety – Industrial Hygiene Standards (IH-STD)

☒ TFC-ESHQ-IH-STD-01 Cold Stress

1. 10 CFR 851, "Worker Safety and Health Program."

☒ TFC-ESHQ-IH-STD-03 Exposure Monitoring, Reporting, and Records Management

1. 10 CFR 851, "Worker Safety and Health Program."
2. 29 CFR 1910.95, "Occupational Noise Exposure."
3. 29 CFR 1926.1101, "Asbestos."
4. 29 CFR 1910.1017, "Vinyl Chloride."
5. 29 CFR 1910.1018, "Inorganic Arsenic."
6. 29 CFR 1910.1020; "Access to Employee Exposure and Medical Records."
7. 29 CFR 1910.1026, "Chromium (VI) – Hexavalent Chromium."
8. 29 CFR 1926.1127, "Cadmium."
9. 29 CFR 1910.1028, "Benzene."

10. 29 CFR 1910.1045, “Acrylonitrile.”
11. 29 CFR 1910.1047, “Ethylene Oxide.”
12. 29 CFR 1910.1048, “Formaldehyde.”
13. 29 CFR 1910.1051, “1.3-Butadiene.”
14. 29 CFR 1910.1052, “Methylene Chloride.”
15. 29 CFR 1926.62, “Lead.”

☐ TFC-ESHQ-IH-STD-08 Lead Control Program

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.133, “Eye and Face Protection.”
3. 29 CFR 1910.134, “Respiratory Protection.”
4. 29 CFR 1910.1025, “Lead (General industry).”
5. 29 CFR 1926.62, “Lead Exposure (Construction).”
6. 29 CFR 1926.1020 “Access to Employees Exposure and Medical Records.”

☐ TFC-ESHQ-IH-STD-11 Carcinogen Control

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, Subpart Z – “Toxic and Hazardous Substances.”
3. American Conference of Governmental Industrial Hygienists (ACGIH), Carcinogen List.

☒ TFC-ESHQ-IH-STD-13 Illumination

1. 10 CFR Part 851, “Worker Health and Safety Program.”
2. 29 CFR Part 1910, Section 120, Paragraph (m), “Illumination.”
3. 29 CFR Part 1926, Section 56, “Illumination.”
4. 29 CFR Part 1926, Section 65, Paragraph (m), “Illumination.”

☒ TFC-ESHQ-IH-STD-14 Prevention of Illness From Hazardous Biological Agents

1. 29 CFR 1910.1200, “Hazard Communication.”
2. TFC-ESHQ-S-STD-24, “Bloodborne Pathogen Exposure Control Standard.”
3. TFC-ESHQ-S-STD-27, “Housekeeping/Sanitation.”
4. TFC-OPS-MAINT-C-01, “Tank Operations Contractor Work Control.”

Safety – Industrial Hygiene (S_IH)

☒ TFC-ESHQ-S_IH-C-02 Hazard Communication

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, Subpart Z, “Toxic and Hazardous Substances.”
3. 29 CFR 1910.1200(h)(3).
4. 29 CFR 1910.1201.
5. 29 CFR 1910, Section 1450, “Occupational exposure to hazardous chemicals in laboratories,” paragraph (f), “Employee information and training,” paragraphs (1), (2), and (4)(I).
6. 29 CFR 1926, Subpart Z, “Toxic and Hazardous Substances.”
7. TFC-PLN-41, “Integrated Safety Management System Description.”

☒ TFC-ESHQ-S_IH-C-05 Respiratory Protection

1. 10 CFR 851, “Worker Safety and Health Program,” Section 23, “Safety and Health Standards.”
2. 29 CFR 1910.134, “Respiratory Protection.”
3. 29 CFR 1926.103, “Respiratory Protection.”
4. TFC-PLN-55, “Industrial Hygiene Program.”

☒ TFC-ESHQ-S_IH-C-07 Heat Stress Control

1. 10 CFR 851, “Worker Safety and Health Program.”
2. American Conference of Governmental Industrial Hygienists (ACGIH), “Threshold Limit Values for Chemical Substances, Physical Agents and Biological Exposure Indices,” 2005.

☒ TFC-ESHQ-S_IH-C-17 Employee Job Task Analysis

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.151, “Medical Services and First Aid.”
3. 29 CFR 1926.50, “Medical Services and First Aid.”
4. TFC-PLN-41, “Integrated Safety Management System Description.”

☐ TFC-ESHQ-S_IH-C-46 Industrial Hygiene Reporting and Records Management

1. TFC-PLN-34, “Industrial Hygiene Exposure Assessment Strategy.”

☒ TFC-ESHQ-S_IH-C-47 Chemical Management Process

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.106, “Flammable and Combustible Liquids.”
3. 29 CFR 1910.119, “Process Safety Management of Highly Hazardous Chemicals.”
4. 29 CFR 1910.1200, “Hazard Communication.”
5. 40 CFR 68.130, “List of substances.”
6. 40 CFR 302.4, “Designation of Hazardous Substances.”
7. 40 CFR 355, “Emergency Planning and Notification.”
8. 40 CFR 370, “Hazardous Chemical Reporting Community Right-to-Know.”
9. 40 CFR 372, “Toxic Chemical Release Reporting Community Right-to-Know.”
10. 41 CFR 101-42, “Utilization and Disposal of Hazardous Materials and Certain Categories of Property.”
11. 42 USC 13101, “Findings and Policy.”
12. 42 USC 13106, “Source Reduction & Recycling Data Collection.”
13. DOE-0223, “Emergency Plan Implementing Procedures,” RLEP 3.27, “Hazard Surveys.”
14. DOE O 151.1C, “Comprehensive Emergency Management System.”
15. DOE O 420.1C, “Facility Safety.”
16. DOE O 450.1A, CRD “Environmental Protection Program.”
17. DOE/RL-94-02, “Hanford Emergency Management Program.”
18. Executive Order 13423, “Strengthening Federal Environmental, Energy, and Transportation Management.”
19. Executive Order 13514, “Federal Leadership in Environmental, Energy, and Economic Performance.”
20. ORP M 420.1-1, R1, “ORP Fire Protection Program.”
21. TFC-PLN-41, “Integrated Safety Management System Description.”
22. TFC-PLN-58, “Chemical Management Plan.”

☒ TFC-ESHQ-S_IH-C-48 Managing Tank Chemical Vapors

1. TFC-PLN-34, “Industrial Hygiene Exposure Assessment Strategy.”
2. RPP-22491, “Industrial Hygiene Chemical Vapor Technical Basis.”
3. DOE/RL-96-68, “Hanford Analytical Services Quality Assurance Requirements Documents.”

☐ TFC-ESHQ-S_IH-C-49 Chronic Beryllium Disease Prevention Program

1. 10 CFR 850, “Chronic Beryllium Disease Prevention Program.”
2. 10 CFR 851, “Worker Safety and Health Program.”
3. DOE-0342, “Hanford Site Chronic Beryllium Disease Prevention Program.”
4. Interim Actions in response to the “DOE Hanford Site Chronic Beryllium Disease Prevention Program,” Contract Modification 069, CORR-2010-0282, September 7, 2010.

☐ TFC-ESHQ-S_IH-C-52 Asbestos Exposure Control and Management

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.1020, “Access to Employee Exposure and Medical Records.”
3. 29 CFR 1910.1200, “Hazard Communication.”
4. 29 CFR 1926.32(f), “Definitions.”
5. 29 CFR 1926.1101, “Asbestos (Construction),” Subpart Z, Section 1101.
6. 29 CFR 1910.1001, “Asbestos (General Industry).”
7. 40 CFR 61, Subpart M, Asbestos, “National Emission Standard for Hazardous Air Pollutants (NESHAP).”

8. Applicable requirements under 40 CFR 763, Subpart E, “Asbestos Hazard Emergency Response Act (AHERA).”
   a. 40 CFR 763.86, “Sampling.”
   b. 40 CFR 763.90, “Response Actions.”
   c. 40 CFR 763.92, “Training and Periodic Surveillance,” (a)(1) and (a)(2).”
   d. Appendix C, “Asbestos Model Accreditation Plan.”
9. Applicable requirements under WAC 296-65, “Asbestos Removal and Encapsulation.”
   a. 296-65-005 and 296-65-010, Certified Asbestos worker training course content and certification.
   b. 296-65-007 and 296-65-012, Certified Asbestos supervisor training course content and certification.
10. Memorandum of Agreement Relating to Removal of Asbestos Materials and Demolitions on the Hanford Site (Washington Department of Ecology and Department of Energy).
11. Article 8 of the Benton County Air Authority, Regulation 1.
12. Memorandum of Understanding Regarding the Return of Respirators to UniTech Services that have been Used to Protect Employees Against a Non-Radiological Airborne Particulate Hazard per UniTech Contract DE-AC06-04RL14540.

☒ TFC-ESHQ-S_IH-C-53 Occupational Noise Exposure and Hearing Conservation

1. 10 CFR 851, Section 23, “Safety and Health Standards.”
2. 29 CFR 1910, Subpart G, Section 95, “Occupational Noise Exposure.”
3. 29 CFR 1926, Subpart D, Section 52, “Occupational Noise Exposure.”
4. 29 CFR 1926, Subpart E, Section 101, “Hearing Protection.”
5. TFC-PLN-34, “Industrial Hygiene Exposure Assessment Strategy.”
6. TFC-PLN-55, “Industrial Hygiene Program.”
7. “Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices,” American Conference of Governmental Industrial Hygienists.

☐ TFC-ESHQ-S_IH-C-54 Laser Safety

1. American Conference of Governmental Industrial Hygienists, Threshold Limit Values for Chemical Substances and Physical Agents & Biological Exposure Indices (2005).
2. ANSI Z136.1- , “Safe Use of Lasers,” (2000) and (2007).
3. 10 CFR 851, “Worker Health and Safety Program.”
4. TFC-PLN-47, “Worker Safety and Health Program.”

☒ TFC-ESHQ-S_IH-STD-03 Ergonomics

1. 10 CFR 851, “Worker Safety and Health Program.”
2. American Conference of Governmental Industrial Hygienists, “Threshold Limit Values for Chemical Substances and Physical Agents.”
3. 29 CFR 1910.5 (a), “General Duty Clause.”
4. TFC-PLN-41, “Integrated Safety Management System Description.”
5. TFC-PLN-47, “Worker Safety and Health Program.”
6. TFC-ESHQ-S_IH-C-17, “Employee Job Task Analysis.”
7. TFC-ESHQ-S_SAF-C-02, “Job Hazard Analysis.”

Safety – Industrial Safety (S_IS)

☒ TFC-ESHQ-S_IS-C-01 Scaffolding

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, Subpart D, Section 28, “Safety Requirements for Scaffolding.”
3. 29 CFR 1910.29, “Manually Propelled Mobile Ladder Stands and Scaffolds.”
4. 29 CFR 1926, Subpart L, Sections 451- 454, “Scaffolds.”

☒ TFC-ESHQ-S_IS-C-02 Personal Protective Equipment

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, Subpart I, “Personal Protective Equipment.”
   a. 1910.132, “General requirements.”
   b. 1910.133, “Eye and face protection.”
   c. 1910.135, “Head protection.”
   d. 1910.136, “Foot protection.”
   e. 1910.138, “Hand protection.”
3. 29 CFR 1926, Subpart E, “Personal Protective and Life Saving Equipment.”
   a. 1926.28, “Personal protective equipment.”
   b. 1926.95, “Criteria for personal protective equipment.”
   c. 1926.96, “Occupational foot protection.”
   d. 1926.100, “Head protection.”
   e. 1926.102, “Eye and face protection.”
   f. 1926.107, “Definitions applicable to this subpart.”

☒ TFC-ESHQ-S_IS-C-07 Powered Industrial Trucks

1. 29 CFR 1910, “Occupational Safety and Health Standards,” Subpart N, “Materials, Handling and Storage.”
2. 29 CFR 1910.178, “Powered Industrial Trucks.”
3. DOE-RL-92-36, “Hanford Site Hoisting and Rigging Manual.”

Safety – Safety Management (S_SAF)

☒ TFC-ESHQ-S_SAF-C-02 Job Hazard Analysis

1. TFC-POL-16, “Integrated Safety Management System Policy.”
2. TFC-PLN-01, “Integrated Environment, Safety, and Health Management System Plan.”
3. 10 CFR 851, “Worker Safety and Health Program.”

☐ TFC-ESHQ-S_SAF-C-05 Issue and Control of Insulating Rubber Gloves

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.137, “Electrical Protective Equipment.”
3. PER-2003-1632.

☐ TFC-ESHQ-S_SAF-C-09 NRTL Requirements for Electrical Equipment

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910 Subpart S, U. S. Department of Labor Regulations, “Occupational Safety and Health Standards, Electrical, 1910.303, “General Requirements.”
3. NFPA 70 National Electric Code.
   a. NEC Article 110-2.
   b. NEC Article 110-3.
4. 29 CFR 1926 Subpart K, U.S. Department of Labor Regulations, “Occupational Safety and Health Standards, Electrical, 1926.403, “General Requirements.”

☒ TFC-ESHQ-S_SAF-C-12 Safety Inspections

1. 10 CFR 851.21, “Worker Safety and Health Program,” “Hazard Identification and Assessment.”
2. 29 CFR 1926.20(b) (2), “Accident Prevention Responsibilities.”
3. TFC-PLN-41, “Integrated Safety Management System Description

☐ TFC-ESHQ-S_SAF-CD-10 Safety Communications

1. 29 CFR 1926.21(a), “Safety Training and Education.”
2. TFC-PLN-41, “Integrated Safety Management System Description.”
3. TFC-BSM-IRM_DC-C-02, “Records Management.”
4. TFC-OPS-OPER-C-28, “Lessons Learned.”

☐ TFC-ESHQ-S_SAF-P-06 Safety and Health Assessments

1. DOE Order 440.1A, “Worker Protection Management for DOE Federal and Contractor Employees.”
2. TFC-PLN-41, “Integrated Safety Management System Description.”
3. TFC-PLN-10, “Assessment Program Plan.”
4. 10 CFR 851, “Worker Safety and Health Program.”

Safety – Standards (S-STD)

☒ TFC-ESHQ-S-STD-01 Ladders

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.25, “Portable Wood Ladders.”
3. 29 CFR 1910.26, “Portable Metal Ladders.”
4. 29 CFR 1910.27, “Fixed Ladders.”
5. 29 CFR 1910.29, “Manually Propelled Mobile Ladder Stands and Scaffolds (towers).”
6. 29 CFR 1926, Subpart X, “Stairways and Ladders.”
7. 29 CFR 1926, Subpart T, “Demolition,” 1926.851, “Stairs, Passageways and Ladders.”
8. DOE-0346, “Hanford Site Fall Protection Program (HSFPP).”

☐ TFC-ESHQ-S-STD-02 Transportation Safety

1. 10 CFR 851, Appendix A, Section 9, “Motor Vehicle Safety.”
2. 29 CFR 1910, Subpart Z, “Toxic and Hazardous Substances,” 1910.1201, “Retention of DOT markings, placards and labels.”
3. 29 CFR 1926, Subpart O, “Motor Vehicles, Mechanized Equipment, and Marine Operations.”
4. 29 CFR 1926, Subpart W, “Rollover Protective Structures; Overhead Protection.”
5. 49 CFR, “Transportation,” Chapter II, Federal Railroad Administration, Department of Transportation, Parts 211-240.
6. RCW 46.20.001, “License Required - Rights and Restriction.”

☒TFC-ESHQ-S-STD-04 First Aid

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.38, “Employee Emergency Plans and Fire Prevention Plans.”
3. 29 CFR 1910.151(b), “Medical and First Aid.”
4. 29 CFR 1926.23, “First Aid and Medical Attention.”
5. 29 CFR 1926.35, “Employee Emergency Action Plans.”
6. 29 CFR 1926.50, “Medical Services and First Aid.”
7. DOE Order 440.1A, “Worker Protection Management for DOE Federal and Contractor Employees, Attachment 2 - Contractor Requirements Document, paragraph 2.”
8. NFPA 70 E, “Standard for Electrical Safety Requirements fort Employee Workplace,” Part II, Section 1-5.3.

☒ TFC-ESHQ-S-STD-05 Walking and Working Surfaces

1. 29 CFR 1910, Subpart D, “Walking-Working Surfaces.”
   a. 1910.22, “General Requirements.”
   b. 1910.23, “Guarding Floor and Wall Openings and Holes.”
   c. 1910.24, “Fixed Industrial Stairs.”
2. 29 CFR 1910, Subpart E, “Means of Egress.”
3. 29 CFR 1926, Subpart M, “Fall Protection.”
4. 29 CFR 1926, Subpart X, “Stairways and Ladders.”)
5. NFPA 101, “Life Safety Code.”
6. 10 CFR 851, “Worker Safety and Health Program.”

☒ TFC-ESHQ-S-STD-11 Office Safety

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.334(b)(2), “Use of Equipment.”
3. 29 CFR 1910, Subpart E, “Exit Routes, Emergency Action Plans & Fire Prevention Plans.”

☒ TFC-ESHQ-S-STD-12 Elevating Work Platforms

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, “Occupational Safety and Health Administration, Department of Labor,” Subpart F, Section 67, “Vehicle-Mounted Elevating and Rotating Work Platforms.”
3. 29 CFR 1926, “Safety and Health Regulations for Construction,” Subpart L, Section 453, “Aerial Lifts.”
4. ANSI/SIA A92.2, “Vehicle Mounted Elevating and Rotating Aerial Devices.”
5. ANSI/SIA A92.3, “Manually Propelled Elevating Work Platforms.”
6. ANSI/SIA A92.5, “Boom-Supported Elevating Work Platforms.”
7. ANSI/SIA A92.6, “Self-Propelled Elevating Work Platforms.”
8. DOE-0346, “Hanford Site Fall Protection Program (HSFPP).”

☐ TFC-ESHQ-S-STD-13 Hand and Portable Power Tools

1. 10 CFR 851, “Worker Safety and Health Program.”
2. DOE-0359, “Hanford Site Electrical Safety Program.”
3. 29 CFR 1910, Subpart P, “Hand & Portable Powered Tools & Other Hand-Held Equipment.”
   a. 1910.169, “Air receivers.”
   b. 1910.242, “Hand and portable powered tools and equipment, general.”
   c. 1910.243, “Guarding of portable powered tools.”
   d. 1910.244, “Other portable tools and equipment.”
4. 29 CFR 1926, Subpart I, “Tools - Hand and Power.”
   a. 1926.300, “General requirements.”
   b. 1926.301, “Hand tools.”
   c. 1926.302, “Power-operated hand tools.”
   d. 1926.303, “Abrasive wheels and tools.”
   e. 1926.304, “Woodworking tools.”
   f. 1926.305, “Jacks - lever and ratchet, screw and hydraulic.”
   g. 1926.306, “Air receivers.”
   h. 1926.307, “Mechanical power-transmission apparatus.”

☒ TFC-ESHQ-S-STD-18 Safety Signs, Tags, Barriers, and Color Coding

1. 29 CFR 1910, “Occupational Safety and Health Administration, Department of Labor.”
   a. Subpart J, “General Environmental Controls.”
   b. 29 CFR 1910.144, “Safety Color Code for Marking Physical Hazards.”
   c. 29 CFR 1910.145, “Specifications for Accident Prevention Signs and Tags.”
2. 29 CFR 1926, “Safety and Health Regulations.”
   a. Subpart G, “Signs, Signals, and Barricades.”
   b. 29 CFR 1926.200, “Accident Prevention Signs and Tags.”

☒ TFC-ESHQ-S-STD-19 Emergency Showers, Eyewash, and Decontamination Facility Operation Standard

1. 10 CFR 851, “Worker Safety and Health.”
2. 10 CFR 835, “Occupational Radiation Protection.”
3. 29 CFR 1910.151, Subpart K, “Medical and First Aid.”

☐ TFC-ESHQ-S-STD-21 Machine Guarding

1. 29 CFR 1910, Subpart O, “Machinery and Machine Guarding.” (S/RID)
2. 29 CFR 1926, Subpart I, “Tools - Hand and Power.” (S/RID)

☒ TFC-ESHQ-S-STD-24 Bloodborne Pathogen Exposure Control Standard

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910.151(b), “Medical Services and First Aid.”
3. 29 CFR 1910.1020, “Access to Employee Exposure and Medical Records.”
4. 29 CFR 1910.1030, “Bloodborne Pathogens.”

☐ TFC-ESHQ-S-STD-25 Storing, Using, Handling, and Transporting Compressed and Liquefied Gases

1. 29 CFR 1910, Subpart H, “Hazardous Materials.”
   a. Section 101, “Compressed gases general requirements.”
   b. Section 102, “Acetylene.”
   c. Section 103, “Hydrogen.”
   d. Section 104, “Oxygen.”
   e. Section 110, “Storage and Handling of Liquefied Petroleum Gases.”
   f. Section 111, “Storage and Handling of Anhydrous Ammonia.”
2. 29 CFR 1910, Subpart I, Section 134, “Respiratory Protection.”
3. 29 CFR 1910, Subpart L, Section 157, “Portable Fire Extinguishers.”
4. 29 CFR 1926.350, “Gas Welding and Cutting.”

☐ TFC-ESHQ-S-STD-27 Housekeeping/Sanitation

1. 29 CFR 1910.22, Subpart D, “Walking-Working Surfaces.”
2. 29 CFR 1910.141, “Housekeeping/Sanitation.”
3. 29 CFR 1926.25, “Housekeeping.”
4. 29 CFR 1926.51, “Sanitation.”
5. 29 CFR 1926.252, “Disposal of Waste Materials.”

☐ TFC-ESHQ-S-STD-28 Hoisting and Rigging Safety

1. 29 CFR 1910, “Occupational Safety and Health Standards.”
2. 29 CFR 1926, “Safety and Health Regulations for Construction.”
3. DOE-RL-92-36, “Hanford Site Hoisting and Rigging Manual.”
4. RPP-8360, “Lifting Attachment and Lifted Item Evaluation.”
5. TFC-PLN-02, “Quality Assurance Program Description.”
6. TFC-PLN-32, “Tank Operations Contractor Safety Management Programs.”
7. TFC-ESHQ-S_IS-C-07, “Powered Industrial Trucks.”
8. TFC-ENG-FACSUP-C-10, “Control of Dome Loading and SSC Load Control.”
9. TFC-ENG-FACSUP-C-25, “Hoisting and Rigging.”

☐ TFC-ESHQ-S-STD-29 Qualified/Competent Persons

1. 29 CFR 1910, “Occupational Safety and Health Standards.”
2. 29 CFR 1926, “Safety and Health Regulations for Construction.”

Fire Protection (FP)

☐ TFC-ESHQ-FP-C-01 Controls for Safe Hot Work

1. DOE O 420.1C, “Facility Safety.”
2. National Fire Protection Association, Standard 51B, “Cutting and Welding Processes.”
3. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”
4. 10 CFR 851, “Worker Safety and Health Program.”
5. 29 CFR 1926.350, “Welding and Cutting.”
6. 29 CFR 1926.351, “Arc Welding and Cutting.”
7. 29 CFR 1926.352, “Fire Prevention.”
8. 29 CFR 1926.353, “Ventilation and Protection In Welding, Cutting, and Heating.”
9. 29 CFR 1926.354, “Welding, Cutting, and Heating in Way of Preservative Coatings.”
10. 29 CFR 1910, Subpart Q, “Welding, Cutting, and Brazing.”

☐ TFC-ESHQ-FP-STD-01 Fire Marshal Permits, Combustible Controls, and Construction/Occupancy Requirements

1. 29 CFR 1910, “OSHA General Industry Regulations.”
2. 29 CFR 1926, “OSHA Construction Industry Regulations.”
3. DOE O 420.1C, “Facility Safety.”
4. HNF-14755, “Documented Safety Analysis for the 242-A Evaporator,” Defense-In-Depth # 7 (Table 3.3.2.3.2-2), “Fire Protection Requirements (Transient Combustible Loading Limits).”
5. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”

☐ TFC-ESHQ-FP-STD-02 Fire Protection Design Criteria

1. 29 CFR 1910.159, “Automatic Sprinkler Systems.”
2. 29 CFR 1910.165, “Employee Alarm Systems.”
3. DOE O 420.1C, “Facility Safety.”
4. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”
5. DOE-STD-1066-99, “Fire Protection Design Criteria.”
6. DOE-STD-1088-95, “Fire Protection for Relocatable Structures.”
7. 10 CFR 851, “Worker Safety and Health Program.”

☐ TFC-ESHQ-FP-STD-03 Flammable/Combustible Liquids

1. 10 CFR 851, “Worker Safety and Health Program.”
2. DOE O 420.1C, “Facility Safety.”
3. RPP-13033, “Tank Farms Documented Safety Analysis.”
4. 29 CFR 1910.106, “OSHA General Industry Regulations,” Flammable and Combustible Liquids.

☐ TFC-ESHQ-FP-STD-04 Fire Protection System Inspection, Testing, Maintenance, and Discrepancies Management

1. DOE O 420.1C, “Facility Safety.”
2. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”
3. 29 CFR 1910, “General Industry,” Subsection L, “Fire Protection.”

☐ TFC-ESHQ-FP-STD-05 Flammable Gas Monitoring

1. HNF-SD-WM-TSR-006, “Tank Farms Technical Safety Requirements.”
2. HNF-15279, “242-A Evaporator Technical Safety Requirements.”

☐ TFC-ESHQ-FP-STD-06 Fire Hazard Analysis and Fire Protection Assessment Requirements

1. DOE O 420.1C, “Facility Safety.”
2. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”
3. TFC-PLN-41, “Integrated Safety Management System Description.”

☐ TFC-ESHQ-FP-STD-07 Ceiling Tiles, Portable Fire Extinguishers, and Building Fire Barriers

1. 10 CFR 851, “Worker Safety and Health Program.”
2. 29 CFR 1910, “Occupational Safety and Health Standards.”
   a. Section 157(g)(1). “Portable Fire Extinguishers.”
   b. Section 157(g)(2) “Portable Fire Extinguishers.”
3. DOE O 420.1C, “Facility Safety.”
4. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”

☐ TFC-ESHQ-FP-STD-09 Fire Protection System Winterization and Portable Heater Use

1. DOE O 420.1C, “Facility Safety.”
2. ENS-ENG-IP-05, R0, “ORP Fire Protection Program.”

☐ TFC-ESHQ-FP-STD-12 Hanford Fire Department Services

1. DOE O 420.1C, “Facility Safety.”
2. ENS-ENG-IP-05 R0, “ORP Fire Protection Program.”
3. DOE-ORP Letter Number 00-SHD-103, “The Authority, Responsibilities, and Duties of the Hanford Fire Marshall” (Fire Marshal’s Charter), dated November 6, 2000.
4. WAC 173-303, “Dangerous Waste Regulations.”
5. 10 CFR 851, “Worker Safety and Health Programs.”
6. TFC-PLN-13, “Fire Protection Program.”

☐ TFC-ESHQ-FP-STD-13 Fire Protection Requirements for Hazardous Material and Used Waste Absorbing Material Storage

1. DOE O 420.1C, “Facility Safety.”
2. ENS-ENG-IP-05, “ORP Fire Protection Program.”
3. WAC 173-303.
   a. Section 395(1).
   b. Section 630(8) and (8)(a).
   c. Section 630(8)(b).

Operations (OPER)

☒ TFC-OPS-OPER-C-68 Control of Working Hours

1. DOE Manual 460.2-1, “Radioactive Material Transportation Practices Manual.”
2. DOE O 440.1A, “Worker Protection Management for DOE Federal and Contractor Employees,” Attachment 2 Section 1 and Section 10b.
3. DOE/RL-2001-36, “Hanford Site wide Transportation Safety Document.”
4. Occupational Safety and Health Act of 1970, OSHA Section 5(a)(1).
5. HNF-SD-WM-TSR-006, “Tank Farms Technical Safety Requirements.”
6. 49 CFR Part 395, Section 3 and 8, U.S. Department of Transportation, Federal Motor Carrier Safety Regulations, “Hours of Service of Drivers – Maximum Driving and On Duty Time.”
7. HNF-15279, “242-A Evaporator Technical Safety Requirements.”

Hanford Site Procedures

☐ DOE-336 Hanford Site Lockout/Tagout

This procedure implements the lockout/tagout requirements of the Worker Safety and Health Program and Conduct of Operations.

☐ DOE-0342 Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP)

10 Code of Federal Regulations 850 (10 CFR 850).

☒ DOE-0346 Hanford Site Fall Protection Program

Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1926, Subpart M, Fall Protection, 29 CFR 1910 and American National Standards Institute (ANSI)/American Society of Safety Engineers (ASSE) Z 359 (2007).

☐ DOE-0360 Hanford Site Confined Space Procedure

Occupational Safety and Health Administration (OSHA) 29 Code of Federal Regulations (CFR) 1910.146, "Permit-Required Confined Spaces" and 29 CFR 1926.

☒ DOE-0344 Hanford Site Excavating, Trenching and Shoring

Occupational Safety and Health Administration (OSHA) regulations in Title 29 Code of Federal Regulations (CFR) Part 1926, Subpart P, "Excavations"; 10 CFR 851, Worker Safety and Health Program; and the Department of Energy (DOE) M 450.4-1, Integrated Safety Management System Manual.

☐ DOE-0352 Hanford Site Respiratory Protection Program

Occupational Safety and Health Administration's (OSHA) 29 Code of Federal Regulations (CFR) 1910.134 (29CFR 1910.134 incorporates 29 CFR 1926.103); Department of Energy (DOE) Respirator Acceptance Program for Supplied-air Suits (DOE-technical Standard-1167-2003 [10 CFR851.A6]); and American National Standards Institute (ANSI) standard ANSI Z88.2-1992(ANSI 1992).

Portions of this Program implement requirements of 10 CFR 851 and 10 CFR835.

☐ DOE-0359 Hanford Site Electrical Safety Program

- National Fire Protection Association (NFPA) 70-2008, National Electrical Code (NEC)
- NFPA 70E-2009, Standard for Electrical Safety in the Workplace
- Code of Federal Regulations (CFR), Title 29, Occupational Safety and Health
- Administration (OSHA), 1910 Subpart S (29 CFR 1910), Electrical
- OSHA 29 CFR 1926, Subpart K, Electrical
- OSHA 29 CFR 1926, Subpart CC, Cranes & Derricks in Construction
- OSHA 29 CFR 1926, Subpart O, Motor Vehicles, Motorized Equipment, and Marine
- Operations
- 10 CFR Part 851 Worker Safety and Health Program
- American Society of Mechanical Engineers B30.5, Mobile and Locomotive Cranes

☐ DOE/RL-92-36 Hanford Site Hoisting and Rigging Manual

Hoisting and rigging work is required by law and DOE to be in compliance with the Occupational Safety and Health Act of 1970 (OSHA) (29 Code of Federal Regulations [CFR] 1910 or 29 CFR 1926 Subpart CC) and ASME B30 Standards. Work involving critical and special/engineered lifts shall follow this Manual. As a minimum, acceptability of equipment and rigging shall be verified by the RL/ORP contractor and critical lift procedures shall be reviewed and approved by the responsible RL/ORP contractor.
NOTE: Refer to 29 CFR 1926, Subpart R, for special hoisting and rigging requirements relating to steel erection.