6/27/2018	WRPS-PER-2018-1658	An unqualified FOM stood the watch for three days in May	QA Independent Assessment FY2018-WRPS-I-0010, F-01: An unqualified FOM stood the watch for three days in May. The particulars are not included in this report; training status is for "Official Use Only." The facility was notified immediately and is cognizant of the details.
6/27/2018	WRPS-PER-2018-1659	ATS-MP-1032 Section 3.4 requires revision to resolve a QA independent assessment observation	QA Independent Assessment FY2018-WRPS-I-0010, O-03: Job titles between the TIM and the ATS-MP-1032 should be aligned for the FOM. Although the TIM calls out the FOM as a qualification position for the facility, the ATS-MP-1032 does not reference this job title or qualification anywhere except in the title of ATS-MP-1012, Qualification Requirements for Field Work Supervisors/Facility Operations Management and in reference to the FOM logbook. Section 3.4.4 references a "shift manager" qualification although there is no specific qualification for a "shift manager" at 222-S. The FOM and "shift Manager" qualification should be better aligned in Section 3.4 of ATS-MP-1032.
6/27/2018	WRPS-PER-2018-1660	Short term qualification cards need to have a documented expiration date	QA Independent Assessment FY2018-WRPS-I-0010, O-04: Some qualifications are identified as "short-term" but there is no definition for what constitutes "short-term" and as a result, the qualification period cannot be defined. These are used for temporary employees such as subcontractors and interns. There is no definition of what short-term is and it is not tracked so it cannot be determined when or if a short-term employee would need a different qualification card. Additionally, a review of these qualification cards reveal little information on them that are not included in general orientation, facility orientation and facility emergency response training which is required for all personnel at the facility. A definition for these qualifications need to be identified and a requalification/expiration date needs to be entered on the employee's training plan for tracking.

6/27/2018	WRPS-PER-2018-1661	Surveillance TF-17-QSR-241, dated 11/14/2017 should have generated two Problem Evaluation Requests (PERs)	QA Independent Assessment FY2018-WRPS-I-0010, O-05: Surveillance TF-17-QSR-241, dated 11/14/2017 should have generated two Problem Evaluation Requests (PERs). Observation 1 was an OFI where cramped conditions result in inefficiency and potential for tube breakage. Observation 2 was an OFI to increase tube inventory to avoid sending non-certified tubes into the field prior to batch certification.
6/27/2018	WRPS-PER-2018-1662	Procedure TFC-ESHQ-Q_PP-P-02, Quality Assurance Surveillances revision needed to address observation	QA Independent Assessment FY2018-WRPS-I-0010, O-06: Procedure TFC-ESHQ-Q_PP-P-02, Quality Assurance Surveillances does not give clear direction for making observations based on performance vs. compliance. The QA department has received performance based program training. Following training, the independent assessment procedures and guide were updated to reflect this paradigm change, but the "P-02" surveillance procedure does not provide clear direction in applying performance based observations.
6/27/2018	WRPS-PER-2018-1663	ATS-MP-1032 Requirements Matrix omits NQA-1 Requirement 10, Inspections and Surveillances	QA Independent Assessment FY2018-WRPS-I-0010, O-07: It is unclear why ATS-MP-1032, Table 1-1, Cross-reference Matrix of the 222-S Laboratory Quality Assurance Requirements doesn't include requirement 10 as a NQA-1 requirement, especially as it relates to ATS-MP-1032, Chapter 11, Quality Control. It is suggested that a Quality Surveillance be scheduled by the 222-S QA Lead to investigate and document this condition. Requirement 10 (Inspection and Surveillances) was reviewed in FY2013-WRPS-I-0005, and the Audit report stated, "It didn't apply to the 222-S Laboratory." After a desk top review of Requirement 10, (invoked by TFC-PLN-02, Part I, Chapter 10) and it's applicability to the 222-S Laboratory Management Plan, ATS-MP-1032 Rev D-10, it is unclear why ATS-MP-1032, Table 1-1, Cross-reference Matrix of the 222-S Laboratory Quality Assurance Requirements doesn't include Requirement 10 from NQA-1.

6/27/2018	WRPS-PER-2018-1664	PER missing objective evidence of completion	QA Independent Assessment FY2018-WRPS-I-0010, O-08: Regarding WRPS-PER-2017-1200: Within the TUF evaluation section, there was an agreed upon corrective action that was not presented as an E-STARS corrective action. Closure for the PER involved a briefing with RadCon exempt personnel on the requirements for sponsoring level 4 work with an outside craft. Although it was mentioned that a briefing took place, there was no objective evidence showing that the briefing took place or who was present for the briefing. When briefings are conducted to support closure, they should be documented. It is recommended that evidence of this briefing and attendees be located (or generated) and attached to WRPS-PER-2017-1200.
6/27/2018	WRPS-PER-2018-1690	Integration of Historical Asbestos data	On Wednesday the 27th of June, 2018 Production Operations Field IS & IH were requested by Production Operations Shift Operations to provide information and guidance on various potential hazards related to facility maintenance and upgrades to Tank Farm change trailers to be performed by MSA personnel. One of the potential hazards identified was Asbestos as disturbance of facility infrastructure was necessary. The Production Operations Field IH sourced information from 3 sources: The IH Programs SME (who was very recently designated Asbestos SME), the WRPS IH Asbestos Inventory and Sampling shared drive, and the "IH programs Library". Below is a summary of information acquired:Of 27 listed "Change Trailers" 12 had no information available related to ACM or PACM or "asbestos free" status. 15 had limited information related to ACM or PACM or "asbestos free" status. Of the 15 facilities that had information available 11 facilities were listed as "asbestos free" in one of three WRPS reports (WRPS-1203347, WRPS-1202444, and WRPS-1204902) based on manufacturer provided letters stating that no ACM was used in construction. Of the 7 facilities in which sampling had occurred 4 had only asbestos sampling surveys without additional supporting documentation. 7 facilities only had information provided by WRPS-1203347, WRPS-1202444, or WRPS-1204902. 1 facility had an official "Building Inspection Report" granting "asbestos free" status based on building manufacturer information, in addition to being listed as "asbestos free" in WRPS-1204902.Of the available information there is no documentation of products used in modification or maintenance of the facilities.WRPS-1202444 "Asbestos Review of building materials (for mobile office facilities manufactured by Northwest Building Systems)" was re-issued most recently in November of 2012 and does not account for modifications or maintenance of the facilities listed within.WRPS-1203347 "Asbestos Review of building materials, 31 Mobile Office Trailers Manufactured by Modern Building Systems Incorporated)" was re-issued most recently in November of 2012 and does not account for modifications or maintenance of the facilities listed within.WRPS-1204902 "Asbestos Review of building materials, Mobile Office Trailers Manufactured by Blazer Industries" was issued in November of 2012 and does not account for modifications or maintenance of the facilities listed within.The Building Inspection Report for MO824 does state that "it appears that no modifications have been made to the trailer", however this report was drafted in February of 2014 and no update to the report has been made as of 06/27/2018 despite the floor having replaced as well as other minor maintenance activities having taken place since the initial draft. It is also stated in the MO824 Building Inspection Report that the "asbestos free" status does not "include under the skirting/crawl space and could contain materials such as but not limited to Pipe and wire insulations, glues and mastics that could contain asbestos fibers" and that "Before disturbing any material under the skirting contact the WRPS Industrial Hygiene Dept."Assuming that MSDS/GHS-SDS review prevented the use of ACM in the modification and maintenance of Change Trailer facilities is a reasonable assumption, however this documentation is difficult and time consuming to track down without an up to date Building Material Inventory or other similar document. When interfacing with work planning, especially when work is being planned and performed by other contractors, this potential delay is prohibitive to timely maintenance/repair/upgrades. Also, the lack of concise documentation is difficult to integrate into work packages.
6/27/2018	WRPS-PER-2018-1691	IH Qualification Card	IH professional qualification card requirement.

6/27/2018	WRPS-PER-2018-1692	Reporting Radiologically Contaminated Flora/Fauna at ETF/LERF to MSA Biological Controls	MSA Biological Controls (IBC) has authorized WRPS via Service Delivery Document (SDD) "J-3 ID #34: Biological Controls" to self-perform the clean-up of biological waste (except for birds and active nests); note that there are volume limitations in place for the waste cleanup authorization unless the waste has comingled with other hazardous contamination (radiological, asbestos, beryllium, etc.). MSA PSRP has also authorized the WRPS Ecological SME to oversee WRPS' self-performance of select activities involving the removal of birds and active nests via MBTA permit authorization letters MSA-1801288 and MSA-1702584. Both MSA authorizations (SDD and letters) require WRPS to notify the respective MSA organization (IBC or PSRP) of any work conducted by WRPS under each authorizing documents (SDD and letters). In addition, HNF-40686 Rev 4, "Administrative Interface Agreement" for IBC, in Section 3.0, bullet "n" requires WRPS notify MSA IBC of all biological contamination and vectors, regardless of level. Note that bullet "d" in that section also requires WRPS provide MSA IBC with copies of any radiological surveillance records when requested. However, some of the recent, contaminated biological events/clean-ups that WRPS has self-performed at ETF (see WRPS-PER-2018-1521 and RSR LE-1800970) were not reported to MSA IBC as required by both the SDD and AIA. A WRPS Interface Management point of contact was pulled in do to the involvement of the SDD and AIA requirements; and when they made initial contact with ETF, they were informed that the facility does not typically notify MSA of biological clean-up activities or contaminated biological events when they occur at ETF/LERF and WRPS self-performs the work. WRPS Interface Management has initiated communications with the manager of WRPS Radiological Controls (RadCon) to inquire what WRPS' processes are overall to ensure proper flow-down of the SDD and AIA notification requirements. In addition, the WRPS Ecological SME, following up on an inquiry from MSA IBC that was explicitly on the recent ETF events, also initiated more direct follow-up communications to discuss this issue with the ETF Facility Manager and Environmental Field Representative. The ETF Facility Manager requested this PER be generated and issued to him so he can follow-up and ensure ETF resolves this issue as it applies to their actions, procedures, and processes while WRPS Interface Management continues to work on identifying the broader, extent of condition with WRPS RadCon.
6/27/2018	WRPS-PER-2018-1693	General House Keeping-AW Farm Interior/Exterior Farm fence line boundaries.	While performing a "Walk Your Space Down" MOP, it was noticed that AW-Farm is in some need of overall General Housekeeping. There is small trash throughout the inside and out side of the farm. There is also electrical cords strung out near AW-02E pit with No Caution Tape being used or possible yellow jackets. Electrical cords are strung out around the east end of the exhauster skid and No Caution Tape, possible tripping hazards while wearing respiratory equipment or just general walking.
6/28/2018	WRPS-PER-2018-1694	Orion Conductivity Meter Found "Out Of Tolerance during Calibration	Orion Conductivity Meter, Model# STAR A122, Serial# H04887 (M&TE# 817-45-70-008) "As Found" reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.

6/28/2018	WRPS-PER-2018-1695	Allegro MX Multimeter Found Out Of Tolerance During Calibration	Allegro Multimeter, Model# Allegro MX, Serial# 172334 (M&TE # 817-45-08-115) "As Found" reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.
6/28/2018	WRPS-PER-2018-1696	Emergency Event Descriptions	EP-PE 6.3 Emergency Response Organization (ERO) On June 6th, 2018 Emergency Preparedness conducted Field Drill to provide the 2620 FERMI (FERMI) Facility Emergency Response Organization (FERO) members and building occupants the opportunity to demonstrate safety and security awareness utilizing the proper response to a potential explosive device during a building evacuation due to a fire alarm. During the course of the drill, the evaluation team identified the following Suggestion pertaining to EP Program Element 6 Emergency Response Organizations: •During the drill the building fire alarm and a "bomb prop" were utilized to demonstrate the ability to safely evacuate the facility, complete accountability, and communicate unusual conditions or identify witnesses to potential cause of the event. During the drill occupants, as well as PAAs observed the "suspicious object" (bomb prop); however with the description of the "bomb" being passed up the chain, the description of the object changed and didn't convey that the item was a confirmed "bomb" prop which resulted in the Central Shift Manager to complete a limited notification up the chain of command. (P/E 6.23) ERO Operations
6/28/2018	WRPS-PER-2018-1700	T Farm PA ECN-714367 Review comments to be incorporated by PA Project	Seven comments were made as part of ECN-714367 review by electrical SME in SPF which may require a significant level of detail to be added or as built once the work is completed. The PA Project's task is only to move DS-200 to the opposite side of the mounting rack in T Farm as a favor to West Area so they can do verifications from outside the farm and avoid additional entries. Therefore, Projects and Engineering EDL have come to an agreement that these changes will be incorporated into a separate revision and tracked via this PER through to completion. This separate revision will be done prior to the field work completion of the ECN (sign off) as a barrier to ensure these comments are appropriately addressed or dispositioned accordingly prior to turnover of the system later this FY.

6/28/2018	WRPS-PER-2018-1701	SY Settlement Agreement discrepancies within Environmental Notification procedure TFC-ESHQ-ENV_FS-C-01	- The regulatory reporting requirements of the SY Settlement Agreement are not clearly identified within procedure TFC-ESHQ-ENV_FS-C-01, Environmental Notification. - The requirements are spread out between Section 4.4, Tank Monitoring Equipment, Section 4.7 Double-Shell Tank RCRA Leak Detection, and Table 6 Regulatory Agency Reporting Requirements. - Sections 4.4 and 4.7 only list one of the 4 reporting requirement, which are different in each section - Sections 4.4 and 4.7 do not provide time frames for which regulatory reporting must be provided - Table 6 lists all 4 reporting requirements and time frames, but no where within the procedure (not even in the table of contents) is there a reference to Table 6 - Table 6 does not appear to follow the regulatory reporting guidelines as written in the SY Settlement Agreement. It is more conservative. - By not having the SY Settlement Agreement requirements, including regulatory reporting time frames, clearly identified in subject procedure WRPS could inadvertently be non-compliant.
6/28/2018	WRPS-PER-2018-1703	Damage to Hoffman Enclosure	During inspection of Hoffman Enclosures it was found that one of the enclosures was damaged when it was shipped out to the 218-A Warehouse.
6/28/2018	WRPS-PER-2018-1627	Chemical(s) procured by the 222-S Laboratory are incorrectly classified as Quality Level 0	Independent Audit report, FY2018-WRPS-I-0010, Finding F-02: Chemical(s) procured by the 222-S Laboratory are incorrectly classified as Quality Level 0, where the chemicals purchased have unique, specific quality requirements that warrant a QL-3 classification per procedure. For more information on the Finding, view .

6/28/2018	WRPS-PER-2018-1704	VISIBLE SAND IN FILTER MEDIA	A LOT OF SAND VISIBLE IN FILTER MEDIA - NOTED ON DATA SHEET 3 AS "UNSAT" FOR ALL FILTER LOCATIONS.
6/28/2018	WRPS-PER-2018-1629	Procedure ATS-310, Section 1.46, Inconsistent usage of SC and SS with reference to 222-S lab.	Independent Assessment, FY2018-WRPS-I-0010, Opportunity for Improvement OFI-02: The use of Safety Class (SC, QL-1) and Safety Significant (SS, QL-2) in procedure ATS-310, Section 1.46, Procurement of 222-S Laboratory Equipment, Supplies, and Services procedure (reference 1) needs to be clarified such that the 222-S Laboratory would only require replacement equipment to be QL-3. The QL-1 and QL-2 wording should be clarified to define, if or when this higher level of quality designation is needed at the Laboratory or remove the references to QL-1 and QL-2 to eliminate confusion.
6/28/2018	WRPS-PER-2018-1698	Work being performed under expired SJHA at ETF	While performing a focused MOP of ETF RadCon task descriptions, I noted a reference in the Special Instructions section for many tasks that SJHA -1069 had been approved to cover all activities during the performance of the task. A review of SJHA-0169 indicated that the SJHA had expired on 10-7-2017.

6/28/2018	WRPS-PER-2018-1699	ETF RadCon Task Descriptions (5) need revision	While performing a focused MOP of the 51 ETF RadCon routine surveillance Task Descriptions, I noted that 3 task descriptions needed revised for clarity and 2 task descriptions need revision to reflect the bio-hazard warning emphasized in TFS-ESHQ-RP_MON-C-20, " Survey Methods for Contaminated Soil, Wildlife, and Vegetation".
6/28/2018	WRPS-PER-2018-1702	Evaluate if a contamination survey inside of a drip container is warranted during routine survey	While reviewing ETF RadCon routine survey Task Descriptions (LE-D005 and LE-W100) and also while observing the W-100 routine performed in the field, I noted that no contamination surveys are performed on the INSIDE of a drip container. My concern is that cross-ventilation or sudden bumping/jarring of the supporting structure of the container could potentially create localized airborne radioactivity and subsequent spread of contamination to the surrounding area. In that (b)(6) I observed wore partial sleeves and surgeon gloves while performing the routine and is trained to perform partial entries into a CA and perform self-survey upon exit, would it not be prudent to (b)(6) inside of the dry containers or even a Q-tip swab of the dry area around standing water inside a container to validate the fact that the inside of the container is/is not in fact a CA and posted accordingly?
6/28/2018	WRPS-PER-2018-1705	AW105 Primary Tank Thermocouple Out Of Service TSR Readings Not Attainable	AW-105 primary tank thermocouple tree has been declared inoperable in accordance with the evaluation performed in RPP-OE-58408 Rev. 01 The evaluation deems all 18 thermocouples as providing either no readings or erratic readings. Additionally, RPP-OE-58419 Rev. 01 evaluation deems all other AW-Farm tanks thermocouples as operable with the exception of AW102-WST-TE-036. The primary concern in this matter is that AW-105 is without a primary tank thermocouple tree to perform temperature monitoring on a weekly basis for AC 5.9.1.

6/28/2018	WRPS-PER-2018-1706	Unprotected reflective, cylindrical component found outside C-Farm	While performing C-Farm project management walk down (WRPS-MOP-2018-1974), an unwrapped/uncovered spherical stainless (reflective) component was identified 2-3 feet from old wooden storage boxes. No tumbleweeds have accumulated around the time at this time. The item is not on a wood pallet nor is other potentially combustible material in direct contact with the item. The reflective component represents a potential fire hazard that requires mitigation or disposal of the item to prevent recurrence of seasonal, isolated fires as described in PER-2016-1400 and PER-2017-1364.
6/28/2018	WRPS-PER-2018-1707	No wireless ISP access at 1835TD	During the course of the AECOM independent assessment of Contractor Assurance Systems (CAS), it was noticed that the building in which the CAS group works (1835TD) there is no access to the HLAN via the Wireless ISP system. The lack of access limited the capabilities of the external assessors. Additionally, many WRPS employees attend meetings at 1835 TD and are unable to access the HLAN remotely. Wireless ISP coverage should be extended to 1835TD as in other WRPS leased facilities.
6/28/2018	WRPS-PER-2018-1697	Review of OHPCD Web Page	TFC-BSM-AD-C-04, Documents Owned by Other Hanford Prime Contractors Used by WRPS, requires that Interface Management periodically review the OHPCD website for accuracy. WRPS-MOP-2018-1928 was performed on 6/27/18, and used to document the results of the review. This PER is being written to capture the MOP, and assign the outstanding actions needing completion by the Procedures organization. Note: The items identified during the review are predominately administrative in nature (e.g. new point of contact, CIGs/RES numbers don't match, typo's, USQ stamp present but on wrong page) and don't appear to be of major concern. There was only one procedure that had been revised that was not updated on the WRPS OHPCD web page, and that was corrected immediately.

6/28/2018	WRPS-PER-2018-1708	Evaluation of Crossing lists	Crossing lists are prepared in multiple ways. A standardized coversheet does not exist, and the Composite Sketch can differ between engineers. All engineers include in the crossing list package, the Ground Penetrating Radar (GPR) scan, associated facility drawings and a number line list which itemizes the lines. Some engineer's crossing lists numerically identify all lines in the GPR scan, and those which are not able to be identified are listed as unknown. Other engineer's crossing list identify all lines on facility drawings in the area of concern and use the GPR scan as a check but no lines are identified as unknown. Both of these examples meet the requirements of a Composite Sketch, which is what the crossing list is used as, in TFC-ESHQ-S-STD-30.The Excavation Engineer list, in the Engineering Toolbox should be updated and should not include phone numbers. There is no formal qualification for Excavation Engineer; however, based on TFC-ESHQ-S-STD-30 the excavation engineer should at minimum have a DA qualification. "The WRPS Excavation Engineer fills the role of Design Authority/Technical Representative for WRPS excavations. For tank farm areas (areas within the Tank Farm boundaries), the WRPS Excavation Engineer is identified on the Engineering Subject Matter Experts list located in the Engineering Tool Box website." The procedure also states that either the Project Engineer or Facility Manager assigns the Excavation Engineer. This can lead to one engineer being over tasked and the Excavation Engineer should be assigned by either Project Engineering Management or Production Operations Engineering Management, not the Facility Manager.
6/29/2018	WRPS-PER-2018-1541	TVAR Internal Assessment FY2018-PI-MD-0330, Observation 1	Internal Assessment FY2018-PI-MD-0330, "Evaluation of Implemented and Proposed Actions in Response to the Hanford Tank Vapor Assessment Report" was completed in June 2018. The assessment focused on the Phase 1 and Phase 2 corrective actions tracked under WRPS-PER-2014-0602 and the associated subtasks. Phase 1 consisted of those actions defined within the Chemical Vapors Implementation Plan funded under US Department of Energy Prime Contract DE-AC27-08RV14800 contract modification 401. Phase 2 actions are actions to address recommendations in the Tank Vapor Assessment Report (TVAR) but completed outside of contract modification 401. The following observation was identified: Observation 1 – References to the Chemicals of Potential Concern list were inconsistently applied. Under Dose Response DR2 the TVAR recommendation was to "Conduct a rigorous review of the COPC list to ensure it is current, and develop a process to document the mechanisms used to ensure COPC updates and the basis for changes in the COPC list over time." In response, WRPS-PER-2014-0602.121 required a review of the IH program and incorporation of changes as necessary. The deliverable for this action was to "...incorporate recommendations from TVAR 10-DR2-1 to include the procedure number, title, revision level, and issue date." During a review of the IH Technical Basis and the associated procedures, it was noted that within TFC-ESHQ-S_IH-66 under section 4.2.1, the Chemical of Potential Concerns (COPC) reference was identified as WRPS-1604188.1, "Tank Operation Contractor Chemicals of Potential Concern, Rev. 1." However, within that same procedure under the requirements section, the COPC list is referenced as WRPS-1703433, "Tank Operations Contractor – Chemicals of Potential Concern, Rev. 1." This discrepancy is carried forward into other IH procedures which reference WRPS-1703433 yet the COPC listing posted on the WRPS IH Website refers to WRPS-1604188. These discrepancies increase the risk that incorrect documents are utilized with evaluating tank vapors.
6/29/2018	WRPS-PER-2018-1542	TVAR Internal Assessment FY2018-PI-MD-0330, Observation 2	Internal Assessment FY2018-PI-MD-0330, "Evaluation of Implemented and Proposed Actions in Response to the Hanford Tank Vapor Assessment Report" was completed in June 2018. The assessment focused on the Phase 1 and Phase 2 corrective actions tracked under WRPS-PER-2014-0602 and the associated subtasks. Phase 1 consisted of those actions defined within the Chemical Vapors Implementation Plan funded under US Department of Energy Prime Contract DE-AC27-08RV14800 contract modification 401. Phase 2 actions are actions to address recommendations in the Tank Vapor Assessment Report (TVAR) but completed outside of contract modification 401. The following observation was identified: Observation 2 – Corrective actions lacked documentation supporting ongoing, institutionalized, training for communication skills. Under Risk Management RM1d, the TVAR recommendation was to "Provide and manage IH professional and technician staffing levels to effectively inform, advise and train line functions and address workers concerns regarding tank farm vapors..." Under WRPS-PER-2014-0602-61, the stated action was to "Initiate hiring actions to increase IH staffing levels so that additional emphasis will be placed on informing and training line functions and managers regarding worker concerns." While the deliverable for this item was to hire IH staff with enhanced training and communication skills, the evidence provided in the closure documentation identified a specific training course held as a one-time event to satisfy this item.

6/29/2018	WRPS-PER-2018-1543	TVAR Internal Assessment FY2018-PI-MD-0330, Observation 3	Internal Assessment FY2018-PI-MD-0330, "Evaluation of Implemented and Proposed Actions in Response to the Hanford Tank Vapor Assessment Report" was completed in June 2018. The assessment focused on the Phase 1 and Phase 2 corrective actions tracked under WRPS-PER-2014-0602 and the associated subtasks. Phase 1 consisted of those actions defined within the Chemical Vapors Implementation Plan funded under US Department of Energy Prime Contract DE-AC27-08RV14800 contract modification 401. Phase 2 actions are actions to address recommendations in the Tank Vapor Assessment Report (TVAR) but completed outside of contract modification 401. The following observation was identified: Observation 3 – Corrective actions were deemed to have closure notes lacking sufficient detail and/or cross references to support the original closure of the item. During the assessment it was noted that PER actions not included under WRPS-PER-2014-0602 have supported closure of a WRPS-PER-2014-0602 subtask. For example, under Dose Response DR5, the TVAR recommendation was to "...continue to evaluate COPC OEL's... to develop a new acute OEL list." The associated deliverable noted under WRPS-PER-2014-0602.30 requires "An approved report...with actionable recommendations for program improvement...to be added as separate action items under WRPS-PER-2014-0602." However, one of the separate actions addressing the original recommendations is being logged under WRPS-PER-2017-0610.2 which has been established to initiate the evaluation/review process for the OEL established with tetrahydrofuran in the COPC list. By providing a clear cross reference between the multiple corrective actions being taken, WRPS can better demonstrate both the actions taken to date and the relationships between the actions. Of the 117 unique correcting actions established under WRPS-PER-2014-0602, three closed actions were deemed to have closure notes lacking sufficient detail and/or cross references, as noted above, to support the original closure of the item: WRPS-PER-2014-0602.98, WRPS-2014-0602.99 and WRPS-PER-2014-0602.66 (see assessment for specific details). In addition, when the following corrective actions are closed, closure notes should include the appropriate cross-reference information: WRPS-PER-2014-0602.20 – reference WRPS-PER-2017-0720; WRPS-PER-2014-0602.30 – reference WRPS-PER-2017-0610.2; and WRPS-PER-2014-0602.48 – reference WRPS-PER-2017-0723.1, 2, and .3 and WRPS-PER-2017-0610.1.
6/29/2018	WRPS-PER-2018-1544	TVAR Internal Assessment FY2018-PI-MD-0330, Observation 4	Internal Assessment FY2018-PI-MD-0330, "Evaluation of Implemented and Proposed Actions in Response to the Hanford Tank Vapor Assessment Report" was completed in June 2018. The assessment focused on the Phase 1 and Phase 2 corrective actions tracked under WRPS-PER-2014-0602 and the associated subtasks. Phase 1 consisted of those actions defined within the Chemical Vapors Implementation Plan funded under US Department of Energy Prime Contract DE-AC27-08RV14800 contract modification 401. Phase 2 actions are actions to address recommendations in the Tank Vapor Assessment Report (TVAR) but completed outside of contract modification 401. The following observation was identified: Observation 4 – Corrective actions were closed based upon draft, not final, reports. During the review it as noted that some corrective actions had been closed based upon draft instead of finalized reports. For example, under WRPS-PER-2014-0602.74, two draft reports, RPP-RPT-59729 and RPP-RPT-59535 were listed as part of the closure documentation. Although these two reports have subsequently been accepted and finalized, similar situations existed under other TVAR-related corrective actions. While the assessment did not find negative outcomes ultimately impacting the satisfaction of the TVAR intent, this practice increases the risk that a substantive change in the underlying report could impact the completion of a corrective action and the accuracy of closure statements. The following corrective actions referenced draft reports in the closure notes: WRPS-PER-2014-0602.64, WRPS-PER-2014-0602.74, WRPS-PER-2014-0602.76 and WRPS-PER-2014-0602.99.
6/29/2018	WRPS-PER-2018-1545	TVAR Internal Assessment FY2018-PI-MD-0330, Observation 5	Internal Assessment FY2018-PI-MD-0330, "Evaluation of Implemented and Proposed Actions in Response to the Hanford Tank Vapor Assessment Report" was completed in June 2018. The assessment focused on the Phase 1 and Phase 2 corrective actions tracked under WRPS-PER-2014-0602 and the associated subtasks. Phase 1 consisted of those actions defined within the Chemical Vapors Implementation Plan funded under US Department of Energy Prime Contract DE-AC27-08RV14800 contract modification 401. Phase 2 actions are actions to address recommendations in the Tank Vapor Assessment Report (TVAR) but completed outside of contract modification 401. The following observation was identified: Observation 5 – 21 TVAR corrective actions were modified during the transition to the CVAP. At the start of the Vapors Mid-Point Assessment in November 2017, the assessment team was provided a report showing draft Phase 2 TVAR corrective actions that were to be migrated to a new CVAP PER corrective action (see Appendix A – Initial TVAR to CVAP Report of Corrective Actions). This report documented the details of the original TVAR corrective actions and deliverables and the planned CVAP corrective actions and deliverables. This report established a baseline to evaluate whether the planned corrective actions to be completed under CVAP actions met the intent of the TVAR. At the conclusion of the assessment, the original draft TVAR phase 2 actions were compared to the final CVAP corrective actions that were entered into the PER system. At that time it was discovered that the draft actions and/or deliverables of some Phase 2 corrective actions had been changed in the new CVAP PERs. As noted in Appendix B – Summary of Changes to CVAP Deliverable, multiple CVAP corrective actions listed "No Action Needed." In some cases, the Phase 2 corrective action noted under the TVAR had been completed during the course of the assessment and therefore, no action would be required under the CVAP. However, the evidence for listing a CVAP corrective action as "No Action Needed" has not been well documented in either the original TVAR Phase 2 corrective action or the CVAP corrective action.

6/30/2018	WRPS-PER-2018-1709	DOE-0336 Implementation Improvement Opportunities	This PER covers DOE-0336 implementation improvement opportunities at the 222-S Complex and does not involve a procedural non-compliance. This PER captures input from 222-S Maintenance, Operations and other worker and management personnel along with a WRPS LOTO SME, that was provided during a meeting to discuss worker concerns regarding implementation of DOE-0336 at the 222-S Laboratory. The meeting was supplemental to the WRPS Safety Pause discussions that were held at the beginning of the work day. One of the WRPS Safety Pause discussion slides referred to an event that occurred at 222-S and is documented by WRPS-PER-2018-1673, Improper Notification of LOTO AWL Lock Removal at 222-S. The supplemental meeting was beneficial in ensuring that 222-S management understood and responded to worker concerns and suggestions for improvements. Workers and management agreed that this PER would be submitted. Workers recommended increased craft involvement in LOTO walk downs prior to field execution. Two specific recommendations provided by workers were: 1. Crafts will be given an opportunity to review TAFs prior to the day of field work execution. 2. Involve applicable crafts in the development of TAFs The 222-S Laboratory Manager committed to having this PER submitted and to ensuring that a causal analysis is conducted and sharing the results with workers once complete. Worker involvement in developing the causal analysis is also planned.
6/30/2018	WRPS-PER-2018-1710	Contamination at 60J-F-1	1. 60J-F-1 is exhibiting crust like material at manufactured seems along the blower housing. Contamination value of 2K dpm/100cm2 Beta-Gamma removable was discovered at approximately 16:00 hours, today 6-30-18, after SOM had requested follow survey be conducted from actions conducted 6-29-18. (see #2 below) 2. Direct contamination was discovered on associated piping & flooring below 60J-F-1 on 6-29-18; all surveys conducted did not identify any removable contamination and the entire area was decontaminated with all direct contamination removed, as evidenced by follow up survey. 3. My concern is that the existing blower unit is not capable of containing the material it is exposed to during TFD rotor flushing operations and possibly even during normal TFD process operations. If a different blower is not available for replacement, then it may be necessary to design a more permanent containment enclosure for the 60J-B-1 location to ensure contamination is controlled without having to have a large C.A. maintained in / around the blower area.
7/2/2018	WRPS-PER-2018-1712	INADEQUATE MONTHLY INSPECTION OF FIRE EXTINQUISHERS	The April inspections were annotated in May 2018 for the fire extinguishers at the entrance and at the rear exit. The aspect of annotating a tag after the fact should be evaluated by Facility Manager and Safety to determine whether it is a prudent practice. The June inspections were not annotated as being accomplished on either fire extinguisher's tag as of end of day on 06/28/2018. Each fire extinguisher was in the green and had the pin installed. WRPS-MOP-2018-1978

7/2/2018	WRPS-PER-2018-1711	Potential inadvertent gravity induced transfer from WTP NLD to TEDF	Inadvertent & unmonitored gravity induced transfer from WTP NLD storage tank to TEDF is possible if NLD storage tank level is above ~34ft, and the WTP flow control valve (FV-8007) opens for any reason. (see attached "NLD transfer illustration") Due to a height difference between the NLD tank level & air stripper tower inlet, a fluid level above ~34ft in the NLD storage tank could provide sufficient static head pressure to flow NLD effluent from the NLD storage tank into the air strippers. The level in the air strippers could then rise to the point of supplying enough head pressure to cause flow into the TEDF transfer line, as the highest point in the transfer line is the air stripper discharge piping. This flow could be initiated if the only flow isolating component, NLD flow control valve (FV-8007; variably positioned valve), opens for any reason (e.g., maintenance, testing, control system changes, etc.), and would not require operation of either NLD-PMP-20A/B or NLD-PMP-43A/B. Flow would be minimally hindered by the system check valves and centrifugal pump impellers. Aside from FV-8007, there are no design elements to restrict flow from the NLD storage tank to the TEDF. Underground liquid pockets may exist and act as loop seals, but have not been analyzed or designed as such. When an intended NLD tank transfer operation is not in progress, indications (NLD-PMP-43A/B Stopped) provided to ETF would indicate no discharge operation is in progress. A slight flow indication, significantly lower than a normal transfer, could be assumed to be due to instrument calibration/noise. During this time, NLD discharge characteristics (pH & conductivity) may not be utilized, since there would be no intended operational discharge in progress. A slow drain condition from the NLD storage tank, with valve 68JGV-01 open, could be nearly impossible for WTP or ETF to discern. Batch additions to the NLD storage tank could be slowly drained to TEDF, leaving room in the NLD tank for additional batch additions, resulting in multiple, unintended, and unmonitored discharges to the TEDF transfer line. References (WTP reference documents are not attached due to Bechtel non-disclosure agreement rules.) 24590-CM-HC1-MTF5-00001-03-00010_00C; DRAWING - AS-BUILT - SHOP FAB FIELD ERECTION DRAWINGS - NLD TANK PLAN AND APPURTENANCE 24590-BOF-P1-54-00002_002; NON-DANGEROUS NON-RADIOACTIVE EFFLUENT FACILITY GENERAL ARRANGEMENT SECTION 24590-BOF-P1-54-00003_001; NLD WASTEWATER THM AIR STRIPPERS GENERAL ARRANGEMENT PLAN 24590-CM-POA-M500-00014-01-00001_00B; DRAWING - STRIPPING TOWER MODEL; 60T20H NLD-VSL-0000A AND NLD-VSL-00008B 24590-CM-POA-M500-00014-01-00003_00C; DRAWING - STRIPPING TOWERS MODEL; 60T20H EQUIPMENT GENERAL LAYOUT 24590-BOF-M6C-NLD-00005_001; NON-RADIOACTIVE LIQUID WASTE DISPOSAL TANK NLD-TK-00001 SIZING 24590-BOF-M6-NLD-00002001; P&ID - BOF NON-RADIOACTIVE LIQUID WASTE DISPOSAL SYSTEM NLD-TK-00001 24590-BOF-M6-NLD-00002002; P&ID - BOF NON-RADIOACTIVE LIQUID WASTE DISPOSAL SYSTEM NLD PUMPHOUSE 24590-BOF-M6-NLD-00002003; P&ID - BOF NON-RADIOACTIVE LIQUID WASTE DISPOSAL SYSTEM NLD PUMP HOUSE 24590-BOF-M6-NLD-00003001; P&ID - BOF NON-RADIOACTIVE LIQUID WASTE DISPOSAL SYSTEM NLD-VSL-00008A/B 24590-BOF-P3-NLD-ZA04155001_002; NLD-ZA-04155-C12A-6 - BALANCE OF FACILITIES ISOMETRIC 24590-BOF-P3-NLD-ZA04355001_000; NLD-ZA-04355-C12A-6 - BALANCE OF FACILITIES ISOMETRIC 24590-BOF-P3-NLD-ZA04355002_000; NLD-ZA-04355-C12A-6 - BALANCE OF FACILITIES ISOMETRIC
7/2/2018	WRPS-PER-2018-1713	Compare S-21 Exhaust Stack Flow Following HVAC Upgrades Completion	Review of the operational acceptance testing (Oat) for the 222-S HVAC upgrades project, while comparing this work to the S-21 permit to ensure compliance. This job involves replacing the intake and exhaust fans with variable frequency drives in order to reduce vibrations in the ducting system and to better control airflow.The quarterly requirement for air flow testing has been waived due to consistent air flow per document RPP-57341. In addition, this document should be reviewed again for accuracy after the upgrades are complete. Current license gives an average stack velocity of 61.16 ft/second (19.25 m/second). Stack flow test performed every 6 months, last tested 3/21. Scheduled again 9/19, which should line up with the finish of this project. Would recommend planning this PM to be completed shortly after the project is complete. If air flow changes significantly it is likely the calculations done for the sample probe will need to be re-verified. This OAT/project should not impact the overall velocity of the stack. The goal of this project was to not change the overall airflow of the system, but to allow for finer control and to minimize duct vibrations. Permit Air 17-135 for stack 296-S-21 would not be impacted with the scope of this work. However, after the work is completed the stack flow should be re-verified via S-21 Stack Flow Test 25-000598 and compared to the current air license, and in addition the stack flow should be trended over the next few years.
7/2/2018	WRPS-PER-2018-1714	Employee Reimbursement System (ERS) Errors	Errors with the Employee Reimbursement System (ERS) resulted in loss of 3 hours of production time in attempts to submit a travel claim. Upon saving or submitting an employee reimbursement for business travel, a six page error report titled, "An unhandled exception has occurred with this application. The HRIS administrator has been notified," was received. After several attempts reentering information to ensure correctness, MSA Help desk was contacted (Ticket number 391816). MSA stated they were not sure what was causing the error and it may take some time to evaluate the error. I read the error report and determined from text " Server: bms.rl.gov Script: /ess/SecPay/ERS/BsnTrvWrk2.aspx cannot set column 'AR_APRV_COMNT_HNF'. The value violates the MaxLength limit of this column," that a character length violation occurred in one of the fields. The ERS software did not indicate that one of the text fields exceeded it maximum length and the field named 'AR_APRV_COMNT_HNF' indicated in the six-page error report does not align with the ERS entry form titles. The field affected was identified when text was removed from the 'Comments' for the 'Exceed Per Diem Justification' entry on the ERS entry page. A review of the governing procedure and the "ERS USERS GUIDE" did not provide any information about maximum character length for comment fields nor was a software generated pop up message received when text was entered in the field to indicate a violation error. The only message received was a six page error report after clicking on Save or Submit. On another note, the field 'A&R Over Per Diem Preapproval' has been added to the ERS software, which provides a drop down menu with a list of three personnel. This field is not mention in the ERS Users Guide (updated March 20, 2018) or procedure TFC-BSM-AC-C-02, "Traveling on Official Business," and based on the title it is assumed this field is to indicate pre-approval was received for lodging over per diem. However, the name of the 'Conference Approver' on the approved travel request is not one of the options listed in the drop down menu. Based on the travel request/claim records, ERS Users Guide, and TFC-BSM-AC-C-02, it is not clear who pre-approved the over-per diem and if the name entered on the travel claim was correct. Additionally, the approved Travel Request contains a note under the 'Conference Approver' field stating, "Lodging should not exceed the GSA maximum per diem rate. Any amount over per diem, not supported by documented justification on a Lodging Cost Comparison Worksheet may be determined to be the traveler's responsibility." This does not provide assurance that lodging over per diem was pre-approved based on the submitted Lodging Cost Comparison Worksheet. A definitive statement on the approved travel request such as, "Based on the submitted Lodging Cost Comparison Worksheet, over per diem for lodging at NANE OF HOTEL (CITY, ZIP CODE) is approved," would provide assurance over per diem was pre-approved. The ERS needs to account for human factors to avoid unnecessary and avoidable loss of production hours due less than adequate instructions on data entry or LTA software error messaging . If the software cannot be updated to a newer system or updated to address the deficiencies, a detail desk instruction providing specific field-by-field guidance for data entries would suffice in the interim. This will eliminate data entry errors, ensure pre-approval for lodging over per diem is clearly documented prior to going on travel, and provide solutions for basic errors received instead of a six page auto generated report that requires an understanding of database development and programing to interpret. Recommend categorization as a TUF assigned to General Accounting, Finance, to develop a detailed desktop instruction or to work with MSA to update the software.

7/2/2018	WRPS-PER-2018-1715	Dust Devil picking up shade tent during excavation	Unexpected wind affecting shade tent stability. During excavation process shade tents were being used to provide heat stress mitigation controls. The shade tents were not tied down due to the frequency of relocation. An unexpected Dust Devil lifted two shade tents into the air violently. Three workers were hit by the shade tents during the event and were subsequently taken to seek medical evaluation. Workers were returned to work without restriction.
7/2/2018	WRPS-PER-2018-1718	Handicap parking	Handicap parking space on the East side of 2750 need to be evaluated. Person said that they had a hard time using the space because as soon as you get out of the vehicle there is a curb. (see attached picture)
7/2/2018	WRPS-PER-2018-1717	Discrepancy Between the Annual Possession Quantity (APQ) in the Rad Air License and the Calculated Values for AX Farm	The annual possession quantity (APQ) is the sum of the quantity of a radionuclide on hand at the beginning of the calendar year and the quantity of that radionuclide received or produced during the calendar year. The APQ is sometimes used to calculate the potential-to-emit (PTE) for radioactive air emission sources. The PTE is the actual or potential discharge from an emission unit that would result if all abatement control equipment did not exist. Condition 3 of Radiological Air Permit AIR 15-807 (effective 7/29/15) identifies the governing APQ, along with the applicable permit limits for each radionuclide (see attached permits). In preparation for an inspection of the portable exhausters POR-126 and POR-127 (296-P-49 and 296-P-50) in AX Farm by the Washington Department of Health (WDOH) on 6/28/18, an evaluation of the APQ against the permit limits was performed. Using radionuclide inventory data from the Tank Waste Information Network System (TWINS) database for AX Farm, decaying to the current query date, and comparing it to the permit limits, it was discovered that the value of 1.32E+02 curies for Plutonium-240 is greater than the permit limit of 1.20E+02 curies.

7/2/2018	WRPS-PER-2018-1720	Contaminated Bird Feces	During the performance of a Scheduled Radiation Survey Task Description LE-D012 at ETF, contaminated bird feces was discovered northeast of 2025ED. Total Contamination of; 10,000 dpm/100 cm2 Beta-Gamma and 63 dpm/100 cm2 Alpha was detected. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801316
7/2/2018	WRPS-PER-2018-1721	Contaminated tumbleweed fragments	During the performance of a Scheduled Radiation Survey Task Description LE-W098 at ETF, contaminated tumbleweed fragments were discovered at LERF. Total Contamination of; 5,160 dpm/100 cm2 Beta-Gamma and <Detectable dpm/100 cm2 Alpha. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801319
7/2/2018	WRPS-PER-2018-1722	242-A Vessel Vent ammonia monitor low disk space.	During the A-2 daily rounds, it was noticed that the Vessel Vent ammonia monitoring unit was displaying low disk space once again.

7/3/2018	WRPS-PER-2018-1723	Incorrect Safety Shower wiring of Manual Transfer Switch AP271-EDS-MTS-001	During the AP Outage for Clean and Inspect PM, it was discovered that the 3 PH, Manual Transfer Switch (MTS) for Safety Shower was wired incorrectly for the Generator input. Load is a 480 to 240/120 MPZ (AP271-EDS-DP-108) which needed A & C Phase to be used; wiring in MTS was incorrectly wired to A and B Phase. See attached picture showing incorrect wiring.
7/3/2018	WRPS-PER-2018-1724	Performed valve manipulation without a procedure	During the initiation of our Fine Filter Cleaning we found that the 60B-FL-1 required a filter change. During the beginning of the filter change (b)(6) was called over to perform draining of the filter housing. (b)(6) was unable to find the steps in the procedure giving him direction to perform the valving so he called (b)(6) assist him. (b)(6) stated that he wasn't sure where it was in the procedure but all you had to do was open these valves which he pointed out, (b)(6) than proceeded to open the valves. (b)(6) following the maintenance crew voiced his concern for opening valves without the procedure in hand and the FWS shut the job down and made notifications. Review of the fine filter procedure ETF-60B-002 has steps for draining the housing in process and when cleaning is complete, which is the normal process, but we started the cleaning with filters that had been partially used and than could not proceed to get the normal draining evolution.
7/3/2018	WRPS-PER-2018-1498	AX Control Trailer Anchoring Inadequacies	**On May 22nd, Engineering (at construction project management's request) inspected what was supposed to be the adequacy of the installation of the AX Control Trailers (POR471 & POR498), just off of Buffalo Avenue.** **Several discrepancies were identified by the Structural Engineering Project Engineer:** **1) One of the anchoring embeds had been broken during installation activities, and therefore it was not strapped to the trailer, &** **2) Several of the anchor straps were not tight,** **The AX A/E (ARES) was consulted to identify if/how the contractor could rectify the broken embed. They identified that the one embed should be replaced with 2 5/8" Hilti Anchor bolts with strapping to the trailer. Construction, w/o the final design for this "fix" did this, and requested Engineering to re-inspect the fix.** During this re-inspection, Engineering identified that a bigger issue may exist. The Control Trailers house Safety Significant instrumentation, and as such the design requirements for anchoring the trailer was to follow PC-2 seismic guidelines in TFC-ENG-STD-06. In addition, the trailers themselves have requirements that **need to be met regarding the requirements of STD-06.**

7/3/2018	WRPS-PER-2018-1223	Use of the S-107 Enraf as the Primary Level Monitoring Device	The LOW in tank S-107 has been found to be contaminated and is no longer useable for level monitoring. Technical Evaluation RPP-TE-58448 was written to assess the acceptability of using the currently installed Enraf as the primary level monitoring device. In order to make the Enraf the primary level monitoring device, several actions must be completed and tracked with a PER in accordance with TFC-ENG-FACSUP-C-03.
7/3/2018	WRPS-PER-2018-1725	Transportation of incorrect container with incorrect paperwork	During the Pickup and deliveries of containers the team went to Sodium Storage to pickup a solids drum. They then loaded the drum and shipped to 616. Once drum was delivered to 616 NCO's noticed that the drum was the incorrect drum, then they notified the FWS that they had transported the incorrect drum.
7/3/2018	WRPS-PER-2018-1726	loose Trailer Skirting on Power Lines	Loose trailer Skirting, that was in a hold down yard west of the 2225 complex, was picked up by a dust devil and landed in power lines.

7/4/2018	WRPS-PER-2018-1727	Sign lying in roadway was driven over resulting in flat tire.	CSM contacted by [redacted] to report driving a government vehicle ran over a metal sign and post lying in roadway by 702-AZ Decon Trailer resulting in a flat tire.
7/5/2018	WRPS-PER-2018-1729	222-S Lab Sample Storage Procedure, ATS-LO-150-132, does not adequately describe inspections of sample storage areas.	Section 6.1 of ATS-LO-150-132 describes inspection of storage areas but only has steps for refrigerator temperature checks. Section 6.2 describes sample handling in terms of labeling and contamination checks but not allowable containers, and section 6.3 requires secondary containment for samples stored for refrigerators, but does not address samples stored on shelves or in cabinets. The Dolly Map referenced in section 6.5.4 and shown in Appendix A has been revised by sample custodian.
7/5/2018	WRPS-PER-2018-1730	Review Area Chosen by Construction Management for Concrete Truck Washout	Construction Management is in the process of selecting a new concrete truck washout location. Environmental has reviewed multiple locations, as documented in WRPS-MOP-2018-2020, to determine regulatory suitability. Construction Management now has two Environmental-approved locations to select from for the washout location. Once Construction Management chooses a location, no process exists to document which location was ultimately chosen for this purpose.

7/6/2018	WRPS-PER-2018-1731	Water Chiller B Alarm	Control Room Operator received alarm thru MCS "Water Chiller B Alarm"
7/9/2018	WRPS-PER-2018-1733	Late In-Process and Post-ALARA Review	TFC-ESHQ-RP_RWP-C-03, ALARA Work Planning, requires the FWS to notify RADCON to initiate an in-process and post-ALARA review no later than one calendar week after the completion of the high risk portion of work, and 30 days after the completion of work. The FWS was tardy in communicating notifications during work under WO# 377495, C-105 Post Retrieval Sample.
7/9/2018	WRPS-PER-2018-1734	Unacceptable housekeeping in the C-Farm contamination area of the change trailer egress area.	The housekeeping in C-Farm contamination egress area is unacceptable as per the Rad Con Manual: Article 125, number 8 8. Cleanliness and good housekeeping are essential. A good Radiological Control program cannot exist in a sloppy, dirty workplace. Cleaning up after operations should be automatic for each person. It is not reasonable to expect radiological control to be separated from the work environment; they go together.

7/9/2018	WRPS-PER-2018-1735	Concerns Raised In RPP-RPT-60925	Several potential issues/concerns were raised in RPP-RPT-60925 that require investigation and resolution if necessary.
7/9/2018	WRPS-PER-2018-1737	Continued Level increase Response Action Plan Needed Address Documented Catch Tank Intrusion	In 2014 Letter WRPS-1402156 and ORP Response Letter 14-TPD-0011 documented and established that WRPS owns the 241-EW-151 Catch Tank. The 241-EW-151 Vent Station Diversion Box and Catch Tank response letter noted, "Please provide a path forward to investigate and establish a plan in response to possible liquid level rises and a possible intrusion prevention approach". The path forward and plan have not been addressed and tank level is currently increasing due to intrusion into the 241-EW-151 catch tank. The current tank level is 62.5". A tank level of 65" represents the tank being filled to 80% capacity. Trending indicates that the tank will reach 80% capacity within the next 6 to 13 months. Historically the 80% capacity was used a an Administrative control for engineering to ensure the 100% capacity was not exceeded as noted in OSD-15 which has since been cancelled. If the liquid level exceeds the tank capacity of 790 gallons, then the tank will overflow to a French drain.
7/9/2018	WRPS-PER-2018-1738	Air Conditioning units out of service at ETF	This PER is being wrote for tracking purposes. A/C units have been an ongoing issue at ETF for years. Management has abandoned efforts to repair or replace existing units and have come to rely on portable units that cannot keep up with environmental conditions. Current temperature in facility lunchroom is 90 degrees and in HPT office is 85. Last week temperatures peaked to over 90 degrees in the facility control room when the A/C units belts were not maintained and unit shutdown. ETF is an Essential Personnel facility and the lack of maintenance and support of the A/C systems is putting undue stress on workers

7/10/2018	WRPS-PER-2018-1739	Unauthorized Operator Aid in Use at 242-A	Issue Type: Finding (Level 3) Significance Level: 1 Statement: Unauthorized Operator Aid in Use at 242-A (Priority Level 3)(Ciola, 6/16/2018)(See pdf OA 36711) Discussion: During the testing of PB-2 at the evaporator, certain alarms that were inhibited during shut down of the evaporator per Step 5.7 of the procedure TO-600-060; Shut Down 242-A Evaporator System, Rev R-16, were uninhibited. The procedure specifically identifies the alarms that are inhibited by nameplate data. When uninhibiting the alarms during the testing of PB-2, operations referred to an ad-hoc list of the inhibited alarms. The list was located in the back of the 242-A Inhibited Alarm Logbook. The list was not approved and managed as an Operator Aid. It did not contain a unique number, and was not being audited to ensure information was updated appropriately. DOE O 422.1, "Conduct of Operations," requires that Operator Aids be approved and managed to ensure accuracy. An approved process for managing Operator Aids ensures accuracy and completeness of the information used by operations. Requirements: DOE O 422.1, "Conduct of Operations," Administrative Change 2, Attachment 2, Appendix A, 2.q.(1)c. Operator aids are approved by operations management prior to posting. Approving authorities determine the accuracy and necessity of operator aids.
7/10/2018	WRPS-PER-2018-1740	242-A Slurry Sampling Procedure Anomalies	Issue Type: Finding (Level 3) Significance Level: 1 Statement: 242-A Slurry Sampling Procedure Anomalies (Priority Level 3)(Ciola, 6/25/2018)(See pdf OA 36711) Discussion: On June 25, 2018, 242-A Operations performed TO0630-001; Obtain 242-A Slurry Samples. Changes to the procedure are warranted. Step 5.3.15 opens Valve RWV-13. The valve is closed using a contingency step, 5.3.16.1, which is dependent on a differential pressure existing across a filter. The valve should be closed regardless of the differential pressure across the filter. Step 5.13.16 opens RWV-6 filter bypass valve if a differential pressure exists, but there is no step to close the valve. This situation is repeated in steps 5.8.4 and 5.9.10, with the same issue. Requirements: DOE O 422.1 Conduct of Operations, Chg 2, Attachment 2, Appendix A states, 2.p The operator must establish and implement operations practices for developing and maintaining accurate understandable written technical procedures that ensure the safe and effective facility and equipment operation addressing the following elements: 2.p.(3) Procedure Content; including consistent format and use of terms (e.g. prerequisites, warnings, cautions, notes, hold points, etc.), detail sufficient for accomplishing the operation, technically accurate procedures capable of performance as written, and procedure conformance with the facility design and manufacture documentation.
7/10/2018	WRPS-PER-2018-1741	Previously Approved Work Instructions are Not Required to be Identified in Level 2 WorkPackages	Issue Type: OFI (Opportunity for Improvement) Significance Level: 1 Statement: 18016-TF-001 – Previously Approved Work Instructions are Not Required to be Identified in Level 2 Work Packages (Swarens, 5/21/2018) Discussion: TFC-OPS-MAINT-C-01, REV R-15, "Work Control" requires that level 2 work packages use approved procedures or previously approved work instructions. While there is no difficulty in identifying approved procedures used in level 2 work packages, identifying a previously approved work instruction for level 2 work packages is not possible in EAM unless a specific note is included in the package. While there is no evidence of level 2 work packages being incorrectly categorized during this surveillance, it was also not possible to easily identify the previously approved work instructions as they were not included or referenced in EAM. Requiring inclusion of a note identifying the previously approved work instructions or other means of providing such identification in EAM will increase the ability to track the previous level 1 package to the current level 2 package.

7/10/2018	WRPS-PER-2018-1742	Two Level 3 Work Orders Did Not Receive Appropriate Review and Approval by Engineering.	Issue Type: Finding (Level 3) Significance Level: 1 Statement: 18016-TF-F01 – Two Level 3 Work Orders Did Not Receive Appropriate Review and Approval by Engineering. (Priority Level 3) (Swarens, 5/29/2018) Discussion: TOD Personnel performed a surveillance to evaluate the work control level of categorization for work packages in the Tank Farms, 242-A Evaporator, ETF, and the 222-S Laboratory. During the process it was discovered that two work packages reviewed (work order numbers 204604 and 225024 to perform work at the 222S laboratory) did not have a review and approval by Engineering as required by TFC-OPS-MAINT-C-01,"Work Control". Requirements: TFC-OPS-MAINT-C-01, REV R-15, "Work Control", section 4.3.3.14 states "Obtain approvals on the WRPS Level 3 Work Control Document site form (A-6005-440), as identified in Attachment B". Attachment B identifies review by the Responsible Engineer when "Level 3 work packages and changes to Level 3 work packages involving work on SSCs to ensure work meets technical requirements of the SSC".
7/10/2018	WRPS-PER-2018-1743	Thin-Film Dryer Reliability Review	Scope: The U.S. Department of Energy, Office of River Protection conducted a surveillance of the thin film dryer (TFD) system at the Effluent Treatment Facility (ETF). The purpose of this surveillance was to assess the failure history and reliability of the system. This particular system was chosen as it is known to be the bottleneck for production at the ETF. Therefore, failures and reliability issues related to the system add a compounding effect to the production needs of the facility. These effects will become especially pronounced as the direct feed low-activity waste (DFLAW) portion of the Hanford mission begins. Requirements Reviewed: WA7890008967, Rev. 8C Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste Contract No. DE-AC27-08RV14800 Tank Operations Contract ---------- 17176-TF-001 – An opportunity exists for the RCM pilot program to include the ETF (Valle). Discussion: In FY2018, WRPS has been incentivized to initiate a RCM pilot program with a focus on tank farm ventilation components. However, an opportunity exists for the RCM pilot program to include the Liquid Waste Processing Facilities (LWPF; i.e., LERF/ETF/TEDF). The LWPF could benefit from RCM analysis in systems that have shown to have unacceptable levels of performance. At the same time, the RCM pilot program could benefit from the initiating this scope at a non-nuclear facility (e.g., the LERF/ETF/TEDF are radiological facilities). The reduction from hazard classification should provide for safer, faster, and more cost-effective program development.
7/10/2018	WRPS-PER-2018-1744	Review manufacturer recommendations for operations and preventative maintenance practices for use in the Thin Film Dryer	Scope: The U.S. Department of Energy, Office of River Protection conducted a surveillance of the thin film dryer (TFD) system at the Effluent Treatment Facility (ETF). The purpose of this surveillance was to assess the failure history and reliability of the system. This particular system was chosen as it is known to be the bottleneck for production at the ETF. Therefore, failures and reliability issues related to the system add a compounding effect to the production needs of the facility. These effects will become especially pronounced as the direct feed low-activity waste (DFLAW) portion of the Hanford mission begins. Requirements Reviewed: WA7890008967, Rev. 8C Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit, Dangerous Waste Portion for the Treatment, Storage, and Disposal of Dangerous Waste Contract No. DE-AC27-08RV14800 Tank Operations Contract ---------- 17176-TF-002 – WRPS should consider reviewing manufacturer's recommendations for operations and preventative maintenance practices for use in the Thin Film Dryer (Fischer). Discussion: A review of some of the manufacturer's (LCI) recommendations for operations and preventative maintenance of the thin film dryer revealed that some of the practices are not being followed for the installation at the Effluent Treatment Facility (ETF). WRPS should review all the recommendations, and reconsider some of the practices. They may also want to use reliability-centered maintenance (RCM) as a tool to assist in decisions of if or when to apply those practices. A sample of some of the practices to consider: 1. The LCI-manual states that the coolant exit temperature should not exceed 30 degrees C of the boiling point, and flow should be adjusted to meet this requirement (between 0-5.3 gpm (with inlet temperature of 20-30 deg C)). LCI does make clear that the flow rate will need to be monitored to control that temperature, which I am informed, is not how the flow rate is controlled for the installation at the ETF. The ETF seal water system does not currently monitor exit temperature and is designed to provide seal water at only 1.0 to 1.2 gpm (gallons per minute). Seal water flow rate and pressures are monitored. Without exit temperature being monitored, it is hard to know if this requirement is being met, or how much damage may be done. 2. The LCI manual states that it is critical that when installing the mechanical seal, that the faces not be chipped or scratched, and they be oiled before installation. Furthermore, it states: "absolutely cleanliness is required during assembly in order to ensure a good seal. O-rings and polished surfaces must be handled with extreme care." While general guidelines in WO 349679 give some guidance on this, it doesn't seem to carry the message, above with the same importance the manufacturer emphasizes. It was noted that there were no quality assurance signoff points in the package.

7/10/2018	WRPS-PER-2018-1745	Operational Awareness Activity for Industrial Safety	Scope: The scope of this operational awareness (OA) activity was to evaluate the Washington River Protection Solutions (WRPS) excavation program to determine its compliance with applicable requirements and procedures. Requirements Reviewed: •10 CFR 851, Worker Safety and Health Program •29 CFR 1926, Subpart P, Excavations ---------- 18020-TF-O01 - Opportunity for Improvement Exists When Workers Encounter Unexpected Conditions during Excavation Activities. (Reyes) Discussion: While reviewing Problem Evaluation Requests (PERs) as part of an excavation assessment, the assessors identified two instances where workers performing excavation proceeded with little or no guidance after encountering an unexpected condition. The following are examples of proceeding in the face of uncertainty: •WRPS-PER-2018-1212, While Removing a Condulet Cover from a Underground Conduit, Water Was Seen Flowing Out of Cover, dated 05/09/18 Workers encountered conduit in AX farm and obtained verbal direction from Engineering to remove a condulet cover, resulting in approximately 40 gallons of non-radioactive liquid to escape. This action had the potential to expose workers to an unknown radiological hazard. •WRPS-PER-2018-1546,AX104 Riser 16 Cracked Concrete Pad, dated 06/16/18 Workers encountered a cracked concrete pad in AX farm and manually manipulated the pad in attempt to mitigate the hazard, resulting in half of the pad breaking off and sliding approximately three feet. This action had the potential to cause injury to workers. In both of the examples above, the decision to proceed with little or no guidance had the potential to expose workers to unanalyzed hazards that could lead to personnel contamination or injury.
7/10/2018	WRPS-PER-2018-1746	Operational Awareness Activity for Industrial Hygiene Field Practices	Scope: The scope of this operational awareness (OA) activity was to evaluate the implementation of full-face air-purifying respirators (APRs) in AP farm determine the industrial hygiene (IH) program's compliance with applicable requirements and procedures. Requirements Reviewed: •10 CFR 851, Worker Safety and Health Program •29 CFR 1910, Occupational Safety and Health Standards for General Industry ---------- 18019-TF-O01 -Minimum Sampling Time Specified in Industrial Hygiene Sample Plans is Unrealistic. ((b)(6)) Discussion: Industrial Hygiene (IH) monitoring and sampling for Risk Classification (RC) 1 and RC 2 work in AP farm are listed in EABO-11047, Industrial Hygiene Sample Plan-AP Farm RC 1 Work Activities, Rev 6, and EABO-11001, Industrial Hygiene Sample Plan - AP Farm RC 2 Work Activities, Rev 11. In both of the sample plans, the minimum time specified for furans is listed as 870 minutes, or 14.5 hours. The following note is found in both sampling plans: "If the work activity duration is anticipated to be less than minimum sample times specified in the applicable method, at the direction of the project Industrial Hygienist, samples may not be required, and where actual sample durations for samples collected are less than minimum, samples may at the direction of the Project IH, be declared invalid and voided." Based on the minimum sampling time for furans and the note specified in the sampling plans, it is unlikely that furan samples will be collected for most jobs, and even if a sample is collected, it would not be representative of the environmental conditions that workers are exposed to when performing work. Discretionary sampling and establishment of an unrealistic sampling time has the potential to lead to further distrust with the workforce. In addition, given the complexity of managing hazards associated with furans and nitrosamines, the practice of discretionary sampling for contaminants needs to be logical, realistic, and in accordance with good IH practices.
7/10/2018	WRPS-PER-2018-1747	Greater Care Should be Used in Documenting Issues Identified in MOPS	Title: 18016-TF - Work Control (TF, ETF, and 222-S) – Proper Level Categorization Summary: Report Number: 18016-TF Title of Assessment: Work Control (TF, ETF, and 222-S) – Proper Level Categorization Division Performing the Oversight: TOD Dates of Assessment: 5/1/2018 – 5/29/2018 Assessor: Cecil Swarens Team Members: Ron Ciola, Kelly Ebert Scope: The scope of this surveillance was to evaluate the work control level of categorization for work packages in the Tank Farms, 242-A Evaporator, ETF, and the 222-S Laboratory and to assess compliance with the requirements listed below. Areas or Activities Reviewed: Work Control Categorization Requirements Reviewed: 10 CFR 851, "Worker Safety and Health Program." DOE O 422.1, "Conduct of Operations." DOE-0359, "Hanford Site Electrical Safety Program (HSESP) NFPA 70E, "Standard for Electrical Safety in the Workplace", 2009 ---------- Issue Type: OFI (Opportunity for Improvement) Significance Level: 1 Statement: 18016-TF-002 – Greater Care Should be Used in Documenting Issues Identified in MOPS (Swarens, 5/21/2018)

7/10/2018	WRPS-PER-2018-1748	OFI exists to provide most current information during safety briefings to prevent recurrence	Title: Reviewed Safety Pause Presentation Summary: The FR reviewed Power Point Slides presented during the Safety Pause. Although it is understood that the Event Investigations are still underway the FR noted the deficiencies associated with the SY Farm Emergency Shower Fire and LOTO AWL Lock removal slides (36694-OFI01). Based on the FRs review of the startup procedure for the safety shower (TO-020-031 Rev C9) had the steps been performed in order, as required unless otherwise stated, the tank heater would not have been turned on prior to filling. In addition the breaker schedule was not filled out in the newly installed panel, which can be considered an error trap. The 222-S LOTO AWL Lock Removal inaccurately stated that attempts were not made to all of the affected workers. Phone calls were made however management has stated that 2 of 8 notifications were not in accordance with the intent of the steps listed in DOE 0336. In addition the individuals were not notified promptly upon their return to work. This particular event is being investigated under EIR-2018-023. ---------- Issue Type: OFI (Opportunity for Improvement) Significance Level: 1 Statement: 36694-TF-O01: An Opportunity for Improvement Exists to Provide the Most Accurate Information Known to Date During Safety Briefings, to Best Prevent Reoccurrence. Discussion: In reviewing a PowerPoint Briefing presented to WRPS employees during the Safety Pause, the FR determined the slides did not adequately represent the actual events. The FR was On-Call during the SY Emergency Shower Fire and had follow-up discussions with the event investigator. The slide states the "Investigation revealed that the startup procedure did not have a step to verify water in the tank prior to energizing the unit." The event investigation is still underway and this was not the determined cause. The FR asked the Event Investigator if they were involved with the development of the slide or in reviewing the content and they confirmed they were not and did not know where that information came from.
7/10/2018	WRPS-PER-2018-1749	Lifting Beam Calculation Open Action Items	RPP-CALC-62243, Grout Box Spreader Beam Structural Evaluation, Identified several Required Actions on page 14, which must be completed prior to use of the beams: REQUIRED ACTIONS The evaluations performed in this calculation necessitate some modifications to certain drawings and calculations as follows: ? Drawing Modifications: o H-14-110572 (Thermocouple/Type 1/Type 2 Beam) ? Update beam rating to match the one given in Table 6-2 ? Modify general note to require minimum upper sling angles of 65° (was 60°) ? Modify general note to reference this calculation for structural analysis of beam o H-14-110742 (Type 3 Beam) ? Update beam rating to match the one given in Table 6-2 ? Modify general note to reference this calculation for structural analysis of beam ? Modify general note to specify use of beam with Type 3 grout boxes WITHOUT GROUT ? Calculation Modifications: o RPP-CALC-60653 (Thermocouple Box/ Beam Eval), RPP-CALC-61007 (Type 1 & 2 Box/Beam Eval), RPP-CALC-61247 (Type 3 STD & Non-STD Box/Beam Eval) ? Remove beam evaluation section and reference this calculation for structural analysis of beam
7/10/2018	WRPS-PER-2018-1750	Excavator Bucket - Degraded Exterior Packaging	While performing a MOP "Walk you Spaces" for Radcon Production Operations, it was discovered that there is a degraded exterior packaging on an Excavator Bucket, labeled: 200LERF-18-028. The item is located in the RMA West of LERF Basin 42. TFC-ESHQ-RP_MON-C-15, Radioactive Material Packaging and Labeling requires package integrity.

7/10/2018	WRPS-PER-2018-1751	Radioactive Material Packaging and Labeling of TEDF Samples	1. Contrary to HNF-5183, Articles 412 & 413 as well as TFC-ESHQ-RP_MON-C-15, Sections 1 & 4.1, TEDF Samples aren't labeled and packaged as Radioactive Material. 2. Exemption to labeling and packaging is provided in referenced documents if criteria is met. 3. RPP-59760, Effluent Treatment Facility Radiological Characterization, Dosimetry and Workplace Air Monitoring provides no basis for exemption for TEDF Samples. Therefore, expectations are to implement programmatic requirements as identified. 4. Action will be assigned to evaluate current position for TEDF in RPP-59760 and work with WRPS Radiological Control Engineering and WRPS Radiological Control Program Manager to determine if exemption basis is warranted.
7/10/2018	WRPS-PER-2018-1454	Actions performed post vomiting in Respiratory Protection Area.	(b)(6) removed mask in SX farm due to vomiting. Exited farm into egress trailer where he continued to vomit. The first aid response observed to the incident was as follows: (b)(6) was sat down and given a bag to continuing vomiting in, given some water, calls were made to a field work supervisor, shift office and RadCon. (b)(6) exhibited symptoms of heat stress. 911 was not called to medically assess. Once (b)(6) stopped vomiting he was helped to undress due to the fact he was unsteady while standing up and then surveyed out of the CA. Instead of a call to 911 as trained in CPR/First Aid, the FWS asked (b)(6) if he felt he needed an ambulance to transport him to HPMC. This was only asked after personnel suggested medical response was needed due to worker safety being at risk. Plus, the fact that he took his respirator off in a respiratory required area and no one was addressing this IH issued management directive.
7/10/2018	WRPS-PER-2018-1752	Impacted drawing not listed as such on ECN	In ECN-713288, essential drawing H-14-030007-57 was not listed in block 14 Engineering Drawings to be Changed as described in TFC-ENG-DESIGN-C-06 and guide SPF-002i . Instead it was listed in block 15 Related Documents. As a result H-14-030007-57 did not appear in the SPF report of essential drawings with work completed ECN's and the desired changes were not incorporated.

7/10/2018	WRPS-PER-2018-1754	Legacy Contamination Outside SY Farm	At approximately 9:30am this morning, while performing the weekly routine perimeter survey of SY-Farm, a small speck of contamination was discovered on the North fence line just east of the Change Trailer. The spot was smaller than the size of the instrument probe (100cm2) and appeared to be just dirt since there were no tumbleweed fragments, animal urine, stained dirt, or animal feces at the location. The highest reading on the spot was 58,000dpm/100cm2 of Beta-Gamma contamination and 49 dpm/100cm2 of Alpha contamination.
7/10/2018	WRPS-PER-2018-1755	RIAS-AR-1 spurious alarms	Spurious alarms are being received on the 242-A MCS from RIAS-AR-1. This ARM monitors radiation levels in the 242-A Condenser Room basement area. The instrument is not alarming locally, just on the MCS.
7/10/2018	WRPS-PER-2018-1756	Clarification on operation of equipment with Out of Service tag	At the ETF facility there has been an issue with the EVU-6/EVU-3 Non-RCA ventilation system. EVU-6 is the supply fan and EVU-3 is the condensing unit for the fan. EVU-3 is currently tagged out of service but the breaker and disconnect are in the closed/ON position. The Stationary Operating Engineers (SOEs) have been asked to start the EVU-6 unit on night shift and turn it off in the morning. Since the two units communicate and are run as one unit on the MCS the concern is that running EVU-6 would then call for EVU-3 to run which being currently tagged out of service presents a possible procedural concern. The procedure, ETF-45-001, doesn't allow for the starting of EVU-6 while EVU-3 disconnect or breaker is in the open/OFF position, so the solution of turning off the breaker to EVU-3 wouldn't allow us to run EVU-6 procedurally. As SOEs operating the equipment we would like some clarification before running the equipment on whether or not running equipment with an Out of Service tag is an acceptable practice. There are also two different procedures for the use of Out of Service tags between ETF and Tank Farms so clarification for both would be appreciated.

7/10/2018	WRPS-PER-2018-1757	Change Trailer HVAC Breaker Validation	During the 3rd Quarter of FY2018, Security and Emergency Services conducted surveillances of the Tank Farms Change Trailer Red Boards. During these surveillances the HVAC disconnect information identified on the Red Board was compared to the HVAC breaker panel identification to assist in validating PER WRPS-PER-2017-1106 . Three change trailers were identified to either have misidentification or no identification on the HVAC panel. MO-815 - AP Farm MO-512 C Farm Middle MO-821 T Farm
7/10/2018	WRPS-PER-2018-1758	Air Sampler Out of Tolerance	A Staplex air sampler was found Out of Tolerance during calibration.
7/10/2018	WRPS-PER-2018-1759	Loss of helium pressure to GC/MS systems	On 7/5/2018, Organic Studies identified several GC/MS instruments in rooms 4TUV and 45 had "inlet error" messages which result from a loss of helium gas pressure. The room gauges indicated adequate pressure, so the error was acknowledged which restarted flow to the instruments. Discussion with pipefitters indicated that HE102 was found on 7/5/2018 with two empty bottles which were changed out upon discovery. Continuous helium flow is required to prevent instrument damage.

7/10/2018	WRPS-PER-2018-1760	48 CFR 52.204-4(b) Requirement Flowdown	Procedures currently linked in DOORs do not relate to specific requirement. DOORs should be updated to reflect procedures relating to submittal of information or data to the Government.While nearly all correspondence with the Government is completed electronically, the document owner/FAM for TFC-PLN-125, TFC-ESHQ-ENV-RM-C-07, and TFC-ESHQ-ENV_PP-C-19 should consider including this requirement for correspondence with the Government requiring printed materials to meet this standard.
7/10/2018	WRPS-PER-2018-1762	AZ-702 Building Ventilation A-Fan not functioning properly	When building exhaust fans are switched from AZ702-K3-5-1B to AZ702-K3-5-1A the A-Fan will only run for approximately 15-30 minutes and then it will auto switch back to the B-Fan.
7/10/2018	WRPS-PER-2018-1763	EATON HEAVY DUTY 30A & 60A SAFETY SWITCHES - Potential Nonconformance - Can Cause Operator Death	Important Product Safety Bulletin regarding certain Eaton Heavy Duty 30A and 60A Safety Switches was received via OPEXSHARE 07/10/2018. Eaton has identified a potential nonconformance with certain Eaton Heavy Duty 30A and 60A Safety Switches. The safety switch can potentially supply power when the handle is in the "off" position, subjecting the operator of the switch or any downstream equipment to risk of serious bodily injury or death. This issue affects various configurations of 30A and 60A Heavy Duty safety switches manufactured between November 19, 2015 and January 23, 2018. Please see Appendix B for a complete list of affected catalog number prefixes. Potentially affected switches can be identified using the information identified in Figures 1 and 2. See attachment, 'EATON HEAVY DUTY 30A & 60A SAFETY SWITCHES - Potential Nonconformance 2015 thru 2018.pdf', Appendix B, for affected part #s & Figures 1 & 2 for pictures of locations of various information (manufacture date/part #s). See attachment, 'EATON = Manufacturer.xlsx', highlighted listing potential affected that WRPS may have (ordered??) Note: WRPS zero energy check process would prevent operator death; note also downstream equipment would be affected...

7/11/2018	WRPS-PER-2018-1764	Vehicle accident at 2704HV east gravel parking lot.	AECOM employee vehicle made contact with another vehicle that stopped behind it while slowly backing up. No injuries. No damage to AECOM vehicle. Small dent in bumper of WRPS vehicle
7/11/2018	WRPS-PER-2018-1761	H-14-030008-31 Anomaly	Received concerned email that ECN-713291 was work completed on 9/27/2017 and H-14-030008-31 Rev 02 was an impacted drawing. And ECN-713291 was incorporated as required by procedure but the specific changes to be made by ECN-713291 were not made to the drawing.
7/11/2018	WRPS-PER-2018-1765	Greater than 20,000 Gallons of water was transferred to tank 241-AW-102 without authorization/approval in the work package	Title: Investigated Issues During PB-2 Variable Frequency Drive Testing Summary: There is one finding that resulted: - Greater than 20,000 Gallons of Water was Transferred to Tank 241-AW-102 Without Authorization and Approval in the Work Package (Priority Level 3)(Ciola, June 25, 2018) ---------- Issue Type: Finding (Level 3)Significance Level: 5 Statement: Greater than 20,000 Gallons of Water was Transferred to Tank 241-AW-102 Without Authorization and Approval in the Work Package (Priority Level 3)(Ciola, June 25, 2018) Discussion: On June 5 and 6, 2018, Washington River Protection Solutions LLC (WRPS) tested the 242-A PB-2, Slurry Pump. Step 5.2 of work order 393932, 242-A Perform Start and Test of VFD (SC-PB2-1) and Valve Lineup, which required approximately 9000 gallons of water to be placed into the C-A-1 vessel to support the test evolution. ENSURE 242-A has added approximately 273 inches of water, as read on LI-CA1-3, to the recirculation loop Reference Operating Procedure TO-600-031. Although there was no allowance to repeat this step, the vessel was refilled to support multiple test runs, which led to the movement of over 20,000 gallons of water to the Double-Shell Storage Tank (DST) 241-AW-102 without authorization in the work package. Since the 20,000 gallons threshold was exceeded, HNF-SD-WM-TSR-006, Tank Farms Technical Safety Requirements (TSR), Specific Administrative Control (SAC) 5.8.1, DST Induced Gas Release Event Evaluation, was invoked. The SAC requires a Waste Compatibility Analysis (WCA) to be performed and documented to ensure proper flammable gas controls are in place prior to the transfer activity. HNF-SD-WM-OCD-015, Tank Farms Waste Transfer Compatibility Program, also requires a WCA to be completed prior to the movement of greater than 10,000 gallons of water from 242-A. However, work order 393932 did not contain Work Order Review and Authorization (WORA) documentation that SAC 5.8.1 requirements were met, and as discussed in more detail later, the engineering WORA review overlooked SAC requirements altogether. The work instructions did document compliance with other TSRs, such as the Waste Leak Path Evaluation (step 4.3) and Overpressure and the Flow Transient Evaluation (step 4.4). After the test, Operations and Engineering produced a WCA that was on file for a previous transfer activity that enveloped water additions that would bound the movement of water. RPP-RPT-60783, Waste Compatibility Assessment for the Transfer of Waste from Tank 241-AW-106 to Tank 241-AW-102 for EC-09, discusses water additions, but the WCA does not specifically mention the discharge of over 20,000 gallons from the PB-2 testing activity. The WCA does specifically discusses the movement of a much smaller amount of liquid from 242-A, identifying 5,000 gallons can result from the letting of the 242-A sump.

7/11/2018	WRPS-PER-2018-1753	MO-2194 and MO-2193 have stairs 8 times and 5 times the allowable tolerance respectively for adjacent risers.	MO-2194 and MO-2193 have stairs 8 times and 5 times the allowable tolerance respectively for adjacent risers as defined in procedure TFC-ESHQ-FP-STD-02 attachment 1. Change trailer MO-2194 supporting the 241SX paving project and Fowler trailer MO-2193 SX field office/lunchroom both have stairs that are NOT dimensionally uniform as required by procedure TFC-ESHQ-FP-STD-02 attachment 1. "Dimensional Uniformity (NFPA 101, Section 7.2.2.3.6) a.Section 7.2.2.3.6.1: Variation in excess of 3/16 inch in sizes of adjacent tread depths or in the height of adjacent risers shall be prohibited. Measure nosing to nosing. b.Section 7.2.2.3.6.2: Variations between the sizes of the largest and smallest riser or between the largest and smallest tread depths shall not exceed 3/8 inch in any flight." MO-2194 is a 241SX change trailer and has a significant amount of personnel entering and exiting the building. It has one set of stairs entering building from "clean" side and 2 sets on contaminated side though it appears only one of these is used regularly. The riser height of the bottom step is approximately 8.5 inches off the ground. All other risers in this flight are approximately 7 inches. The riser height difference of the bottom step at MO-2194 is approximately 1.5 inches (8 times the allowable tolerance of 3/16 inch). The 2 sets of stairs on contaminated side have NOT been measured for dimensional uniformity though from attached pictures at least one of these is clearly non-compliant. MO-2193 has two sets of stairs entering building. The riser height of the bottom riser is approximately 5.75 inches off the ground. All other risers in this flight are approximately 6.75 inches. The riser height difference of the bottom step at MO-2193 is approximately 1 inch (5 times the allowable tolerance of 3/16 inch).
7/11/2018	WRPS-PER-2018-1641	LOTO Effectiveness Review - Attendance at HECC Meetings	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2017-0659.1 called for institutionalizing quarterly COA Forums to maintain awareness and address topics raised by Controlling Organization Administrators (COAs) during their interviews. The Effectiveness Review determined the action to be Effective and with greater attendance by COAs it would be considered Highly Effective.
7/11/2018	WRPS-PER-2018-1642	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - COA Topics at HECC Meetings	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2017-0659.2 called for LOTO briefings to address topics raised by COAs during their interviews. The Effectiveness Review determined the action to be Effective and with periodic emphasis on improved methods for preparing Tagout Authorization Forms (TAF) this action would be Highly Effective.

7/11/2018	WRPS-PER-2018-1643	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Adding LOTO Modules in Continuing Training Curriculum	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document **reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER).** ESTARs corrective action 2017-0659.3 called for the development of LOTO training modules to be included with the Continuing Training curriculum. Observations have been completed for one round of training and the results are positive and this action was determined to be Effective. To continue to improve, the LOTO module needs to be part of the regular Continual Training curriculum.
7/11/2018	WRPS-PER-2018-1644	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - 8-criteria Verification On-Hand during Pre-Install Briefs	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document **reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER).** ESTARs corrective action 2017-0659.8 called for the revision of TFC-POL-37, Lockout/Tagout to require (b)(6) to have positive verification in hand during pre-installation briefs when an Eight-Criteria Checklist is being used. The Effectiveness Review determined this action to be Effective with an opportunity to improve.
7/11/2018	WRPS-PER-2018-1645	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Submittal deadlines and timeliness for LOTO records	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document **reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER).** ESTARs corrective action 2017-0659.9 called for the development of a procedure that requires WRPS Operations to retain records of LOTO activities. The Effectiveness Review found this action could be improved and determined it to be Marginally Effective.

7/11/2018	WRPS-PER-2018-1646	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Filing Structure of LOTO Records	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2017-0659.9 called for the development of a procedure that requires WRPS Operations to retain records of LOTO activities. The Effectiveness Review found this action could be improved and determined it to be Marginally Effective. The new procedure requires that LOTO records be uploaded to IDMS for archival and for the purpose of being able to retrieve these documents for verification documentation to be used for the future development of Eight-Criteria Checklists.
7/11/2018	WRPS-PER-2018-1647	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Separating Hazardous Energy Control Issues from LOTO Issues in the KPI	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2017-1789.1 directs the revision of the current LOTO PI and develop additional attributed-based Performance Indicator. The Effectiveness Review found that the action was implemented correctly, met the success criteria, and was determined to be Effective. Further observation pointed out that the current Company level PI (i.e., KPI) is a a measure of LOTO performance, but seems to lack the ability to differentiate between Hazardous Energy Control issues defined in DOE-0359, Hanford Site Electrical Safety Program and those of DOE-0336, Hanford Site Lockout/Tagout. For example, if a cover plate is found to have broken and fallen off a junction box during a routine surveillance, this would meet the occurrence reporting criteria as a Hazardous Energy Control issue, but would not represent a LOTO issue. The scope of DOE-0336, reads in part: This procedure shall be used whenever workers (contractors, subcontractors, vendors, service providers, etc.) are performing servicing or maintenance activities on facility equipment or systems, including construction, where there is any possibility of personnel injury as a result of an unexpected release of energy or hazardous materials. Under this example, WRPS would not capture this example issue on the current KPI due to the fact the work was not being performed as part of a LOTO (WRPS-MOP-2018-1479).
7/11/2018	WRPS-PER-2018-1648	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Develop and Implement COA-Specific SPF Training	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified zero (0) findings, one (1) ineffective action, and nine (9) opportunities for improvement (OFI). The ineffective action and OFIs prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2018-0659.11 called for a Needs Analysis be performed to determine applicability of SmartPlant training specific to LOTO COAs. The intent of the action was to develop COA-specific SmartPlant training and implement that training. Those objectives were not achieved and the COAs were not provided with the training they requested.The Effectiveness Review determined the action to be ineffective in resolving COA concerns with respect to retrieving LOTO technical information from SmartPlant.

7/11/2018	WRPS-PER-2018-1649	LOTO Effectiveness Review (FY2018-OPS-MD-0381) - Improvements to Qualification Cards 350501, 350502, & 350160	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2018-0659.12 called for the revision of the following Qualification Cards: 350501, 350502, and 350160 to include the review and sign-off of DOE-0336. The Effectiveness Review determined the action to be Effective.
7/11/2018	WRPS-PER-2018-1728	LOTO Effectiveness Review - LOTO Continuing Training Modules for 222-S and 242-A	Effectiveness Review (ER) FY2018-OPS-MD-0381 evaluated sixteen (16) corrective actions that were implemented to improve performance of the WRPS Lockout / Tagout (LOTO) Program, in response to WRPS-PER-2017-0659. Each corrective action was evaluated using surveys, interviews, observations, and document reviews. The review identified nine (9) opportunities for improvement (OFI) which prompted further recommended actions in the form of problem evaluations (PER). ESTARs corrective action 2017-0659.3 called for developing and including LOTO topics to add to each Operations Continuing Training module. However at the time of this assessment, the LOTO modules have not been implemented for 222-S and 242-A Continuing Training. Thus far, the modules that have been completed have been observed to be positive and effective, however, because those for 222-S and 242-A have yet to be implemented (although not due until the end of the year), this action is determined to be Marginally Effective (WRPS-MOP-2018-1393/2018-1807).
7/11/2018	WRPS-PER-2018-1766	WAC 173-360-210(1) Requirement Flowdown	TFC-ESHQ-ENV-STD-08, Section 3.4.1 needs to be updated to reflect each of the reporting and recordkeeping requirements in WAC 173-360-210(1) and (2).

7/11/2018	WRPS-PER-2018-1736	Leak in TEDF Manhole TL-08	While performing the monthly Treated Effluent Disposal Facility (TEDF) transfer line surveillance, a leak was observed coming from the air vacuum relief valve in manhole TL-08. The leak rate was approximately 1 drip every 5 seconds.
7/11/2018	WRPS-PER-2018-1768	Requirement Inconsistency Between RPP-16922 and the Hanford Site AOP	As a CSE/DA for the ventilation systems at tank farms I have a responsibility to ensure the phase designator (e.g., ENV, TSR) on PMs is correctly identified. In development of new, and revision to existing, PMIDs it is difficult to understand what is and what is not an environmental requirement with respect to a PMID designation and performance requirements such as PM frequency. RPP-16922, Environmental Specification Requirements, has generally been considered a summary of all the environmental requirements from the Hanford Site air operating permit however there seems to be requirements identified that are not driven by the environmental permit. A couple examples are as follows: 1) RPP-16922, Sect 2.3.4.1, states annual HEPA filter differential pressure indicator and transmitter calibrations are required. Annual calibrations do not appear to be an AOP requirement for the majority of our ventilation systems yet it is currently considered an environmental requirement/PM because it is in RPP-16922. 2) RPP-16922, Sect 2.3.4.3, states HEPA filter in-place leak tests are required at least annually on ventilation system exhaust HEPA filters on all active, operable exhaust stacks. Annual HEPA filter leak testing does not appear to be an AOP requirement for many of our ventilation systems (e.g., VTA systems) yet it is considered an environmental requirement/PM because it is in RPP-16922. Given the importance of classifying the PMs correctly, consistent with the requirements, we need to ensure we are not going against ALARA principles and performing maintenance activities at an unjustified frequency which is even more important now with all the work performance issues associated with vapor concerns. With a BOP PM we can evaluate and justify a performance frequency for the maintenance activities using historical data and guidance from the ventilation codes however there is little flexibility with environmental PMs driven by RPP-16922. Potentially we have been classifying many PMs as ENV which applies a level of importance (e.g., cannot be deferred) that may not have been justified.
7/11/2018	WRPS-PER-2018-1769	Air Operating Permit Concerns	In review of a recent update to the Air Operating Permit related to the 241-AY Annulus Exhauster it was noticed that new requirements have been added including a requirement associated with HEPA filter in-place leak testing. The requirement states "The HEPA filter shall be in-place leak tested once a year or after complete or partial filter bank replacement ...". 1) I am assuming the wording of the requirement intended to mean that leak testing is required once a year AND after filter replacement. As written if we only performed after filter bank replacement we are in compliance which is likely not the intent. 2) Assuming the intention was performance annually what is the driver for this frequency given it is an annulus system with I am assuming a low potential to emit and with consideration to design features such as two HEPA filters in series. Also ASME N511 requires the in-place leak test at 2 year intervals however a 1 year frequency was written into the permit. Not being involved with development of the permit revisions I am unsure how the requirement was generated but I am hoping a good technical justification for the frequency exists. We need to ensure we are not going against ALARA principles and performing maintenance activities at an unjustified frequency which is even more important now with all the work performance issues associated with vapor concerns.

7/12/2018	WRPS-PER-2018-1767	AZ156-EDS-BKR-100 inadvertantly tripped	AZ156 main breaker was bumped and opened causing power to go away.
7/12/2018	WRPS-PER-2018-1770	Damaged Hand Hold Electrical Box in Ground West of Trailer MO-564 Entrance.	A Damaged Electrical Hand Hold Box in the Ground with Soil Caving in. This has a High Potential to cause Employees to fall into and Lead to a Possible Foot, Ankle, and or Leg Injury.
7/12/2018	WRPS-PER-2018-1771	Rough Wash boarded Unnamed Dirt Road Between Cooper Ave. and Bridgeport Ave Running South off 16th Street Towards SY-Farm.	Unnamed Dirt Road from 241-SY going to 16th Street Between Cooper Ave. and Bridgeport Ave is Heavily Wash boarded and in need of resurfacing/ Blading/smoothing. Road is Heavily Traveled and Utilized by Contract Rock Delivery Trucks, MSA Fueling Trucks, Leased Gov't vehicles, and Employee Personal Vehicles due to SX-Farm Excavation/Asphalt Project. Will Get More Use as Asphalt Equipment/Asphalt Deliveries in near Future is Delivered via this route.

7/12/2018	WRPS-PER-2018-1719	Electronic instrument maintenance notebooks	During the annual "internal audit" of the 222-S Laboratory Industrial Hygiene Quality Assurance program, it was discovered that the documentation in the electronic instrument maintenance notebooks has not been kept up-to-date with respect to the changes in notebook custodianship and equipment disposition. For example, the electronic instrument maintenance notebooks still list (b)(6) as the responsible custodian even though she has been retired from WRPS for almost one year. In addition, the electronic maintenance logbook for instrument "Bones" has still not been archived and moved to IDMS even though this instrument was excessed more than a year ago.
7/12/2018	WRPS-PER-2018-1772	reoccurring safety log book issues	The PO safety log book at 272AW last review and update was signed back in March 3-27-18 (required weekly). There were also three open detail sheets dating 6-5-18, 6-20-18 and 7-3-18 all indicating a safety issue that had no issue tracking number, evidence of assignee/champion or of any short/long term actions taken, and if a per was generated or not. I had heard of these issues and in discussion with a safety professional they were aware of some issues and stated they thought they were being worked but unsure of log book status. Workers reviewing log book were concerned process/ procedure was not being followed and appearance of issues entered not being evaluated in timeframe agreed to and in procedure not being followed.
7/12/2018	WRPS-PER-2018-1773	Major revision required of the Operations Person-in-Charge (PIC) Qualification Card (Course 350501)	While working through the Operations Person-in-Charge (PIC) Qualification Card many details were found to require further review. When delving deeper into the information required of the PIC candidate numerous procedures in the Document Review list and references to material contained within procedures in the Demonstration sections were determined to be outdated. A list of information that requires attention as well as a list of suggestions for consideration in making this a better tool for the candidate and candidate's reviewer are displayed in the attached/linked MOP.

7/12/2018	WRPS-PER-2018-1784	Contamination Discovered During HIHTL Removals at POR104 Valve Box	During Hose In Hose Transfer Line (HIHTL) removals at POR104 Valve Box in C Farm, while opening one of the secondary hose connections at this valve box, contamination was discovered outside the primary HIHTL. Discovery of this contamination is not what was expected as the secondary hose was slid back to expose the primary hose. None of the radiological limits for safe condition levels or Void levels were reached. A small amount of contamination was found on the splash cover/drape below this flange and was decontaminated. The work area where the bulk of the contamination was identified, was placed in a safe configuration (double bagged and secured at the valve box). An in-process ALARA review was conducted. Project management was notified.
7/12/2018	WRPS-PER-2018-1788	LOTO Discrepancies Identified During Review	A lockout/tagout (LOTO) assessment was performed on retrieval operations closed LOTO tagout authorization forms (TAFs). 3 TAFs had discrepancies that were identified but were none were non-compliances. With these 3 TAFs there were 2 issues (1 repeated). The first issue identified were that the TAFs had corrections that were not initialed and dated by two separate (b)(6) In actuality, the TAFs were initialed by two separate (b)(6), but there was only 1 date, providing the appearance that only one review had been completed. The second issue identified was a safe condition **check for addition of a new tag, the safe condition check referenced Block 14 "Special Instructions" and adequate information was not included in Block 14. In actuality, the TAF should have referenced Block 15 "Reason(s) for Partial Clearance/Addition of Tags/Comments, where the safe condition information resided.** These were completed TAFs already submitted as records, thus no corrections could or should be made.
7/12/2018	WRPS-PER-2018-1777	222-S 2017 Ecology Identified Non-compliance Observation #3	During an Ecology inspection of 222-S operating records for containers were reviewed. The review resulted in an observation that container 0098842 was brought into storage room 28 on 8/28/17. The records did not identify whether the waste was subject to LDR requirements for wastewater or for non-wastewater. See letter 18-NWP-069 and attached Ecology inspection report (17.614). .

7/12/2018	WRPS-PER-2018-1778	222-S 2017 Ecology inspection Non-compliance Observation #4	During an Ecology inspection of 222-S operating records, copies waste designations for additions into the DST system via 219-S were requested. Most records were initially provided but the submittal did not contain designations for 20152599, LA212-105 8-3, ASD-16-02, ATS-L0-100-107, and 512T003537.
7/12/2018	WRPS-PER-2018-1789	Inadvertent Issuance of a Quality Assurance Surveillance Report (QSR) to WRPS Subcontractor	TFC-ESHQ-Q_PP-P-02, "Quality Assurance Surveillances", Section 4.5, Item 8 requires that supplier surveillances be distributed by QA to the BTR, Procurement Manager, ^WRPS Procurement (as applicable), and ^TOC VENDOR (if applicable). On 7/2/2018 the supplier surveillance QSR TF-18-QSR-150, "American Electric Inc. Document Control - Emphasis on FIT Plans and Associated Submittals" was distributed by QA to those personnel listed in the procedure but also inadvertently issued it to two American Electric personnel. Distribution of this QSR to the subcontractor should have been done by Procurement not QA.
7/12/2018	WRPS-PER-2018-1776	222-S 2017 Ecology inspection Non-compliance Observation #2	Inspection records were requested as part of a Dangerous Waste Facility compliance inspection of 222-S Lab by the Department of Ecology. 1) Inspection records for eyewash/safety shower inspections records for September 2016 were requested. The inspector observed that the records appeared to be incomplete since initials were not present for some of the equipment. 2) Inspection records for the last day of each month from September 2016 to August 2017 were requested. The inspector noted that inspections records for Sumps 6, 7, 8, and 9 were missing for April 30, 2017.

7/12/2018	WRPS-PER-2018-1780	concern regarding consistency of waste codes on containers and the electronic waste tracking systems.	222-S 2017 Ecology inspection Concern #2--On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding consistency of waste codes on containers and the electronic waste tracking systems. Ecology had difficulty determining which waste codes applied to container 0096691.
7/12/2018	WRPS-PER-2018-1781	inspection document (18-NWP-069) identified a concern regarding LDR notifications and documentation	222-S 2017 Ecology inspection Concern #3-On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding LDR notifications and documentation. Ecology's concern is quoted as follows: "On February 22, 2018, I received an explanation from WRPS and USDOE-ORP that said the information in the LDR notification is found in various other documents in the operating record (e.g. in waste designations or SWIR120 Waste Container Contents Repo1is) not just on the LDR notification form. In the cases of LDR generator statements required in the Table in 40 CFR 268.7(a)(4), WRPS and USDOE-ORP referenced the ce1iification code listed on SWIR120 Waste Container Contents Rep01is. These are listed in these reports as codes (e.g. A, HI, and B). The statements that are required in column "268.7(a)(2)" of the Generator Paperwork Requirements Table in 40 CFR 268.7(a)(4) need to be specifically listed out in the operating record when a waste is brought into storage. For example: HI - Debris requires treatment - This waste is hazardous debris that requires treatment using the alternative treatment standards of 40 CFR 268.45. These are the requirements of the operating record and also the requirements of generators to meet LDR requirements. In this case, the LDR requirement sets the timeframe for when this information needs to be incorporated into the operating record. In this case, when a waste is brought into storage. Additionally, if the data is available to determine if a waste is a wastewater or non-wastewater, this determination, in accordance with the requirements 40 CFR 268.7, needs to be specifically included in the operating record before a waste is brought into storage. This is different from the above examples, where a determination has already been made for LDR generator treatment statements. In that case, the statements just need to be specifically written out to meet the requirements of 40 CFR 268.7."
7/12/2018	WRPS-PER-2018-1782	Records did not indicate specific tank that transfer to 219-S was going to	222-S 2017 Ecology inspection Concern #4--On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding records of hotcell transfers to the 219-S tank system. Ecology's review of operating records did not list the specific location where the waste was going. The concern is quoted as follows: In my review of operating records of hotcell transfers to the 219-S Tank System, I observed records indicated waste was going to 219-S, but it did not list the specific tank location where the waste was going. WAC 173-303-380(1)(a) and (b) require a description of and the quantity of each dangerous waste received or managed on-site, and the method(s) and date(s) of its treatment, storage, or disposal at the facility and the location of each dangerous waste within the facility and the quantity at each location. Records of hotcell transfers to the 219-S Tank System should also include the specific tank where the waste is being transferred to.

7/12/2018	WRPS-PER-2018-1783	Ecology obtained tank level measurements information on additions identified a 463.85 gallon discrepancy with the tank volume	222-S 2017 Ecology inspection Concern #5--On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding operating records for the 219-S tank system. Ecology obtained tank level measurements and information on additions (both waste and flush water) identified a 463.85 gallon discrepancy with the tank volume. Ecology's concern is quoted as follows: In my review of operating records, I observed a total of 14.5 liters of waste additions and 67.75 liters of water rinse flush added to the 219-S Tank System between October of 2016 through September of 2017 from the Hot Cells. This resulted in an addition of 82.25 liters (21. 7 gallons) of waste added to the 219-S Tank System. I observed on tank level inspection records on September 30, 2016, Tank TK-101read696.6 gallons and on August 31, 2017 it read 1,314 gallons. The difference between the September 30, 2016 and August 31, 2017 readings for Tank TK-101 was 617.4 gallons. I observed by subtracting additions of waste and water rinse flushes during the same period with an additional month (October 2016 to September 2017) resulted in a discrepancy of 463.85 gallons of waste that was not accounted for in Tank TK-101. During a follow up inspection, WRPS staff said there is a rinse and a flush after each waste addition and that waste additions are tracked very closely, but that water additions are estimated. They explained water is run through a flexible tube for the flushes and more water may be added than estimated. Due to the mixture rule, adding water to a tank with listed waste makes more listed waste. Since water additions make for more tank waste, water rinses and flushes should be analyzed so better estimates or actual amounts are available for accounting for additions to the 219-S Tank System and better tracked in accordance with WAC 173-303-380(1)(a) and (b) requirements.
7/12/2018	WRPS-PER-2018-1785	ability to determine the specific training requirements for an individual.	222-S 2017 Ecology Inspection Concern #6--On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding the ability to determine the specific training requirements for an individual. Ecology concern is quoted as follows: During my inspection, I asked for training records for a waste worker and an advance waste worker. I was able to determine the trainings required for these workers because WRPS staff were available to inf01m me these individuals were not associated with job positions associated with the footnotes for other job positions. Without direct on-site help, there is no way to determine if footnotes with additional training requirements apply from just reviewing training records and the Dangerous Waste Training Plan. I did not request or review the dangerous waste training plan for the 222-S Laboratory Complex in this inspection. It appears "he dangerous waste training plan for the 222-2 Laboratory Complex needs to be updated to include the specific trainings required for every job position that involves work with the dangerous waste regulations.
7/12/2018	WRPS-PER-2018-1786	receipt of mercury switches that had been found in a low level waste shipment from SY Farm.	222-S 2017 ecology inspection Concern #7--On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding the receipt of mercury switches that had been found in a low level waste shipment from SY Farm. Ecology concern is quoted as follows: During my inspection, I reviewed records from 2011 that indicated mercury switches were found in a low level waste shipment from SY Farm to Perma-Fix N01ihwest which did not fit the low level waste profile. Perma-Fix N01ihwest sent the waste to the 222-S Lab through Uniform Hazardous Waste Manifest Number 004900189JJK, dated June 6, 2011. Staff adding low level waste to containers and managers overseeing such work, should ensure better processes of waste segregation and designation in accordance with the dangerous waste regulations.

7/12/2018	WRPS-PER-2018-1787	concern regarding the eye wash/Safety shower inspection documents.	222-S 2017 Ecology inspection Concern #8-On September 14, 2017 Ecology conducted an inspection of 222-S lab. The inspection document (18-NWP-069) identified a concern regarding the eye wash/Safety shower inspection documents. The inspections are conducted weekly and documented on a single monthly inspection record. The inspection record has only one space for the inspectors initial and to show that each piece of equipment was inspected.. Ecology's concern is quoted as follows: During the inspection, I asked to see eye wash/safety shower inspection records (Preventative Maintenance Data Sheet 2S-000791 - Safety Shower and Eye Wash). I observed these inspections were conducted weekly and documented on a single monthly inspection record. The inspection record only had one space for the inspector to initial and show that each piece of equipment was inspected with a signature page on the back for sign offs of each weekly inspection. This inspection record should be updated to be clear on when each piece of equipment was inspected and who conducted the inspection.
7/12/2018	WRPS-PER-2018-1790	non-compliance regarding container labeling on a container	222-S 2017 Ecology inspection Non-compliance observation #1--In letter 18-NWP-039 Ecology cites an area of non-compliance regarding container labeling on a container. Ecology's observation is quoted as follows: Inside of storage area HS-00838, I observed mixed-waste container number 0080954 was labeled as Hazardous Waste with a major risk of corrosive. During my inspection, I observed Container 0080954 was designated with a D009 waste code. I did not observe a major risk of Toxic on Container 0080954.
7/12/2018	WRPS-PER-2018-1791	Ecology expressed the following written concern regarding the addition of unaltered tank samples to the 219-S tank system	222-S 2017 Ecology inspection concern #1--Ecology expressed the following written concern regarding the addition of unaltered tank samples to the 219-S tank system. Quoted: When unused or analyzed tank samples are added to the 219-S Tank System, they are no longer samples, as they are mixed into the contents of 219-S Tank System which contains listed waste. That is, under the mixture rule, the samples now take on all of the listed waste codes of the waste being stored in the 219-S Tank System and are no longer made up of the same constituents of the original sample. Fmthermore, when an excluded waste is mixed/commingled with regulated dangerous waste, that "excluded" waste loses its "excluded" status. For example, excluded household hazardous waste that is mixed/added/etc. with listed waste from a Large Quantity Generator results in the household hazardous waste losing its excluded status; and the mixing activity creates a larger volume of regulated listed dangerous waste. In the cases where unused or analyzed tank samples are added to the 219-S Tank System, the waste is being stored in a dangerous waste management unit. Thus the waste is instead transferred to the Double Shell Tank System from another dangerous waste management unit which requires compliance with the final facility standards in the dangerous waste regulations. WAC 173-303-300 requires a facility owner or operator to confirm knowledge about a dangerous waste before it is stored, treated, or disposed. The sample exclusion does not allow the 219-S Tank System to circumvent the final status requirements that apply to it. Additionally, in order to qualify for the sample exclusion in WAC 173-303-071(l)(i), a laboratory returning samples to a sample collector must assure the following information accompanies the samples as is required in WAC 173-303-071(l)(ii)(B): (AA) The sample collector's name, mailing address, and telephone number; (BB) The laboratory's name, mailing address, and telephone number; (CC) The quantity of the sample; (DD) The date of shipment; (EE) A description of the sample

7/16/2018	WRPS-PER-2018-1792	Contaminated Bird Feces and Eggshells	During the performance of a Scheduled Radiation Survey Task Description LE-D012 at ETF: 1. Contaminated eggshells were discovered in the Surge Berm on Northeast side of Surge Tank. Total Contamination of; 12,000 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha was detected. No removable contamination was detected. 2. Contaminated bird feces were discovered under the entrance stairs to Surge Berm. Total Contamination of; 30,000 dpm/100 cm2 Beta-Gamma and 42 dpm/100 cm2 Alpha was detected. No removable contamination was detected. The locations were decontaminated. Survey results are documented in Survey Simple on survey # LE-1801383
7/16/2018	WRPS-PER-2018-1793	Contaminated Bird Feces	During the performance of a Scheduled Radiation Survey Task Description LE-D012 at ETF, contaminated bird feces was discovered Surge Berm northeast side of Surge Tank. Total Contamination of; 7,850dpm/100 cm2 Beta-Gamma and 14 dpm/100 cm2 Alpha was detected. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801379
7/16/2018	WRPS-PER-2018-1794	Contaminated Bird Feces	During the performance of a verification survey at ETF, contaminated bird feces was discovered on top of Verification Tank 60H-TK-1C. Total Contamination of; 6,850 dpm/100 cm2 Beta-Gamma and 7 dpm/100 cm2 Alpha was detected. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801382

7/16/2018	WRPS-PER-2018-1795	Routing Board Update	During a recent Route Board drawing update, it was identified on H-14-107346, Sheet 1, PPB-030 was "redline" added on the drawing under SS Process Blank Tracking Table. After review of ECN-713867, page 10 of 11, the clouded area included PPB-030 through PPB-049. Engineering requests to have all process blanks be listed on the table. QAT and Operations redlined the update, adding all process blanks. H-14-107346, Sheet 1 did not reflect the changes made per the ECN.
7/16/2018	WRPS-PER-2018-1796	Performance Objectives Form	Performance Objectives Form is difficult to use, making updates time-consuming. The form forces to re-save under another name every time you make a change. You could end up with several files with just one iteration of performance reviews. This is especially awkward if you have quite a few staff members. Some of Word's functions don't perform normally, e.g., using tab to add new row. Information is not logically arranged. I would like to see the individual section instructions moved to those sections. I find I always skip past this page assuming it has nothing useful for me. It also does not have a form number. As a form (required by an admin procedure, contains company logo, crosses departmental lines), this form must be under change control in accordance with TFC-BSM-AD-C-02.
7/16/2018	WRPS-PER-2018-1797	Vessel Vent System Configuration Management Discrepancy	While reviewing PMID EE-001880 Rev. 1, it was noted that the Asset ID in Block 5 did not match the Block 15 PM Description. The Task was rejected. Further investigation found the incorrect reference to FCS-1 was in SmartPlant Foundation as the Equipment Title is "FCS-1 DIFF PRESS IND (0-10 IN)". RPP-16922, Environmental Specification Requirements, page 11-28 has the same incorrect reference for the equipment title,: "PDI-FC6-1A FCS-1 Differential Pressure Indicator". PMID-BAS-4703 is not affected by this error.

7/16/2018	WRPS-PER-2018-1798	QA Surveillance and Oversight of American Electric Incorporated (AEI) Issues	a supplier corrective action report (SCAR), TF-18-SCAR-002 was issued to American Electric upon the review and approval of QSR-TF-18-150 which raised concerns about AEI's implementation of their QA program. The SCAR lists a number of measures that AEI is required to address. This PER is being written to document WRPS' comp measures in increasing oversight of AEI.
7/16/2018	WRPS-PER-2018-1799	Four radioactive sources left unattended/unsecured	Four radioactive sources were checked out on Thursday 07/12/18 at 0835 by ETF Instrument Technicians and not returned to the normal storage location at end of the shift. Sources were found unattended/unsecured on desk in instrument tech office at approximately 1510 on 07/16/18.
7/17/2018	WRPS-PER-2018-1808	LERF Basin 42 liner damage during cover replacement	The cover on LERF Basin 42 is in the process of being replaced. During removal activities the morning of 7/17/18 workers identified a small hole in the liner when the old cover material was removed. The old cover is being removed in sections to allow rolling it up for easy removal. Liner cleaning and inspection is being performed as the cover is removed. Tubes in question are influent (flow into the basin) and issues are being reviewed now for cause of floating the tubes. Possible cause would be high input flow, but more discussions will be held to determine this.

7/17/2018	WRPS-PER-2018-1810	Operation of equipment under test control	On 7/15/18 a switch of exhauster configuration at 222-S was made, from EF-1 and EF-4 to EF-1, -2 and -3. Exhaust Fans EF-1, -2 and -3 are currently in test control from upgrades to VFDs. EF-2 has an open Test Deficiency Report (TDR) for a bad flow signal, making it inoperable. The planned start of EF-2, along with EF-1 and EF-3, required a forced lower flow setpoint in the control system with approvals by the Facility Operations Manager (FOM), the Design Authority (DA), and the Test Director on the open TDR, prior to starting EF-2. At 07:45, EF-2 was started with engineering and the FOM present, but prior to documentation and approvals on the TDR. At 08:45 the Test Director was made aware of EF-2 running and obtained the approvals required on the TDR to support the temporary force in the control system and running of EF-2.
7/17/2018	WRPS-PER-2018-1813	Skin Contamination found on (b)(6) (b)(6)	During the morning work evolution at the ETF Basin Cover replacement, a worker was changing out gloves after exiting the partial HCA (High Contamination Area). During this time while the worker was changing their gloves, the worker extended more pressure when removing his outer gloves, this causing the material on the gloves to let particles come off. One particle was noticed by the Health Physics Technician (HPT) to land on (b)(6) (b)(6)
7/17/2018	WRPS-PER-2018-1814	Rental Equipment receipt inspection forms	To be compliant with DOE/RL-92-36 WRPS must perform a safety receipt inspection on all rental equipment. Currently the safety department is using three non formalized forms to document the inspection. The safety program needs to create new forms and provide a WRPS driving documents to ensure that all rental equipment is being inspected.

7/17/2018	WRPS-PER-2018-1812	Access to RMA & RBA without proper dosimetry	Contrary to the requirements of RWP S-606, and radiological postings, a worker entered the 219S RMA and 11A RMA/RBA without required personal dosimeter.
7/17/2018	WRPS-PER-2018-1815	Some legacy accounts and passwords have not been updated since employees changed roles or left the company.	**Implementation of Cyber security Assessment** - Observation 1--During FY2018-ENG-MD-0303 -- Implementation of Cybersecurity for Industrial Control Systems Assessment it was observed that some legacy accounts and passwords have not been updated since employees changed roles or left the company. Assign to (b)(6)
7/17/2018	WRPS-PER-2018-1816	EAPC Safety Book -- Stairs Out of Compliance	**TFC-ESHQ-FP-STD-02 attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures and EAPC safety book detail sheet for information on each location.** **Stairs suspect to not be procedurally compliant:** **Locations:** **200E: MO-2241 south and south set of stairs, MO-2240, MO-2242 south set, MO-131, MO-532, 241AW Farm stairs over ducting, MO-818 241 AW Change Trailer, MO-2251, MO-2350, MO-2249 A-Farm, MO-164 and MO-098** 200W: MO-296 (SY) and MO-2172

7/17/2018	WRPS-PER-2018-1817	242-A MCS has not been routinely patched.	Implementation of Cyber security Assessment - Observation 2--During FY2018-ENG-MD-0303 – Implementation of Cybersecurity for Industrial Control Systems Assessment it was observed that 242-A MCS has not been routinely patched. Assign to (b)(6)
7/17/2018	WRPS-PER-2018-1818	develop a list of key cyber security controls for new projects or modifications to existing systems.	Implementation of Cyber security Assessment - OFI 1--During FY2018-ENG-MD-0303 – Implementation of Cybersecurity for Industrial Control Systems Assessment an opportunity for improvement was identified to develop a list of key cybersecurity controls for new projects or modifications to existing systems. Assign to (b)(6)
7/17/2018	WRPS-PER-2018-1819	opportunity for improvement to review virus detection notification process with P&CS engineering technical staff.	Implementation of Cybersecurity Assessment - OFI 2--During FY2018-ENG-MD-0303 – Implementation of Cybersecurity for Industrial Control Systems Assessment an opportunity for improvement to review virus detection notification process with P&CS engineering technical staff.

7/17/2018	WRPS-PER-2018-1820	Broken Window in MO-598/200E	Window is broke on the east side of MO-598/200E. Potential to cut employee if they lean on glass.
7/17/2018	WRPS-PER-2018-1822	Epoxy Needed to be Applied To Stairwells on Facilities Outside C-Farm	MO-523, MO-525 and MO-143 in the 200E Area have large portions of epoxy that have been worn off the steps entering and exiting these facilities. Poses a potential slipping hazard when freezing wet weather arrives.
7/17/2018	WRPS-PER-2018-1823	TK-C-100 Overflow	The 242-A Evaporator Campaign 09 (EC-09) Process Memo requires that an overflow of TK-C-100 be perform during the deep flush if the C-A-1 vessel is drained of waste and the process is not restarted within 14 days. Due to major equipment failure, EC-09 was prematurely secured. Attempts to obtain Process Condensate (PC) samples post EC-09 operations which required holding off on the overflow were not successful due to delays and the ability to deliver the PC samples to the labs. This made the PC sample and overflow evolutions exceed the 14 day window per the Process Memo.

7/18/2018	WRPS-PER-2018-1821	The flow capacity of the TEDF "J" discharge line is not fully tested	The WTP NLD line feeds the TOC "J" line, which discharges into the "H" line, and then feeds the TEDF transfer line. Sustained flow capacity (at the allowable 500gpm limit) of the TEDF "J" discharge line has not been tested. The TDEF ICD (RPP-RPT-59117) allows WTP NLD discharges up to 500gpm, however, testing has not been completed to verify that capability. When full, at a 500gpm flow rate, the WTP NLD tank could need in excess of 12 hours to empty. A Hydraulic Analysis (FH-0000493 / WMH-9852526) was performed for the "H" line capacity, but was performed at a time when expected WTP NLD discharge was limited to 240gpm, and does not include analysis of the "J" line. Additionally, the hydraulic analysis does not seem to include consideration of a sustained WTP NLD discharge of 500gpm with other "competing" 200E area discharges. There seems to be a risk of future potential impact to WTP operations, or a situation where concurrent discharges could overwhelm a section of the Hanford transfer lines.
7/18/2018	WRPS-PER-2018-1825	TOC HVAC Glycol System Maintenance Procedures	AN Team has requested 5-GLY-905 (Glycol System Maintenance at AN Exhauster...) be left as a "Reference" procedure and 5-GLY-911 (Glycol System Maintenance at AP Exhausters...) be changed from a "Continuous" to "Reference" procedure. Currently 5-GLY-906 (Glycol System Maintenance on POR-1007, POR-126, and POR-127 Exhauster...), 5-GLY-907 (Glycol System Maintenance at AW Farm...), 5-GLY-910 (Glycol System Maintenance at SY Exhauster...), and 5-GLY-912 (Glycol System Maintenance on POR06 Exhauster...) are "Continuous" use procedures. All of these procedures functionally do they same thing at each farm, drain, flush and fill the Exhauster Glycol System. Given that the hazard our equal and the systems are relatively the same, each of the procedures should be consistent with their use, either "Continuous" or "Reference".
7/18/2018	WRPS-PER-2018-1824	Corrective Action May Need to Be Generalized for All Employees	As a result of the effectiveness review for WRPS-PER-2017-2576, it was deteremined that all corrective actions were satisfactorily completed and that the corrective actions were effective. One of the corrective actions was to update employee orientations with the importance of cord inspections but this was heavily weighted in the direction of field work. This PER suggests that Safety take a look again and determine if their electrical safety slides that appear regularly in the Safety Startup might include the importance for all employees to inspect cords and outlets whenever any equipment, including office equipment, portable heaters, personal electronics, etc. There are PERs and Lessons learned about the failure of outlets as well as the example of this event where the plug was faulty, that could result in personnel injury no matter where and what the electrical equipment is..

7/18/2018	WRPS-PER-2018-1826	Lack of proper attire and work release for leak response at ETF	Monday around 1:00pm the maintenance FWS asked the (b)(6) to go out to the process floor and identify leak location on the RO skid. (b)(6) went to the floor ahead of the FWS, when the FWS arrived at the RO unit he observed that (b)(6) was dressed in modesty level of clothing. The FWS immediately asked (b)(6) to stop what he was doing and leave the floor and put on the appropriate level of clothing and additional PPE required to perform any work on the process floor. (b)(6) complied and returned re-dressed back to the floor. It was then discovered by the FWS that (b)(6) had performed work dressed inappropriately. (b)(6) had used a wrench to tighten the leaking probe on the RO unit. When questioned as to what paperwork he was performing work under he replied that he believed he was using SWIM's and that when the FWS asked him to locate the leak, he was asked to address the leak, which is not what the FWS had asked. Several issues were identified. 1. The lack of proper attire and PPE for performing work on the process floor. 2. The lack of proper paperwork released to perform the tightening of the leaking probe. 3. The miss communications between the supervisor and the craft.
7/18/2018	WRPS-PER-2018-1827	SSC Regulatory Issues" section was inconsistent between SSC Status and Health Reports reports.	Title: Reviewed content of and expectations for "SSC Regulatory Issues" sections of SSC Status Reports Summary: During review of RPP-RPT-60791-00, Systems, Structures, and Components (SSC) Status Report C-105 Waste Retrieval System (WRS), noted that section "SSC Regulatory Issues," sub-section "ORP Facility Representative Reports," which was described as "observations relevant to the waste transfer containment system", instead listed Occurrence Reports EM-RP-WRPS-TANKFARM-2017-0012 and EM-RP-WRPS-TANKFARM-2017-0013. The sub-section "Reportable Events" stated "No reportable events during this period." Based on this, a review was conducted of the requirements, expectations, and content for the "SSC Regulatory Issues" sections of SSC Status Reports. Also noted in Engineering System Monitoring, Performance, and Reporting Guidance Document: There are multiple attachments (A-C), but the Table of Attachments only lists Attachment A, "SSC Status & Health Report Instructions." ---------- Issue Type: OFI (Opportunity for Improvement) Statement: 36670-TF-O01 - SSC Status & Health Report guidance should be clarified to improve consistency and accuracy in report content (Patel, 7 /12/18) Discussion: A review of multiple SSC Status & Health Reports found that the content of the "SSC Regulatory Issues" section was inconsistent between reports.
7/18/2018	WRPS-PER-2018-1828	Bentley AutoPIPE software critical error notifications ; 905085, 865266, 896029	Bentley notified WRPS of software critical errors 905085, 865266, 896029 affecting the design/analysis software AutoPIPE. AutoPIPE has been used to analyze both general service and safety significant piping used in TOC SSCs. These software critical errors MAY cause non-conservative results to be produced during analysis. As AutoPIPE has been used by WRPS and subcontractors, design analyses of TOC SSCs may be affected.

7/18/2018	WRPS-PER-2018-1829	242-A Campaign EC-09 deep flush	Per HNF-14755, Rev 6-E, flushing the C-A-1 vessel is a defense in depth (DID) feature. At the conclusion of campaign EC-09, (due to the failed PB-1 recirculation pump) a deep flush was performed, but, not completely by procedure TO-650-140, Flush 242-A Evaporator Vessel, Recirculation Loop and De-Entrainer Pads, as described in the DID Table. Without the recirculation pump PB-1, the C-A-1 flush water was not heated.
7/18/2018	WRPS-PER-2018-1831	Work Instructions Not Followed During Pumping Operations in prep for cover replacement at LERF Basin 42	Title: Observed LERF Basin 42 Cover Removal Summary: Observed removal of LERF basin 42 cover. During this observation the LERF basin cover was being pumped to remove water. Operation of the pumping system is covered by Work Instructions of WO# 384046, "LERF Basin 42 - Replace Floating Cover" Specifically: 5.5.3.3.8. THROTTLE valve 60M-321 to FULL OPEN 5.5.3.3.9. THROTTLE valve 60M-322 so that pressure is read on gauges 60M-328 and 60M-329. 5.5.3.4. MONITOR catch basin and encasement return to Basin 42 for leakage, minimum once per shift 5.5.3.4.1. IF leakage is observed, then STOP pump. 5.5.3.4.1.1. NOTIFY ETF Shift Operations Manager (373-9000) 5.5.3.4.1.2. REWORK leakage (hose and fittings) as needed. 5.5.3.4.1.3. GO TO step 5.5.3.3. 5.5.3.5. MONITOR filter DP on skid. 5.5.3.6. THROTTLE valve 60M-322 as needed to maximize filter life while ensuring pressure is read on 60M-328 and 60M-329. 5.5.3.6.1. If filter DP is =30 PSI, CHANGE out filter per attachment A. During observation it was noted PI-60M-329 was reading 119 PSIG, and PI-60M-328 was reading what appeared to be 0 PSIG, but was later identified to be "pegged" high. During the discussion the FWS indicated that after draining the filter the gage PI-60M-329 did not return to zero and remained at 119 PSIG. This indicates that the work instruction was not being followed (specifically steps 5.5.3.3.9, 5.5.3.5, and 5.5.3.6.1) (OA-36710 F01). Additionally, this is an example of operating equipment with inaccurate or malfunctioning instruments that could lead to equipment damage, and placing production above safety (OA-36710 F02). When asked by the FR if a PER had been written for the issue with PI-60M-329, the FWS answered no PER had been written (OA-36710 F03).
7/18/2018	WRPS-PER-2018-1830	Tumble weed accumulation inside and outside the TY Farm by 242-T-271 building.	Tumble weed accumulation inside and outside the TY Farm by 242-T-271 building.

7/18/2018	WRPS-PER-2018-1832	Operation of Pump and Filter Without Procedurally Required Gages Places Production Above Safety	Title: Observed LERF Basin 42 Cover Removal Summary: Observed removal of LERF basin 42 cover. During this observation the LERF basin cover was being pumped to remove water. Operation of the pumping system is covered by Work Instructions of WO# 384046, "LERF Basin 42 - Replace Floating Cover" Specifically: 5.5.3.3.8. THROTTLE valve 60M-321 to FULL OPEN 5.5.3.3.9. THROTTLE valve 60M-322 so that pressure is read on gauges 60M-328 and 60M-329. 5.5.3.4. MONITOR catch basin and encasement return to Basin 42 for leakage, minimum once per shift 5.5.3.4.1. IF leakage is observed, then STOP pump. 5.5.3.4.1.1. NOTIFY ETF Shift Operations Manager (373-9000) 5.5.3.4.1.2. REWORK leakage (hose and fittings) as needed. 5.5.3.4.1.3. GO TO step 5.5.3.3. 5.5.3.5. MONITOR filter DP on skid. 5.5.3.6. THROTTLE valve 60M-322 as needed to maximize filter life while ensuring pressure is read on 60M-328 and 60M-329. 5.5.3.6.1. If filter DP is =30 PSI, CHANGE out filter per attachment A. During observation it was noted PI-60M-329 was reading 119 PSIG, and PI-60M-328 was reading what appeared to be 0 PSIG, but was later identified to be "pegged" high. During the discussion the FWS indicated that after draining the filter the gage PI-60M-329 did not return to zero and remained at 119 PSIG. This indicates that the work instruction was not being followed (specifically steps 5.5.3.3.9, 5.5.3.5, and 5.5.3.6.1) (OA-36710 F01). Additionally, this is an example of operating equipment with inaccurate or malfunctioning instruments that could lead to equipment damage, and placing production above safety (OA-36710 F02). When asked by the FR if a PER had been written for the issue with PI-60M-329, the FWS answered no PER had been written (OA-36710 F03).
7/18/2018	WRPS-PER-2018-1833	A PER Was Not Written to Identify an Issue Affecting Quality	Title: Observed LERF Basin 42 Cover Removal Summary: Observed removal of LERF basin 42 cover. During this observation the LERF basin cover was being pumped to remove water. Operation of the pumping system is covered by Work Instructions of WO# 384046, "LERF Basin 42 - Replace Floating Cover" Specifically: 5.5.3.3.8. THROTTLE valve 60M-321 to FULL OPEN 5.5.3.3.9. THROTTLE valve 60M-322 so that pressure is read on gauges 60M-328 and 60M-329. 5.5.3.4. MONITOR catch basin and encasement return to Basin 42 for leakage, minimum once per shift 5.5.3.4.1. IF leakage is observed, then STOP pump. 5.5.3.4.1.1. NOTIFY ETF Shift Operations Manager (373-9000) 5.5.3.4.1.2. REWORK leakage (hose and fittings) as needed. 5.5.3.4.1.3. GO TO step 5.5.3.3. 5.5.3.5. MONITOR filter DP on skid. 5.5.3.6. THROTTLE valve 60M-322 as needed to maximize filter life while ensuring pressure is read on 60M-328 and 60M-329. 5.5.3.6.1. If filter DP is =30 PSI, CHANGE out filter per attachment A. During observation it was noted PI-60M-329 was reading 119 PSIG, and PI-60M-328 was reading what appeared to be 0 PSIG, but was later identified to be "pegged" high. During the discussion the FWS indicated that after draining the filter the gage PI-60M-329 did not return to zero and remained at 119 PSIG. This indicates that the work instruction was not being followed (specifically steps 5.5.3.3.9, 5.5.3.5, and 5.5.3.6.1) (OA-36710 F01). Additionally, this is an example of operating equipment with inaccurate or malfunctioning instruments that could lead to equipment damage, and placing production above safety (OA-36710 F02). When asked by the FR if a PER had been written for the issue with PI-60M-329, the FWS answered no PER had been written (OA-36710 F03).
7/18/2018	WRPS-PER-2018-1834	Responsibilities of Project Personnel in Relation to Applicable DOE O 422.1 are not specified in WRPS procedures	Title: Observed LERF Basin 42 Cover Removal Summary: Observed removal of LERF basin 42 cover. During this observation the LERF basin cover was being pumped to remove water. Operation of the pumping system is covered by Work Instructions of WO# 384046, "LERF Basin 42 - Replace Floating Cover" Specifically: 5.5.3.3.8. THROTTLE valve 60M-321 to FULL OPEN 5.5.3.3.9. THROTTLE valve 60M-322 so that pressure is read on gauges 60M-328 and 60M-329. 5.5.3.4. MONITOR catch basin and encasement return to Basin 42 for leakage, minimum once per shift 5.5.3.4.1. IF leakage is observed, then STOP pump. 5.5.3.4.1.1. NOTIFY ETF Shift Operations Manager (373-9000) 5.5.3.4.1.2. REWORK leakage (hose and fittings) as needed. 5.5.3.4.1.3. GO TO step 5.5.3.3. 5.5.3.5. MONITOR filter DP on skid. 5.5.3.6. THROTTLE valve 60M-322 as needed to maximize filter life while ensuring pressure is read on 60M-328 and 60M-329. 5.5.3.6.1. If filter DP is =30 PSI, CHANGE out filter per attachment A. During observation it was noted PI-60M-329 was reading 119 PSIG, and PI-60M-328 was reading what appeared to be 0 PSIG, but was later identified to be "pegged" high. During the discussion the FWS indicated that after draining the filter the gage PI-60M-329 did not return to zero and remained at 119 PSIG. This indicates that the work instruction was not being followed (specifically steps 5.5.3.3.9, 5.5.3.5, and 5.5.3.6.1) (OA-36710 F01). Additionally, this is an example of operating equipment with inaccurate or malfunctioning instruments that could lead to equipment damage, and placing production above safety (OA-36710 F02). When asked by the FR if a PER had been written for the issue with PI-60M-329, the FWS answered no PER had been written (OA-36710 F03).

7/18/2018	WRPS-PER-2018-1835	WRPS Should Review DOE O 422.1 for Applicability of Requirements to Maintenance/Projects Personnel	Title: Observed LERF Basin 42 Cover Removal Summary: Observed removal of LERF basin 42 cover. During this observation the LERF basin cover was being pumped to remove water. Operation of the pumping system is covered by Work Instructions of WO# 384046, "LERF Basin 42 - Replace Floating Cover" Specifically: 5.5.3.3.8. THROTTLE valve 60M-321 to FULL OPEN 5.5.3.3.9. THROTTLE valve 60M-322 so that pressure is read on gauges 60M-328 and 60M-329. 5.5.3.4. MONITOR catch basin and encasement return to Basin 42 for leakage, minimum once per shift 5.5.3.4.1. If leakage is observed, then STOP pump. 5.5.3.4.1.1. NOTIFY ETF Shift Operations Manager (373-9000) 5.5.3.4.1.2. REWORK leakage (hose and fittings) as needed. 5.5.3.4.1.3. GO TO step 5.5.3.3. 5.5.3.5. MONITOR filter DP on skid. 5.5.3.6. THROTTLE valve 60M-322 as needed to maximize filter life while ensuring pressure is read on 60M-328 and 60M-329. 5.5.3.6.1. If filter DP is =30 PSI, CHANGE out filter per attachment A. During observation it was noted PI-60M-329 was reading 119 PSIG, and PI-60M-328 was reading what appeared to be 0 PSIG, but was later identified to be "pegged" high. During the discussion the FWS indicated that after draining the filter the gage PI-60M-329 did not return to zero and remained at 119 PSIG. This indicates that the work instruction was not being followed (specifically steps 5.5.3.3.9, 5.5.3.5, and 5.5.3.6.1) (OA-36710 F01). Additionally, this is an example of operating equipment with inaccurate or malfunctioning instruments that could lead to equipment damage, and placing production above safety (OA-36710 F02). When asked by the FR if a PER had been written for the issue with PI-60M-329, the FWS answered no PER had been written (OA-36710 F03).
7/18/2018	WRPS-PER-2018-1836	Leak from AE-60F-270	2nd RO Permeate Conductivity Probe was found to be leaking a drop every ~5 seconds onto the drip pan below the 2nd RO skid. About 1 quart of water had accumulated on the drip pan.
7/18/2018	WRPS-PER-2018-1838	Vehicles driving through pedestrian walkways	An employee brought to my attention in a Safety Share that she had experienced a near miss from a vehicle that had driven through a pedestrian walkway in the 2704HV parking lot. She also said that she had recently experienced a near miss from a vehicle driving into a 'No Parking Zone' in the same lot. Over the next couple of days I arrived early and observed a number of employees driving across the pedestrian walkways in the 2704HV parking lot so that they could park their vehicles oriented to exit parking by driving forward. The concern is that this practice increases the risk that an employee could be injured while walking in a pedestrian walkway. Similar behaviors have been documented in MOPs and PERs (WRPS-MOP-2018-0676, WRPS-MOP-2017-2984, WRPS-PER-2017-0517, and WRPS-PER-2017-2477). Corrective actions for these MOPs and PERs have included placing pedestrian stations in designated walkways to block cars from crossing, issuing a Safety Flash to all employees, addressing the issue in Safety Startups, and engaging management with employees to address these infractions. Improvement in employee conduct was documented for some of the corrective actions, however, the incidents of vehicles driving through pedestrian walkways, and parking in no parking zones (as documented in pictures attached to WRPS-MO-2018-1914) continues. The HPI Error Precursors for this condition are complacency/overconfidence, and inaccurate risk perception. The HPI LOW allowing this condition to persist appears to be primarily, ineffective accountability policy.

7/18/2018	WRPS-PER-2018-1803	Independent Assessment of WRPS QA Program, Finding F1 - Manager Qualification	TFC-BSM-TQ-STD-11, REV B-12, Manager Qualification Requirements, specifies training requirements for Operations and Training managers but does not specify the training requirements for other management personnel in the organization. Training "Option-sets" for all management positions have been established in the Electronic Learning Management (ELM) program and applies to "specific management positions as listed in the TOC Training Implementation Matrix." It was found that Option-set R003 has been included in ELM for the QA Management personnel in accordance with TFC-BSM-TQ-STD-23, REV A-0, TOC Training Implementation Matrix, but the procedure does not reflect that requirement. Discussion with the QA Manager and Training Manager confirmed that there is a gap at this time and the procedure requires update.
7/18/2018	WRPS-PER-2018-1804	Independent Assessment of WRPS QA Program, Finding 2 - Identification and Control of Items	TFC-PLN-02, Quality Assurance Plan (QAPD), Section 8.5 Limited Life Items, states "Items having a limited calendar or operating life or cycles shall be identified and controlled to preclude use of items whose shelf life or operating life has expired." TFC-BSM-FPM_PR-C-24, Material and Equipment Staging Area Control, Attachment B – Item Storage Requirements states in part 2. "The SAC is responsible for maintaining items identified with a shelf life. Shelf life items are to be: Listed, Maintained and updated, as necessary. The list, if necessary, will contain: the unique identification number (purchase order number preferred) or manufacturer's number and a description of the item; expiration date; storage location. 3. Items, which have an expired shelf life, unless evaluated by engineering in accordance with TFC-ESHQ-Q_ADM-C-02 and determined suitable for use, shall be dispositioned as excess. 4. The SAC will review the shelf life data periodically to identify items with expiring shelf life." Finding: Evidence of the required activities above could not be found. All personnel interviewed could not provide evidence of a limited life items monitoring program.
7/18/2018	WRPS-PER-2018-1805	Independent Assessment of WRPS QA Program, Finding 3 - Maintaining identification of stored items	TFC-PLN-02, Quality Assurance Plan (QAPD), Section 8.6 Maintaining Identification of Stored Items, states "Provisions shall be made for the control of item identification consistent with the planned duration and conditions of storage, such as: 1. Provisions for maintenance or replacement of markings and identification records due to damage during handling or aging 2. Protection of identifications on items subject to excessive deterioration due to environmental exposure 3. Provisions for updating existing facility records." TFC-BSM-FPM_PR-C-24, Material and Equipment Staging Area Control, Attachment B – Item Storage Requirements states in part "Inspections shall be performed and documented on a periodic basis to assure that the integrity of the item and its container is being maintained. Deficiencies noted shall be corrected and documented. The characteristics verified during this inspection shall include: identification and marking, protective covers and seals, coatings and preservatives, desiccants and inert gas blankets, physical damage, and cleanness." Finding: Maintenance of markings and identification on items has been flowed down to implementing procedure, TFC-BSM-FPM_PR-C-24, Material and Equipment Staging Area Control. Objective evidence of the required inspections above could not be found. All personnel interviewed could not provide evidence of a maintenance program for markings and identification on items.

7/18/2018	WRPS-PER-2018-1806	Independent Assessment of WRPS QA Program, Finding 4 - Audits Follow-up Action	TFC-PLN-02, Quality Assurance Plan (QAPD), Section 18.8 Audit Response states in part "Audit responses shall be evaluated by or for the auditing organization." Section 18.9 Follow Up Action states "Follow-up actions shall be taken to verify corrective actions are accomplished as scheduled." Finding: Five of eight PERs reviewed did not get processed correctly resulting in the auditing organization (Lead Auditor) follow-up action to verify corrective action plans and corrective actions to not being documented for PER closure review. Therefore there was no documented evaluation of audit responses by the auditing organization or follow-up by them to verify corrective action was accomplished. Independent Assessment FY2017-WRPS-I-0001 WRPS-PER-2017-0420: no follow-up documented WRPS-PER-2017-0422: no follow-up documented Independent Assessment FY2017-WRPS-I-0003 WRPS-PER-2017-0839: T. Maciuca concurred 6/12/17 WRPS-PER-2017-0819: T. Maciuca concurred 1/2/18 Independent Assessment FY2018-WRPS-I-0006 WRPS-PER-2018-0626: no follow-up documented WRPS-PER-2018-0627: no follow-up documented Independent Assessment FY2018-WRPS-I-0002 WRPS-PER-2017-2664: no follow-up documented WRPS-PER-2017-2564: S. Eklund concurred 1/23/18
7/18/2018	WRPS-PER-2018-1807	Independent Assessment of WRPS QA Program, Observation 1 - Required reading	Multiple interpretations on the utilization of required reading were encountered during the assessment that potentially conflicts with TFC-PLN-114 and TFC-OPS-OPER-C-33. TFC-BSM-AD-C-01, REV Q-1 does not address or offer specific guidance for the dissemination of the updated procedures, e.g., utilizing the required reading procedure or other appropriate methods, as identified in the Work Review and Approval (WRAP) process. Other processes that may benefit from utilizing required reading included: Independent Assessment Technical Specialist training and procedure updates for engineering/commissioning personnel. These may be considered within the scope of the TFC-PLN-114 requirements. The only documentation of Technical Specialist training is the Lead Auditor's signature on Form A-6003-296, Independent Assessment/Audit Plan, that the Team Member Qualifications are verified. Furthermore, discussions with Tank Farms Projects Engineering also indicated that a concise Required Reading process would be helpful in lieu of each engineer gleaning relevant document changes from a daily report of ten to twenty document updates. If the Required Reading system were utilized, the engineers would be notified of only relevant updates, saving time and resources. These situations were discussed with the QA Manager with concurrence that the required reading program could improve this weakness in the system.
7/18/2018	WRPS-PER-2018-1811	Independent Assessment of WRPS QA Program, Observation 2 - Documents owned by Other Hanford Prime Contractors (OHPCs)	TFC-PLN-50, REV A-0, Quality Implementation Plan includes the following documents as implementing the QAPD that have not been evaluated in accordance with or listed in TFC-BSM-AD-C-04: DOE/RL-96-68 Volumes 1-4 (added to TFC-BSM-AD-C-04 during audit) HNF-42884, Administrative Control of Welding Other documents not listed in TFC-PLN-50 but should be considered to add to TFC-BSM-AD-C-04 include: HNF-58395 Extrusion Welding of Geomembrane HNF-60652 Subcontractor Welding Specification - Requirements and Practices The WRPS Inspector Certification Authority (latest approval 4/12/18) has specified required reading of the CHPRC Weld Manual to the WRPS qualified/certified weld inspectors which indicates WRPS usage of these OHPCDs. This issue was found during the review of Finding FY2015-ESHQ-I-0010-F1, from the previous Independent Assessment on the WRPS QA Program found that further documents may need to be added to TFC-BSM-AD-C-04.

7/18/2018	WRPS-PER-2018-1839	Lack of Cell Phone Coverage in 2750E D Wing First Floor	Quality Assurance Technicians do not have cellular phone coverage in 2750E, D-Wing, 1st Floor. This is affecting the mission capabilities of technicians to be on call for inspections. This lack of ability to communicate can cause easily avoidable work slow downs. Further this is a safety concern as government cellular phones cannot consistently dial out in case of an emergency. This was specifically covered in the last Active shooter response class I attended. Limiting our ability to communicate with law enforcement and first responders in the event of an incident could cause unnecessary loss of life. This has been seen in a number of terrorist attacks, school, and work shootings that have occurred recently in this country. It is specifically recommended in the Department of Homeland Security Active Shooter Response training that personnel should have access to cellular networks for emergency calls.
7/18/2018	WRPS-PER-2018-1840	Gas Bottle delivery truck operated by MSA	The Gas Bottle delivery truck operated by MSA has some clouded headlamp lens reducing their effectiveness during dark/adverse hours of operation.
7/18/2018	WRPS-PER-2018-1841	Condenser room potential for contamination.	At 242-A evaporator there is a definite potential for contamination migrating through the K1 ventilation duct work from the Evaporator, and Pump rooms into the Condenser room when both K1 system exhaust fans K1-5-2 and K1-5-3 are "Off". I say definite potential because it has happened before. This is also not the first PER that I have written about this same subject. Many years ago, as part of an upgrade we turned both exhaust fans off, and left them off for months. The Condenser room was restricted during the upgrade, and when we reentered the Condenser room we found contamination all over the horizontal surfaces, the duct work screens, and some walls that were under a wall penetration between the Condenser room and the Evaporator room. Months were spent decontaminating the Condenser room, the wall penetration was sealed up, and for a while we taped up the duct outlet anytime we had both fans "Off". Over the years the new managers that did not go through the "event", decided that this contamination event could not happen again, and decided for everyone that it would be "OK" for people to be in the Condenser room while both exhausters were "Off", despite past history showing that contamination can migrate into the Condenser room and could be a radiological and/or chemical hazard to people working inside the room. I have brought this concern up numerous times to management and have been ignored most of the time. Management even put the statement into a procedure step: TO-620-020 step 3.1.1, saying that basically it is ok not to restrict access into the Condenser room while both exhaust fans were "Off" unless the duration were to exceed 24 hours, at which time radiological monitoring would be started. The reason that step was put into the procedure was so they could ignore my safety concern, and have a plausible explanation of why they allowed people into the Condenser with the ventilation "Off", just in case the room an/or people were to were to become contaminated. I never got an answer back on my first PER about this subject, but never followed up on it because we had worked out a compromise, first about sealing up the duct outlet, then about making sure everyone knew about the ventilation outage, and could make up there own mind about whether they wanted to work in the Condenser room with air being drawn from highly contaminated areas into there air spaces with monitoring equipment or any protective clothing or respirator equipment what-so-ever. Management apparently doesn't want us to have any say about what we feel is a safe condition. People who are not familiar with this facility, who are ordered to work in the Condenser room without ventilation aren't even aware of the hazard, and management has been unhappy with me if I warn them because they might decide not to accept the risk, and refuse the work, as is there right as Hanford workers.

7/18/2018	WRPS-PER-2018-1837	NCR issued to address suspect Kobeleco compressor a Kobe Steel, Ltd. company	Kobe Steel, Ltd. and its related corporate entities have acknowledged that they had falsified quality data on steel and other materials. As part of a WRPS led Extent-of-Condition review, a compressor was found to have been purchased from Kobelco, a Kobe steel business group. The compressor, model "KNW A00-D/H" was purchased for use in WRPS tank farm facilities. The compressor is quality indeterminate and NCR number TF-18-NCR-013 will document what review and evaluation is appropriate, as determined necessary, to establish reasonable confidence in this item's performance. NOTE - Equipment purchase was originated with MR-15-04736 and P/O #58441 and issued against MR-17-01045. Reference: Extent-of-Condition review initiated by WRPS-PER-2017-2556.
7/18/2018	WRPS-PER-2018-1842	Repetitive HEPA filter testing package for HEPA filters that have been replaced.	Vent and Balance was in the 222S lab performing Annual HEPA testing on fume hoods. The work packages that I was given to for FWS duties was for rooms 4C,4B, 4K. In each room they have multiple fume hoods that are to be tested. In the morning meeting I mentioned that we were performing HEPA testing in those rooms listed. No one had any issues with that work that was being performed. We did our pre-job and then V&B and supporting craft went to work in the lab. While they were doing work in the lab the Chief operator called me to state that 4K had been completed. He had looked at the HEPA testing sticker. They had been completed on 7/5/18. Then he walked into 4H to look at the HEPA test stickers and they were the ones that were due. I did not have a package to perform HEPA testing in room 4H. I went to the PM planner and requested the paper work for 4H HEPA testing. He was pulling it up in EAM and looked at the due date and it was not due until November. I contacted the Chief operator and he went and looked at the HEPA test stickers and found one sticker that had been done in November. Went back to the PM planner and asked him when we have to do a HEPA test and its because we had to replace the HEPA filter he stated its pulled up from the PM in EAM. So that one PM ID number for that room encompasses all 10 hoods in the room. So instead of them being due on 7/10/18 all HEPA's were due in November. So when you pull it up in July room 4H did not show up due.
7/19/2018	WRPS-PER-2018-1843	EAPC Safety Book Issue	Goat paths from A-Farm parking lot to AW-Tent *Need to install stairs to avoid a potential tripping / falling hazard. 200E / AW-Tent / Goat paths from A-Farm - Parking lot to AW-Tent

7/19/2018	WRPS-PER-2018-1844	Simulator software for ventilation systems at 222-S Labs	We need simulator software for SOE training purposes in the labs. I have been told that we have the software at 2752 but it has not been implemented. I talked to (b)(6) today and he is not aware of simulator software for 2225 Labs.
7/19/2018	WRPS-PER-2018-1845	Review of WAC 173-303-573(9)(a) Requirement Flowdown	WRPS procedures (TFC-OPS-WM-C-26 and ETF-60K-007) nor the posted signs inform a generator that spent batteries must be contained in a container that is closed, structurally sound, compatible with the contents of the battery, and lacks evidence of leakage, spillage, or damage that could cause leakage.
7/19/2018	WRPS-PER-2018-1846	Surface disinfecting time for PCM use.	The disinfecting chemical described to be used for cleaning of the PCM states that one must "allow to remain wet for 10 minutes". If a worker wants to clean the PCM and they are going to use prior to entering it they will have to wait for the 10 minute disinfection time prior to doing an exit survey.

7/20/2018	WRPS-PER-2018-1800	Tested new procedure during drill	On June 20th, 2018 WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving a chemical spill and contamination on workers at the Effluent Treatment Facility/Liquid Effluent Retention Facility (ETF/LERF). During the drill hotwash comments identified the following Suggestion which pertains to EP-Program Element 2, Program Administration. Several suggestions were captured that indicated there were updates/improvements that could be incorporated into a new procedure: ETF-AOP-85B-013, Activation of ERF Decontamination Facility. (P/E 2.14) Program Responsibilities
7/20/2018	WRPS-PER-2018-1801	Suggestions for improvements to decontamination room	On June 20th, 2018 WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving a chemical spill and contamination on workers at the Effluent Treatment Facility/Liquid Effluent Retention Facility (ETF/LERF). During the drill hotwash comments identified the following Suggestion which pertains to EP-Program Element 8, Facilities and Equipment. Suggestions were captured that indicated there were updates/improvements that could be made/considered when evaluating the decontamination room: make sure there is adequate flow of tepid water available in the sink and shower; add more supplies, such as "scrubs or blues" to the cabinets; and review the reason for water on the floor, there was water on the floor from the sink and shower. (P/E 8.1) General (Response)
7/20/2018	WRPS-PER-2018-1802	Event Response Training	On June 20th, 2018 WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving a chemical spill and contamination on workers at the Effluent Treatment Facility/Liquid Effluent Retention Facility (ETF/LERF). During the drill and drill hotwash comments identified the following Suggestion which pertains to EP-Program Element 3, Training and Drills. There was discussion around event scene set up. It was suggested that the NCOs and HPTs attend the TOC Event Scene Response course (35E006). Training records were pulled and some of the personnel have had the class and some have not. We are recommending both the NCOs and HPTs have this course. A SES staff member can provide this course. (P/E 3.11) Training Requirements - Onsite

7/22/2018	WRPS-PER-2018-1849	Sample storage cell routine surveillances	Section 3.0 of ATS-LO-150-132, Sample Storage, states "Only one door, on each side of the sample storage unit in room 2B, may be opened at one time, to control possible contamination and to keep exposure at a minimum." Routine surveillance tasks S-Q015 through S-Q018 have wording that states: "Ensure that no more than one cubicle is open at a time" Routine surveillance task S-D051 has no such limitation listed. Tasks S-Q015 though S-Q018 each correspond to 12 sample storage cells, with two tasks per side of sample storage. These quarterly tasks, with the current wording; and, the daily 2B task (with no such wording / limitations) poses a potential conflict with ATS-LO-150-132, a procedure with which HPTs are not intimately familiar.
7/23/2018	WRPS-PER-2018-1850	Violation of TFC-OPS-OPER-C-68 REV A-1 Control of working hours	Employee on 7/19/18 worked 19 hours in a 24, Started at 04:00am (normal start time 06:00am to 04:30pm), Held over on Swings and worked to 11:30pm. Employee also worked 31.5 hours on 7/18/18 and 7/19/18 in 48 hours period.
7/23/2018	WRPS-PER-2018-1868	ALARA AWARENESS UPDATES NEEDED	Several of the ALARA Awareness modules, positioned throughout TOC-managed facilities, contained outdated and obsolete information related to the condition of the ALARA program. The ALARA Awareness Program is outlined in TFC-PLN-048, ALARA Program Plan.

7/23/2018	WRPS-PER-2018-1848	Contamination found outside posted CA.	While performing daily boundary survey at basin 42 ETFy , HPT found a 1/2 dollar size flake of algae, dirt clump reading 500,000 dpm per probe area. with a 15 cm size probe. Tape press was used to pick up the clump; no alpha was detected, and no smearable contamination found. The clump was taken to an RMA and resurveyed with a 100cm2 probe and was found to be reading 750,000 dpm. The previous day, (7/17/18), work was stopped due to heat stress , and the basin 42 floor was not properly secured and that night there was 40 mph wind which likely picked up material from the CA to outside the CA likely resulting in the contamination found on 7/18/18.
7/23/2018	WRPS-PER-2018-1885	Process condensate samples were packaged and shipped offsite for analysis without the required ice packs.	Process condensate samples were packaged and shipped offsite for analysis without the required ice packs. 222-S Lab's Sample Management Office was notified by the offsite lab that the Process Condensate samples from the evaporator received on 7/19/18 were outside of temperature specification for one of two coolers received. See attached email. The Chain of Custody incorrectly listed "none" as the required temperature, while the preservation for the individual samples correctly listed "cool".
7/23/2018	WRPS-PER-2018-1886	92 Day 60I-C-01. Oil Filter Change	During the morning meeting it was stated that all systems were shut down and configured for the outage this week to support Maintenance work. I pre job the crew to do the Vapor compressor oil change and hit all the steps on the data sheet. which includes discussing the Prerequisite step. 3.1 Operations Personnel have configured the system to allow performance of this PM. The crew went out to the field with the procedure in hand and made notification to the control room and started draining oil. A, low pressure alarm came in at the control room.

7/23/2018	WRPS-PER-2018-1887	Determine if Data Sheet 9 in the Transfer Procedure Template Needs to Meet the Requirements of TFC-OPS-OPER-C-17	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. Observation 1 requests the owner of the OPS-OPER-C-17 guidance for logkeeping to determine if those requirements should apply to the content and intent of the Data Sheet 9 entries in the transfer procedures.
7/23/2018	WRPS-PER-2018-1888	Waste Transfer Procedure needs More Guidance for Data Sheet 9 Entries	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. Observation 1 is related to the quality and consistency of the entries into the Data Sheet. It is a narrative that recounts actions taken during a transfer. The assessment teams sees value in the transfer log entries "following" the transfer record into the Integrated Document Management System (IDMS) for easy retrieval, but there needs to be a mechanism to provide guidance to the users to ensure the actions that are key to compliance make their way into the record. Examples: It could not always be ascertained who made entries into Data Sheet 9 because the entries were not signed or initialed. It was noted in Data Sheet 9 for transfer TO-230-044 conducted between 08/08/2017 and 08/16/2017 that the water meter was read incorrectly; this condition should have been identified and corrected and an extent of condition done to see if this is common for operators and represents a training issue.
7/23/2018	WRPS-PER-2018-1890	Issues During Transfers Could Be Recorded in PERs	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. Currently, the transfer process requires PERs to be generated when Material Balance Discrepancies (MBDs) are reset. Other issues that could be recorded in the PER database are: Needing a procedure change mid-transfer The detection of equipment that cannot be used for its purpose (faulty thermocouples or inoperative level instrumentation) Anytime information is needed from an outside organization that was unplanned Like needing an MBD reset, this information would give the transfer organization trendable indications that some areas of the process needs improvement. In the case of faulty equipment, it could provide information across organizational lines that follow-up is necessary (maintenance on the equipment, deletion of the equipment from engineering databases, deletion of the equipment from the next transfer procedure, etc.).

7/23/2018	WRPS-PER-2018-1891	Guidance To the Inclusion of Material into the Transfer Record Needs Improved	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. The assessment team found the waste transfer records to be largely complete, but there are improvements that could be made. During the transfer, many supporting documents are aggregated into the Transfer OE's notebook, including emails from Engineering, turnover sheets and the like. Any document that resulted in approvals (such as emails specifying different thermocouples and allowing some to be deemed "not applicable" in data sheets) should be included in the transfer record. The team found no Transfer OE turnover sheets in IDMS although they are turned into the records custodian for transmittal. The team suggests that the guidance given in the transfer template be strengthened to give the transfer OE more specific criteria for determining what the transfer record should include. OE Transfer sheets be kept as a part of the transfer record for easy retrievability.
7/23/2018	WRPS-PER-2018-1892	Formal Post-Jobs Should Be Conducted After Transfers	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. Many post-job reviews are simple evaluations against the Site Form checklist A-6005-438, Post Job Review. Replacing such a pro forma process with a meeting with written minutes and corrective actions could have a positive effect on the improvement of the process. Some transfers have a small enough scope that a meeting may not be warranted. The transfer organization should choose some indicators (the number of procedure changes needed, the number of "NAs" noted, the number of times the MBD was reset, any equipment failures, etc.) and use that indicator to hold such meetings on the graded approach. The transfer organization should hold post-job meetings that invite personnel across organizational lines (Procedures, Engineering, Training) to help improve the transfer process when indicators point to improvements being needed. The transfer organization could leverage assistance from Production Operations Performance Assurance for note-taking and the associated report. Documenting good practices is as important as correcting poor performance. Capturing and repeatedly implementing good practices prevents poor performance and events and improves performance in the long-term.
7/23/2018	WRPS-PER-2018-1893	Better Tailoring of Transfer Procedures from the Template Could Result in Better Field Procedures	FY2018-OPS-MD-0308 was performed on the Production Operations waste transfer process in July of 2018. The report should be reviewed for the entire discussion of the issue and the background. The use of the transfer procedure template is generally seen as a strength, resulting is a consistent product, compliant to TFC-OPS-OPER-C-49, Development of Waste Retrieval and Transfer Operating Procedures (including Water and Chemical Additions). Some of the transfer records reviewed revealed many parts and sections that were marked as "not applicable" for undocumented reasons. This might indicate that the procedures need better tailoring for specific activities. As the transfer procedure is developed from the template, better tailor it to minimize the parts and sections that are "not applicable." When parts are "not applicable," a note should be added why that procedure step, part, or section is "not applicable."

7/23/2018	WRPS-PER-2018-1897	Review of 40 CFR 63.6604(a) requirement	The site is complying with the fuel requirements of 40.6204(B), as evidenced by review of bill of lading for fuel, procedure requirements, permit applications & e-mail from MSA's fleet manager.DOORS does not specify all linked procedures for this requirement. Procedure TFC-ESHQ-ENV-PP-C-05 refers to 40 CFR 63 in it's entirety and does not define specific fuel requirements. All applicable procedures are not currently linked in DOORS. DOORS should be updated to reflect current environmental permitting standards.
7/23/2018	WRPS-PER-2018-1898	Contaminated Bird Feces	During the performance of LE-W084 Radiation & Contamination surveys of Surge Tank Berm Area, contaminated bird feces was discovered. Total Contamination of; 2,240 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha was detected. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801424.
7/23/2018	WRPS-PER-2018-1899	Review of WAC 173-201A-0400(10) requirements	The current revision of the procedure currently linked in DOORs is not correct. DOORs should be updated to reflect the most current revision number. STD 12 does not list the WAC regulation as a reference. I recommend a PER be written to incorporate reference into the standard.The implementing document(s) linked to requirements in DOORS include:*Hanford Federal Facility Agreement and Consent Order is linked to ID#3458 in DOORS.*P2BMP is listed as DOE/RL-97-67 under ID#4227 in DOORS.There were no issues or concerns with these DOORS links.The language in STD-12 does not accurately describe and/or flow the requirement in a manner that can be implemented. STD 12 does not contain language to implement WAC. The implementing document been not been used to implement specific requirements for mixing zones. The WAC regulation is specific to storm water discharge mixing zones. WRPS currently does not operate any storm water discharges to surface waters.The evidence or records that show the requirement was met include:*The ICD outlined in the TOC Contract Service Delivery Document J-3 ID#42.*The 1987 Budget Appropriation Bill, Congress required DOE to provide a plan to discontinue contaminated discharges to the soil column. DOE published a plan and schedule document containing a strategy for the implementation of alternative treatment and disposal systems for contaminated liquid effluents. The actions recommended were incorporated into the Hanford Federal Facility Agreement and Consent Order (Tri Party Agreement) as milestones M-17-00A and M-17-00B.*ST4511 implements permit conditions and P2BMPs.*STD-12 is implemented at Tank Farms through TFC-ESHQ-ENV_RM-C-04.The only improvement identified at this time to ensure accurate flowdown of requirement is that STD 12 should be updated to reference requirement and instruct the reader that stormwater discharges to surface waters at the site must meet the WAC regulation.

7/23/2018	WRPS-PER-2018-1900	Review of WAC 173-50-020(1) requirements flowdown	The procedure currently linked in DOORs does not specifically name WA ELAP accreditation, only "accreditation documentation". Recommend PER to specifically name WA ELAP in procedure. This difference should be incorporated into the standard.The implementing document(s) linked to requirements in DOORS include the procedure PPC-19. The WAC is specific to WA ELAC accreditation. The procedure needs to be updated to reflect this. The procedure does not go into specific details about accreditation of a lab. The procedure does state "accreditation information are obtained from the labs performing the analyses".There were no issues or concerns with these DOORS links.The language in PPC-19 does not accurately describe and/or flow the requirement in a manner that can be implemented. PPC-19 does not contain language to implement WAC. The implementing document has not been used to implement specific requirements for lab accreditation. The WAC regulation is specific to WA ELAC. WRPS currently operates the 222S laboratory and probably sends samples to other labs both in and out of state.The evidence or records that show the requirement was met includes the procedure that says, "accreditation information is obtained from the labs performing the analyses. The only improvement identified at this time to ensure accurate flowdown of requirement is that PPC-19 should be updated to reference accreditation materials.
7/23/2018	WRPS-PER-2018-1902	ATTACHMENTS B & C OF TFC-ENG-STD-47	There are Attachments B & C in the procedure, however, There are no reference either anywhere in the standard. There is an Attachment C, but it is empty.
7/23/2018	WRPS-PER-2018-1901	Contaminated Bird Feces	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird feces was discovered on top of Verification Berm. Total Contamination of; 16,000 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha was detected. No removable contamination was detected. The location was decontaminated. Survey results are documented in Survey Simple on survey # LE-1801445.

7/23/2018	WRPS-PER-2018-1903	AZ102 Moisture separator was discovered broken on the annulus CAM	AZ102 Moisture separator was discovered broken on the annulus CAM rendering the CAM inoperable.
7/23/2018	WRPS-PER-2018-1847	Suspension of Active Service of POR-107 (296-P-107)	296-P-107 has been suspended from active service. Permit-required preventative maintenance tasks for 296-P-107 were suspended on 6/21/2018.
7/24/2018	WRPS-PER-2018-1904	IODR Completion 15 Work Day Requirement Exceeded	Section 1.0 Purpose and Scope of TFC-ESHQ-RP_DOS-P-10, REV C-4, External Dosimetry Investigations, states the FPOC has 15 work days to complete the IODR. Currently there are 4 IODRs that have exceeded the 15 work day requirement (TO-18-048, TO-18-050, TO-18-052, TO-18-053, and TO-18-054). Another IODR (TO-18-058) is due July 30.

7/24/2018	WRPS-PER-2018-1905	Clarify Operations Manager Actions for Updating Reported Occurrences	On July 19, 2018, in re-categorizing the occurrence documenting the event captured in PER WRPS-PER-2018-1848, it was realized the process described in Section 4.6, "Update Report," of TFC-OPS-OPER-C-24, "Occurrence Reporting," does not address the specific duties the Central Shift Manager (CSM) or Facility Operations Manager (FOM) must perform when an update to an occurrence report's categorization/reporting level is required.
7/24/2018	WRPS-PER-2018-1854	Significant problem evaluations (SIG PERs) with long term corrective actions (LTCAs) have been removed from the KPI	OFI-CAS1-01: The Key Performance Metric (KPI) that tracks Timely closure of ProblemEvaluation Reports (PERs) states that all levels of PERs are represented, however the significant problem evaluations (SIG PERs) with long term corrective actions (LTCAs) have been removed from the KPI so that it doesn't mask the timeliness status of the other PER categories. It is reasonable to separate out the LTCAs, however this KPI should annotate the removal of this category of PER actions and a separate metric be generated to track the status of the long term corrective actions associated with SIG PERs such that its status is reviewed with senior management along with the other KPIs.
7/24/2018	WRPS-PER-2018-1855	Lowering effort to determine cause may be increasing the likelihood that a lower risk issue could result in high sig event	OFI-CAS1-02: The WRPS strategy to exclude lower significance issues from Causal Analysis results in an industry accepted practice which prioritizes risk and maximizes the use of resources to mitigate higher risk issues. However, by reducing the effort to determine cause and trend lower level issues, WRPS may be increasing the likelihood that a lower risk issue could result in high significance consequence event (or injury). Also, since causal analysis is reduced; there is the risk that learning from those lower significance issues may be limited. WRPS should ensure that the graded approach to exclude causal analysis does not result in a reduced safety margin or impede operational learning.

7/24/2018	WRPS-PER-2018-1856	WRPS could benefit by challenging the assessment process to identify strengths with similar rigor	OFI-CAS1-03: WRPS could benefit by challenging the assessment process to identify strengths with similar rigor that is used to identify weaknesses. The identification and sharing of those strengths can effect positive change and organizational learning throughout the organization. Note: The use of self-assessments to identify Strengths as well as Findings and OFI's was identified as a best practice at the Spring 2018 EFCOG meeting
7/24/2018	WRPS-PER-2018-1857	Above average MOP grades could be shared within WRPS for company benefit	OFI-CAS1-04: To document the results of an attribute on a Management Oversight Program (MOP); a selection is made on the electronic form of one, two or three... which reflects: 1- Unsatisfactory 2- Satisfactory 3- Above Average For Example: WRPS-MOP-2018-056 graded the Pre-Job Brief as a 3 – Above Average. However, the reason the Pre-Job was graded as Above Average was not included in the MOP. WRPS could learn from and share this type of information if the process required some narrative to describe what made the activity above average.
7/24/2018	WRPS-PER-2018-1858	Utilization of a Direct Process to close a PER does not allow the initiator or management to continue to track progress	OFI-CAS1-05: The Problem Evaluation Request Procedure TFC-ESHQ-Q_C-C-01, Rev M-8 states that a Direct Process can be selected to close a PER. PER 2018-1068 which was originally categorized as a process improvement evaluation/continuous improvement measure (PIE/CIM) and later re-classified as a track until fixed (TUF) was closed without the corrective action being complete. Utilization of a Direct Process to close a PER does not allow the initiator or management to continue to track progress for corrective actions associated with the PER or to be contacted once the action is completed within the Direct Process.

7/24/2018	WRPS-PER-2018-1859	Corrective actions associated with TUFs appear in some cases not to be broad based (no Extent of Condition)	OFI-CAS1-06: Corrective actions associated with TUFs appear in some cases not to be broad based (no Extent of Condition). Example: PER 2012-1236 Metal Stakes Outside C Farm Present Tripping Hazard. The PER action removed one metal stake, but discussion with the individual who wrote the PER indicated these stakes continue to be present throughout the various tank farms and the PER has been closed.
7/24/2018	WRPS-PER-2018-1860	A process to integrate the information from the EAPC Safety Logbooks needs to be developed.	OFI-CAS1-07: Employee Accident Prevention Council (EAPC) Safety Logbooks (TFCESHQ-S_SAF-C-14, Rev B) have been placed at the entrance of buildings to provide employees another avenue to input information by manually filling out a form to identify safety activities or conditions that require correction and opportunities for improvement. This is a useful tool that has been implemented during the past year and appears to be supported by employees. A process to integrate the information from the EAPC Safety Logbooks and ensure high risk items get addressed in a timely manner needs to be developed. (This has been self-identified as discussed during the Collective Significance Review Meeting)
7/24/2018	WRPS-PER-2018-1861	Event investigations are not conducted in a timely manner	OFI-CAS1-08: Event investigations are not conducted in a timely manner (same shift or next day); the delay is frequently due to personnel pulling information together to determine if a formal event investigation is needed. This delay can impact the effectiveness of the investigation when personnel statements and fact findings are not by default conducted immediately after an event occurs. This delay can lead to ineffective corrective actions and Lessons Learned.

7/24/2018	WRPS-PER-2018-1862	The output from System Health reporting process should be integrated to the company infrastructure priorities and trending	OFI-CAS1-09: The output from new System Health reporting process by the Engineering organization should be integrated to the company Infrastructure Priorities and CAS Trending Process to ensure infrastructure and equipment risk are appropriately aligned.
7/24/2018	WRPS-PER-2018-1863	The Work Control implementation varies across areas	OFI-CAS2-01: The Work Control implementation varies across areas (example: pen and ink change in one area vs revision to work document in another area for the same document discrepancy – related to performance of backflow preventer inspections)
7/24/2018	WRPS-PER-2018-1864	Employees are not being contacted by management for input on actions to be taken for PERs they've initiated	OFI-CAS3-01: Employees interviewed indicated they are not being contacted by management to solicit input on the actions to be taken for PERs they had initiated or to inform them when the PER is closed, even though they are checking the box in the PER system requesting to be contacted.

7/24/2018	WRPS-PER-2018-1865	More employee involvement in LEAN events would be positively recognizedby employees	OFI-CAS3-02: More employee involvement in LEAN events would be positively recognized by employees. (appearance seems to be that only those groups that aren't directly supporting priority work activities are allowed to participate)
7/24/2018	WRPS-PER-2018-1866	Utilization of Front line workers (FLWs) appears to be limited within theassessment process	OFI-CAS3-03: Utilization of Front line workers (FLWs) appears to be limited within the assessment process. While some examples were identified were FLWs participated (e.g., VPP Self-Assessment); WRPS could benefit from the additional perspective and experiences of their FLWs. The view from the top is often very different from workers perspective.
7/24/2018	WRPS-PER-2018-1867	WRPS should consider additional indicators to ensure that mgmt. has a complete picture regarding of the health of the CAS	OFI-TREND1-01: WRPS should consider additional indicators to ensure that management has a complete picture regarding of the health of the CAS. For example; the chart below indicates that there are 22 overdue PER assignments. However, it excludes LTCA's which are not displayed routinely for evaluation. In addition, the chart also does not show that there are 175 PER assignments that are greater than one year in age with the oldest going back 2011 days as of 6/26/2018.

7/24/2018	WRPS-PER-2018-1869	Alignment of trend codes across all organizations is needed for consistencyin trending	OFI-TRND1-02: Alignment of trend codes across all organizations is needed for consistency in trending. This will be particularly important with the implementation of DevonWay.
7/24/2018	WRPS-PER-2018-1870	Implementation of software tools such that data from multiple systems is consolidated for more effective trending purposes	OFI-TRND1-03: Implementation of software tools (ex: DevonWay) such that data from multiple systems is consolidated for more effective trending purposes. This will also eliminate the need for tracking of issues and actions in multiple systems (i.e. PERs and E-Stars)
7/24/2018	WRPS-PER-2018-1871	Utilization of the data from the Engineering System Health Reportingprogram as part of the trend analysis process	OFI-TRND1-04: Utilization of the data from the Engineering System Health Reporting program as part of the trend analysis process

7/24/2018	WRPS-PER-2018-1872	WRPS should consider additional indicators to ensure that management has a complete picture of the health of the CAS	OFI-TRND1-05: WRPS should consider additional indicators to ensure that management has a complete picture of the health of the CAS. For example; there are 22 overdue PER assignments. However, it excludes LTCA's which are not displayed routinely for evaluation. In addition, the metric does not reflect that there are 175 PER assignments greater than one year in age with the oldest going back 2011 days as of 6/26/2018.
7/24/2018	WRPS-PER-2018-1873	Some of the trend data being analyzed is not necessarily being analyzed by the SME for the area of evaluation.	OFI-TRND1-06: Some of the trend data being analyzed is not necessarily being analyzed by the Subject Matter Experts for the area of evaluation.
7/24/2018	WRPS-PER-2018-1874	There needs to be a matrix developed that depicts CAS elements that support each cross cutting risk matrix items	OFI-IA1-001: Develop a matrix that depicts the CAS elements that support each of the crosscutting risk matrix items to evaluate completeness of the CAS Program.

7/24/2018	WRPS-PER-2018-1875	Evaluate ownership of SQA program following the results of the Management Assessment scheduled for Aug 18	OFI-IA1-002: Evaluate the ownership of the SQA program following the results of the Management Assessment scheduled for August 2018.
7/24/2018	WRPS-PER-2018-1876	There is no standardized training for those whose work responsibility includes review, approval and authorization of TSR	OFI-NS1-001: There is no standardized training for personnel whose work responsibility includes review, approval and authorization of TSR impacting activities commensurate with their responsibility and the potential impacts of errors.
7/24/2018	WRPS-PER-2018-1877	Consider revising definition of	OFI-ES1-1: The current definition for Independent Verification as listed in DOE-0336 states "independence can best be achieved by separating the operation and the verification by time and distance.' Consider revising to "independence can best be achieved by separating the operation and the verification by time, distance and freedom of thought." Standard practice is "time and distance," but the addition of "freedom of thought" is thought to be a logical progression to get personnel thinking about the concept of not trying to convince co-workers that their mistake is actually correct. The assessor understands that some documents in other WRPS programs already include

7/24/2018	WRPS-PER-2018-1878	Consider scheduling Electrical Planners to attend the LOTO Controlling Organization Administrator (COA) training	OFI -ES1-2: Consider scheduling Electrical Planners to attend the LOTO Controlling Organization Administrator (COA) training to improve their overall knowledge of the LOTO process.
7/24/2018	WRPS-PER-2018-1879	Review current processes for controlling work around overhead power lines for possible improvement opportunities.	OFI-ES1-3: Review current processes for controlling work around overhead power lines for possible improvement opportunities. Note that this was self-identified by the Arc Flash SME.
7/24/2018	WRPS-PER-2018-1880	Review DOE-0359 to determine if stud and sheetrock type wall construction should also be scanned for hidden hazards	OFI-ES1-4: Review DOE-0359 Section 5.13 paragraph 3.b to determine if stud and sheetrock type wall construction should also be scanned for hidden hazards prior to penetrations being performed.

7/24/2018	WRPS-PER-2018-1881	Evaluate opportunities to provide additional support for CSEs	OFI-CSE1-001: CSEs are challenged to keep up with all of their responsibilities. Evaluate opportunities to provide additional support.
7/24/2018	WRPS-PER-2018-1882	Strengthen existing monitoring plans by revising TFC-ENG-FACSUP-D-01.1	OFI-CSE1-002: Strengthen existing monitoring plans by revising TFC-ENG-FACSUP-D-01.1 to identify minimum required contents in the monitoring plans as opposed to allowing CSEs to "consider" section 4.2 topics. (reference 4.2.1)
7/24/2018	WRPS-PER-2018-1883	Develop System Performance Monitoring Plans to be more proactive/predictive	OFI-CSE1-003: Proceed with development of System Performance Monitoring Plans (including Asset Criticality rankings) to drive monitoring plans to be more proactive/predictive by monitoring as possible field instrumentation that will indicate system function degradation.

7/24/2018	WRPS-PER-2018-1884	Resolve inconsistency between TFC-ENG-FACSUP-P-01 and TFC-ENGFACSUP-D-01.1	OFI-CSE1-004: Resolve inconsistency between TFC-ENG-FACSUP-P-01 and TFC-ENGFACSUP-D-01.1 to require Monitoring Plan data to be included in the System Notebook
7/24/2018	WRPS-PER-2018-1889	The Continuing training hours for one CSE in CY16 and CY17 were under the required 24 hours.	AECOM INDEPENDENT ASSESSMENT The DOE contractor has established an effective SE program as defined in DOE Order 420.1C, Facility Safety, to ensure continued operational readiness of identified systems to meet their safety functional requirements and performance criteria. Management is aware of system vulnerabilities and system health evaluations are effective in identifying deficiencies and prompting corrective actions. The Cognizant System Engineer Training and Qualification is documented and continuing training is developed to improve performance. This criterion was partially met. A 100% review of CSE Qualification Card documentation was completed. The Qualification Card included continuing training requirements. All documentation except for one was satisfactory. ISSUE 01: The continuing training hours for one CSE in CY16 and CY17 were under the required 24 hours (CY16- 8 hours short, CY17-11 hours short).
7/24/2018	WRPS-PER-2018-1894	The electrical distribution system monitoring plan was not maintained in the system notebook.	AECOM INDEPENDENT ASSESSMENT The governing documents are inconsistent relative to expectations for documenting monitoring plan information in the System Notebook. TFC-ENG-FACSUP-D-01.1 section 4.2.1 states the Monitoring Plan is maintained in the System Notebook and TFC-ENG-FACSUP-P-01 section 4.4 states the performance monitoring data and results should be documented in the system notebook. Feedback mechanisms exist via the periodic system health presentations. Mechanisms could be improved by ensuring issues/concerns/improvements are institutionalized via the PER process. A sampling of CSE periodic assessments and annual reports were reviewed (RPP-RPT-53025 EDS, RPP-RPT-53141 Ventilation, and RPP-RPT-53179 Waste Transfer). The reports did not meet all requirements established in TFC-ENG-FACSUP-D-01.1. ISSUE 02: The Electrical Distribution System monitoring plan was not maintained in the System Notebook (Reference TFC-ENG-FACSUP-D-01.1, section 4.2.1).

7/24/2018	WRPS-PER-2018-1895	Recommendations, concerns, and issues did not have associated PERs to track to completion in the EDS or Vent reports	AECOM INDEPENDENT ASSESSMENT A sampling of CSE periodic assessments and annual reports were reviewed (RPP-RPT-53025 EDS, RPP-RPT-53141 Ventilation, and RPP-RPT-53179 Waste Transfer). The reports did not meet all requirements established in TFC-ENG-FACSUP-D-01.1. ISSUE 03: Recommendation, concerns, and issues did not have associated PERs to track to completion in the EDS or Ventilation reports (reference TFC-ENG-FACSUP-D-01.1, section 4.5.1).
7/24/2018	WRPS-PER-2018-1896	The frequency of periodic presentations and annual reports were not met	AECOM INDEPENDENT ASSESSMENT A sampling of CSE periodic assessments and annual reports were reviewed (RPP-RPT-53025 EDS, RPP-RPT-53141 Ventilation, and RPP-RPT-53179 Waste Transfer). The reports did not meet all requirements established in TFC-ENG-FACSUP-D-01.1. ISSUE 04: The frequency of periodic presentations and annual reports were not met (EDS periodic presentations exceeded 8 months (11/14//16 and 3/29/18), Evaporator annual report covered a 2.5 year period). (Reference TFC-ENG-FACSUP-D-01.1, section 4.6.1).
7/24/2018	WRPS-PER-2018-1906	Hazard evaluations for excavations when performed in Underground Beryllium Area's (UBA)	Employees expressed concern about the recent UBA postings across multiple tank farms and how it affects jobs where excavations were being performed. A request to speak with the project IH and beryllium SME to explain the process was provided but failed to completely answer concerned individuals questions. Two main questions were 1-Provide additional documentation to support the evaluation that beryllium work controls were not required in SX farm. 2-Identify a path forward to collect beryllium bulk samples to validate IH evaluations.

7/24/2018	WRPS-PER-2018-1911	Data sheets not being updated	OVER THE PAST SEVERAL MONTHS I HAVE REQUESTED DATA SHEET CHANGES BE MADE TO ET-007232(MONTHLY GFCI PM). IN THE WORK RECORD OVER THE LAST 6 MONTHS I HAVE NOTED CHANGES,SENT ELECTRONIC COPIES OF CHANGES AND MADE MULTIPLE PHONE CALLS TO PM PLANNER AND ENGINEERING. NOTHING HAS CHANGED AND NOBODY IS SURE WHO'S RESPONSIBILITY IT IS TO MAKE MUCH NEEDED CHANGES.
7/24/2018	WRPS-PER-2018-1913	Hoisting and Rigging Calculation Error	During the planning of a critical lift, an error was found in the supporting lifting calculation (RPP-CALC-61732). On page 52, the thickness used to calculate the out-of-plane strength of the lifting tabs was incorrect. A thickness of 0.34" was used when the tab is actually 0.5" thick. Thus, the calculation shows that the lifting tab is much weaker than it actually is. While, it is a conservative mistake from a strength stand-point, it makes lifting and handling of the assembly very difficult. It only allowed the lifting tabs to be used after the assembly (a 30' long stack extension) was already in a vertical position. If the proper thickness was used, the tabs would be shown to be strong enough be used to bring the assembly to a vertical position (from a horizontal position on a trailer) and then to lift it.
7/24/2018	WRPS-PER-2018-1914	Declared a Group 4B(4)L(a) occurrence due to ARP-002-100 Low Exhaust Pressure in Plenum at 222-S	At approximately 1354, Construction Forces at 222-S were relocating a trouble light from MCC-1 to DDCP-10 in the Duct Level, which controls the exhaust fans. While testing the switch, a circuit breaker in DDCP-10 tripped, which shut down all 3 electric exhaust fans. Diesel powered EF-4 started as designed, however exhaust pressure dropped below specifications(APR-002-100, PA-EP-1 reading less than 1.8), with some indications that the facility may have gone positive for a very short period of time. Operations successfully restarted the electric exhaust fans and have currently restored ventilation to within normal operating parameters.

7/25/2018	WRPS-PER-2018-1915	Unknown underground cable discovered during excavation near 204AR	On Monday, 07/23/18, DGR Grant was installing the 204AR Parking Lot following the work instructions in WO-392927 when they encountered unknown electrical lines that were not identified on the ground scan or crossing list. The backhoe operator was excavating for installation of the catch basin and drain pipe when he felt some resistance on the controls of the equipment and immediately stopped and asked the FWS for direction. All underground obstructions had previously been pot-holed and identified.
7/25/2018	WRPS-PER-2018-1916	Level one work package expectations	Pen and ink changes to the work package were in process, however, the work was completed prior to final signature as required by procedure.
7/25/2018	WRPS-PER-2018-1917	Improvements to 222-S Gas Bottle Inspections and Gas Bottle Storage Area	Upon closure of WRPS-PER-2018-1072 it was recognized additional actions should be considered to improve the gas bottle inspection process as well as improve the gas bottle storage area to prevent water intrusion to reduce the likelihood of rust.

7/25/2018	WRPS-PER-2018-1918	Enterprise Asset Management Training Insufficient for Tank Farms Projects	The Enterprise Asset Management (EAM) Training insufficiently addresses key concerns with ordering equipment for tank farms projects and retrieval. The training is being based off of anticipated procedure changes to the Procurement Procedure that have not been approved by all parties addressed in TFC-BSM-AD-C-01, Rev 0-1 Administrative Document Development and Maintenance. 4.2. Due to the procedure not being written, there are a multitude of questions that need to be answered before the EAM go live on 6 Aug 18. These questions include what to do with Quality Levels of items, inspections of critical characteristics of items, and how EAM will interface with the Quality Assurance Inspection Plans for items. These questions not being answered could lead to unnecessary negative Retrieval and Production Operations impacts. Any upgrade or change of the magnitude of EAM can be expected to have potential slowdowns. However when these issues are related to the quality inspection of items that will be used as Safety Significant parts inside the farms. Due to the associated safety risks to personnel and the environment extra caution should be applied. These observed deficiencies in the training could cause items which require inspections for conformance to the Nationally Recognized Testing Laboratory Standards to be issued. Those items which contain hazardous levels of energy could potentially be issued and installed in the field. As the procurement procedure for EAM has not been approved students run the risk of being out of compliance when it is approved. Any changes to the procedure could require additional training for all of the more than 100 students.
7/25/2018	WRPS-PER-2018-1919	PLAN procedures on the WEB page not locked	Upon opening TFC-PLN-05 and TFC-PLN-07 I discovered I was able to revise without unlocking the document.
7/25/2018	WRPS-PER-2018-1920	No accountability/tracking ability/ inventory for HPT instrumentation.	The main issue is a shortage of instruments caused impart by instruments not being returned at the end of shift. Also because the instruments are not checked/signed out it's very hard and time consuming to track these instruments down.

7/25/2018	WRPS-PER-2018-1716	NCR TF-18-NCR-012	Description of Nonconformance: Required condition: PO 65500 - 150 pairs (5 cases) of Scott Respirator Cartridge 7422-SC1 PO 66424 - 30 pairs (1 case) of Scott Respirator Cartridge 7422-SC1 PO 65384 - 1663 pairs (54 cases, 1 case with 43 pairs) of Scott Respirator Cartridge 7422-SC1 PO 65384 - 785 pairs (25 cases, 1 case with 35 pairs) of Scott Respirator Cartridge 7422-SD1 PO 66424 - 30 pairs (1 case) of Scott Respirator Cartridge 7422-SD1 PO 65146 - 25 pairs (1 case of 25 pairs) of Scott Respirator Cartridge 7422-SD1 Respirator cartridges are to be clean and free of excess charcoal dust. Actual Condition: The Scott Respirator Cartridges identified above, 1843 pairs of part number 7422-SC1 and 840 pairs of part number 7422-SD1, were found to have excess charcoal dust.
7/25/2018	WRPS-PER-2018-1921	AZ-801 Instrument Building	Was raising and lowering ENRAFS for AZ farm and restoring power to equipment. Walked into AZ-801 building and seen extension cords, ladders, garbage and air samplers on transformer, etc. Tripping and fire hazards a big concern. Wrote a few PER's about this issue and still it is not controlled.
7/25/2018	WRPS-PER-2018-1912	Damaged foam cover on Diversion Box	The foam barrier on Diversion Box/WIDS site 240-5-151 is damaged. The Diversion Box is inside a Contamination Area and is located in the 202-5 North courtyard. Most of the damage is due to weather erosion there are also small areas that appear to be damaged by other means and the damaged area is down to the cement cover block.

7/26/2018	WRPS-PER-2018-1922	Post Job / Project Review	Over the last Three years the 2225 Laboratory has completed a number of major projects, including EF4 exhaust fan diesel replacement, 2195 P1 pump replacement, Room 4N upgrade, EF 1,2,3 exhaust fans motor upgrade, and Air handling units 1,2,3,4, motor replacement. While each project involved varying scopes, levels of planning, and hazard controls, none of these projects went as well as we would have liked, and it is to be expected that unplanned/unintended events/issues can cause delays and an increase in cost. Repeating the same mistakes from one project to the next should be avoided, when possible by using existing processes such as Lessons Learned and Post-Job Briefing Reviews to obtain feedback, learn from previous problems, and modify processes to avoid recurrence of events or problems. Unfortunately, 222-S has not implemented the necessary feedback mechanisms to capture opportunities for improvement and prevention of future errors.
7/26/2018	WRPS-PER-2018-1925	Equipment Knowledge	EP P/E 3 - Training and Drills On June 12th, 2018 the WRPS Emergency Management department conducted an emergency preparedness Field Drill that involved Tank Farms Emergency Response Organization and shift production personnel responding to simulated High Wind event at the 242-S Evaporator. (EM-PO-FD-2018-06-01) The HPT assigned to car 11 radiological response vehicle did not know how to utilize the power inverter to plug in the air sampler. On the spot training was provided by another lead HPT. If the HPT Lead had not been there, the air sampler would not have been able to be utilized for habitability. (P/E 3.17 - Drills)
7/26/2018	WRPS-PER-2018-1926	ICP Briefings	EP P/E 6 - Emergency Response Organization On June 12th, 2018 the WRPS Emergency Management department conducted an emergency preparedness Field Drill that involved Tank Farms Emergency Response Organization and shift production personnel responding to simulated High Wind event at the 242-S Evaporator. (EM-PO-FD-2018-06-01) The BED did not conduct periodic ICP briefings to update personnel of the event status. Additional SOEN notifications were not sent to update site personnel of event status. (P/E 6.25 – ERO Operations)

7/26/2018	WRPS-PER-2018-1927	EAPC Book - 60 Days	Concern of employees accessing the exhauster skid by going under North end piping. Uneven surfaces, low piping, and SCBA makes all a concerning safety issue. Area: 200 E / 241-AW Farm
7/26/2018	WRPS-PER-2018-1923	Mobile office stairs NOT compliant with the "Life safety code" (NFPA 101).	The following trailers have stairs NOT compliant with TFC-ESHQ-FP-STD-02 attachment 1 (NFPA 101): MO251, MO596, MO599, MO597, MO525, MO280, MO824, MO825, MO2192, MO577, MO578, and MO157. See attached for details. MO577, MO578, MO157 have been previously identified as being non-compliant but to my knowledge are not being tracked by a PER. These 3 trailers have stairs that are NOT dimensionally uniform in multiple ways. "Uneven stairs" signs (without pictogram) were posted on these 3 trailers on 6.21.18 and 6.26.18. MO577 has offices for approximately 50 people and its stairs are used a few hundred times a day collectively. MO577 stairs have been inspected by riggers and are not able to be adjusted to meet code. MO577 due to frequency of use should have the highest priority for stair replacement.
7/26/2018	WRPS-PER-2018-1809	Submittal Review Process in Smart Plant	Recently a change was made in the routing of Construction Subcontractor Submittals to requested reviewers/approvers. Previously, documents were received by Construction/Commissioning Document Control and processed, and submittal and cover sheet were sent to appropriate reviewers for signature. During the week of July 9th, a change was implemented to route submittals via Smart Plant. The immediate issue was that a submittal was sent by a construction subcontractor to document control, the reviewers were expecting this submittal Tuesday afternoon or Wednesday morning. The submittal went in to document control on Tuesday and went into SPF for review. The end users were not made aware that a change in submittal process was coming, so we were not made aware that the submittal was in Smart Plant until Thursday. Once reviewed on Monday, one reviewer made comments against the document in concurrence with the other reviewer (as was normally done). Both reviewers then recorded their signatures as was assumed needed, and the tasks completed. I was contacted several hours later stating that I needed to sign off the submittal. To which I replied that I had signed and completed my task. It was later determined that I needed to go in and make a comment stating that I agreed with the other comments made. At no point was it made clear that this was the expectation of reviewers, as it was assumed that recording my signature was my concurrence with the comments made by the other reviewer. Main Issues: 1) In review of the following procedures there is no change to vendor submittal process which tells users how to review and complete SPF tasks related to submittals. There is no update that submittals are being routed via SPF. TFC-BSM-IRM_DC-C-01 Document Control TFC-BSM-IRM_DC-C-02 Records Management TFC-BSM-IRM_DC-C-07 Vendor Processes TFC-PRJ-CM-D-02 Construction & Commissioning Document Control Processes 2) The change was implemented without end users knowledge that this was coming via formal changes to the above procedures at a minimum. 3) Expectations of users were not disseminated such that submittals could be reviewed and returned in a timely manner. It was only after I went back and forth on signing vs. commenting, that I was forwarded a link with Power Point Presentations for Vendor Submittal Guides. 4) As an engineer, I am in SPF daily and see my updated "To Do' List. Many users have minimal interaction with SPF, and may not receive notification, or be able to complete the tasks without someone walking them through it every time. Because this information was not known prior to this change being implemented, we lost a week of schedule for a construction subcontract, on a resubmit of a shop drawing awaiting fabrication.

7/26/2018	WRPS-PER-2018-1924	Periodic Review Roadblock In Workflow Review and Approval	There are two allowable responses to the questions posed, yes or N/A. In the case of TD-600-010, Question 5. Does the procedure still contain the proper level of detail to support safe and correct performance? (technically accurate) [422.1]. The answer is no which is not a choice. This leaves no way to proceed.
7/26/2018	WRPS-PER-2018-1929	Building MO198 unsecured	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities as part of an annual Security self-assessment. It was noted that building MO198 in the 200E area was unsecured. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results.
7/26/2018	WRPS-PER-2018-1930	Central High Radiation Area Database	Not all of the Facility Radiological Control organizations are utilizing the High Radiation Area Inventory logs established to provide one numbering system for High Radiation Areas within WRPS-managed facilities.A Centralized database for the tracking of High Radiation Area inventory has established to facilitate in ensuring that one location could be maintained and available to all personnel that would detail the HRA number, Location, how controlled (e.g. physical locked boundaries or postings) dose rates, dates of establishment (where available), the responsible project, and which group is performing the routine surveillance. One organization is maintaining a separate list and does not utilize the WRPS central inventory. No High Radiation Areas are unaccounted for and the information kept by the one project meets all requirements.WRPS should evaluate whether it should be required of all organizations to utilize the central list.

7/26/2018	WRPS-PER-2018-1931	Building 2715WA left unlocked	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities as part of an annual Security self-assessment. It was noted that 2 doors at building 2715WA in the 200W area was unlocked. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results.
7/26/2018	WRPS-PER-2018-1932	Telehandler	AEI performed excavation in AX Farm using a telehandler. The telehandler operator extended the boom out 20ft. (b)(6) began shoveling wet soil into the bucket. As the bucket began to fill, the operator noticed the telehandler was tipping. The operator quickly put out the outriggers to quickly get control of the **equipment. This action lifted the back tires 2 feet off the ground.** After discussion with AEI and Construction Management, it was discovered that the telehandler can hold 2,750 lbs of dry soil and 3,200 of wet soil. During the course of work, the telehandler operator was told his bucket would be ¾ filled. The operator was not expecting a full load in the bucket. The crew overloaded the **bucket. In addition, the bucket cannot be filled to capacity with boom extended.**
7/26/2018	WRPS-PER-2018-1933	Connex's not secured after hours	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities, six storage units commonly known as "connex containers" were found to be unlocked with equipment inside. These containers numbers CC2E0090, CC2E0092, CC2E0093, CC2E0094, CC2E0095 and CC2E0175 located at the ETF. Per MSC-RD-SEC-11440, Rev. 8, Physical Protection of Property and Facilities 1.0 states cost-effective protection measures to prevent unauthorized access, damage or destruction arising from deliberate acts of arson, civil disorder, riot, sabotage, terrorism, or vandalism, and to deter and prevent theft of government property. Appropriate managers were notified of the physical security walkdown results.

7/26/2018	WRPS-PER-2018-1935	Building 272WA had two propped opened after hours and no one in the building	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities. It was noted that 2 doors at building 272WA in the 200W area were propped open after everyone had left for the day. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results.
7/26/2018	WRPS-PER-2018-1936	WRPS Facilities unsecured	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities. It was noted that MO648, MO2171, 27135, MO533, MO531, MO525, MO733, and MO725 buildings in the 200E and 200W area were unlocked. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. Buildings MO648, 27135, and MO725 are re-occurring finding from past 2 yr. assessments. During a recent DOE Security Assessment (March 2018) a suggestion was documented in both the WRPS PER system and DOE SITS system that stated "WRPS SAS program lead should consider seeking management engagement for reoccurring physical security deficiencies identified in WRPS self-assessments that are repeatedly entered into the CAM database and validated closed". WRPS Appropriate managers and key custodians were notified of the physical security walkdown results,
7/26/2018	WRPS-PER-2018-1937	WRPS facilities unsecured	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities. It was noted that buildings MO579 and MO131 in the 200E area were unsecured. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results.

7/26/2018	WRPS-PER-2018-1938	2225-Labs door 16 unlocked after hours	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities. It was noted that door 16 of the 2225-Labs building in the 200W area was unlocked. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results
7/26/2018	WRPS-PER-2018-1939	WRPS facility unsecured (MO523)	Safeguards and Security conducted a back shift physical security walk down on 5/15/2018-6/30/2018 of WRPS facilities. It was noted that building MO523 in the 200E area was unsecured. Asset Protection Agreements (APA) for these buildings states they will be locked from 1630/1700 hours till 0500/0530 hours or when occupied. WRPS Appropriate managers and key custodians were notified of the physical security walkdown results
7/26/2018	WRPS-PER-2018-1940	WRPS vehicles left unsecure after hours	WRPS Security & Emergency Services conducted a Safeguards and Security walk down from 5/15/2018-6/30/2018 for facilities and equipment focusing on government owned vehicles (GOV) as part of an annual Security self-assessment.. The walkdown of WRPS parking lots located at 2750E, MO588-MO595 area, 272AW, MO280, 272WA, and 2225-Labs revealed that 45 out of 107 GOV's were found to be unlocked (42%), (this is a re-occurring finding from past 2 yr. assessments). During a recent DOE Security Assessment (March 2018) a suggestion was documented in both the WRPS PER system and DOE SITS system that stated "WRPS SAS program lead should consider seeking management engagement for reoccurring physical security deficiencies identified in WRPS self-assessments that are repeatedly entered into the CAM database and validated closed" The WRPS Security representative briefed WRPS Fleet Management and the WRPS SES Manager of the results. Procedure reference: TFC-BSM-FPM_PR-C-06, REV C-2, "Government Motor Vehicle and Equipment Management, Section 4.7.2, Ensure Government motor vehicles are secured/locked when unattended and/or not in use.

7/26/2018	WRPS-PER-2018-1934	Failure to notify and/or include interfacing systems in a timely manner during the software change process	On July 9, 2018 I received a WRPS General Delivery email noting that WRPS was going to stop using the Tank Farm Material Services System (TFMSS) as of August 6, 2018. TFMSS is being replaced with a new material request workflow within Enterprise Asset Management (EAM). This is a concern because one of our software applications, OpsTracker, interfaces with TFMSS. OpsTracker is a Grade B Safety Application and is impacted by this change. The legacy data stored within TFMSS is not being migrated to EAM, thus an interface to the legacy system must be maintained in addition to the new interface. This creates an error precursor and is a source for potential confusion and delay as data is now stored in two locations and redundant queries must be constructed, tested, and maintained.
7/26/2018	WRPS-PER-2018-1907	Improve (ETF) managemen t feedback to the workforce	A Safety Culture Evaluation of the ETF's workforce was conducted by Oak Ridge Associated Universities April 12-13, 2018. The aim of the evaluation was to collect and analyze data about the ETF workforces' perceptions of safety culture as they relate to management and operations of the ETF. Observation: ETF management needs to develop and implement mechanisms for providing feedback to the workforce when safety issues are resolved. Apply appropriate energy and resources to resolve safety issues quickly when possible. For complex issues that require more time to address, regularly communicate progress to the workforce. When an issue is resolved, assure that the individual(s) reporting the problem receive timely feedback and broadcast the accomplished resolution to other members of the workforce.
7/26/2018	WRPS-PER-2018-1908	Prioritizing the managemen t of issues and concerns	A Safety Culture Evaluation of the ETF's workforce was conducted by Oak Ridge Associated Universities April 12-13, 2018. The aim of the evaluation was to collect and analyze data about the ETF workforces' perceptions of safety culture as they relate to management and operations of the ETF. Observation: Management must continuously reinforce the message that success can only be achieved when work is performed safety, securely and within quality specifications. Managers must be sensitive to any message that has been misinterpreted otherwise. Management peers should help each other identify when messages are being misinterpreted.

7/26/2018	WRPS-PER-2018-1909	Encourage ETF workforce involvement to execute the ConOps Improvement Plan	A Safety Culture Evaluation of the ETF's workforce was conducted by Oak Ridge Associated Universities April 12-13, 2018. The aim of the evaluation was to collect and analyze data about the ETF workforces' perceptions of safety culture as they relate to management and operations of the ETF. Observation: ETF needs to continue to execute the Conduct of Operations Improvement Plan. Engage the ETF workforce to help resolve conduct of operations issues. Seek their feedback and acknowledge their contributions.
7/26/2018	WRPS-PER-2018-1910	ETF Staffing Plan shortfalls	A Safety Culture Evaluation of the ETF's workforce was conducted by Oak Ridge Associated Universities April 12-13, 2018. The aim of the evaluation was to collect and analyze data about the ETF workforces' perceptions of safety culture as they relate to management and operations of the ETF. Observation: Resolve staffing shortfall issues. Communicate clearly to the workforce the staffing plan and provide feedback on progress.
7/26/2018	WRPS-PER-2018-1941	Unreviewed Safety Question Process Annual Assessment Finding	A required assessment of the Unreviewed Safety Question (USQ) process was conducted from January through July, 2018. The results of the assessment are documented in RPP-ASMT-62102, "FY2018-ENG-R-0174 – Unreviewed Safety Question Process Annual Assessment," Rev. 0. Two (2) findings and two (2) observations were identified in the assessment. This PER documents Finding 1. Finding 1. A Document was determined to be outside the scope of the USQ process contrary to the requirements of TFC-ENG-SB-C-03, "Unreviewed Safety Question Process." (1 occurrence). The following document was determined to be outside the scope of the USQ process contrary to the requirements of TFC-ENG-SB-C-03, "Unreviewed Safety Question Process." Procedure TFC-ESHQ-ENV_PP-C-11, "Independent Qualified Registered Professional Engineer Assessment Process," Rev. C-0. This procedure requires USQ evaluation in accordance with TFC-ENG-SB-C-03, but was incorrectly determined to be outside the scope of the USQ process under N/A-4. Procedure TFC-ESHQ-ENV_PP-C-11 is referenced in RPP-13033, "Tank Farms Documented Safety Analysis" (DSA), Section 4.4.1, "Waste Transfer Primary Piping Systems," subsection 4.4.1.4.1.1, "Grandfathered Systems," as the procedure under which required integrity assessments are performed. In accordance with TFC-ENG-SB-C-03, N/A-4 is not applicable to procedures that implement TSR controls or DSA requirements not associated with safety management program implementation. The changes associated with this finding were reviewed by a qualified USQ evaluator who verified that a positive USQ does not exist. A USQD needs to be completed to evaluate the change. Recommend this PER be screened as a TUF. Recommend this PER be assigned to the Manager Nuclear Safety (b)(6)

7/26/2018	WRPS-PER-2018-1942	Unreviewed Safety Question Process Annual Assessment - Finding 2	A required assessment of the Unreviewed Safety Question (USQ) process was conducted from January through July, 2018. The results of the assessment are documented in RPP-ASMT-62102, "FY2018-ENG-R-0174 – Unreviewed Safety Question Process Annual Assessment," Rev. 0. Two (2) findings and two (2) observations were identified in the assessment. This PER documents Finding 2. Finding 2. Engineering documents dispositioned under a "PrHA USQ" (N/A-8) were not reviewed in the USQ process prior to modification of the facility as required by TFC-ENG-SB-C-03, "Unreviewed Safety Question Process." (4 occurrences). The following engineering documents were not evaluated in the USQ process prior to modification of the facility as required by TFC-ENG-SB-C-03, "Unreviewed Safety Question Process." a. ECN-712579, "C-105 Retrieval - Modify POR297 for Slurry Pump Installation," Rev. 3 was not evaluated in a USQD prior to modification of the facility as required by TFC-ENG-SB-C-03. SmartPlant identifies that work was completed for ECN-712579, Rev. 3 on 7/12/17. Block 11 of the ECN lists the work package that implements the change as WO# 204559. ECN-712579, Rev. 3 was dispositioned under N/A-8. TFC-ENG-SB-C-03 requires ECNs dispositioned under N/A-8 to be evaluated in a USQD prior to modification of the facility to implement the change. The work steps that implemented ECN-712579, Rev. 3 (adding access holes for hydraulic hoses and jumper heat trace cables) were added to WO# 204559 in a pen & ink change dated 5/22/17. The pen & ink change was evaluated in a GCX-3 USQ screening (TF-17-0425-S, Rev. 8). The pen & ink change did not identify that the added work steps implemented ECN-712579, Rev. 3. If the pen & ink change had identified that the changes implemented an ECN, the USQ evaluator would have known that a USQD was required. While the work steps (without reference to the ECN#) were evaluated in the USQ process, a GCX-3 USQ screening is not appropriate for changes that modify a nuclear facility per TFC-ENG-SB-C-03. b. ECN-712586, "C-105 Retrieval - Revise AN-106 P&ID sheet (H-14-020801-004)," Rev. 0 was not evaluated in a USQD prior to modification of the facility as required by TFC-ENG-SB-C-03. SmartPlant identifies that work was completed for ECN-712586, Rev. 0 on 7/12/17. Block 11 of the ECN lists the work package that implements the change as WO# 263921. ECN-712579 Rev. 3 was dispositioned under N/A-8. TFC-ENG-SB-C-03 requires ECNs dispositioned under N/A-8 to be evaluated in a USQD prior to modification of the facility to implement the change. There are no work steps in WO# 263921 associated with the P&ID that was revised in this ECN (H-14-020801, Sheet 4); however the P&ID is attached to the work package as a reference to the configuration of the facility.
7/26/2018	WRPS-PER-2018-1943	Unreviewed Safety Question Process Annual Assessment - Observation 1	A required assessment of the Unreviewed Safety Question (USQ) process was conducted from January through July, 2018. The results of the assessment are documented in RPP-ASMT-62102, "FY2018-ENG-R-0174 – Unreviewed Safety Question Process Annual Assessment," Rev. 0. Two (2) findings and two (2) observations were identified in the assessment. This PER documents Observation 1. Observation 1. A USQD for a work order that involved hazards inside and outside the 242-A Evaporator facility did not address the hazards outside the facility (1 occurrence). USQD EV-17-0612-D, Rev. 0 evaluated a work order (WO# 277105, "242-A Vessel Vent Exhaust Stack Extension") that involved hazards inside and outside the 242-A Evaporator facility. The hazards inside the facility were evaluated in the USQD, but the hazards outside the facility were not discussed. The hazards outside of the nuclear facility were standard industrial hazards (i.e., chemicals, asbestos, electrical, crane use, vehicular traffic, elevated work platforms, overhead utilities, fire hazard, e.g. hot work) that do not require evaluation in a USQD, but are within the scope of N/A-1 per TFC-ENG-SB-C-03. The USQD should have documented that the hazards associated with work performed outside of the 242-A Evaporator were not evaluated because N/A-1 applies to those hazards, or alternately, the USQ evaluator could have communicated to the work planner (via email or phone call) that the hazards outside the facility are covered under N/A-1, which did not occur. This is not a finding because the USQ procedure requirement for evaluation of hazards inside a nuclear facility were met. No additional USQ review is required. Recommend this PER be screened as a TUF. Recommend this PER be assigned to the Manager Nuclear Safety (b)(6)
7/26/2018	WRPS-PER-2018-1944	Unreviewed Safety Question Process Annual Assessment - Observation 2	A required assessment of the Unreviewed Safety Question (USQ) process was conducted from January through July, 2018. The results of the assessment are documented in RPP-ASMT-62102, "FY2018-ENG-R-0174 – Unreviewed Safety Question Process Annual Assessment," Rev. 0. Two (2) findings and two (2) observations were identified in the assessment. This PER documents Observation 2. Observation 2. USQ evaluations containing non-technical errors that do not result in a non-compliance with TFC-ENG-SB-C-03 were identified. The non-technical errors identified in this observation include typographical, formatting, and grammatical errors; incorrect document step numbers, cut and paste errors, revision number of document evaluated omitted in USQD title, USQD Change Description did not reference DSA Chapter 2.0 sections applicable to the change, previous USQD not referenced in GCX-3 USQ screening, minimal or omitted documentation. Each occurrence is described below. - Typographical errors in USQ screen/determination (5 occurrences). - Summary statement in USQD revision did not address all USQD sections (1 occurrence). - Cut & paste error (e.g., wrong document number listed) in USQD (1 occurrence). - Revision number of document evaluated not identified in USQD title (3 occurrences). - Information in USQD title inconsistent with Change Description (1 occurrence). - USQD Change Description did not reference DSA chapter 2 sections applicable to the change (2 occurrences). - General Hazard Analysis or Ignition Source Control form not discussed in USQD (1 occurrence). - USQD discussion of flammable gas hazards inconsistent with Ignition Source Control form conclusion that ignition controls are not required (1 occurrence). - Incorrect USQ number for previous USQD referenced in GCX-3 USQ screening (1 occurrence). - Conclusion that changes are consistent with GCX-3 categorical exclusion omitted (1 occurrence). - Minimal documentation of change in Change Description (1 occurrence). - GCX-5 applied for document outside the scope of the USQ process (1 occurrence). - Wrong N/A designator applied for out of scope document (1 occurrence). The USQ evaluations associated with this observation do not require revision to correct the non-technical errors.

7/26/2018	WRPS-PER-2018-1851	Review TFC-ESHQ-ENV-PP-C-05	**(Consolidation) Management observations program assessments PER followup to evaluate** ESHQ-ENV-PP-C-05WRPS- for MOP-2018-2129 & MOP-2018-2165.
7/27/2018	WRPS-PER-2018-1945	Telehandler forklift overloaded with material	AEI operator was signaled into the excavation by (b)(6) boomed out and placed the bucket approximately 18-24 inches off the ground inside the excavation to allow (b)(6) to fill the bucket with soil. While the bucket was being loaded the operator identified the forklift was overloaded. He corrected this by retracting his boom and lowering his outriggers, while doing this the rear tires lifted off the ground ~2 feet before being corrected. The outriggers likely stopped the forklift from tipping any further and was determined to be the reason for the forklift coming back down to all 4 tires. The boom was retracted 25' and the bucket had ~0.75-1.0 yard of soil when the event occurred.
7/30/2018	WRPS-PER-2018-1946	AY102-WSTA-LDT-151 FL Code	ER-1 reported that AY102-WSTA-LDT-151 Annulus leak detector is displaying a FL code in the field. Declaring Enraf O/S.

7/30/2018	WRPS-PER-2018-1948	Modification travelers MT-50040 and MT-50153 have been filled out incorrectly	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 1 – Modification travelers MT-50040 and MT-50153 have been filled out incorrectly. There is in both documents missing information in both the inputs and outputs sections, as noted in detail in LOI-5 of Attachment 3 of RPP-ASMT-62525.
7/30/2018	WRPS-PER-2018-1949	Per TFC-ENG-FACSUP-C-24, requirements source documents must be FREDs or SREDs.	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 2 – For components associated with SRED RPP-RPT-59678, the SECD listed the DSA as a requirements source document for the requirement to perform a 48-month resistance check. Per TFC-ENG-FACSUP-C-24, requirements source documents must be FREDs or SREDs.
7/30/2018	WRPS-PER-2018-1950	Some requirements from the various temperature monitoring SREDs have been applied as a requirement to some SSCs but not to ot	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 3 – Some requirements from the various temperature monitoring SREDs have been applied as a requirement to some SSCs but not to other SSCs of the same type. All requirements should have been applied equally to all SSCs of the same type. Per TFC-ENG-FACSUP-C-24, requirements should be applied to all applicable SSCs. The specific issues are provided in LOI-9 of Attachment 3 of RPP-ASMT-62525.

7/30/2018	WRPS-PER-2018-1951	Not all SSCs are clearly tied to a SRED	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 4 – Not all SSCs are clearly tied to a SRED. For instance, some components under the newer jack panel design had CGD documents that only referenced the older SRED RPP-RPT-53037 and its associated DVRs. These requirement documents do not evaluate the jack panel design. It is acceptable to procure to a draft SRED (in this case, RPP-RPT-59678) but the draft SRED should be referenced. Per TFC-ENG-DESIGN-C-15, Section 4.1.15 states that advanced procurement activities of SSC and piece parts critical characteristics shall include a draft SRED with appropriate supporting calculations and a draft final FMEA. The specific issues are provided in LOI-9 of Attachment 3 of RPP-ASMT-62525.
7/30/2018	WRPS-PER-2018-1952	The AN01A and AN06A terminal boxes are missing Design Requirement DR-1	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 6 – The AN01A and AN06A terminal boxes are missing Design Requirement DR-1 "Components must be safety significant and meet NQA-1" in the SECD. These components were upgraded via the NCR/tech eval process since they were already installed before they were identified as required to perform a safety function. However, the need for these components to be upgraded to safety significant should still be identified and required in the SRED.
7/30/2018	WRPS-PER-2018-1953	RPP-RPT-59678 only requires the SIS performance assessment be performed every 5 years for the jack panel designs	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 7 – RPP-RPT-59678 only requires the SIS performance assessment be performed every 5 years for the jack panel designs. The other (selector switch) designs did not have a requirement for the periodic SIS performance assessment. The performance of all safety instrumented systems require periodic evaluation to validate the SIL calculation.

7/30/2018	WRPS-PER-2018-1954	For the thermocouple PMIDs for AP01A, AP04A, AP05A, AP06A, AP07A, and AP08A, the cover sheet expiration date and the datashee	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 8 – For the thermocouple PMIDs for AP01A, AP04A, AP05A, AP06A, AP07A, and AP08A, the cover sheet expiration date and the datasheet expiration date are not consistent. In the case of AP01A, AP04A, AP05A, and AP06A, if the datasheet date was followed in the field the 20-year in-service inspection date would be exceeded.
7/30/2018	WRPS-PER-2018-1955	PMID ET-200504 contains all work steps within the PMID itself, and does not use a procedure to perform required work steps	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 9 – PMID ET-200504 contains all work steps within the PMID itself, and does not use a procedure to perform required work steps. In accordance with TFC-OPS-MAINT-STD-12, work instructions should not be located inside a PMID, but within a separate working procedure. This applies to other similar PMIDs.
7/30/2018	WRPS-PER-2018-1956	There is not one set of requirements documents that define the requirements of the manual temperature monitoring systems	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 1 – There is not one set of requirements documents that define the requirements of the manual temperature monitoring systems. There are three different SREDs and two different FSAs. Although this is allowed by WRPS procedures, it is confusing and is the primary cause of many of the observations and findings listed in this section.

7/30/2018	WRPS-PER-2018-1957	There seems to be a lack of system owner involvement in the development of the various temperature monitoring projects	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 2 – There seems to be a lack of system owner involvement in the development of the various temperature monitoring projects. It is evident that both the Cognizant System Engineer that would eventually be the technical authority of these systems, and the Operations personnel that would eventually own these systems, were not involved (or marginally involved) until project turnover.
7/30/2018	WRPS-PER-2018-1958	A pre-job field walkdown of ECN-714227 identified inconsistencies between H-14-042660 and field condition	A pre-job field walkdown of ECN-714227 identified inconsistencies between H-14-042660 and field condition. Farther review of H-14-04660, Sheet 2 identified multiple ECNs in progress and pending field implementation.
7/30/2018	WRPS-PER-2018-1959	SCAR Procedure TFC-ESHQ-Q_C-C-05 should be clarified to define applicability of PER supporting the SCAR process is required.	The QA organization generates approximately 3 SCARs per year. In 2018, two SCARs have been submitted, 2017 had 3, 2016 had 4 and 2015 had 4. The SCAR procedure TFC-ESHQ-Q_C-C-05 defines the SCAR process, Section 4.3, item 5: States when applicable initiate a PER in accordance with TFC-ESHQ-Q_C-C-01 and reference it in the SCAR. This requirement appears to have been applied inconsistently in the past. SCAR Reports TF-15-SCAR-004, Level A; TF-15-SCAR-003, Level B; TF-16-SCAR-004, Level C all had PERs associated with the documentation. Section 4.2 of the SCAR procedure defines the 3 significance levels and attachment D defines the Graded Approach to the response from the subcontractor. The SCAR Report was documented in PER WRPS-PER-2018-1798 and supported by Surveillance, TF-18-QSR-150.The PER process ensures the shift office performs an operability review related to safe to work and configuration controls onsite. The PER also provides a record document for the documentation required in Attachment D of the SCAR procedure.The current language in the SCAR Procedure TFC-ESHQ-Q_C-C-05 should be clarified to better define the applicability of when a PER supporting the SCAR process is required.

7/30/2018	WRPS-PER-2018-1960	Survey equipment needed to survey hands prior to disinfecting PCM's.	In the rad happenings steps to sanitize the PMC equipment it states to survey hands prior to disinfecting the equipment. The survey equipment required to complete this first step is not located at the PCM locations.
7/30/2018	WRPS-PER-2018-1962	Interface Management Review of Interface Documents	An internal Management-Directed Assessment on WRPS Interface Management (IM) documents was conducted during April April2-July 31, 2018. The assessment found that the IM process ensures that documents are current, relevant, and cancelled when appropriate. Overall, the process is consistent with the requirements of the IM procedure, and is effective. This PER is to capture one (1) observation of an opportunity that exists to further review some legacy documents and identify if they should be formally cancelled or otherwise handled.
7/30/2018	WRPS-PER-2018-1963	Safety systems assessment RPP-ASMT-62525, Observation #3	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 3 – In the temperature modification upgrades associated with modification travelers MT-50040 and MT-50153, the testing level chosen for the upgrades was TP-3 (test level 3). Test level 3 modifications direct the DA to provide test requirements (in lieu of having a formal test requirements program under the direction of a test director). There is no evidence of DA approval of the test requirements or the test acceptance under both of these modification travelers.

7/30/2018	WRPS-PER-2018-1964	Safety systems assessment RPP-ASMT-62525, Observation #4	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 4 – Some SECD entries referenced RPP-CALC-53087 incorrectly as RPP-RPT-53087. These corrections are needed in the SECD.
7/30/2018	WRPS-PER-2018-1967	Safety systems assessment RPP-ASMT-62525, Observation #5	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 5 – Consider the use of the tickler system to keep track of the 20 year thermocouple replacements. This would also apply to the tracking of other requirements in the SREDs that are not performed by the maintenance organization. This is an opportunity for improvement.
7/30/2018	WRPS-PER-2018-1968	Safety systems assessment RPP-ASMT-62525, Observation #6	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 6 – SPF can track multiple PMIDs and associated due dates for any given component. However, SPF can only electronically inactivate a component on one due date per PMID. The PMIDs associated with the thermocouples evaluated in this assessment contain multiple due dates per PMID. Therefore, there are due dates in PMIDs that are not being triggered for automatic inactivation by the SPF safety equipment compliance database. Consider dividing these PMIDs into more than one PMID.

7/30/2018	WRPS-PER-2018-1966	Contaminated Tumbleweed Increase from non-WRPS WIDS Sites	We have seen an increase this year in contaminated tumbleweeds blowing in and striking the tank farm fence lines, spreading contamination in quantities and at levels we have not experienced in recent years. For example, the 218-B-10 Burial Ground located west of B-Complex is believed to have contributed multiple contaminated tumbleweeds which, during high winds, impact the fence lines and spread a large number of contaminated tumbleweed fragments outside the perimeter of B-Farm. Reference PERs 2018-1211, 2018-1502, 2018-1754, 2018- 0952, 2018-0846, 2018-1096, and 2018-0068 (note: these PERs do not include contaminated tumbleweeds identified at ETF).
7/30/2018	WRPS-PER-2018-1969	Safety systems assessment RPP-ASMT-62525, Observation #7	Safety systems assessment RPP-ASMT-62525 was written to evaluate the manual freeze protection safety instrumented systems. The purpose of the assessment was to review a sample of the temperature monitoring systems and components to assess compliance with safety basis documentation, and to ensure that those systems are meeting their safety function. Specifically, the assessment focused on temperature monitoring SSCs which are required to be operable to provide compliance with specific administrative control (SAC) 5.8.8 "Waste Transfer System Freeze Protection" and design feature (DF) 6.9 "Waste Transfer Freeze Protection Temperature Monitoring Systems" of the Tank Farm Technical Safety Requirements (TSR) (HNF-SD-WM-TSR-006), revision 8-E. Nine findings and seven observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 7 – during this assessment, it was very difficult for the assessment team to compare the requirements of a component to the requirements of a similar component. SPF can only be opened one component at a time, and when you have many components to review and compare this becomes very cumbersome. Consider providing the ability to open multiple components at once to allow comparison of requirements. This is an opportunity for improvement.
7/30/2018	WRPS-PER-2018-1970	Multiple procedure change workflows results in incorrect changes to final versions of procedures	In review of recently issued V&B procedures it appears that having multiple procedure change workflows on the same procedure resulted in issues with changes being incorrectly incorporated into the current versions. Examples are as follows. EXAMPLE 1 3-VB-155ZA, Rev. D-6 Included a Pass/Fail criteria at the bottom of Data Sheet 5 on Page 11 of 14. 3-VB-155ZA, Rev. D-7 This Pass/Fail criteria has been removed as we intended with the PCA. 3-VB-155ZA, Rev. D-8 The Pass/Fail criteria shows back up in the procedure. EXAMPLE 2 3-VB-155ZA, Rev. D-6 Included a Step 19 to notify Engineer for failed items on Page 12 of 14. 3-VB-155ZA, Rev. D-7 This Step has been removed as we intended with the PCA. 3-VB-155ZA, Rev. D-8 A portion of the old Step 19 shows back up in Step 18 with "Engineer Contacted" and "Work Request Number" identified. I believe there are more examples but these should give an idea of what I am talking about. As stated previously I am assuming these errors were created as a result of having multiple work flows going through at the same time on the same procedure.

7/30/2018	WRPS-PER-2018-1971	Links in DOORS	During Assessment (FY2018-ESHQ-MD-0366), the links in DOORS provides users with a fair starting point to look at implementation of requirements; however, many procedures are linked to sections of regulations when they only implement a small subset and other procedures should be linked based upon the level of details in the procedure.
7/31/2018	WRPS-PER-2018-1972	LERF leachate pump power panel labeling walk down	A MOP was performed on the labeling of the LERF leachate pumping system on 7/24/18. WRPS-PER-2017-2870.1 states the following: Label handswitches, lights, etc. identified on the P&ID for the leachate pumps at all three LERF basins. The results of the MOP indicate that one component on each basin leachate pump power panel has been recently labeled, however the label does not meet TFC-ENG-STD-12 requirements. Note that the component ID's recently installed do in fact agree with the P&ID (basin 44 HS-44-1 is labeled differently than the other 2 basins in the field (HS-P-42 and HS-P-43) and on the P&ID). While the labels/component ID do match the drawings, they do not meet the standard. There are 3 additional components on the leachate pump power panel at each basin that are shown on the P&ID (H-2-88766, sht 2, 3 and 4) which are not yet labeled as shown on the P&ID. Those specific components are YL-42-1, YL-42-2, KQI-42-1, YL-43-1, YL-43-2, KQI-43-1, YL-44-1, YL-44-2 and KQI-44-1. In addition to the difference noted above for the HS numbering, the hand switch identification on the P&ID shows M/O/A (per H-2-79601 indicates Manual/Off/Auto); however in the field the label for the switch shows Hand/Off/Auto.
7/31/2018	WRPS-PER-2018-1961	Weather-induced degradation of plastic wrapping on contaminated object releases loose contamination, voids RWP.	HNF-5183 TFRCM Article 414.1: In cases where outdoor storage is necessary, the integrity of containers or wrapping materials used should be ensured to prevent degradation from weathering and subsequent release of radioactive materials. Current TOC practices regarding wrapping and storage of contaminated objects lacks proactive, effective measures to prevent weather-induced degradation which can release contamination. Responsibility to perform the monthly inspections for integrity as required by TFC-ESHQ-RP-STD-06 "Packaging of Radioactive Material" section 3.2.3 #2 is not clearly assigned. RadCon job coverage surveys and RadCon routine surveillances are more effective at detecting when a radiological release has occurred and less effective at determining when a loss of integrity is imminent in time to prevent a release. As such, adding additional RadCon surveys or increasing the frequency of those surveys will not likely prevent future releases from degradation but only detect them sooner.

7/31/2018	WRPS-PER-2018-1973	Need for additional ice machine for construction activities	Each summer we have an issue with the lack of ice for Tank Farm Projects Personnel at the 2704HV facility. Construction forces comes to the facility and empties the ice machine by 0630 hours. This does not allow Projects personnel available ice for their personnel in their own facility. Construction forces needs to find another facility to get their ice from and/or purchase their own. The second issue is that when construction forces gets their ice they are not using sanitary means to retrieve the ice. They have been observed digging ice out with their work gloves to using unsanitized 5 gallon buckets to retrieve the ice. This creates a health hazard for both themselves and others in the facility who use this machine.
7/31/2018	WRPS-PER-2018-1974	222-S Planning Procedure Compliance Issue	Reviewed the following work packages with a specific focus on confirming the activity is listed on the Skill of the Craft (SOC) list; proper Level 3 screenings were performed; no detailed work instructions were utilized; the work package had the appropriate approvals as required by TFC-OPS-MAINT-C-01, attachment B; approved supporting documents were attached in EAM; and the current status and location were accurate in EAM. Result for Work Order 218229: SOC -Met Screenings -Met No detail - Met Approvals - Met Documents in EAM -Met Current Status - Met Results for 382313: SOC - Met Screenings - Met No detail - Met Approvals - Not Met (Engineering) Documents in EAM - Met Current Status - Met Results for 291795: SOC - Met Screenings - Met No detail - Met Approvals - Not Met (Engineering) Documents in EAM - Met Current Status -Met
7/31/2018	WRPS-PER-2018-1975	TX-105 Flammable Gas Surveillance Frequency Change	The annual update of RPP-5926 (Rev 20) indicates that time to 25% of the lower flammability limit (LFL) for SSTs 241-TX-105 is less than the current Surveillance Frequency of 365 days in LCO 3.2. The time to 25% of the LFL for 241-TX-105 is 292 days, therefore the new Surveillance Frequency should be 182 days. HNF-IP-1266, 5.9.1 DST and SST Time to Lower Flammability Limit, section 3.B.3.b states: "For a planned activity (i.e., waste transfer, water addition, and chemical addition), if requested by the Production Operations Manager (or equivalent) or the SST Retrieval Closure Manager (or equivalent), and when the required decrease in a surveillance frequency or action completion time results from a DST temperature increase or the two-year update: 1. Production Operations Process Engineering shall notify the Shift Manager and Nuclear Safety, and shall prepare a PER in accordance with TFC-ESHQ-Q_C-C-01. 2. The responsible log keeper shall make a red arrow entry in accordance with TFC-OPS-OPER-C-17, to implement the decrease in surveillance frequency or action completion time prior to the planned activity (i.e., waste transfer, water addition, chemical addition) or IMMEDIATELY (i.e., if resulting from a DST temperature increase or two-year update). 3. The responsible log keeper shall verbally notify the ORP on-call facility representative within 48 hours of making the red arrow entry. 4. Nuclear Safety shall submit a TSR amendment to ORP within 60 days of making the red arrow entry."

7/31/2018	WRPS-PER-2018-1978	Joint Review Group (JRG) Process Recommendations	Conducted MOP on Joint Review Process from scheduling and qualification aspects. For some organizations, it is challenging to get JRG members scheduled with confidence in their attendance for JRG meetings. A successful practice is to invite and put responsibility for filling the membership on the functional responsible manager. In the case they cannot attend, they are responsible for ensuring coverage of the JRG meeting. This is more challenging for the role of ESHQ representative since they roll up under the ESHQ Manager, (b)(6) so there is not a Project Level Functional manager to ensure that role gets filled. Further there appears to be little value in filling that role since Safety/IH and Radcon are required JRG members. Although there are several qualified ESHQ JRG members, the majority of the JRGs are covered by one individual. The requirement for a separate ESHQ JRG member originated from a formal corrective action **plan dating back to 2010 (WRPS-1000320 R1 of March 26 2101 from Chuck Spencer to Shirley Olinger) prior to WRPS adopting a centralize ESHQ Organization. It is recommended that the necessity for a stand alone ESHQ representative be re-evaluated.** Additionally, the JRG process has changed from Radcon ownership to the responsibility of work control under the Maintenance organization although the procedure remains to fall within the ESHQ procedure set. It is recommended that the procedure be aligned within the work management procedure set with **Operations/Maintenance**. Finally the associated JRG Chairperson and ESHQ qualification cards (351047 / 351057) should be reviewed for updates. The Chairperson qualification card has not been revised since 2012 and the ESHQ qualification card could not be located on the training page.
7/31/2018	WRPS-PER-2018-1980	Evaluate the need for clarifying the definition of "regulated areas" in TFC-ESHQ-S-IH-C-52, REV C-1	Program document may need some clarification on Regulated Areas
7/31/2018	WRPS-PER-2018-1981	Equipment Storage Requirements in 2704HV Laydown Yard and other outdoor storage locations	On 07/24/18, a heater being installed in AN Farm was inspected POST installation in the pump pit by the construction contractor prior to electrical tie in and testing. Electricians on the crew inspected the wiring, and noticed significant damage to the RTD cable; this was immediately suspected of being a rodent causing **this damage**. Construction requested WRPS Engineering support for further evaluation and development of the path forward. Upon further inspection, WRPS Engineering determined the damage was done while the in pit heaters were in storage in the 2704HV laydown area. Although it was believed to have been previously tarped in the laydown area for at least some duration, the heater was left uncovered for an unknown period of time after the tarp/cover was weathered away. Engineering determined that the damaged RTD cabling could either be replaced inside the tank farm, or a new heater could be pulled out of the 2704HV laydown area **for replacement (with the damaged heater to go for repair)**. An Extent of Condition evaluation (informal) was requested by WRPS Project Manager on the In Pit Heating Project to determine if any further damage was present on the other stored heaters to be installed in the field. Although no other rodent damage was identified, it was identified that a number of heaters appeared to be uncovered and out in the elements. Of those, one of the other ~13 total heaters was identified to have significant water intrusion due to the configuration it was left in during storage (cabinet door upright toward the sky, making it less water resistant).

7/31/2018	WRPS-PER-2018-1979	Code Violations for Facility Standards for Wooden Access Stairs	The following items on drawing H-2-836389 sheet 7 do not agree with the current codes 1. Note 11.B specifies a minimum concrete compressive strength of 3000 psi at 28 days. ACI 318-14 Table R19.3.1 identifies members subject to deicing chemicals as Exposure Category F3. ACI 318-14 Table 19.3.2.1 requires Exposure Class F3 concrete to have a minimum strength of 5000 psi at 28 days. 2. Note 11.C specifies a 3% maximum air content. ACI 318-14 Table 19.3.3.1 requires a target air content of 6%. 3. Note 10 states "Add or remove treads as required to match elevation of door sill minus 1/2". IBC 2015 Section 1010.1.5 requires floor or landings on the each side of the door to be level. NFPA 101-18 Section 7.2.1.3.1 states that that the elevation of the floor surfaces on both sides of a door opening shall not vary by more than 1/2 inch unless otherwise permitted. The note should read "Add or remove treads as required to match elevation of landing. 4. Note 10 specifies the rise and run of the stair treads but does not state a tolerance. NFPA 101-18 Section 7.2.2.3.6.1 specifies a maximum variation in adjacent treads of 3/16" and Section 7.2.2.3.6.2 specifies a maximum variation between largest and smallest riser of 3/8". 5. The drawing plan shows a 3" distance between the centerline of the handrail and the edge of mobile office. This provides a 2.05" clearance. NFPA 101-18 Section 7.2.2.4.5.5 specifies a clearance of not less than 2 1/4" between the handrail and the wall. 6. NFPA 101-18 Section 7.1.8 requires guards be installed where landings exceed 30" above the floor or finished ground level below. NFPA 101-18 Section 7.2.2.4.6.3 requires guards such that a sphere 4" in diameter is not able to pass through any opening. The platform is shown as 36" above grade and the guard has greater than a 4" wide openings. The stairway above 30" does not show a guard with maximum of 4" openings. 7. The drawings show a centerline distance between handrails of 36". NFPA 101-18 Table 7.2.2.2.1.1(b) specifies the minimum width clear of all obstructions to be 36" for existing stairs and Table 7.2.2.2.1.2(B) specifies 44" for new stairs. 8. NFPA 101-18 Section 7.2.2.3.3.1 states that treads and landings shall be solid without perforations unless otherwise permitted. The drawing has gaps between the landing elements and tread elements.
7/31/2018	WRPS-PER-2018-1984	Review of TFC-ENG-FACSUP-C-26	During performance of MOP#WRPS-MOP-2018-2316, it was identified that TFC-ENG-FACSUP-C-26, Rev B-6, requires a waste leak path screening for each transfer even if and existing technical evaluation specifically bounds the activity (Section 4.2, #3.a.). In cases where a technical evaluation was written to specifically bound a waste transfer (e.g., 219-S to 241-SY-101, not global waste leak path evaluation) performing a separate screening provides little value.
7/31/2018	WRPS-PER-2018-1965	Missed weekly function test of APM	Contrary to the requirements of HNF 5183, Article 551.5.d, weekly performance testing of automated personnel monitors (ARGOS 5A/B) at 222-S Laboratory in accordance with 3-RM-829 (weekly) were last performed on 7/17/2018. Facility Operations determined that this work would take place on overtime during the week of 7/23, due to resource availability and priorities, and then failed to follow through ensuring that the work was completed.

7/31/2018	WRPS-PER-2018-1852	QA Surveillance of Gibbs Energy Minimization Calculator (GCALC)	TFC-BSM-IRM_HS-C-03, Rev. E, provides the requirements for the software life cycle deliverables. The GCALC SMP included these items, but contains multiple sections that could use clarification to ensure adequate implementation from the governing procedure requirements flow-down to the SMP for the following areas: A. Software Management Planning B. Software Requirements Identification C. Software Design and Implementation D. Testing Phase and Acceptance Testing E. Problem Reporting and Corrective Actions
7/31/2018	WRPS-PER-2018-1986	RBA for dose posted in 3B at 222-S	During the performance of S-W066, dose rates in excess of 50 micro-rem/hr were identified in room 3B of 222-S Laboratory. The room has an occupancy factor of 1 and a limit of 50 micro-rem/hr to ensure unmonitored personnel do not receive greater than 100 mrem/year.
7/31/2018	WRPS-PER-2018-1988	WRPS RPP Requires Updating	The WRPS RPP (HNF-MP-5184) includes DOE activities performed by Advanced Technologies and Laboratories International, Inc. (ATL), which is no longer applicable.

7/31/2018	WRPS-PER-2018-1989	MOP system hidden/lost data	While finalizing my MOP, a warning popped up that there was data in a hidden field that would be lost if I continued. I tried searching for this hidden field but could not find it. The pop up gave no hint as to the data or the field.
7/31/2018	WRPS-PER-2018-1990	s-complex down posting inconsistencies	An employee in the (b)(6) group contacted me with concerns dealing with ongoing activities at S-Farm and down posting of radiological areas without approved down posting plans and t-posts left in place. Also the (b)(6) group was not informed of changes. One area these T-posts are still installed where a designated parking area now is and personnel vehicles and trailers are in close proximity pictures attached.
7/31/2018	WRPS-PER-2018-1575	Hilti Undercut Issue	On 2/28/18, AX Construction sent a photo of an installed HDA-TR-M12 (H-14-110043, Item 44) undercut anchor to Hilti and requested guidance on determining if the installation was correct. The anchors are used to attach pipe support bases to the "big" concrete blocks shown on H-14-11034, Sheet 7 (Supports 2, 3, 4, 5, & 6). Hilti identified that one of the vendor markings that is used to verify proper installation was not present on the anchor. Construction sent Hilti a sample of the anchors for evaluation to determine if the product was defective or not. Hilti blocked any further sales of the product pending the evaluation. Hilti's **Engineering team evaluated the anchors and determined that the marking was incorrect and additional measurements were required to verify that the anchor was set properly.** On 5/7/18, Hilti responded with a bulleted list of items/inspections to ensure proper installation. One of the inspections was a measurement on the anchor from the top of the sleeve to the top of the bolt. If the criteria could be met, the installation could be considered satisfactory. WRPS Engineering decided **that a sample anchor from each footing would be verified against the new Hilti criteria and if inspections came back satisfactory, the anchor installation could be considered acceptable.**

7/31/2018	WRPS-PER-2018-1991	Identification of legacy error in tank farms and 242-A Evaporator DSAs (not impactful)	Associated MOP documents evaluations of the three informal questions/requests. The first question is documented in this PER the other two questions/requests are on an unrelated topic and will be documented in another PER. An email question reads as follows: DSA Section 3.3.1.5.4 says "another requirement for SAC designation is that the AC was selected when an SSC was available..." Should that say "was not available?" Evaluation: Both the tank farms and the 242-A Evaporator DSAs contain this statement. This statement was introduced into the tank farms DSA in Revision 4, which was released on March 28, 2010 and was subsequently introduced into the 242-A Evaporator DSA in Revision 4, which was released on January 29, 2014. This text should actually read: "another requirement for SAC designation is that the AC was selected when an SSC was not available or could not have been designed and installed to perform the credited safety function...." This legacy error is not consequential because SACs have been implemented in accordance with DOE-STD-1186-2004, "Specific Administrative Controls" as evidenced by the fact that procedure TFC-ENG-DESIGN-C-47 requires documentation in the control decision meeting memo: "Where a SAC is selected, include the basis for selecting the AC over any available SSCs." Thus, SACs have been implemented as if the two missing "nots" were included in the DSA text.
7/31/2018	WRPS-PER-2018-1992	Identification of correction and enhancement to RPP-27195	Associated MOP documents evaluations of the three informal questions/requests. The first question is documented in WRPS- PER-2018-1991. The other two questions/requests are on an unrelated topic and are documented in this PER. Verbal communication indicates that: HNF-EP-0182, "Waste Tank Summary Report," is listed in RPP-27195 as a document that is outside of the USQ process. However, HNF-EP-0182 is cited in Chapter 9 of the tank farms DSA . Evaluation: Verified that this condition does exist and being referenced in the DSA excludes HNF-EP-0182 from inclusion in RPP-27195. It appears that HNF-EP-0182 was added to RPP-27195 in Revision 3 which was released on October 10, 2013. However, HNF-EP-0182 was cited in the tank farms DSA at that time (it was even cited in Revision 3 of the tank farms DSA, which was released in 2009). An email indicates that: WRPS recently assumed ownership of the 622-S Field Lysimeter Test Facility. This non-rad facility is not described in the tank farms DSA or listed in RPP-27195. Given that maintenance and renovation are scheduled for this facility in the future it would be beneficial to have it listed in RPP-27195 (and to perhaps add a brief description of the facility to the tank farms DSA). Evaluation: This request represents a valid enhancement that will be addressed.
8/1/2018	WRPS-PER-2018-1993	Back fill at Bottom of Stair Cases at MO 564	Soil has Eroded at the Bottom of Both Staircases due to Constant Foot Traffic.

8/1/2018	WRPS-PER-2018-1994	Review of Corrective Maintenance Backlog	This MOP is a follow-up to WRPS-MOP-2018-1196. In the previous MOP I reviewed the corrective maintenance logs for the various teams, looking for older work packages that could be closed and/or work package prioritization. For several of the teams work packages were prioritized at what was perceived to be a higher level than the guidance provided in TFC-OPS-MAINT-C-01 (i.e. A work order prioritized as "Urgent" open for 240 days, when Urgent means Requires immediate action to: * Prevent imminent danger to personnel, property, or the environment; * Prevent a significant breach in security; * It is worked without delay or interruption until the condition is stabilized. From the previous MOP, the following PERs were generated: WRPS-PER-2018-1037, -1038, -1039, -1040, & -1041. All of these PERs are statused as Closed in the PER system. The first activity was to print out the current corrective maintenance backlogs for each team. The reports reviewed were dated 7/9/18. The following facilities/teams had corrective maintenance items (meaning they are >180 days old) with priority levels of High, Rapid or Urgent: ETF, Labs & AZ. The Labs did not have any items in their CM backlog during the review conducted in April. I then pulled the associated PERs generated from the April review for ETF and AZ Teams (PERs 18-1037 & 18-1041, respectively). PER 18-1037 states the corrective action was to be completed by 6/22/18 with the action for "Operations, Work Week and/or Maintenance Manager to review the current CM Backlog to ensure the work orders are properly prioritized." The deliverable is to "Document the CM work orders reviewed, the results of the review, and any additional actions required as a result of the review." I sent an email to the Work Week Manager (Assigned the action for the PER) and Operations Manager on 7/25/18, requesting they explain what actions were done to close the PER and how the priorities of the items in the current CM backlog are consistent with the guidance from TFC-OPS-MAINT-C-01. To date I have only received a note back stating they will look into it. For the CM Backlog dated 7/9/18 at ETF, 10 of the 21 total items are prioritized as "High" or "Rapid". Similar to the concern identified in PER 18-1037, it appears the priority guidance contained in TFC-OPS-MAINT-C-01 is not being followed. The Work Orders of concern are: 261679 - High - 695 days old, 291831 - High - 515 days old, 293265 - High - 493 days old, 297738 - High - 436 days old, 312462 - High - 368 days old, 324713 - High - 341 days old, 376361 - Rapid - 228 days old, 377432 - High - 212 days old, 377433 - High - 212 days old, and 378673 - High - 205 days old.
8/1/2018	WRPS-PER-2018-1995	Review of CM Backlog	This MOP is a follow-up to WRPS-MOP-2018-1196. In the previous MOP I reviewed the corrective maintenance logs for the various teams, looking for older work packages that could be closed and/or work package prioritization. For several of the teams work packages were prioritized at what was perceived to be a higher level than the guidance provided in TFC-OPS-MAINT-C-01 (i.e. A work order prioritized as "Urgent" open for 240 days, when Urgent means Requires immediate action to:*Prevent imminent danger to personnel, property, or the environment; *Prevent a significant breach in security; *It is worked without delay or interruption until the condition is stabilized.From the previous MOP, the following PERs were generated: WRPS-PER-2018-1037, -1038, -1039, -1040, & -1041. All of these PERs are statused as Closed in the PER system.The first activity was to print out the current corrective maintenance backlogs for each team. The reports reviewed were dated 7/9/18. The following facilities/teams had corrective maintenance items (meaning they are >180 days old) with priority levels of High, Rapid or Urgent: ETF, Labs & AZ. The Labs did not have any items in their CM backlog during the review conducted in April.I then pulled the associated PERs generated from the April review for ETF and AZ Teams (PERs 18-1037 & 18-1041, respectively). PER 18-1041 states "The AZ Team CM Backlog has been addressed and a message attached showing the current status of all that were on the list given. The CM with the higher priority has been Ops Accepted as Field Work Complete. The others have been addressed as well. No further actions are necessary as AZ Team is making strides in shrinking the backlog of CM's." In reading the email attached to the PER, the status of each work order is provided, but I could not find any reference to the prioritization. The current CM backlog for AZ team has 9 items, 2 of which are prioritized as High (205404 - 887 days old & 223738 - 774 days old). Again, the prioritization and age of each work order does not seem consistent with the guidance contained in TFC-OPS-MAINT-C-01.
8/1/2018	WRPS-PER-2018-1996	Review of CM Backlog	This MOP is a follow-up to WRPS-MOP-2018-1196. In the previous MOP I reviewed the corrective maintenance logs for the various teams, looking for older work packages that could be closed and/or work package prioritization. For several of the teams work packages were prioritized at what was perceived to be a higher level than the guidance provided in TFC-OPS-MAINT-C-01 (i.e. A work order prioritized as "Urgent" open for 240 days, when Urgent means Requires immediate action to:*Prevent imminent danger to personnel, property, or the environment; *Prevent a significant breach in security; *It is worked without delay or interruption until the condition is stabilized.From the previous MOP, the following PERs were generated: WRPS-PER-2018-1037, -1038, -1039, -1040, & -1041. All of these PERs are statused as Closed in the PER system.The first activity was to print out the current corrective maintenance backlogs for each team. The reports reviewed were dated 7/9/18. The following facilities/teams had corrective maintenance items (meaning they are >180 days old) with priority levels of High, Rapid or Urgent: ETF, Labs & AZ. The Labs did not have any items in their CM backlog during the review conducted in April.I then pulled the associated PERs generated from the April review for ETF and AZ Teams (PERs 18-1037 & 18-1041, respectively). At the 222-S Labs, there were not any items prioritized as Urgent, Rapid or High in April, so there was no associated PER. However, for their backlog in July there are a total of 27 work orders, 2 of which are prioritized as High (326361 - 333 days old & 374979 - 236 days old). Both have the status of "In Planning." The age and prioritization of these packages does not seem consistent with the guidance in TFC-OPS-MAINT-C-01.

8/1/2018	WRPS-PER-2018-1987	LERF basin 42 contaminated waste clean up improvements	During Basin 42 cover removal activities, higher levels of contamination were encountered than expected. Several methods were instituted during the three or four week process to control this, and provide decon to the liner as the cover was removed. During the weekend of 7/28-29 final removal activities were performed. Once the final piece of cover was removed, the remaining water and sludge in the sump was left to be removed. Several attempts were made to pump the water from the pit without success. The amount of sludge in the water did not allow the filter skid to operate for more than 15 to 20 minutes. With this amount of time required to remove a small amount of water, the team needed a better alternative method.
8/1/2018	WRPS-PER-2018-1985	Loss of K1 ventilation at 242-A	During the fire alarm panel replacement work at 242-A, Electrician removed wires associated with a installed jumper for a 24 volt system relay controlling the K1 Ventilation.
8/1/2018	WRPS-PER-2018-1997	Editorial Discrepancies found on TAF LEF-18-036	During the installation of LEF-18-036 the following was found. Valve 60H-076 required position per TAF Block 23 was CLOSED, field indication of the valve is CLOSE. Air isolation valve for AOV-60H-048 was listed on TAF as V-AOV-60H-048-A, labeled in field as V-AOV60H048-A. Air isolation valve for AOV-60C-044 was listed on TAF as V-AOV-60C-044-A, labeled in field as V-AOV60C044-A. The air isolation valves to the AOV's are not shown on P&ID's.

8/1/2018	WRPS-PER-2018-1998	Emergency Event Descriptions	EP-PE 6.3 Emergency Response Organization (ERO) On July 25th, 2018 Emergency Preparedness conducted Field Drill to provide the 2425 STVCN Facility Emergency Response Organization (FERO) members and building occupants the opportunity to demonstrate safety and security awareness utilizing the proper response to a potential explosive device during a building evacuation due to a fire alarm. During the course of the drill, the evaluation team identified the following Suggestion pertaining to EP Program Element 6 Emergency Response Organizations: •During the drill the building fire alarm and a "bomb prop" were utilized to demonstrate the ability to safely evacuate the facility, complete accountability, and communicate unusual conditions or identify witnesses to potential cause of the event. During the drill occupants, as well as PAAs observed the "suspicious object" (bomb prop); however with the description of the "bomb" being passed up the chain, the description of the object changed and didn't convey that the item was a confirmed "bomb" prop which resulted in the Central Shift Manager to complete a limited notification up the chain of command.
8/1/2018	WRPS-PER-2018-1999	Lack of proper pilot/escort of a Genie Lift across site	At approximately 1600 on 19 July 2018 a "Controlled" 80 Foot Genie Man Lift was observed on RT. 3 traveling in the Eastbound direction being operated improperly with the boom rotated to the operators right out past the "Fog Line" and without adequate pilot/escort (one AEI Van with only emergency flasher operating). This appears to be in violation of TFC-ESHQ-STD-S-02 Attachment A. This type of equipment is normally transported on a flat bed truck vice driven down the road. In addition FMCSR's DOT interpretation 390.5 Question 7 states: "Off-road motorized construction equipment is outside the scope of these definitions: (1) When operated at construction sites: and (2) when operated on a public road open to unrestricted public travel, provided the equipment is not used in furtherance of a transportation purpose. Occasionally driving such equipment on a public road to reach or leave a construction site does not amount to furtherance of a transportation purpose. Since construction equipment is not designed to operate in traffic, it should be accompanied by escort vehicles or in some other way separated from the public traffic. This equipment may also be subject to State or local permit requirements with regard to escort vehicles, special markings, time of day, day of the week, and/or the specific route."
8/1/2018	WRPS-PER-2018-2000	Non-conforming welds related to the Extended Reach Sluice Systems (ERSS) procured under PO 58195 and 61762	In the current weld submittals associated to PO 61762 for the ERSS Sluicers fabricated for AX Farm it has been noted that there are several welds that would require qualification testing to be code compliant such as preheating requirements that don't meet code, weld procedures that don't cover the types of welds being performed, and weld sizing that does not meet code requirements. It has also been determined that the ERSS sluicers procured under the previous PO 51895 will have the same issues. These conditions have rendered all of the received ERSS sluicers procured under PO 58195 and 61762 quality indeterminate. The ERSS sluicers affected are listed below by PO number, serial number and there respective status. ERSS sluicers already received and green tagged under PO 58195: M-1451-15A, M-1451-15B, M-1451-15C, M-1451-15D, M-1451-15E, M-1451-15F ERSS sluicers already received and green tagged under PO 61762: M-1490-16A, M-1490-16B, M-1490-16C

8/1/2018	WRPS-PER-2018-2003	Labeling Issues	While receiving OJT/OJE training for the 702AY Decon Facility this afternoon, I found that there is a labeling issue/concern. It is required to have the make-up air vent opened prior to turning on the fan switch. It calls out that the fan switch numbers are LS-8 or LS-10. There are no such switches. The switches are labeled POR292-EMER-MS-110 and POR292-EMER-MS-111. So, it is not known what switches to operate.
8/1/2018	WRPS-PER-2018-2004	Finger Rings worn but not issued in ACES	Two sets of finger rings were found to be worn but were not issued in ACES. The finger rings could not be linked to the workers who wore them. This creates difficulties assigning dose. This has been a repeat quarterly occurrence with in the Tank farm projects.
8/1/2018	WRPS-PER-2018-2005	Legacy Contaminati on Outside U-Farm	At approximately 8:30am this morning, while performing the monthly routine perimeter survey of U-Farm, (3) small spots of contamination were identified on the South fence line and (1) small spot of contamination was identified on the East fence line. All of the spots appeared to be tumbleweed fragments and the results were as follows: (3) Spots on South Fence Line: * 20,000dpm/100cm2 of Beta Gamma Contamination * 20,000dpm/100cm2 of Beta Gamma Contamination * 10,000dpm/100cm2 of Beta Gamma Contamination (1) Spot on East Fence Line: * 60,000dpm/100cm2 of Beta Gamma Contamination No alpha contamination was identified on any of the spots, and all the readings were direct readings with the dirt/tumbleweed mixture on the ground.

8/1/2018	WRPS-PER-2018-2006	Contaminated Bird Feces	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird feces was discovered inside Surge Berm. Total Contamination of; 10,370 dpm/100 cm2 Beta-Gamma and 49 dpm/100 cm2 Alpha. Survey results are documented in Survey Simple on survey # LE-1801518.
8/1/2018	WRPS-PER-2018-2007	Contaminated Bird Feces	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird feces was discovered on the ground outside the east Truck Bay rollup door. Total Contamination of; 58,540 dpm/100 cm2 Beta-Gamma and less than Det dpm/100 cm2 Alpha. Survey results are documented in Survey Simple on survey # LE-1801538.
8/1/2018	WRPS-PER-2018-2008	AW-101 Daily Surface Level Readings not taken ENRAF out of service	AW101-WST-LIT-106 was reported by ER-1 operator to the CSM as displaying a FL code.

8/1/2018	WRPS-PER-2018-2009	AX-change trailer stop work	A stop work was implemented by worker on the use of AX tent as a cool down area when AX tent ambient temperature is greater than 85 degrees Fahrenheit. Concern is with the tent controls not being adequate to maintain internal temperature to be designated as cool down area and providing necessary relief.
8/2/2018	WRPS-PER-2018-2010	The equation used to calculate the Shallow Dose component for lost dosimetry over-estimates the value.	In TFC-ESHQ-RP_DOS-P-10 Attachment A (and repeated in form A-6006-773 instructions) the equation to calculate shallow dose is "Shallow = Hp(0.07) + Neutron + Deep". This equation is most often used with supplemental dosimetry such as the Thermo EPD and displayed in ACES. However, the Hp(0.07) value recorded by the EPD already includes the Hp(10) dose, aka deep dose. This error was made more difficult to discover because the display nomenclature in ACES promotes misunderstanding: Hp(10) is labelled WB and Hp(0.07) is labelled EXT. The equation in DOS-P-10 would over-estimate the shallow dose by a quantity equal to the deep dose. This over-estimated value would be entered into the employee's dosimetry record, however the employee does not actually receive the physical dose. The error is strictly conservative in nature. The only anticipated impact from this is that, if the employee approached a dose limit, they might be temporarily restricted from radiological work, when in fact, some quantity of available dose still remained.
8/2/2018	WRPS-PER-2018-1983	Contamination Discovered Outside of a Posted CA Boundary (in RBA)	A HPT was performing the daily routine (WTP-D007) CA boundary survey around the LERF Basin #42 perimeter when contamination was discovered on the concrete perimeter. The HPT noticed a trail of dots on the concrete that appeared to be a liquid substance. The contamination was discovered on the east side of the basin, around the mid-point near MO-727. The following contamination levels were detected: Highest Readings: Contamination Measurements-Direct Readings: 50,000 dpm/100 cm^2 Beta/Gamma 98 dpm/100 cm^2 Alpha Removable (Smearable): 5,000 dpm/100 cm^2 Beta/Gamma 98 dpm/100 cm^2 Alpha The highest contamination readings were found in one spot (one end of the "drip line"), while the rest of the line was 8,000 dpm/100cm^2 direct beta/gamma and 42 dpm/100cm^2 direct alpha and no smearable beta/gamma or alpha. Once contamination was found, notifications were made to management, ETF shift office, and the CSM. The area was posted and the surround areas were surveyed. No other contamination was identified. Upon further investigation, it was discovered that the likely source of the contamination was from the 7/29 filter change outs when workers transported a waste bag with the old filters from the NE corner of LERF Basin 42 to the SE corner CA around the waste containers. The bag was removed from the CA with the filter banks on the NE corner of Basin 42 and transported through the RBA on the east side of the basin, until it reached it's final destination in the CA on the SE corner of the basin. The bag was outside of the CA when it likely leaked some of the contaminated filter sediment in transit. The line of contamination was approximately 5' x 15' and was near the east edge of the concrete pad. The spots were approximately 1/4" in diameter. The extent of condition survey identified no other contamination in the surrounding area.

8/2/2018	WRPS-PER-2018-2012	3 cut lines coming off power line lying on the ground (perhaps communications lines)	Observed 3 lines that maybe communications lines coming off the power pole on the northwest corner of A farm. This is not normal and even of de-energized or communications lines the wind can whip them around. (see attached pics)
8/2/2018	WRPS-PER-2018-2011	Radeco Air Sampler rotometer 8995 Out Of Tolerance outside +-15% of conventionally true value CTV	Radeco air sampler rotometer was found Out Of Tolerance (OOT), outside +-15%, during a routine calibration.
8/2/2018	WRPS-PER-2018-2017	Non-conforming welds related to the Extended Reach Sluice Systems (ERSS) procured under TO 56230	In the current weld submittals associated to PO 61762 for the ERSS Sluicers fabricated for AX Farm it has been noted that there are several welds that would require qualification testing to be code compliant such as preheating requirements that don't meet code, weld procedures that don't cover the types of welds being performed, and weld sizing that does not meet code requirements. It has also been determined that the ERSS sluicers procured under the previous TO 56230 for AY-102 will have the same issues. These conditions have rendered all of the received ERSS sluicers procured under TO 56230 as quality indeterminate. The ERSS sluicers affected are listed below by PO number, serial number and there respective status. ERSS sluicers already received and green tagged under TO 56230 and installed into AY-102. M-1423-14A, M-1423-14C, M-1423-14D, M-1423-14E ERSS Sluicer already received and green tagged under TO 56230 at 2101M warehouse in storage as a spare. M-1423-14B

8/2/2018	WRPS-PER-2018-2018	Heat stress controls not implemented.	During visit to AW cool down tent today and discussion with support personnel assigned there the following was identified. The tent ambient temperature read Monday from thermometer was quoted as being >90 degrees Fahrenheit. The two portable A/C units inside tent, condensate pans are not being maintained shutting down these units. Me and the lead HAMTC Safety Rep observed the exterior door open and remained open for extended period of time even after personnel exited. Concern was identified with the canvas tarping over tent being gone and workers stated they informed management months ago as it had deteriorated and blew off during winter or spring timeframe but never reinstalled prior to using this summer. Feedback to workers was it would require a JLG. These cooling/shade structures are included under 4.1 Preparing For Heat Stress Conditions long lead time controls and should have been installed prior to use. Also 4.5 Applying Heat Stress Control Strategies states work may not proceed if required controls are not in place or functioning. Just being involved with the AX cool down tent stop work there seems to be lack of consistency and communications across the projects as that tent had implemented improvement actions over the last year or two with spring loaded door hinges, additional shading tarps over tent, use of mister units etc.
8/2/2018	WRPS-PER-2018-2013	damaged FCA paint	Fixed contamination Area E-06-035 on 241-AN-01A cover block is damaged, paint is peeling.
8/2/2018	WRPS-PER-2018-2014	Fixed Contamination Area peeling paint	FCA W-30-002 at 241-T farm cement pad has peeling paint.

8/2/2018	WRPS-PER-2018-2015	WIDS UPR-600-20/600-284-PL	New growth vegetation and Insect intrusion on WIDS site UPR-600-20/600-284 Cross Site Transfer line.
8/2/2018	WRPS-PER-2018-2001	Peeling Paint on FCA	FCA found with peeling paint at FCA# E-95-063 220-A Sampler Pit, 200 East area.
8/2/2018	WRPS-PER-2018-2002	Peeling paint on FCA CS-29-001	Discovered peeling paint on FCA# CS-29-001 at 2102HV material management pad.

8/4/2018	WRPS-PER-2018-2021	Employee sustains injury after a fall	An employee sustained an injury while using an "elevated" chair.
8/5/2018	WRPS-PER-2018-2022	Sticking of FV-EC3-1	During our valve exercising activity, we found that FV-EC3-1 sticks in the "Closed" position.
8/6/2018	WRPS-PER-2018-2023	Missing or Incorrect Tamper Seals/Labels on Equipment	While conducting routine surveillances throughout 200E/W the power operator (SOE) discovered a number of missing labels or incorrectly labeled valves/equipment. Also there are tamper seals missing on specific pieces of equipment. The following equipment has missing labels: AW272-POT-PI-101 2750E Fire Protection Alarm Line Valve 616 Fire Protection Alarm Line Valve The following equipment has broken tamper seals that need to be replaced: 2750E/Fire Protection/RM AR-114 241-AZ-701 Room #101Tamper Seal 218A Fire System 241-AZ-702 Rm #107 272 AW Fire System

8/6/2018	WRPS-PER-2018-2024	Generator Maintenance Lag Time	There are many generator maintenance issued tracked on the power operator (SOE) RATLs than have not been resolved. This PER is to capture all identify generator issues. TX-Portable generator: Maint Light On UT Generator -Leaking fluid into the drip pan AW 217 Generator - Generator shut down due to no coolant
8/6/2018	WRPS-PER-2018-2025	Power Operator Equipment not function correctly	This PER is to capture all misc equipment on the power operator rounds that is not function correctly. AZ: Safety Shower 006 - Leaking Roof AZ: PDI-702K2-2 AZ: 241-AZ-702 Building Exhaust Fan: fan auto switched from A to B AZ: 217 Tanker Tent above temperature range AZ: 241AZ-702, Room 107 Backflow preventer leaks
8/6/2018	WRPS-PER-2018-2026	Unplanned Shutdown of 242-A Exhauster 296-A-21A	242-A Shift Office reported an unplanned shutdown of the K1 Building Exhauster (296-A-21A).

8/6/2018	WRPS-PER-2018-2029	Pumping of Basin 42 leachate system	On 8/3/18 the ETF SOM noted that the LERF Basin 42 leachate level was approaching the upper end of the normal range, which typically prompts Operations to manually operate the leachate pumping system. However since construction was actively working in Basin 42 the SOM thought best to wait until the construction crew was not working in the basin so he turned over to night shift to perform the pumping. This pumping evolution was discussed with the construction FWS, but the level of detail on how the pumping system works was not well understood by the FWS. On the morning of 8/4/18 the night shift SOM told the construction FWS that the leachate had been pumped, and to expect some liquid in the basin. The pumping of liquid back into the basin, without taking prior mitigation actions, impacted the project.
8/6/2018	WRPS-PER-2018-2030	Leachate water pumped into basin 42-Stop work	Stop work was initiated on the Basin 42 liner removal and replacement work(WO#384046) due to water being transferred from the basin 42 leachate system to the work place where the liner cover has been removed. This pumping activity occurred 8/4/18 prior to the start of work Saturday the 5th of Aug. 2018. The concern is that without documented controls the pumping may have occurred with workers in the basin or produced other hazards(i.e. Electrical equipment left in place and could have the potential of being in the water. Also, radioactive water contaminating previously decontaminated areas). The work scope is under the construction and projects group and this transfer is a configuration change to the work place from it's original hazard evaluation for work.
8/6/2018	WRPS-PER-2018-2031	Removal of Environmental Requirements from IH Procedures	IH Technical Procedures TF-OPS-IHT-009 containing Environmental requirements and processes. This PER documents the root of the issue in PER 2018-1048, and will be closed when actions within this PER are completed.

8/6/2018	WRPS-PER-2018-2032	CA Boundary Reconfigured	Stanchions marking CA boundary between Basin 43 & 44 are being moved. Removable contamination has been found in this area up to sidewalk. In order to set up boundaries stanchions must be placed on sidewalk so rope will line up with sidewalk edge. Several times stanchions are pushed off sidewalk or completely moved into CA.
8/7/2018	WRPS-PER-2018-2028	Long length load shifting during transportation	Four 40' long pipe spools with a three foot elbow were placed on a flatbed trailer for mobilization to another laydown area to pick up more spool pieces for mobilization into AX-Farm. During transportation the middle tie down strap came loose. After the strap came loose the front and middle pipe support shifted off of the bed of the trailer. The Teamster immediately pulled over and made notifications.
8/7/2018	WRPS-PER-2018-2016	Personal clothing contamination during AY-102 light install at riser 69.	241-AY-102 riser 69 was being prepared for a light installation. Work consisted of removing the remnants of plastic sleeve inside the riser top hat. Before completing the work, the employee performing the hand-on work received an low-air alarm on their SCBA bottle and retired to the change trailer for a replacement bottle. Once there contamination was found on the employee's mask, SCBA harness and protective clothing. After removing the protective clothing, detectable contamination was found on the employee's personal clothing consisting of tee shirt and gym shorts. All contaminated clothing was removed and employee was surveyed and released. No skin contamination was detected.

8/7/2018	WRPS-PER-2018-2033	Inspection Camera Discovered With Isolated Contamination on Lens Edge	While performing pre-job surveys for AZ-102 Pit Video inspection a contaminated camera was discovered. First smear was 8,000 dpm/100cm2 B/Y, no alpha. Operators decontaminated the camera lens and the next smear was 200,000 dpm/100cm2 B/Y, no alpha. The final smear was 10,000 dpm/100cm2 B/Y, no alpha. Due to the size and location of the smear, the area was not considered "General Area". The area of concern was a small isolated lip between the camera lens and the frame. The smears and decon were performed over a bag. All work was performed in the AZ farm which is posted as a Contaminated Area.
8/7/2018	WRPS-PER-2018-2034	INEFFECTIVE RADIOLOGICAL EVENT SCENE SETUP	During an assessment a review of the PER system indicated that there are some issues with the proper establishment, from a RadCon perspective, of the event scene during emergency preparedness activities.
8/7/2018	WRPS-PER-2018-2019	Spare P-8-1 Pump Casing Misplaced for 29 Years	After the 242-A evaporator recirculation pump P-8-1 failed in June, the procurement specification from 1987 for upgraded pumps was reviewed. The specification referred to a spare pump casing to be supplied to the pump manufacturer to be used in testing the new, upgraded pumps. Procurement documents confirmed that the casing was sent. The casing was to be returned to the buyer. A database search did not find any reference to the pump casing.

8/7/2018	WRPS-PER-2018-2036	Black residue on face from FFAPR usage	5 of 9 AEI craft employees exited A-farm gate and had black residue on their faces in the nasal area after doffing full face APR's. Scott combo cartridges were used. The work was being performed using an approved ARPA for A-farm exhauster slab install. This issue was experienced in SY farm about a few months ago as well (WRPS-PER-2018-1275).
8/7/2018	WRPS-PER-2018-2020	Cryogenic bottle handling PPE requirements.	(b)(6) was exposed to liquid nitrogen while performing bottle change out. (b)(6) was not wearing gloves.
8/7/2018	WRPS-PER-2018-2037	WTP has no controls to prevent effluent discharge from exceeding the maximum temperature rating of the TOC "J" line (100 F)	**WTP NLD (Non-Radioactive Liquid Waste Disposal System) discharge, which includes blow down water from steam boilers, is configured to transfer NLD from two (redundant) air stripper towers to the ETF TEDF transfer piping using associated discharge pumps (NLD-PMP-43A/B); see attached illustration.** Temperature of the NLD is monitored in the tank portion of the air strippers, and will provide an alarm to WTP at 95F or higher. The existing high temperature alarm is not configured to shut down the discharge pump. Rather, the current abnormal response procedure (24590-BOF-NLD-ARP-001) calls for continued operation of the discharge pump to reduce the level in the air stripper tower. The ARP lists High NLD storage tank temperature and High ambient temperatures as possible causes. Monitoring of a potential event may be further complicated as temperature monitoring instrumentation is not configured to report **temperatures higher than 100F (temperatures above 100F will only indicate 100F), limiting information which could be collected for evaluation.** There is no documented objective evidence that NLD discharge will not exceed the maximum temperature rating of the TOC "J" line (100 F per W-519-PI; Performance Specification Liquid Effluent Transfer System; PIPE CODE P-1); ETF has no capability to monitor the temperature of the effluent stream at the interface **with the WTP NLD system; and WTP instruments do not monitor/record NLD effluent temperature greater than 100F.** **WTP NLD related temperature information:** **100F NLD discharge maximum temperature indication (24590-BOF-JDX-NLD-00001; TI-8317/8319 Max R);** **at temperatures above 100F, temperature indication remains at 100F.** **100F Pipe Design temp limit (24590-BOF-M6WX-NLD-00002001)** **100F Discharge temp limit (ICD-5)** **95F High temp alarm (24590-BOF-NLD-ARP-0001); Stripper Blower stops, NLD-PMP-20A/B stop,** **Stripper level control transfers to manual. The ARP directs continued P-43 operation** **(transferring to TEDF) to reduce air stripper tower level.** **75F Pipe Maximum temp (24590-BOF-M6WX-NLD-00002001)** **60F Pipe Normal temp (24590-BOF-M6WX-NLD-00002001)** **60F nominal fluid temperature is assumed to be 60°F... (24590-BOF-M6C-NLD-00001; 6.1.4)**

8/7/2018	WRPS-PER-2018-2027	Notification of AP Exhauster VOC Sample Hold Time Exceedance.	This nosification follows up on phone messages from 7/26/2018. WRPS advises Washington State Department of Ecology that condition 3.2 of Approval Order DE11NWP-001, R4, dated 3/3/2016, was not met during the 2nd quarter of calendar year 2018. The condition requires that AP tank farm exhauster VOC emissions be assessed quarterly. The condition was not met due to an expired holding time for the sample.
8/7/2018	WRPS-PER-2018-2039	PC-5000 line encasement purge air not configured per TO-640-140	On 7/18/18 PC-5000 purge air was turned on. On 8/7/18 242-A was requested to secure the purge air to support an ETF work activity, per procedure the 242-A SM requested ETF to perform steps 4.2.2 which included performing a valve lineup and removing a downstream pipe cap. (If the system was configured correctly these steps would have been just verified and not actually performed). When the NCO performed step 4.2.2.2 to remove a pipe cap it shot off the vertical piping leg.
8/8/2018	WRPS-PER-2018-2041	AY102-WSTA-LDT-151 FR Code	AY102-WSTA-LDT-151 was not communicating with TMACS and when field reading was taken the ENRAF has an "FR" (Frozen) code.

8/8/2018	WRPS-PER-2018-2040	Forklift was refueled with wrong fuel	During the Event Investigation and Combined Apparent Cause Analysis (EIR-2018-025, PER-2018-1685) it was found that the C-Farm forklift (HO-75-04117) was refueled with diesel rather than unleaded gasoline rendering the forklift inoperable. The forklift had a red fuel cap, and did not specify what type of fuel to use. Evaluate the need for placing fuel type sticker or other indicator to prevent human error on forklift.
8/8/2018	WRPS-PER-2018-2048	Pre-Use Inspection Discrepancy	During the Event Investigation and Combined Apparent Causal Analysis (EIR-2018-025 and PER-2018-1685) it was found that the pre-use inspection checklist of forklift (HO-75-04117) has a note "Daily pre-shift inspections are an OSHA requirement. It is recommended that you document these inspections have been made." However in procedure TFC-ESHQ-S_I5-C-07, Powered Industrial Trucks (PIT). PIT operators are "Perform pre-use inspection of PIT before operating PIT. Evidence of a completed inspection will be available on the PIT or otherwise made readily available. As a minimum, evidence shall consist of a laminated or magnetic checklist filled out with a grease pencil or dry erase marker, and must contain the current date, shift, and operator initials."
8/8/2018	WRPS-PER-2018-2051	Vehicles not properly controlled as Radiologically Controlled Vehicles	Contrary to TFC-ESHQ-RP_MON-C-19, "Radiologically Controlled Vehicles" two trailer mounted cameras were introduced into a Contamination Area without being designated as Radiologically Controlled Vehicles. The two vehicles in question are WC74300 and WC74301. The vehicles were located in the A and AX Farms. It is not known how long the vehicles were in the Contamination Area or for what purpose. The available evidence (Serial Number identifiers) suggests they may have been introduced into the Contamination Area as early as 2006. The discovery was made when the Production Operations ALARA Chair was pursuing a request to issue release survey plans for the units. In the process of developing he plans he discovered that they should have been labeled and controlled as Radiologically Controlled Vehicles.

8/8/2018	WRPS-PER-2018-2052	Damaged Filter Skid LERF Basins Assembly Was Installed For Use	Recently the ETF facility provided a Filter Skid LERF assembly that had been previously damaged to support LERF Basin maintenance . It was not known by the team that the skid had been previously damaged. The damaged gauges were identified when the skid was placed in operation since the gauges were not functional. It appears that the skid was not controlled as damaged equipment when last used.
8/8/2018	WRPS-PER-2018-2035	Contaminated Bird Feces	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird feces was discovered on the top of Verification Tank A. Four spots were found with Total Contamination readings of: 112,920 dpm/100 cm2 Beta-Gamma and 63 dpm/100 cm2 Alpha 19480 dpm/100 cm2 Beta-Gamma and 49 dpm/100 cm2 Alpha 16,280 dpm/100 cm2 Beta-Gamma and 14 dpm/100 cm2 Alpha 3,300 dpm/100 cm2 Beta-Gamma and 35 dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801584
8/8/2018	WRPS-PER-2018-2050	No Controlled Work Area (CWA) Utilized	While performing routine maintenance work (GFCI Testing) in AW Farm, exposed conductors were found protruding from an electrical box with no Controlled Work Area established and/or maintained. Work Package #205516 was released and worked to install in pit heaters and to install/modify receptacle circuits for the AW Valve Pit "A", AW Valve Pit "B" and AW02A pit locations. This work scope was covered under LOTO (TAF 241AW-18-07). The LOTO installation points were upstream of the MPZ's (electrical panels) to be worked in. Multiple ECN's were utilized for this scope of work. ECN-713183 was being worked to install/modify receptacle(s) circuits at the AW02A pit location. Conductors were found protruding from an electrical box that were coming from Electrical Panel AW02A-EDS-DP-301 and were left unattended with no CWA established.

8/8/2018	WRPS-PER-2018-2046	Fixed contamination on SCBA harness at detectable levels but less than release criteria	On 8-3-2018 MSA RadCon detected 4700 dpm/100 cm sq direct beta-gamma contamination, no removable contamination, no alpha contamination, on one spot of the web harness of SCBA rack A-2100 at the Fire Station. Although 4700 dpm/100 cm sq is less than the DOE release criteria of 5000 dpm/100 cm sq, it is the policy of Hanford Contractors to control all detectable contamination, including that which is below release criteria. Prior to the MSA survey, the SCBA unit was surveyed and released by WRPS on 7-30-2018 with no detectable contamination.
8/8/2018	WRPS-PER-2018-2053	Posting deficiency and insect infestation at WIDS UPR-200-E-86	At WIDS site UPR-200-E-86 the URMA posting had been removed and there are signs of insects burrowing under the Shotcrete.
8/8/2018	WRPS-PER-2018-2054	In Process Electrical Construction at AW-Farm	New electrical construction upgrades were in process inside of AW-Farm. Wire run was not fully completed and non-hazardous electric conductors had been left unattended and visually exposed inside of a Receptacle. There were no identified LOTO boundaries located around the exposed non-hazardous wires. A WRPS Maintenance Electrician Worker was performing his routines inside of AW-Farm and noticed the non-hazardous exposed wires left unattended inside of the Receptacle Panel and issued a concern to his Superiors.

8/8/2018	WRPS-PER-2018-2055	Contaminated Bird Feces at ETF	During the performance of LE-W084: Radiation & contamination surveys of Surge Tank Berm Area. Contaminated bird feces was discovered in the Surge Tank Berm Area. Three spots were found with Total Contamination readings of: 9,310 dpm/100 cm2 Beta-Gamma and 21 dpm/100 cm2 Alpha 8,190 dpm/100 cm2 Beta-Gamma and 77 dpm/100 cm2 Alpha 110 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801582
8/9/2018	WRPS-PER-2018-2056	Document missing required approver	RPP-RPT-42119 Rev. 8 was discovered to be missing the Procurement Engineer approver required per TFC-ENG-DESIGN-C-45 section 5.0.
8/9/2018	WRPS-PER-2018-2049	In Process Electrical Construction at AW-Farm	New electrical construction upgrades were in process inside of AW-Farm. Wire run was not fully completed and non-hazardous electric conductors were left unattended and exposed inside of a Receptacle. There were no identified LOTO boundaries located around exposed non-hazardous wires. A WRPS Maintenance Electrician worker was performing his routines inside of AW-Farm and noticed the non-hazardous exposed wires left unattended inside of the Receptacle Panel and issued a concern to his Superiors.

8/9/2018	WRPS-PER-2018-2058	Industrial Hygiene samples picked up at 222-S lab on Monday-8/6/18, and Tuesday-8/7/18 were shipped to the wrong offsite lab.	Industrial Hygiene samples picked up at 222-S lab on Monday-8/6/18, and Tuesday-8/7/18, were shipped to the wrong offsite lab. Chain of custodies (COC) for the samples are attached. Sampling operations picks us samples daily at 222-S lab, transports them to their facility for packaging, and prepares paperwork needed to ship them offsite via MSA storekeepers. 222-S sample management office was contacted on Tuesday morning, 8/7/18, by one of the offsite labs used for analysis of industrial hygiene samples (ALS in Salt Lake City, UT) to report that they received a Chain of Custody but not the samples listed on the COC. Sampling operations personnel was contacted by 222-S sample custodian and it was determined they were sent to another lab by mistake (Assay Tech in Livermore, CA). Assay Tech agreed to forward the samples to ALS. Sampling Operations NCO indicated new personnel were being trained on packaging and shipping. On Thursday, 8/9/18, Assay Tech lab contacted 222-S sample management office to report they received extra samples in their shipment on Wednesday-8/8/18. Again, these should have been shipped to ALS in Salt Lake City, UT. Assay Tech agreed to forward the samples to ALS.
8/9/2018	WRPS-PER-2018-2057	Radiological Instrument Out of Tolerance Report	Radiological Instrument Out of Tolerance Report. 2360/43-93 Barcode Number SCLL8-0803/DTLLP-0894. As found measurements during calibration determined that as found Pu-239 efficiency were less than the minimum specified efficiency. PU-239 efficiency as found was 13.4% with the acceptable limit being 14%. See attached file SCLL8-803- DTLLP-0894 OOT.pdf.
8/9/2018	WRPS-PER-2018-2060	Radiological Instrument Out of Tolerance Report	Radiological Instrument Out of Tolerance Report. 2360/43-93 Barcode Number SCLL8-1063/DTLLP-0194. As found measurements during calibration determined that as found Pu-239 efficiency were less than the minimum specified efficiency. PU-239 efficiency as found was 13% with the acceptable limit being 14%. See attached file SCLL8-1063- DTLLP-0194 OOT.pdf.

8/9/2018	WRPS-PER-2018-2061	Create a surface bacterial, mold, and viral culture growth analysis program to sample skin contacted areas of all PCM's used.	Regular or per use sanitation of PCM's is not established.
8/9/2018	WRPS-PER-2018-1636	Course to Course Equivalencies Need to be Reviewed	While performing a causal analysis on implementation of the training program within Emergency Preparedness, weaknesses in the granting of course to course equivalencies were noted. While the causal analysis adequately addresses the issue within EP and provides actions for the process correction, it is known that other course to course equivalencies exist that should be reviewed for compliance.
8/9/2018	WRPS-PER-2018-2062	AP and AY Emergency Showers Filled by MSA Water and Sewer Utilities without Tank Farms Support or Procedure Use	AP and AY emergency showers were filled with potable water and shocked with sodium hypochlorite by MSA without having tank farms SOE present to operate the equipment per TO-020-031, Emergency Shower Setup, Startup, Inspection, and Shutdown.

8/9/2018	WRPS-PER-2018-2063	PPE gloves	Today I received feed back from workers in the field is there appears an issue with the surgeon gloves that are currently being purchased and on the shelves in the change trailers. There does not seem to be any XXX size and the gloves that they have rip at the cuff when you put them on. These seem to be less durable than the previous ones and can lead to possible failure in the field and a contamination event.
8/9/2018	WRPS-PER-2018-2064	TFC-PRJ-CM-C-19 Missing Step 4.1.13 Responsible Entity	During Extent of Condition analysis of Construction Fit Plan issues, noticed that TFC-PRJ-CM-C-19, REV A-4, Construction Fabrication, Inspection, and Test Plan procedure, Step 4.1.13 is missing the 'Responsible' entity for the step. The responsibility for Steps 4.1.12 and 4.1.14 are identified as "C&C Document Control." However, that does not seem appropriate for Step 4.1.13, which is currently blank. C&C Document Control probably does not complete fabrication and submit required documentation to themselves. It appears that the responsible entity for Step 4.1.13 should be "Subcontractor."
8/9/2018	WRPS-PER-2018-2066	Unexpected Sanitary Water System Spike.	While performing the TF-OR-PWR-03 SOE round at the 242-A Evaporator facility on 8/8/18, it was noted by a red circle that the PI-SW-2 (Sanitary Water Pressure) had a spike reading above the normal range. The Shift Manager at the 242-A facility notified the engineering group about the problem. The responsible engineer responded back with them also getting word that they had a particularly bad spike in the sanitary water pressure system which caused a lot of sprinklers that are on sanitary water to report flowing water.

8/12/2018	WRPS-PER-2018-2069	LCV-60E-012 Degas tank LCV would not OPEN due to desiccant build-up	MTT was taken to unexpected/unplanned mode "OPERATION" to "READY" due to LCV-60E-012 not opening causing a HI-HI alarm of Degas tank level high.
8/12/2018	WRPS-PER-2018-2070	Spill at Degas tank area due to LCV-60E-012 allowing tank to overfill	Entered ETF-AOP-85B-003 for a spill in the Degas tank area. LCV-60E-012 was full of desiccant, causing Degas tank level to overfill, water leaked from the lower flange of the Degas Blower when condensate was pulled off the Degas clear well, when the high level was noticed in the Degas tank.
8/13/2018	WRPS-PER-2018-2065	Fire in 222-S Analytical Instrument	Shortly before noon today, the Hanford Fire Department was summoned to the 222-S Laboratory in Hanford's 200-West Area after a piece of analytical equipment caught fire.

8/13/2018	WRPS-PER-2018-2067	In Pit Heater Shifts While Loading on 3-ton Truck Bed	While loading a 9-foot-long ~500lb heater onto the bed of a 3-ton p/u the load slipped on metal to metal surface causing the flange of the heater to strike a worker in the left triceps region of the arm. This caused the worker to jump from the truck bed as he was caught off balance.
8/13/2018	WRPS-PER-2018-2071	IA18-01 Purchase Card Audit Finding #1	Controls are not adequately designed to ensure segregation of duties within P-Card purchasing The P-Card administrator can pull a query of P-Card transactions where the requestor was also the purchaser. During the audit period there were 353 of these transactions. A statistical sample of 43 was selected for testing. The results are as follows: o 8 of 43 (19%) statistically selected P-Card transactions where the requestor was also the purchaser were found to be initiated, purchased and received by the same employee. These were purchases of consumable items. Therefore, we were not able to observe the items purchased.
8/13/2018	WRPS-PER-2018-2072	IA18-01 Purchasing Card Finding #2	Monthly P-Card reconciliations are not ensuring preapproval for the purchase of prohibited items with exceptions. The P-Card population for fiscal years 2016 and 2017 was searched for items that were on the prohibited items list; this produced 54 items for further evaluation. The results are as follows: o 13 of the judgmentally selected transactions tested did not have the required approval for the prohibited item exce

8/13/2018	WRPS-PER-2018-2068	Re-evaluation of closed PER's WRPS-PER-2017-0332 and WRPS-PER-2017-0333 at ORP's request.	ORP QA is in the process of performing an Assessment of certain aspects of the WRPS QA Program. As part of that assessment, the Team Leader is researching closure of past Findings identified in ORP Audit Report U-16-QAD-TANKFARM-001. A meeting was held with the ORP Assessment Team Leader and WRPS QA Management on August 7, 2018 to discuss closed PERs WRPS-PER-2017-0332 and WRPS-PER-2017-0333. After detailed discussions, it was agreed upon that WRPS would initiate an additional PER to better address the closures of the referenced PER's. As reference, both PER's addressed concerns relating "Control of Purchased Items and Services" (NQA-1 Requirement 7). PER WRPS-PER-2017-0332 was intended to address Finding U-16-QAD-TANKFARM-001-F01 and PER WRPS-PER-2017-0333 was intended to address Finding U-16-QAD-TANKFARM-001-F02 from the referenced OPR Audit Report. The previous closure actions for the referenced WRPS PER's was determined to be less than adequate. See referenced ORP Audit Report and Audit Findings for further information.
8/13/2018	WRPS-PER-2018-2076	Worker entered the CA at B farm with a sealed wound without notifying Radiological Control Personnel	On Saturday 08/11/2018, a worker had entered the B Farm complex which is posted as a CA (Contamination Area), the worker had a (b)(6) sealed with a plastic bandage, two ace bandages and a compression bandage. The worker did not contact the HPT (Health Physics Technicians) before entering the CA. It wasn't until after the worker exited the CA, when he informed the HPT's.
8/13/2018	WRPS-PER-2018-2077	Radiological Posting Deficiencies	A stanchion was found tipped over with a URMA posting attached. Attachment A -Posting Requirements: When using stanchions, ensure they are properly weighted to withstand the environmental conditions they may be subjected to and will not fail (fall over or tip) in adverse weather conditions. There are permanent t-posts adjacent to this one and another URMA posting on a stanchion that should have been used preventing this occurrence. The t-post had no signs and create additional and unnecessary hazards by themselves. This is co located next to UPR-200-E-18 and included in 200-E-131 as permanent URMA and not temporary posting as part of a work package.

8/13/2018	WRPS-PER-2018-2080	Need for Improved WRPS Performance	Finding: Proceeding in the Face of Uncertainty Prevalent in Recent Events (Priority Level 2) (Ciola, July 31, 2018) Discussion: On March 17, 2018, during a waste transfer between Double-Shell Tanks there was a small leak from a component in a physically-connected containment structure, 241-AP-102A pump pit. About 90 minutes into the transfer the leak detector came into alarm. The U.S. Department of Energy, Office of River Protection (DOE-ORP) Tank Operations Division (TOD), Facility Representative (FR) identified that the alarm response procedure, ARP-T-041-00002, was not followed. The issue was tracked in Washington River Protection Solutions LLC (WRPS) Problem Evaluation Request (PER) WRPS-PER-2018-0930 (TUF). The resolution of the PER attributes the issue to a poorly written procedure. Behaviors associated with this event are indicative of proceeding in the face of uncertainty. On June 5 and 6, 2018, testing was conducted on the PB-2 Variable Frequency Drive at 242-A. A TSR-related volume limit was unexpectedly exceeded when 20,000 gallons of water was moved to 241-AW-102. A WRPS event investigation was not conducted. The TOD investigation of the event identified failures in procedural control, work planning and proceeding in the face of uncertainty. The resultant finding is being tracked in WRPS-PER-2018-1765 (PER w/RES). On June 25, 2018, the high vibration alarm, 242-AVI-PBI -2A came in on the MCS at 242-A. The applicable Alarm Response Procedure, ARP-T-601-12, directs the shutdown of the main circulating pump PB-1 if the high vibration persists for greater than five minutes. The pump was operated for several hours beyond the ARP limits. The non-compliance persisted and the FR intervened. The pump has since been declared non-operational. WRPS-PER-2018-1634 (TUF) and WRPS-PER-2018-1651 (PER w/RES) relate. The TOD investigation into this event found issues with command and control and with proceeding in the face of uncertainty at levels above the facility operators and shift managers. 242-A facility management was also slow to follow the ARP after the issue was pointed out to them by the FR, delaying the shutdown by an additional two hours. On July 5, 2018, a failure to follow work instructions occurred while pumping liquid from LERF Basin 42. During pumping, the FR noted a significant pressure gage discrepancy that was being ignored by the crew. It was later determined that the gage was not functioning properly, consistently indicating an out-of-range high press ure, even when depressurized. There were no actions taken by the crew to correct the issue, and a PER was not submitted. ORP TOD findings 36719-TF-FOI , F02, and F03 were written to track and resolved the issues. On July 18, 2018, there was a spread of contamination outside a posted radiological contamination area at the Liquid Effluent Retention Facility Basin 42, while performing work to remove the basin cover. The work involved cutting and removing portions of the old cover, but the exposed areas were not properly contained. The improper radiological work controls and subsequent high winds resulted in the spread of contaminated particles outside of the controlled contamination area, and the particle with the highest in-field reading was measured at 500,000 dpm/100 cm2 beta/gamma. The following day, additional particles were found in the newly posted Radiological Buffer Area, and the highest in-field reading was 600,000 dpm/100 cm2 beta/gamma. The on-going conditions prompted TOD to intervene and ensure proper controls were in place prior to recommencing work. Following recommendations by the FR, the initial particle was recounted in a lower background area with a more accurate instrument and was determined to be 748,846 dpm/100cm2 beta-gamma. Conservative decision-making, rapid response and investigation of abnormal conditions are expected behaviors. DOE O 422.1, Conduct of Operations, Attachment 2, Appendix A, 2.b.(8) provides, "Operators achieve plant safety over production for normal, emergency and abnormal operations." Section 2.b.(6), requires that "Operators place safety above production, promptly respond to instrument indications, and take prompt action to investigate and correct abnormal conditions." It also reinforces the expectation, "In case of doubtful readings, operators place safety above production." Further, the Institute of Nuclear Power Operations reinforces the need for conservative decision- making in their Traits of a Healthy Nuclear Safety Culture, December 2012.
8/13/2018	WRPS-PER-2018-2081	Loss of Gas Cylinders off truck due to less than adequate load securing	During the routine transportation of welding cylinders on work truck, the cylinders fell off vehicle when employee turned the corner.
8/13/2018	WRPS-PER-2018-2082	Traffic Sign backed into	When leaving a vehicle parking lot, an employee backed into a speed limit traffic sign damaging the sign post.

8/14/2018	WRPS-PER-2018-2079	Contaminated Tumbleweed Fragments at ETF	During the performance of Scheduled Radiation Survey Task LE-W098, "Perform Contamination Survey of LERF CA Boundaries". Contaminated tumbleweeds were discovered. Two tumbleweeds were found with Total Contamination readings of : 109,000 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha 27,500 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801635
8/14/2018	WRPS-PER-2018-2084	Fix basin 44 western CA boundary	CA boundary along the west side of basin 44 is not stable
8/14/2018	WRPS-PER-2018-2091	HEPA Filter Challenge Test PM ID	During review of RPP-16922 Rev. 35, an Engineer from Production Operations Mechanical and HVAC Engineering identified an error in Table 11-7, page 11-17 for the preventive maintenance task ID #s associated with exhauster 296-A-43. Mark up of Table 11-7 attached. There is no impact to the actual PMs or 296-A-43.

8/14/2018	WRPS-PER-2018-2083	Buddy system in Haz	Buddy system in TFC-OPS-C-008 procedure C needs to be more clear to state "operations in hazardous areas (emphasis added) shall be performed using the buddy system in groups of two or more." Since all farms are demarcated as Danger Hazardous Materials, having a "May warrant" in the C-08 procedure is a lot different than "shall be" as required by OSHA. 1910.120(a)(3) Definitions -- Buddy system means a system of organizing employees into work groups in such a manner that each employee of the work group is designated to be observed by at least one other employee in the work group. The purpose of the buddy system is to provide rapid assistance to employees in the event of an emergency. TFC-OPS-C-008 1.The manager will analyze each work assignment and evaluate the hazards to decide whether it requires the presence of two or more employees to ensure worker safety. (7.1.33) a.It is impossible to provide a list of all jobs that may warrant the assignment of more than one employee to ensure worker safety. The following activities represent examples of typical two or more person assignments: •Working within a permit-required confined space (DOE-0360) •Applying a safety monitor system ("spotter") for fall protection (DOE-0346) •Performing hot work outside of a designated shop area (TFC-ESHQ-FP-C-01) •Working in atmospheres requiring the use of a supplied breathing air system (TFC-ESHQ-S_IH-C-05) •Work involving heavy machinery or equipment operations at isolated locations (hoisting or lowering heavy loads on cable tool drilling rigs [TFC-ESHQ-S_IH-C-05]) •Working with toxic, hazardous, or high-pressure chemicals (TFC-ESHQ-S_IH-C-47). 10CFR1910.120
8/14/2018	WRPS-PER-2018-2094	Lockout Device Issue in AP Farm	During performance of work package 421568, Replace AP Farm A-Train Glycol Pump, an 8 Criteria Lockout was being used to isolate power to the pump. During the course of the job activity, it became necessary to add additional locks to the locking device to allow for some insulation to be remove. During this activity, when the worker picked up the "spider" to add his lock, the locking device came loose from the breaker.
8/14/2018	WRPS-PER-2018-2090	Inadequate housekeeping in CA at LERF Basin 44	Work environment and equipment should be maintained in a clean and orderly condition. This can be maintained with regular monitoring and continuous vigilance regarding safe housekeeping practices. Changing conditions over time caused by environmental exposure can go unnoticed and increase risk levels for personnel safety and exposure, especially in the radiological contaminated area (CA). The conditions found in the CA at LERF Basin 44 need improvement to attenuate potential hazards to personnel safety. Examples include sections of metal fencing strewn across common walk areas, which has sharp edges/corners and is camouflaged by gravel laying beneath it. This is a tripping/injury hazard to personnel working in the CA and may tear anti-contamination clothing/PPE. Labeled packaging around radioactive material (geo tube sling) has lost its integrity and is within 5 feet of a high contamination area. The packaging material contains holes from long-term exposure to outside weather, exposing the contaminated material to the environment. Operations has previously been informed that these examples need attention. Housekeeping is not limited to these examples.

8/14/2018	WRPS-PER-2018-2103	Damaged/Degraded Packaging of Radioactive Material Stored in WRPS-RMA-094	MOP of WRPS-RMA-094, C-Farm Laydown Yard One packaged item needs to be repackaged as the original wrapping is badly degraded and what appears to be some added wrapping has become detached due to wind. 1. Are items outside a Contamination Area that are potentially contaminated or has been exposed to radioactivesources properly packaged? Is the packaging of material consists of yellow impermeable material? (Article 413,Section 4.2, Attachment A) There are several packages which appear to have been stored for a long period of time. They are wrapped with reinforced plastic which may have been yellow originally but have faded to white due to harsh environmental conditions. Also, part of the wrapping for one package has become detached due to wind and it appears to have been a repackaging job as the wrapping which is still attached is badly degraded. Unable to tell for certain but, the RAM tag is probably attached to the wrapping that became unsecured. (See attached photos)
8/14/2018	WRPS-PER-2018-2097	Programming Error Affected OPEXSHARE 'Views' Reporting from about June 19 - August 09, 2018	Mission Support Alliance (MSA) programming changes (on or about June 19th. or 20th.) were made to the OPEXSHARE Web Application reporting mechanism which resulted in inaccurate reporting of 'Views by Users' for WRPS from June 19th. or June 20th. to August 9th. (the programming error issue was reported as being fixed at 13:37 on 08/09/2018 by the OPEXSHARE Administrator - MSA). MSA indicated the programming correction (data for 'Views by Users') would not allow the correct data to be retrieved for the affected timeframe - instead of pulling 'views' by 'Department', 'Sub Departments', or both it only pulled data from Departments with Sub Departments assigned,no matter what criteria was picked in the reports... The 'Views' reporting (according to MSA) was mistakenly programmed resulting in the reporting reading of only those 'Departments' that had been assigned 'Sub Departments'. As WRPS' population of the 'Lookup Tables' only contains 'Departments' [89 of them] except for a few newly added 'Sub Departments' [TUA0 - TUA7] for 'Department' = TUA (Work Control) data retrieved was not complete for the above time frames; June, July & August metrics are affected. Appears the testing of the parameters were not adequately tested prior to implemented changes by MSA for the DOE RL/ORP owned/MSA administered OPEXSHARE Web Application which is required to be used by Hanford Site Contractors [DOE-ORP: 10-ESQ-429 Use of Hanford Information Lessons Learned Sharing (HILLS)/OPEXSHARE] in implementing DOE O 210.2A, DOE Corporate Operating Experience Programs. The MSA administrator indicated there are no 'testing' or 'configuration controls' requirements required for this web application (a check of the Hanford Information Systems Inventory indicates OPEXSHARE, HISI application, ID: 2186, is graded 'N/A'. WRPS (& a few other DOE Complex-wide contractors) uses the OPEXSHARE reporting mechanism to prepare their Monthly Company Performance Indicators/Dashboard supporting 'Performance Assessment/OPEXSHARE Active Internalization (Applied)': NOTE 1: that the Report (Content Application) which supports Special Emphasis Area 9 was not affected by the programming error, however sub-chart (supporting) data which displays WRPS' use of OPEXSHARE and review of Operating Experience/Lessons Learned content has been permanently lost for the affected time frame. NOTE 2: Past - previously identified issues (by WRPS to MSA) have been corrected by MSA upon receipt of 'reporting' discrepancies by WRPS related to OPEXSHARE Users leaving WRPS (transfer) to go to work for different contractor and/or inactivation (leaving the company/Hanford site, etc.) where their data was going with them (or being deleted upon inactivation) instead of remaining static (intact) and retrievable for the previously reported data (repeatable) to the reporting company. NOTE 3: It was later communicated (08/08/2018) by MSA to WRPS OPEXSHARE Coordinator that the Nevada National Security Site OPEXSHARE Coordinator first reported issues of incorrect data 'views' being retrieved/reported for their company on 06/20/2018.
8/15/2018	WRPS-PER-2018-2110	Recommendation to Loss of Power AOP Exit Process	The process of exiting the AOP for Loss of Power to supporting facilities such as 2750E could benefit from ensuring all supporting systems such as AC are re-established before declaring the AOP exited. There should be a formal process to return supporting facilities to full operational pre-event condition when it is known that systems will not fully return upon reestablishment of power to the facility. That list of actions could reside within the AOP process for declaring that facility operational and exiting the AOP. The power was returned to 2750E in time on 8-14-18 to reestablish AC to the facility but was not executed until notified the following morning from personnel arriving to work that there was excessive heat in the building.

8/15/2018	WRPS-PER-2018-1976	QA Manager Approval of QA Project Plan for the Effluent Treatment Facilities	While investigating the quality assurance program supporting LERF/ETF, the Quality Assurance Project Plan for the Effluent Treatment Facilities was found attached as Appendix B to the Sampling and Analysis Plan for the Effluent Treatment Facility, Liquid Effluent Retention Facility, and Treated Effluent Disposal Facility (RPP-PLAN-60723, Rev. 0). Upon review of the associated Document Release and Change Form, the Manager of Quality Assurance was not on the approval list. Whether as a standalone "umbrella" Quality Assurance Project Plan (QAPjP) or QAPjP information embedded in a sampling and analysis plan, the signature approval of the Manager of Quality Assurance is required per the QAPD (TFC-PLN-02, Section 11.4).
8/15/2018	WRPS-PER-2018-2111	WINDOWS 10 Survey Simple/Monitor Size	Not able to see full screen in Survey Simple in Windows 10 when using a 19" Monitor.
8/15/2018	WRPS-PER-2018-2113	ETF failed to make notification to the CSO	On 8/13/18 legacy contamination was discovered outside of LERF Basin 44 and documented on PER-2018-2084, this contamination was reported to the Radcon First Line manager but not to the ETF SOM. The ETF SOM is responsible for reporting such contamination events to the CSO.

8/15/2018	WRPS-PER-2018-2114	Release Survey Errors	While performing a MOP tour (WRSP-MOP-2018-2425) of release surveys two errors were observed: 1) Scan speeds were greater than 2" per second while surveying SCBA bottles 2) An expired copy of release survey plan PO-RSP-2016-019 was in the field
8/15/2018	WRPS-PER-2018-2116	Procedure "Attachment" Evaluation	Of the sample size of the procedures with attachments, all were identified as properly listing attachments in the records section. However there were instances were where the attachment, checklist, etc. may not be formatted and included consistent with TFC-OPS-OPER-STD-01. To evaluate the root cause, the team went back to review TFC-OPS-OPER-STD-01 and the definition of an Attachment.
8/15/2018	WRPS-PER-2018-2117	Discrepancies in PB-1 Pump Investigation Report, EIR-2018-024; "Investigation of Response to 242-A P-B-1P	Title: Reviewed Event Investigation Report, EIR-2018-024; "Investigation of Response to 242-A P-B-1 Pump Vibration Alarm" Summary: Comments to the EIR are contained in an OFI in this report. The attachment provides a lineout of the EIR sections described in the OFI, and reference to sections of logs discussed. ---------- Issue Type: OFI (Opportunity for Improvement) Significance Level: 1 Statement: Discrepancies in PB-1 Pump Investigation Report, EIR-2018-024; "Investigation of Response to 242-A P-B-1 Pump Vibration Alarm" (Ciola, August 5, 2018) Discussion: On June 25, 2018, the PB-1 main circulating pump high vibration alarm, 242-AVI-PB1-2A, came in on the Master Control Station (MCS) at 242-A. The applicable Alarm Response Procedure, ARP-T-601-12, directs the shutdown of the pump if the high vibration persists for greater than five minutes. The pump was operated for several hours beyond the ARP limits, in violation of the Alarm Response Procedure. The event investigation report, EIR-2018-024; "Investigation of Response to 242-A P-B-1 Pump Vibration Alarm", requires revisiting. Specifically, the narrative and timeline provide a depiction of events that conflicts with evidentiary materials in the report. Also, detail in the report should be sufficient to understand the procedures that were used. 1. The EIR states that the "shutdown of PB-1" was ordered at 1450 hrs and shutdown at 1455. Logs show the pump was shutdown at 1503 hrs, immediately after the overcurrent alarm came in. The narrative on page 5 and detailed timeline on page 14 should reflect these critical aspects of the shutdown: • 1455 — Facility begins a controlled shutdown of the evaporator using procedure TO-600-060, "Shut Down 242-A Evaporator System". Facility logs state, "Management wants to shutdown and dump pot and fill with water and restart up. Starting TO-600-060."

8/15/2018	WRPS-PER-2018-2118	Opportunity to Improve Timeliness of SOEN for ORPS Declaration	Title: Observed Event Response for Small Fire in 2225 Summary: As on-call FR received notification that there was a small fire in a gas spectrometer in the 2225 lab on 8/9/18. A worker in the area immediately extinguished the fire and unplugged the equipment. The lab facility was evacuated. HFD was notified and responded to the scene, verified the fire was out, and turned control of the facility back over to WRPS. FR responded to the ICP set up at the 2225 lab to observe activities, receiving a brief from various staff members and the BED. Communication and activities in the ICP appeared to be controlled and well ordered. Response to the even was good. 2225 management assisted in making even categorization and notification. In general, updates on the status of the event were timely, with the exception of the SOEN announcement for the ORPS declaration. ---------- Issue Type: OFI (Opportunity for Improvement) Significance Level: 0 Statement: 36944-TF-O01 - Opportunity to Improve Timeliness of SOEN for ORPS Declaration. (Scrabeck) Discussion: Following a small fire in the 2225 laboratory on Thursday 8/9/2018, the Shift Office Event Notification (SOEN) announcement of the "reportable occurrence" per TFC-OPS-OPER-C-57, Event Notifications, was less than timely having been made on the morning of Monday 8/13/2018. In general, other SOEN announcements on the day of the event communicating response activities were timely and accurate, and this FR has not noted a trend in untimely notifications of related SOENs for other events. Therefore, the SOEN relaying Thursday's reportable occurrence appears to be an outlier for this event. While there is no explicit time limit for SOEN announcements contained in TFC-OPS-OPER-C-57, Event Notifications, the delay of several days is not in line with the need to provide DOE as well as WRPS management the necessary information in a timely manner, and therefore there is an opportunity to learn from this outlier to ensure consistent performance in the future. REF: TOD Weekly 08-06-18; B Scrabeck; OFI; OA36944
8/15/2018	WRPS-PER-2018-2119	June Production Operations Radiological Control Radiological Survey Report (RSR) Review	1. During the performance of the June Production Operations Radiological Control Radiological Survey Report (RSR) Review, discrepancies were identified with 7 Radiological Survey Reports. 2. Discrepancies were communicated to respective RCFLMs and RSRs were corrected.
8/15/2018	WRPS-PER-2018-2120	Change Trailer HBA Disposal Operator Aid	It was brought to managements attention that there is an operator aid posted in AN farm change trailer, MO-497, that states for body fluid clean up, the waste is to be disposed of as Low Level Radioactive Waste. This is contrary to TO-100-052 Perform Waste Generation, segregation, accumulation and clean up which states in Attachment 1 that Infections Biological Waste are prohibited items.

8/15/2018	WRPS-PER-2018-2115	Farm entry with open wound	Sub contractor electrician stated that he had a headache due to his mask not fitting correct and was cleared from the farm, ask if he needed to go to HPMC replied no. At this point employee was told to go to FE&C office to relax. Talking with the other electrician it was indicated the employee had just received a new tattoo the day before. I contacted the FWS and told him to directed FE&C safety to escort employee to HPMC to be evaluated.
8/16/2018	WRPS-PER-2018-2122	Evaluation of Construction Fit Plans found numerous errors.	The WRPS Quality Assurance (QA) Manager requested a QA Surveillance be performed to evaluate the state of Fabrication, Inspection, and Test (FIT) Plans submitted by Construction contractors from January through July 2018. This was in part to support an Extent of Condition related to American Electric, Inc. (AEI) FIT **Plan issues identified in Supplier Corrective Action Report (SCAR) TF-18-SCAR-002. This Surveillance investigated the extent to which similar FIT Plan document control issues exist with other WRPS Construction contractors.** The scope of this Surveillance was FIT Plans submitted from Grant, FE&C, Fowler, and Ojeda (no FIT Plans were submitted by other Construction contractors during this timeframe). The same QA Checking Methodology used to perform FIT Plan reviews of American Electric, Inc. for TF-18-QSR-150, American Electric **Document Control, was used to perform this Surveillance.** **There were numerous minor documentation** issues identified throughout the sample of Construction FIT Plans reviewed. Construction subcontractors would benefit from improved understanding of FIT Plan documentation expectations. **The FIT Plan process would benefit** from increased attention to detail from subcontractors prior to submission of FIT Plans, and from increased attention to detail from WRPS Engineering and QA reviewers. Recommend this be assigned as a TUF to (b)(6) .
8/16/2018	WRPS-PER-2018-2123	Tripping Hazard	Concern was identified with AX -cool down tent entry ramp as tripping hazard, uneven surface deformities. EAPC Safety log entry made and all corrective actions have now been completed. This per is for documenting the non-compliance and trending purposes.

8/16/2018	WRPS-PER-2018-2121	insufficient main water service installed at 2750	Construction crews are in process of installing a new water service and supply water lines in 2750 on the North end. The original design, prints, and supply valve are all sized as 2.5" based on Uniform plumbing code sizing requirements driven by fixture unit demand, static loss, distance from supply valve, line restrictions and so on.. At some point engineering and construction made a decision to re-size the main line to 2" despite the building fixture unit demand. According to engineering they sized the water line for the (2) bathrooms that the line supplied. Based on blue prints the line supplies (4) bathrooms and multiple other plumbing fixtures. The 2" line will not meet the fixture unit demand of the Uniform Plumbing Code based on current fixtures in use and quantity of fixtures in use. Concern was brought to construction manager, project manager, and employees immediate supervision. Employee was asked to leave the issue alone. Engineering at this point sent an email accepting the potential issues and potential non-compliance of Uniform plumbing code based on their calculations. This PER is being written to document concerns of the issue in the chance the line proves to be insufficient in the future
8/16/2018	WRPS-PER-2018-2127	TFSPS Annunciator Test Button SRED Requirement Not Fully Met	The SRED for the new DST Annulus High-Level Safety Instrumented Alarm System specifically requires a pushbutton for each of the five annunciator panels in the Central Control Room (RPP-RPT-57267, Rev 3, SDR24). The design was modified to use a single pushbutton for all five without updating the description in the requirement. This was discovered during the revision to the Design Requirements Compliance Matrix for finalization of project T1P99.
8/16/2018	WRPS-PER-2018-2128	TFSPS Annulus Level Probes Not Independently Verified per SRED Requirements	The SRED for the new DST Annulus High-Level Safety Instrumented Alarm System requires independent verification of the probe installation at the correct height and of the probe's alarm setpoints adjustment (RPP-RPT-57267, Rev 3, CON1 and CON2). The alarms were adjusted and tested during the Factory Acceptance Tests, but independent verification was not documented. Similarly, an installation process was performed to ensure installation at the correct height in the annulus, but without formal independent verification. There is one probe for each DST except AY-102.

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8/16/2018	WRPS-PER-2018-2129	702-AZ Building A/C Supply Fan Duct Work Insulation Cladding/Weather Protection Damaged	The weather protection for the 702-AZ Building Supply Fan A/C unit ducting (located on 702-AZ roof) is destroyed and requires replacement. Insulation is exposed and may already be degraded. It appears that weather and wind have created the damage, exposing the insulation to the environment. See attached photos.
8/16/2018	WRPS-PER-2018-2130	Dark Powder Generated in Thin Film Dryer	8/13/2018 in the Thin Film Dryer Room it was noted that the powder was very dark in color. The normal powder color is a white or cream color. This PER is generated as the dark colored powder is not normal and may be an indication of a process change. This finding last occurred on 1/29/18 and documented in WRPS-PER-2018-0239. PER-2018-0239 has since been closed.
8/16/2018	WRPS-PER-2018-2132	Sink Hole discovery at Single Shell Waste Tank 108	While preparing the area for the application of asphalt, utilizing a hand operated compactor, the compactor operators noticed a abnormality forming (a sink hole - soil subsidence) a few feet in front of the compactor.

8/16/2018	WRPS-PER-2018-2133	Sinkhole discovered near tank SX-108.	A 16"-18" diameter sinkhole close to the condenser hatchway for tank SX-108. The sinkhole is outside the perimeter of the tank. The sinkhole was discovered when a worker was compacting soil around the tank perimeter in preparation for the installation of the Interim Surface Barrier (ISB).
8/17/2018	WRPS-PER-2018-2134	Worker contact with sodium hydroxide residue at ETF during scaffold installation	**This is a followup PER associated with notification of skin contact that was made with sodium hydroxide residue the previous night. All notifications have been previously made. Below is a description of the scenario:** [Tonight maintenance FWS reported @ 20:25 that an MSA (b)(6) made skin contact with sodium hydroxide residue while building scaffold on top of CT-B tank. (b)(6) brushed white powder residue on a pipe while building the scaffold to support an upcoming repair work package. The work being done was thru a L3 repetitive work package # 389568 to erect/disassemble scaffold at ETF facilities. (b)(6) rinsed/wash residue from his skin and left to take a break at the MSA (b)(6) to take a break and change clothes, as they had become sweaty. Upon returning from their break, It was determined we would stop the work due to the chemical residue hazard and due to the work package not including chemical hazards in the JHA. Contacted CSM @ 20:45 after reviewing ETF-ERP/AOP's. Made notification and agreed that no ERP or AOP had been entered. FWS/SOM restricted access to atop CT-B tank with Contact SOM for access sign on CT-B ladder. 21:25 FWS/SOM asked (b)(6) if he wanted to go to HPMC or if he had any more burning itch sensation and he said "no, I'm good. ....." 21:45 told (b)(6) Lead that CSM and on-call Safety would like employee to go to HPMC to get checked out, at this point, exposed worker had left ETF and returned to (b)(6) As of 22:10 (b)(6) and (b)(6) are at HPMC.]
8/17/2018	WRPS-PER-2018-2135	ETF Surge B pump seal water valve out of position	On 8/17/18 while an NCO was performing rounds noticed the "Surge Tank Pump B Seal Water Throttling Valve 95B-032" (as referenced in ETF-95B-001) in the closed position. At that time the Surge B Pump (60A-P-1B) was operating. The NCO notified the SOM and the SOM directed the valve be placed in the correct position per ETF-95B-001. The pump was running fine with adequate seal water pressure and bearing indication and not running abnormally. As a precaution the SOM contacted two different Engineers and the decision was to keep running the pump.

8/17/2018	WRPS-PER-2018-2136	ETF Hot Shop flam cabinet expired material in plastic bag identified	DOE performed an ETF facility inspection on 8/17/18 and found a ziplock bag labeled "Expired" containing several Locktite 603 containers in the ETF Hot shop (RM 125). Then asked if there was any current plans for disposition of these items. At this time the SOM was unaware of these items or plans for dispositioning of these items.
8/20/2018	WRPS-PER-2018-2137	The Must Be Done By Dates in EAM did not match the Next TSR Surveillance dates in SPF for some SS SSCs.	While reviewing DVI valves for activation in the SPF SECD for the 241-AW-103 Recirculation, I double-checked to ensure that the Must Be Done By Date in EAM matched the Next TSR Surveillance date in SPF. In two of the seven cases reviewed, the dates were off by a day. SPF provided a date that was one day later than EAM (3/7/2018 vs. 3/6/2018). The two valves that did not match had exceeded their Must Be Done By Date and were inactive. These valves are: AWVPA-WT-V-321 (ET-107031) and AWVPA-WT-V-324 (ET-107034) (See attached file for what EAM states and what SPF states). These are TSR-driven surveillance dates that either allow the valve to be used for DVI or not based on the Must Be Done By Dates. If a valve has exceeded that date it can no longer be used for DVI as the TSRs do not allow it. Therefore, the dates should match in each system being used so that there is no question whether that valve can be used for DVI. According to the Engineering Programs Manager, the SECD in SPF takes its due dates from OpsTracker, which is the safety software that independently calculates the "Late Due Date" for PMs based on the latest frequency and grace period from EAM and the last completed date. The PMs in question had had their frequency and grace period revised in SPF from 330 days/35 days grace to 365 days/0 days grace. The revised frequency and grace period are accurately reflected in EAM. In discussions with the PM Work Control Manager, once a PM work order is generated in EAM for a "Float" type PM, the due dates on that work order are locked down and do not change, even if the frequency and grace period for the PM change. For the PMs in question, work orders had already been generated and were "Ready to Work" prior to the frequency/grace being revised. Therefore, the work order "Must Be Done By" date in EAM is reflective of the old frequency and grace period. The dates in EAM reflect the originally planned dates. Currently, for waste transfer procedures, the Must Be Done By Dates for PMs (to include Environmental and TSR PMs) are being taken from EAM according to the Shift Operations Waste Transfer Planning Manager. This represents a risk, if EAM does not reflect the latest due dates based on the latest frequency and grace period for the PM. If Operations relies on EAM for due dates for TSR Surveillances, then this implies it is being used as safety software, instead of relying on the credited safety software Ops Tracker. A process needs to be developed to either align due dates in all systems, or clarify which system to rely on.
8/20/2018	WRPS-PER-2018-2138	Wrong step referenced with in TFC-ESHQ-S-STD-02	While performing a review of TFC-ESHQ-S-STD-02 as part of the Management Assessment for Tank Operations Contractor FY2018-OPI-R-0105-Conduct of Operations it was noticed that in section 3.8 (2) it asks the user to Perform pre-use inspection per 3.1.1 when survey is complete. This step does not exist in the procedure and needs to be corrected.

8/20/2018	WRPS-PER-2018-2139	Determine if PERs in DRAFT status are accessible to outside organizations	When completing an internal assessment, I drafted some (16) PERs (saved, but not submitted). This was to save time on submittal of the assessment report. The PERs were subject to change upon receipt of comments from the organization on factual accuracy of the findings and observations. I was surprised that I received an inquiry from ORP Safety and Health Division concerning my draft PERs. I, then, learned that anyone in WRPS or ORP can review draft PERs.
8/20/2018	WRPS-PER-2018-2140	ETF VOG pressure instrument valve out of position	On 8/14/18 while an NCO was performing rounds they noticed that the isolation valve (45D-041) for PDI-45D-102 on the VOG System was found in the closed position, which isolated the PDI. This PDI had been running out of range then on 8/9 it came in below range reading near 0 psi which was within specification and is likely why the misalignment was not previously noted. Valve misalignment did not have an adverse impact on Operations or Environmental requirements. No work was released to position this valve, nor any other work in the area. See attached roundsheets, release sheets and photos.
8/21/2018	WRPS-PER-2018-2131	Inadequate Detail in Work Plan	Work Order 401704, "Remove Spare PB-1 Pump from the 242-A Evaporator for Repairs" did not contain specific enough instructions regarding the use of a fork lift. The work scope was to remove the PB-1 pump from the Load Out Room in the 242-A Evaporator and position it outside the building. The pump is large (approximately 8,000 pounds) and required a heavy fork lift. The pump is radiologically contaminated. Due to building design, the width and height tolerances that applied to moving the pump were highly restrictive. For all these reasons, fork lift selection and radiological controls designed to protect the fork lift were significant aspects of the work scope. Work planning was initiated on or about 07/02/18. It was approved and ready for work on 08/15/18 with the expectation that it would be worked on 08/16/18. At that time the work plan contained the following instructions regarding the fork lift: Step 4.5: "Prepare forklift for lifting activities." Step 5.5: "Utilizing a forklift, LIFT the pump and motor stand." These work instructions are generic and as a result, the day prior to starting work the following considerations had not been completely determined: 1)The specific contamination controls needed to protect the fork lift from contamination 2)The specific fork lift to be used. An approved release survey plan was not in place for the fork lift. This was partly due to uncertainty on which fork lift would be used and partly due to an apparent lack of recognition during the planning cycle that a release survey plan is necessary. Once a fork lift was identified, an expedited effort was undertaken to generate a release survey plan. The survey plan was issued the morning of the work (08/16/18). It was then discovered that the fork lift was not adequate and the search began for a different fork lift. At the time this PER was drafted, the proper fork lift had not yet been identified (and therefore no release survey plan was approved).

8/21/2018	WRPS-PER-2018-2142	CP Test Station Removal	Unable to complete work completion walkdown of ECN-713005. The ECN specified that upon the removal of test station T(42-10) that the wires be safed off using a scotchcast kit and abandoned in place. The excavated area had been backfilled prior to walkdown and no pictures were take. Review of the work package WO # 260364 gave no indication that the wires were safed off per the ECN. Because of this, a work completion walkdown could not be completed.
8/21/2018	WRPS-PER-2018-2143	Non-Disclosure Agreement with WRPS, BNI, AECOM, and WTCC	There is a Non-Disclosure Agreement with WRPS, BNI, AECOM, and WTCC (copy attached). This NDA has not been signed by most WRPS employees or subcontractors. The NDA prevents sharing WTP information with people that have not signed the NDA. There is no mechanism or program in place to ensure information from WTP is protected from disclosure to those that have not signed the NDA, including information attached to PERs, included in documents placed in IDMS or Smartplant, or other locations. There is no feasible way to ensure WTP information is not discussed in meetings, teleconferences, or emails. There is no published listing of those that have signed the NDA, and it is impractical to prevent information access.
8/21/2018	WRPS-PER-2018-2144	5 YEAR CATHODIC PROTECTION INDIVIDUAL ANODE OUTPUT	During performance of 3-CATH-782 it was discovered that the procedure contains insufficient information to successfully complete PMID ET-200537. The procedure did not specify that DC current measurements be taken and only specified current measurements. This led to AC current measurements to be taken on a DC system, which is not valid data. This is an HPI issue that needs to be corrected.

8/21/2018	WRPS-PER-2018-2164	POR127 Containing Incorrect Software Version	During the execution of work package 382941, it was discovered that an older version of software was still loaded in the controller after a download had already completed. POR126 had successfully completed testing and when testing POR127, the tank farm audible alarm generated instantly when the exhauster started. This is due to a previous revision of the software still installed on the exhauster when tank vacuum alarms were set at -.5 "H20.
8/21/2018	WRPS-PER-2018-2165	Expired Radiological Release Survey Plan	On 8/21/18, I performed a mop on Material and Equipment Release at SX construction change trailer and 217-AW change tent. Upon arrival at SX change trailer, I asked the HPT's that were releasing bottles and racks what survey plan they were working to and the HPT showed me PO-RSP-2016-019 Rev. 02 an expired (7/25/18) release survey plan. After I mentioned the plan was expired, the HPT went thru the cabinets at the survey station and was able to produce a current Revision that was not out for use or in their release survey plan book. The same issue was identified at 217-AW change tent but they were not able to locate a current revision. The HPT had to pull the current revision up on the computer.
8/21/2018	WRPS-PER-2018-2166	Legacy Contamination Outside SY Farm	At approximately 1:15pm this afternoon, while performing the monthly routine perimeter survey of SY-Farm, four small spot of contamination were discovered on the North fence line just east of the SY-Farm Change Trailer. Each spot was smaller than the size of the instrument probe (100cm2) and appeared to be tumbleweed fragments mixed in the soil/dirt. No alpha contamination was detected on any of the spots and the readings were as follows: 1. 72,000dpm/100cm2 of Beta contamination 2. 45,000dpm/100cm2 of Beta contamination 3. 38,000dpm/100cm2 of Beta contamination 4. 15,000dpm/100cm2 of Beta contamination

8/22/2018	WRPS-PER-2018-2170	Routing Board Update	During the week of July 23rd, 2018, drawing H-14-107346 Sheet 8 was issued to rev 30 showing that ECN-713922 and ECN-713868 were completed. Request was made for (b)(6) to hang the new drawing. When (b)(6) saw the changes, they refused to hang the new drawing stating that the work in the field is not complete. **PER was written and closed the following week, spoke with management on this issue. Management mentioned that the ECN or drawing has 30 days to be revised. The work activities are in WO #381090, Step 6.3 has (b)(6) and FWS update the routing board at that time.** Issue is that drawing H-14-107346, sheet 30 is still on my desk waiting to be installed.
8/22/2018	WRPS-PER-2018-2171	URMA Posting around S-Farm Complex	**During an walkdown of the S/SX/SY Farms Complex it was found that the URMA surrounding these farms was not adequately posted to encompass the whole URMA area.** Three T-posts are needed around the outside perimeter of SX-Farm to fully post the URMA. One post is needed on the right hand side of the new gravel road between SX Farm and the water run-off basin on the South side of SX Farm. Two more posts are needed on the East side of SX Farm on the right hand side of Camden Avenue. All three posts need a ground scan then the T-posts can be pounded in the ground and new signs can then be hung on them to post the URMA.
8/22/2018	WRPS-PER-2018-2172	Housekeeping in Radioactive Material Area RMA-012	On August 21, I visited the Radioactive Material Area RMA-012 while looking for a specific Radiologically Controlled Vehicle.The Radioactive Material Area was clearly identified and posted with applicable entry requirements.All material and equipment observed were identified with radioactive material labels with the requisite trefoil and the words "Caution Radioactive Material"One Red service body truck "E-3974" presented several housekeeping issues that warrant review for upkeep. There is a broom, electrical cord, radiation area signs, and other debris in the bed of the truck that should be disposed of or properly stored, if still useable.Rolls of weather-degraded yellow plastic bags are on the pipe racks. One of the issues with this situation is that pieces of the yellow wrapping material (e.g. bags) are subject to breaking off and becoming spread during windy conditions. Once removed from the RMA, it becomes impossible to determine whether the shards came from contaminated areas and equipment or not. Consideration should be given to conduct of an aggressive campaign to properly dispose of these items.

8/22/2018	WRPS-PER-2018-2174	Equipment Configuration for control cables and MCS on LDE-315 and LDE-316	During a review of PMID frequency and grace it was discovered that ET-107787 leak detector PM is set to inactive pending the completion of a level 3 work package and then was to be returned to an active status. This took place on 06/09/2015 and has not been restored. This is an environmental PM for the leak detectors.
8/22/2018	WRPS-PER-2018-2173	Subsidence found on berm south of 241-A-501 Valve Pit	A subsidence area 6 inches in diameter and 12 inches deep opened up on the berm south of 241-A-501 Valve Pit. The berm is over the A Farm Vapor Header Condenser vessel and piping. The subsidence roughly aligns with the vertical portion of the 8" vent line from the 241A-161 Condenser (H-2-56125). Walk down 8/21/18 verified size of subsidence has not increased.
8/22/2018	WRPS-PER-2018-2175	Procurement of Safety Shoes	Several recent requests for safety shoes and winter clothing prompted me to look in to that process. I asked an engineer who had been here about 8 months to walk me through ordering safety shoes. It didn't take long to get to the Personal Protective Equipment procedure, TFC-ESHQ-S_I5-C-02. This procedure defines the selection criteria for types of shoes, defines the types of shoes and identifies the ASTM requirements for different safety shoes. It also directs you to "Obtain the safety shoes as directed in the P-Card Procedure, TFC-BSM-CP_CPR-C-01." The P-Card procedure lays out the steps for entering and approving the MR and states that "WRPS has a list of recommended suppliers." Further in the procedure it tells you to "Refer to the safety footwear suppliers for a list of small local businesses that are approved vendors." The procedure does not tell you where to find that list. After some prompting, the engineer found a list on the P-Card web page along with a helpful guide on how to procure safety shoes. That guide does not follow the procedure and references a site form (A-6003-769) that does not exist. It is unclear if the list of safety shoe vendors is recommended or if they are the approved vendors and therefore required.The desk guide on the P-Card web site on how to order safety shoes is incorrect and does not align with the procedure.Since most work in the farms now requires safety shoes, not just substantial footwear, it is appropriate to revisit the maximum amount allowed for safety shoes.

8/22/2018	WRPS-PER-2018-2176	Fix Enclosure Datasheets	ET-200728 and ET-200729 are enclosure clean and inspect PMs. Various issues make the PM unworkable, with unnecessary or duplicated equipment maintenance, mislabeling, excessive outage requirements, and nonexistent equipment.
8/22/2018	WRPS-PER-2018-2177	Evaluate Parking conditions at Dry Grout-	Congested parking at dry grout mobile offices. Need to evaluate additional parking locations.
8/22/2018	WRPS-PER-2018-2178	Simpson Sound Calibrator found Out--Of-Calibration	Simpson Sound Calibrator, Model# 890-2, Serial # 067640 (M&TE # 817-13-49-004) "As Found reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.

8/23/2018	WRPS-PER-2018-2181	Fall Protection Assessment Opportunity for Improvement.	A Fall Protection assessment was conducted by the Industrial Safety Subject Matter Expert (SME). The assessment identified an opportunity for improvement which was to establish a Temporary Covers database to be located on the Fall Protection website to track all temporary covers that are in place.
8/23/2018	WRPS-PER-2018-2179	Fall Protection Assessment Opportunity for Improvement	A Fall Protection assessment was conducted by the Industrial Safety Subject Matter Expert (SME). The assessment identified an opportunity for improvement which was to update the Fall Protection Work Permit (FPWP) website with previously approved FPWP's that can be used as a "reference only document for future FPWP's".
8/23/2018	WRPS-PER-2018-2182	Part Number Verification on Power Supply and Redundancy Unit	During the final review of CGD-50067, CGD-50068 and CGD-50181 for green tagging/closeout it was discovered that the part number for the power supplies and redundancy units were not consistent throughout the document (SBVK-G48024 & SVBK-G48024). Upon further investigation, the part number breakdown and critical characteristic 1 (Part Number) were incorrectly documented (SVBK-G48024). On all 3 CGDs, (b)(6) signed off as part number being correct when it was incorrect in the CGD package and did not match the units inspected.

8/23/2018	WRPS-PER-2018-2180	Structures fabricated of Corrugated Metal Pipe - potential for unexpected collapse of soil.	In the SX Tank Farm, there are several below grade structures designed and installed using corrugated metal pipe (CMP). The CMP installed in the 1960's generally was galvanized with an asphaltic exterior coating. Per the Corrugated Steel Pipe Design Manual, the Handbook of Steel Drainage & Highway Construction Products, et. al., the design life of this material is in the range of 50 to 75 years. As these structures exceed their original design life, they are subject to structural failure which may result in unexpected collapse of soil. The structures of concern are as follows: 1. Leak Detection Monitoring wells, 12 feet in diameter approximately 65 feet deep, drawing H-2-31881 2. Tank 241-SX-108 Caisson, 10 feet in diameter and 13 feet deep, drawing H-2-33907 3. Utility Station and Trap Assembly, 4 feet in diameter and approximately 5 feet deep, drawing H-2-46194 4. Valve Pit Flush Pit, 5 feet in diameter approximately 4 feet deep, drawing H-2-46206 Also, please note there are similar structures in other tank farms.
8/23/2018	WRPS-PER-2018-2184	SJHAs on WRPS Safety-Health Programs Web Page Expiration Dates in Excess of Six Months Inconsistent with TFC-ESHQ-S_SAF-C-02	Scope: The scope of this operational surveillance was to evaluate the Washington River Protection Solutions (WRPS) implementation of the JHA Process. Requirements Reviewed: ? TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Rev G-8, dated May 31,2018. ---------- 17048-TF-F01 – SJHAs Listed on the WRPS Safety-Health Programs Web Page Show Expiration Dates in Excess of Six Months, which is Inconsistent with TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Section 4.2.3. (Ebert) Requirements Not Met: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Section 4.2.3 states: Responsible Manager/ Procedure Owner 12. Ensure that a review and update of the Standing JHA Checklists is performed and documented by the appropriate Supervisor and SMEs on a bi-annual basis. Discussion: In reviewing the WRPS Safety-Health Programs Web Page based on the current requirement of bi-annual review, there are over forty SJHAs marked as "active" that have not been reviewed and approved in the last six months in accordance with the JHA Procedure. The Website states: SJHAs are approved for 2 years, once that time has elapsed, they will need to be reviewed and re-submitted on the latest REV form. This statement does not match the six-month review requirement in section 4.2.3 of the Job Hazards Analysis Procedure. The FR discussed this issue with WRPS Industrial Safety and determined that WRPS's intent was for the review requirement to be biennial (every two years) rather than biannual (twice a year). The FR concluded that although WRPS's intent was a biennial review; section 4.2.3 states a biannual review requirement, and WRPS failed to meet this requirement. REF: TOD Weekly 08-13-18; Ebert; Finding; 17048-TF
8/23/2018	WRPS-PER-2018-2185	Improve Design Comment Categorization and Tracking	An unacceptable number of initial submittal of design documents from vendors are less than adequate. While it is understood that they are not final documents, some are inadequate to the point that is indicative of non-checked documents being submitted for review. The primary problem is that the only way engineering management is discovering this is via complaints from interdisciplinary reviewers. In other words, discovery of the issue is expert based, not process based. A positive means of tracking and documenting inadequate engineering vendor document submittals is needed. Note that this does NOT apply to NON-engineering document submittals.

8/23/2018	WRPS-PER-2018-2187	SJHAs Listed on Safety-Health Programs Web Page Are Expired and not removed as required	Scope: The scope of this operational surveillance was to evaluate the Washington River Protection Solutions (WRPS) implementation of the JHA Process. Requirements Reviewed: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Rev G-8, dated May 31,2018. ---------- 17048-TF-F02- Several SJHAs Listed on the WRPS Safety-Health Programs Web Page Are Expired and Have Not Been Removed as Required by TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Section 4.2.3. (Ebert) Requirements Not Met: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Section 4.2.3 states: The Safety Programs Representative 11. Remove any Standing JHA Checklist from the WRPS Safety-Health Programs Web Page if expired. Discussion: In reviewing the WRPS Safety-Health Programs Web Page there are nineteen SJHAs with a status of "expired". Those marked "expired" show an expiration date two years from the "signed date". The Website states: Expired SJHA's are available for reference but cannot be used until they are updated and show an "Active" status on the list below. This is in conflict with the procedural requirement to remove expired SJHAs from the Web Page. REF: TOD Weekly 08-13-18; K Ebert: Finding; 17048-TF
8/23/2018	WRPS-PER-2018-2188	Ineffective Corrective Actions Result in Continued Procedural Noncompliance	Scope: The scope of this operational surveillance was to evaluate the Washington River Protection Solutions (WRPS) implementation of the JHA Process. Requirements Reviewed: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Rev G-8, dated May 31,2018. ---------- 17048-TF-F03 - Ineffective Corrective Actions Result in Continued Procedural Noncompliance (Ebert) Requirements Not Met: 10 CFR 830 Part A, § 830.121 Quality Assurance Program (QAP) (c) Criterion 3—Management/Quality Improvement. (3) Identify the causes of problems and work to prevent recurrence as a part of correcting the problem. Discussion: Two issues were identified by WRPS-PER-2018-0202. The first issue is that expired SJHA's were not being removed from the WRPS Safety-Health Programs Web Page. The second issue is that the SJHAs are not being reviewed on a bi-annual (twice a year) basis. Both of these are requirements defined in the Job Hazards Analysis Procedure. The corrective action taken included automatically updating the status of SJHAs on the website to "expired" two years from the "signed" date. The website was updated to automatically update the status when they expire. The corrective actions are not compliant with the procedure and failed to correct the issues identified in the PER, resulting in repetitive failure in procedural compliance. REF: TOD Weekly 08-03-18; Ebert; Finding; 17048-TF
8/23/2018	WRPS-PER-2018-2189	Actively Review the GHA During TPM/JHA Meetings or Verify with the SME that the Defined Work Scope and Identified	Scope: The scope of this operational surveillance was to evaluate the Washington River Protection Solutions (WRPS) implementation of the JHA Process. Requirements Reviewed: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Rev G-8, dated May 31,2018. ---------- 17048-TF-O01 - An Opportunity for Improvement Exists to Actively Review the GHA During TPM/JHA Meetings or Verify with the SME that the Defined Work Scope and Identified Hazards Are Bounded by the GHA. (Ebert) Discussion: During two of the JHA meetings language was used by the Planners including "assume" and "should" in reference to hazards being covered by the GHA. The assessor observed Planners reviewing the JHA checklist but did not observe use of the GHA to verify identified hazards are bounded by the GHA. The Job Hazard Analysis Procedure Section 4.1, General Hazards Analysis, states: Information contained in the GHA should be used as appropriate by workers, supervisors, and managers to discuss and identify applicable hazards and controls within the work area. REF: TOD Weekly 08-03-18; Ebert; OFI; 17048-TF

8/23/2018	WRPS-PER-2018-2190	Provide Clarification in Section 4.2.2 of the Job Hazards Analysis Procedure as to What Steps Are Not Required to be Performe	Scope: The scope of this operational surveillance was to evaluate the Washington River Protection Solutions (WRPS) implementation of the JHA Process. Requirements Reviewed: TFC-ESHQ-S_SAF-C-02, Job Hazards Analysis, Rev G-8, dated May 31,2018. ---------- 17048-TF-O02 - An Opportunity for Improvement Exists to Provide Clarification in Section 4.2.2 of the Job Hazards Analysis Procedure as to What Steps Are Not Required to be Performed if All Hazards Are Bounded by the GHA. (Ebert) Discussion: The assessors reviewed the Job Hazard Analysis, TFC-ESHQ-S_SAF-C-02. As written, it is unclear if steps five through twelve of Section 4.2.2, Job Hazard Analysis for Work Control Documents, are required if the work activity falls within the GHA. TFC-BSM-AD-STD-05, Administrative Document Format and Preparation Standard, states the following: 5. Steps are written in the order they are intended to be performed (sequentially). Under certain circumstances determined by the document owner, flexibility can be given for steps to be performed in any logical order or eliminated if they don't apply. If this is the case, a specific statement is added to describe which steps are affected and what is the alternate order that can be used. Provide a clear statement as to which steps within section 4.2.2 are not required to be performed if all hazards are bounded by the GHA.
8/23/2018	WRPS-PER-2018-2042	Correction to records in IDMS that were found to have error	During an audit or records in IDMS, three records were found to have error. Correction is required for records compliance. TF-OR-QR-ST 3/31/17: pg 7 of 46; SX104-WST-LIT-101; footnote is illegible due to a write over. Single-line, initial, and date required. SACS ST-4; pg 2 of 2; TY105-WST-LIT-101; Illegible due to write over. Single-line, initial and date required.. TX-302-C; Illegible (12.4 or 12.42?); Single-line, initial, date required. TF-OR-QR-ST 9/30/17: SACS ST-3; pg 1 of 2; S106-WST-LIT-101; correction is not dated. ETF-30-001 Round Sheet 3 12/3/17: pg 26 of 53 (1 of 9); PI-60I-149; Friday-days; Correction needs dated.
8/23/2018	WRPS-PER-2018-2043	Insufficient gray scale shading on records scanned to IDMS	During the audit of records in IDMS there were several records that appeared to have data missing as the gray scale shading of unrequired data cells was not visible on the printed scans of the records. This issue was previously identified by Performance Assurance in 2016. WRPS-PER-2016-0526 called for the evaluation of gray scaling in procedures. Two corrective actions were taken as a result of the PER. First, TFC-OPS-OPER-STD-01 Technical Procedure Format and Preparation Standard was revised to increase the gray scaling requirement of procedures from 10% to 20%. Second, printers/copiers across the WRPS complex were either permanently adjusted to ensure shading is not removed during photocopying or they were replaced with Bizhub color printers. Functional Area Managers were briefed on the requirements to ensure implementation and proper utilization. Further investigation found that the shading on the scans produced from IDMS were being washed out in the scanning process because of red (red circles or red lines) markings on the data sheets/rounds.

8/23/2018	WRPS-PER-2018-2044	Legibility of printed names in Operations records	Despite WRPS Records Management's effort to define proper authentication requirements (legibly printed first and last name, signature, date/time), some operations staff fail to legibly print their name on WRPS record material. Records Management has stressed the need for identification of those performing and reviewing work documented in record material.
8/23/2018	WRPS-PER-2018-2045	Insufficient Records Compliance Direction for non-round surveillances and data sheets	In February 2016, Performance Assurance was tasked with the responsibility of providing a quality review of all Operations generated records. The criteria for review was established based on Records Management principles set forth in TFC-BSM-IRM_DC-C-02 and flowed down to Operations administrative procedures including TFC-OPS-OPER-C-60 Surveillance Rounds, TFC-OPS-OPER-C-13 Technical Procedure Control and Use, and TFC-OPS-OPER-C-08 Shift Routines and Operating Practices. Although Technical Procedure Control and Use and Shift Routines and Operating Practices provide general records compliance guidelines Surveillance Rounds provides the majority of the prescriptive records compliance instruction. In the last fiscal year, the Performance Assurance records reviewer was given specific direction by the document owner of Surveillance Rounds stating that the requirements set forth in TFC-OPS-OPER-C-60 only apply to TF-OR rounds procedures, but not other TF-OPS or TO- operating/surveillance procedures. This direction provides a gap in prescriptive records keeping instruction, as TFC-OPS-OPER-C-08 and TFC-OPS-OPER-C-13 do not provide specific records compliance instructions. For example, while TFC-OPS-OPER-C-60 provides direction to red circle, footnote, and provide explanation/RATL for all out of normal readings and deficient equipment, TFC-OPS-OPER-C-08 only states, "Identifies operating parameters outside specified limits and their cause (if known)."
8/23/2018	WRPS-PER-2018-2199	Safety Basis Compliance Office Qualification Card	A review of the current Qualification Card for the Safety Basis Compliance Officer (SBCO) was conducted. During the course of this review the roles, responsibilities, authorities and accountabilities (R2A2) were reviewed in the following procedures with respect to the SBCO. TFC-OPS-OPER-C-02, Safety Basis Implementation Checklist Preparation, Review, and Approval TFC-ENG-SB-C-01, Safety Basis Issuance and Maintenance TFC-ENG-SB-C-09, Plant Review Committee Section 2 Prerequisite Qualification(s) of the current SBCO Qualification card (Course 350895) is listed as: - Current or previous Operations Engineer / Shift Manager Tank Farm Qualification, or - Current or previous Tank Farm Engineering or Technical Qualification These prerequisites directly correlate to the Operations Engineer Base (Course 354025) Qualification Card and are reinforced with a Operations Engineer Requalification (Course 350147). An opportunity exists to revisit the prerequisite section of the SBCO Qualification Card to ensure it is still in alignment with existing practice and OE qualification cards. Recent corrective actions have revised and in some cased added additional TSR training which were the result of internal management assessments, FY2017-OPS-S-0313, "Training and Qualification of Personnel Doing TSR Management Assessment Report". Some of these "new" trainings may be appropriate to capture on SBCO Qualification Card.

8/23/2018	WRPS-PER-2018-2047	Identification of unprocessed eRounds	The review did uncover three rounds that were not yet created in IDMS as they were missing electronic authentication. Review and authentication has been obtained for the three rounds in question, however an opportunity for improvement presents itself with this observation. In these three cases messages were sent to the Tank Farm Operations email box the day after submittal should have occurred, indicating that the record was not produced which should have triggered action by Operations in researching the cause of the missing record. Currently, there is no process for regeneration of the email notification to ensure that action is taken by the Shift/Area Manager responsible for the authentication of the round. Further investigation found that Operations does not have a clear understanding of the steps to take when notification of an unprocessed round is received. Software Engineering is working to facilitate notification to the responsible manager as identified in eTurnover
8/23/2018	WRPS-PER-2018-2198	AZ02A Pit Leak Detector not set to correct height.	AZ02A Pit Leak Detector not set to correct height after pump replacement. When water was added to the pit, the leak detector didn't alarm.
8/23/2018	WRPS-PER-2018-2201	Failure to perform weekly RCRA Waste Inspection of LERF Basins	Weekly RCRA Waste Inspection was completed in all required areas at ETF, except the LERF Basins. The RBA around LERF Basin 42 was actively being surveyed by RCTs for down post. (b)(7) marked the LERF section as "N/A" and the inspection not performed.

8/23/2018	WRPS-PER-2018-2202	Duplicate 2750E Arc Flash analysis	Three calculations exist for the 2450E Electrical Distribution System. Two calculations, RPP-CALC-54748 and RPP-CALC-60614, are in regards to wings A,B,& C for one calc; and D wing for the other respectively. The third, RPP-CALC-61277, encompasses 2750E in its entirety and is a more recent update of the 2750E electrical distribution system analysis.
8/23/2018	WRPS-PER-2018-2145	TFC-PLN-123 lists the needs and expectations of interested parties which includes	During the Triennial EMS Audit #FY2018-ESHQ-X-0200, it was found that TFC-PLN-123 lists the needs and expectations of interested parties which includes a few items that may not have a clear nexus with the environment (i.e. be relevant to the EMS) – o Worker safety o Job opportunities and security o Economic development of DOE owned land o Adherence to bargaining agreements of represented workers *To be considered in the EMS, needs and expectations must have a nexus to the environment
8/23/2018	WRPS-PER-2018-2146	noted to ensure it continues to be appropriate to reference TFC-PLN-162, Workforce Resources Plan as an implementing	Opportunity for Improvement (OFI) 2--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted to ensure it continues to be appropriate to reference TFC-PLN-162, Workforce Resources Plan as an implementing process for flowing down environmental/EMS roles and responsibilities

8/23/2018	WRPS-PER-2018-2147	noted that TFC-PLN-123 Attachment A included text stating that the list of environmental aspects	Opportunity for Improvement (OFI) 3--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that TFC-PLN-123 Attachment A included text stating that the list of environmental aspects was inclusive with the exception that those aspects driven by contract would not be listed (i.e. sustainability related items). However, the actual list included in Attachment A did include sustainability related aspects. Aspects are to be identified without consideration of compliance obligations.
8/23/2018	WRPS-PER-2018-2148	noted that many of the documents listed in TFC-PLN-123, Table 5, Environmental Aspects, appear to not be impleme	Opportunity for Improvement (OFI) 4--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that many of the documents listed in TFC-PLN-123, Table 5, Environmental Aspects, appear to not be implementing documents for the environmental aspects/impacts element. These documents appear to be implementing documents for other processes in the system such as operational control. Examples are: o‰TFC-ESHQ-ENV_PP-C-05 o‰TFC-ESHQ-ENV_PP-C-09 o‰TFC-ESHQ-ENV_PP-C-14 o‰TFC-ESHQ-ENV_RM-C-04 o‰TFC-ESHQ-ENV_RM-C-12 o‰TFC-ESHQ-ENV-STD-12 o‰TFC-ESHQ-ENV-STD-17 o‰TFC-OPS-MAINT-C-01 o‰TFC-PLN-125 o‰TFC-PLN-140 o‰TFC-PRJ-PM-C_06 o‰O-100-52
8/23/2018	WRPS-PER-2018-2149	TFC-PLN-123, should be updated to clearly identify the aspects and impacts analysis records that are generated and that	Opportunity for Improvement (OFI) 5--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that TFC-PLN-123, should be updated to clearly identify the aspects and impacts analysis records that are generated and that they are to be controlled through the IDMS

8/23/2018	WRPS-PER-2018-2150	TFC-PLN-123, Revision C-1 of October 24, 2017, Sections 6.2 and 6.1.1 and documented evidence of objectives, it is not clear	Opportunity for Improvement (OFI) 6--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that following review of TFC-PLN-123, Revision C-1 of October 24, 2017, Sections 6.2 and 6.1.1 and documented evidence of objectives, it is not clear how risks and opportunities have been taken into account in setting Objectives
8/23/2018	WRPS-PER-2018-2200	AP Stack Monitor Sample Flow Meter Calibration	Flow meter was configured per manufacturer instructions. Manufacturer calibration software was installed. Unable to establish communications with flow meter and therefore unable to calibrate flow meter.
8/23/2018	WRPS-PER-2018-2151	TFC-PLN-123, Revision C-1, October 24, 2017 did not show documented evidence describing how objectives were communicated	Opportunity for Improvement (OFI) 7--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted following the review of TFC-PLN-123, Revision C-1, October 24, 2017 did not show documented evidence describing how objectives were communicated.

8/23/2018	WRPS-PER-2018-2152	TFC-PLN-123, Revision C-1 , October 24, 2017 did not address determination of training needs associated with its	Opportunity for Improvement (OFI) 8--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted during review of TFC-PLN-123, Revision C-1 , October 24, 2017 did not address determination of training needs associated with its environmental aspects and EMS.
8/23/2018	WRPS-PER-2018-2153	communications elements documentation of TFC-PLN-123 did not address the ISO 14001 requirements based on review of the doc.	Opportunity for Improvement (OFI) 10--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that the communications elements documentation of TFC-PLN-123, Revision C-1, October 24, 2017 did not address the ISO 14001 requirements based on review of the document.
8/23/2018	WRPS-PER-2018-2154	Triennial EMS Audit #FY2018-ESHQ-X-0200 Opportunity for Improvement (OFI) 11	Opportunity for Improvement (OFI) 11--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that TFC-ESHQ-ENV-STD-07 includes Table 1 which is a list of environmental records. The table in the "requirements management" section (page 12), lists Aspects/Impacts worksheets as a record. These are not the only records required by the ISO standard. Add other ISO required records to this document (e.g. objectives, plans to achieve objectives, management review).

8/23/2018	WRPS-PER-2018-2155	TFC-PLN-123, Revision C-1did not address the ISO 14001 requirements for Operational Controls	Opportunity for Improvement (OFI) 12--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 Based on review of the document TFC-PLN-123, Revision C-1, October 24, 2017 did not address the ISO 14001 requirements for Operational Controls, e.g. processes for compliance obligations or objectives, dealing with consequences of unplanned changes or outsources processes, etc. Many of the controls were listed in Table 12 but the text did not address the controls.
8/23/2018	WRPS-PER-2018-2156	Triennial EMS Audit #FY2018-ESHQ-X-0200 Opportunity for Improvement (OFI) 13	Opportunity for Improvement (OFI) 13--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that the WRPS intranet website states that relative to DOE/RL-91-50 "Plan is not currently applicable to WRPS at this time due to DOE-ORP provided contract direction". This document was included in Table 13 of TFC-PLN-123 as an implementing document for monitoring and measurement.
8/23/2018	WRPS-PER-2018-2157	TFC-PLN-123, Section 9.1it is difficult to recognize which referenced documents address which parts of the ISO 14001	(OFI) 14--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that in TFC-PLN-123, Section 9.1, the way it is currently written it is difficult to recognize which referenced documents address which parts of the ISO 14001 criteria for this element.

8/23/2018	WRPS-PER-2018-2158	TFC-PLN-123, Section 9.1 should address the monitoring and measurement of objectives rather than referring back to Section 6.	(OFI) 15--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that TFC-PLN-123, Section 9.1 should address the monitoring and measurement of objectives rather than referring back to Section 6.1.1
8/23/2018	WRPS-PER-2018-2159	Consider adding a performance indicator related to the progress towards environmental objectives with a goal of achieving a c	During the Triennial EMS Audit #FY2018-ESHQ-X-0200 Consider adding a performance indicator related to the progress towards environmental objectives with a goal of achieving a certain % where reasonably applicable.
8/23/2018	WRPS-PER-2018-2160	In order to institutionalize the requirements of ISO 14001 into the Environmental program include the required annual EMS int	(OFI) 17--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that In order to institutionalize the requirements of ISO 14001 into the Environmental program include the required annual EMS internal audits in TFC-ESHQ-ENV-STD-09 Table 2.

8/23/2018	WRPS-PER-2018-2161	Triennial EMS Audit #FY2018-ESHQ-X-0200 Opportunity for Improvement (OFI) 18	(OFI) 18--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that Tte EMS management reviews are performed in concert with the environmental protection SMP review. The minutes for 2017 did not have clear documentation of what was decided and directed. They simply included a bullet list of the text from the ISO standard requirements for required outcomes of the system. It would be better to add a conclusion statement as to what management decided relative to each of mandatory outcomes of the review. If the SMP and EMS are to be viewed as separate and distinct. Ensure that the required contents and outcomes are differentiated between the two reviews. If not, assure directed action in the SMP are addressed in the minutes for the EMS management review in the following period as required by ISO 14001. A method should be implemented to systemize required contents of the meeting in the minutes.
8/23/2018	WRPS-PER-2018-2162	Triennial EMS Audit #FY2018-ESHQ-X-0200 Opportunity for Improvement (OFI) 19	(OFI) 19--During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that following review of TFC-PLN-123, Section 10.2, the core process for nonconformance and corrective action is the PER process while the other processes referenced seem to either provide inputs that create need for corrective action or lead to post corrective action processes. Recommend TFC-PLN-123 text for this element being revised to reflect this.
8/23/2018	WRPS-PER-2018-2163	Triennial EMS Audit #FY2018-ESHQ-X-0200 Opportunity for Improvement (OFI) 20	During the Triennial EMS Audit #FY2018-ESHQ-X-0200 it was noted that TFC-PLN-123, Revision C-1, description of the system's continual improvement element is limited, focused on TFC-POL-16, ISMS Policy and TFC-POL-30, Environmental Policy. The remainder of the system demonstrates much broader range of mechanism/processes that result in continual improvement.

8/23/2018	WRPS-PER-2018-2203	SES Field Drill Identifies electrical cabinet in 2750E that wasn't properly marked (P/E 8.6 Facilities (Response)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 8 "Facilities and Equipment". One of the electrical cabinets in 2750E wasn't properly identified to show which breakers to utilize to secure ventilation and it didn't match what was posted on the FERIBs in the building. (P/E 8.6 Facilities (Response)
8/23/2018	WRPS-PER-2018-2204	SES Field Drill Communications between Unified Command and WRPS ERO (P/E 10.15 Communications)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 10 "Notifications and Communications". WRPS ERO had issues with communications and passing of information from the Unified Command of HFD/HP. The ES ERO and ICP ERO would overhear bits of information on the unified command radios but then would have to inquire about details rather than automatically getting a briefing from the OSCs and ICs.(P/E 10.15 Communications)
8/23/2018	WRPS-PER-2018-2206	SES Field Drill Showing up for drills with the appropriate instrumentation (P/E 8.13 Equipment (Response))	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 8 "Facilities and Equipment". HPTs did not respond to the drill with instruments that could survey for alpha contamination. (P/E 8.13 Equipment (Response))

8/23/2018	WRPS-PER-2018-2207	SES Field Drill Sense of urgency in resource coordination at the event scene (P/E 12.4 PA Decision Making)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 12 "Protective Actions". A sense of urgency was not demonstrated in regards to the coordination of resources at the event scene to ensure a timely response. (P/E12.4 PA Decision Making)
8/23/2018	WRPS-PER-2018-2208	SES Field Drill Proxy access to alternate ICP (P/E 8.5 Facilities (response))	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 8 "Facilities and Equipment". The BED/CSM was unaware that their ID card gave them proxy access to the alternate ICP. (P/E 8.5 Facilities (response))
8/23/2018	WRPS-PER-2018-2209	SES Field Drill Multiple Facility Declaration process clarification/improvement (P/E 2.13 Program Responsibilities)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 2 "Program Administration". The wording in the RLEP 1.0, Appendix 1-0.A Event Recognition and Classification for declaration of EALs at multiple facilities needs to be evaluated for improvement. WRPS ERO Training should also be evaluated to include information on declaration of EALs at multiple facilities (P/E 2.13 Program Responsibilities)

8/23/2018	WRPS-PER-2018-2211	SES Field Drill Communicating safe route of travel (P/E 10.11 Communications)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the **course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 10 "Notifications and Communications".** The ICP Communicator was tasked with activating the ERO and began relaying safe routing for members before ensuring the safe route of travel was approved by the BED. (P/E 10.11 Communications)
8/23/2018	WRPS-PER-2018-2210	SES Field Drill Update training to include multiple facility EAL declarations (P/E 3.7 Training Program)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the **course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 3 "Training and Drills".** WRPS ERO Training should be evaluated to include information on declaration of EALs at multiple facilities (P/E 3.7 Training Program)
8/23/2018	WRPS-PER-2018-2205	SES Field Drill First Aid not prioritized over radiological conditions (P/E 12.17 Onsite PAS)	On 7/18/2018, WRPS Security and Emergency Services (SES) conducted an emergency preparedness field drill to evaluate emergency response actions involving an explosive device and explosion at the 242-A Evaporator and an explosive device at the Tank Farms that impacted WRPS facilities and personnel. During the **course of the drill, the evaluation team identified the following "Suggestion" which pertains to EP-Program Element 12 "Protective Actions".** When the HFD first responders were told that alpha had not been surveyed for because (b)(6) did not have alpha instruments and that the injured person could possibly be contaminated they all backed away and did not prioritize first aid over radiological conditions. (b)(6) clarified that Alpha was not expected because beta/gamma had not been detected and first aid and immediate transport of the injured patient resumed. (P/E 12.17 Onsite PAS)

8/23/2018	WRPS-PER-2018-2212	Polisher water transient event	During maintenance activity to repair AOV-60G-201, solenoid valve replacement, water transient was observed in the piping of Polisher B. The water transient was determined to be due to verification tank water flow to the surge tank via the polisher system. Water flow also resulted in the shutdown of the RO/Degas system, from Ready mode. No leaks have been observed from the piping system that experienced the water hammer.
8/24/2018	WRPS-PER-2018-2213	Old RPF Rev's in Tank Farm Mask Stations	RPF 380028 and 380029 was Rev'ed on 8-22-18 but the new version was only given to one mask station.
8/26/2018	WRPS-PER-2018-2214	RARM Alarm during AY-102 Annulus Pumping	RARM-024 Alarmed within min. after starting the AY-102 Annulus Pump on 8/24/18 @ 1556. The RARM Laptop in the control room alarmed at 7.9 mR when in fact it should have alarmed @ 40 mR. at 1900 hours.

8/27/2018	WRPS-PER-2018-2232	Inadequate direction in Exempt Overtime and Shift Differential and On Call Process	Section 4.1 "Compensable Overtime" of TFC-BSM-HR_AT-C-04, "Exempt Overtime and Shift Differential and On Call Process", step 4 says "Complete the Time Information System (TIS) timecard and record any compensable overtime using TIS attendance code "OVE," "CW," "FCW," or "PTW." Use the drop down box to enter the Level 1 (or designee) in the PIC/OT Approver box. Ensure the comments section contains adequate detail supporting the work performed on compensable overtime." The TIS User Guide says "Any time an employee records hours worked that are greater or less than the normal hours for his or her regular shift schedule, the Deviate Shift Schedule feature of TIS must be used." TFC-BSM-HR_AT-C-04 does not state that the Deviate Shift box must be checked when Compensable OT is performed. Neither does it say not to check it. Therefore, as we follow procedures and a guide is providing direction not indicated in the procedure, this is a Human Performance error trap.
8/27/2018	WRPS-PER-2018-2233	Need for procedure review and re-write.	WRPS Hoisting and Rigging SME has identified the need and initiated a procedure review and modification for TFC-ESHQ-S-STD-28. Mid way through the revision a DOE assessment was conducted and during the interview DOE found the same need for a procedure change. I informed them that as the SME i was in the process of rewriting the procedure. I am submitting this PER to insure that the changes are made to the document.
8/27/2018	WRPS-PER-2018-2234	Non-Exempt Time Rounding	TFC-BSM-HR_CB-C-03, "Salaried Non-Exempt and Bargaining Unit Overtime and Shift Differential", Section 4.0 Step 7 states "Calculate the incremental amount of overtime actually worked computed to the nearest one-tenth (1/10) hour by using the rounding method. One-tenth of an hour represents an increment of six minutes. Working the first through the third minute results in rounding down, working the fourth through the sixth minute results in rounding up." The procedure does not state which minute in the "six minute" window starts the 0.1 hour window. The procedure gives examples of 10-15 minutes being .2 hour and 16 minutes being .3 hours, but it does not state which 3 minutes are the first three minutes of the window. This is an error trap. The ETVS User Guide does not state which minute starts the 6 minute window either. The ETVS User Guide requires the user to deduce the time rounding method using a tabularized example with the note provided below. Providing direction via deductions is an error trap.

8/27/2018	WRPS-PER-2018-2235	Vehicle Incident	(b)(6) bottle delivery truck parked at AP Farm change tent was not aware of change in surroundings while pulling back out into traffic. This caused the flat bed to clip the open door of the bottle delivery truck parked next to him resulting in damage to door.
8/27/2018	WRPS-PER-2018-2237	Question provided in WRAP for approval by the IH reviewer needs to be revised	Question 1 "Does this procedure meet GHA requirements" of the IH approver section has only boxes to select "Yes" or "N/A". The options to this question should be "Yes" or "No". N/A is not correct/appropriate as a work activity will either be GHA or JHA.
8/27/2018	WRPS-PER-2018-2238	Yokogawa found Out of Tolerance at Calibration Lab	Yokogawa Decade Box, Serial# 69VX0051, Model# 2793 01 (M&TE # 817-63-02-018) " As Found " reading during calibration was Out-Of Tolerance. It was adjusted to manufacturer spec.

8/27/2018	WRPS-PER-2018-2186	Sinkhole (Subsidence) in 241-SX Tank Farm	Workers discovered a sinkhole (subsidence) with an a diameter of approximately 16 - 18 inches in the vicinity of the condenser hatchway for SX-108, but outside the perimeter of the actual tank. It was observed while soil compaction work was underway near Tank SX-108 in preparation for installation of the Interim Surface Barrier (ISB). Depth of the hole was not initially known, but later determined to be approximately 3 feet deep.
8/27/2018	WRPS-PER-2018-2239	Recovery Plans Should be Made Available for Review by Workers	Feedback from pre-job briefings that workers had not reviewed or read the recovery plan. Worker access to the recovery plan could better facilitate communications and understanding of working to the recovery plan in the future. Operations should evaluate a way to make recovery plans available to the workers involved with recovery in the future.
8/27/2018	WRPS-PER-2018-2240	CA Boundary continues to be Reconfigured	CA Boundary at Basin 44 continues to be moved off the sidewalk. Removable contamination has been found up to edge of sidewalk, stanchions must be placed on sidewalk to get rope to the edge of the sidewalk. See pictures. See PER WRPS-PER-2018-2092

8/27/2018	WRPS-PER-2018-2242	Work Order did not have proper documentation	During work order Planner Post Review it was identified that the work order did not have a USQ performed during the planning process. The Planner selected "NO" USQ in the screening section of the form.
8/27/2018	WRPS-PER-2018-2243	In-Service 2360 did not meet portable instrument source acceptable use range requirement on alpha channel	During performance of a MOP of the RCT daily instrument source check process, one 2360 did not fall within the acceptable use range for the instrument/source combo for the alpha channel, as required by procedure. The instrument has been in-service since June 2018.
8/27/2018	WRPS-PER-2018-2244	Add significant aspect statement to purpose section of TFC-ESHQ-ENV-STD-13.	TFC-ESHQ-ENV-STD-13, REV A-5, "Asbestos Management Program" was recently revised. As the environmental program management (control) for a significant aspect of the WRPS EMS it should make a statement to that effect in the purpose and scope of the document.

8/27/2018	WRPS-PER-2018-2246	Potential Improvements to TFC-OPS-OPER-C-13	An independent review of TFC-OPS-OPER-C-13 yielded a number of potential improvement areas warranting evaluation by the Procedures organization.(1) Several technical procedure change types described in TFC-OPS-OPER-C-13 should be evaluated for conversion from paper processes to processing via an Electronic Document Acceptance Review Form (eDARF) workflow hosted in Procedures' Workflow Review & Approval Process (WRAP) web-based application. Those candidate change types include: Minor Inconsequential Pen and Ink Field Changes, First Time Use Changes, and Temporary Procedure Changes.(2) TFC-OPS-OPER-C-13 can be made the subject of its own Lean process and undergo substantial improvements such as: rewriting the document to focus it primarily on [field] end users' information needs, and secondarily on Procedures' actions that support the various processes; and removing little-used legacy processes, and providing simpler and more precisely worded process descriptions in the procedure.(3) Several procedure wording change recommendations were identified during this MOP, and are conveyed in the file attachment to this report.
8/28/2018	WRPS-PER-2018-2248	241AN PRIMARY EXHAUSTER SKID - EAPC Safety Book	241AN primary exhauster skid North stairs are NOT dimensionally uniform as the first step is approximately 9 3/8 inches high and more than an inch higher than the other two steps. Procedure TFC-ESHQ-FP-STD-02 attachment 1 requires stairs to be a maximum height of 9 inches when used to access equipment and dimensionally uniform. A possible solution is to place a steel grate with appropriate thickness at the base of the stairs.
8/28/2018	WRPS-PER-2018-2250	HEPA Filter Bag-In Bag-Out Bags Don't Always Fit Filter Housing	During filter replacement activities in SY Farm, work crew members were unable to fit some filter bags over the lip of the housing. Some of the bags fit and some did not, even though they had the same part number. The bags being used were the correct part number and matched what had been called for on the filter housing doors (see attached). Normally, the flexible portion of the bag will stretch over the lip of the housing, ensuring contamination containment within the housing. Bags used were Flanders 90C x 108 CID: 629218.

8/28/2018	WRPS-PER-2018-2249	Contaminated Bird Feces at ETF	During the performance of LE-W095: Radiation & contamination surveys of CA Boundaries along LERF fence line on the east side of main entry road. Contaminated bird feces was discovered along the Basin 43 CA boundary. Four spots were found with Total Contamination readings of: 10,000 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801747.
8/28/2018	WRPS-PER-2018-2251	FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping	Assessment Report FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping, Line of Inquire 8 - Computerized Accident/Incident Reporting System (CAIRS) – Are CAIRS cases entered in the required timeframe? Review of the injury and illness records were conducted during this assessment indicated the injury and illness records were being entered into the CAIRS database accurately and entered in a timely manner. The construction sub-contractors that were included in this assessment were providing the appropriate and required information to WRPS case management so entry into the CAIRS database was performed in the required timeframe. Opportunities for improvement: Multiple CAIRS form DOE F 5484.3 Individual Accident/Incident Reports were in the OSHA case files but does not adequately show the timeline of the case and the timeliness of the reporting. The reports do show when the report was printed which would be evidence of the timeframe the information was entered into the system, but the report does not show if it was the final report that was submitted to the Production area in the CAIRS database or preliminary reports that were submitted to the Workspace area in the CAIRS database. DOE Order 231.1B, Chg. 1, Environment, Safety and Health Reporting requires injury and illness incident reports to be submitted into CAIRS by the 15th and the last working day of the month.
8/28/2018	WRPS-PER-2018-2252	Contaminated Bird Feces at ETF	During the performance of LE-W084: Radiation & contamination surveys of Surge Tank Berm Area. Contaminated bird feces was discovered in the Surge Tank Berm Area. One spot was found with a Total Contamination reading of: 12,690 dpm/100 cm2 Beta-Gamma and 14 dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801752

8/28/2018	WRPS-PER-2018-2253	Assessment Report FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping	Assessment Report FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping, Line of Inquire 11 - Injury and Illness Investigation - Are injuries and illnesses being investigated in a timely fashion? Interviews with case management indicated that there was an improvement over last year and investigations are occurring where applicable. One opportunity for improvement was identified when interviewing members of the case management team and safety professionals. However, there were three actions that were identified from that opportunity for improvement. Event reports should be more comprehensive with required information. TFC-ESHQ-S_CMLI-C-02, Injury and Illness Events procedure states to include witness statements and photographs with the completed event report. This assessor reviewed event reports from March – July 2018, less than 30% of these reports contained photographs and actual witness statements. With most of the witnesses identified, no statement was provided, however the witness did sign the actual event report.
8/28/2018	WRPS-PER-2018-2254	Contaminated Tumbleweeds at ETF	During the performance of LE-W098, Contamination surveys of 2025E: LERF Contamination Area Boundaries on the North, South and East sides outside the LERF perimeter fence. Contaminated tumbleweeds were discovered Three spots were found with Total Contamination readings of: 57,000 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha. 43,500 dpm/100 cm2 Beta-Gamma and <Det dpm/100 cm2 Alpha. 13,000 dpm/100 cm2 Beta-Gamma and 56 dpm/100 cm2 Alpha. Survey results are documented in Survey Simple on survey # LE-1801746.
8/28/2018	WRPS-PER-2018-2255	FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping	Assessment Report FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping, Line of Inquire 11 - Injury and Illness Investigation - Are injuries and illnesses being investigated in a timely fashion? Interviews with case management indicated that there was an improvement over last year and investigations are occurring where applicable. One opportunity for improvement was identified when interviewing members of the case management team and safety professionals. However, there were three actions that were identified from that opportunity for improvement. Event reports should be more comprehensive with required information. TFC-ESHQ-S_CMLI-C-02, Injury and Illness Events procedure states to include witness statements and photographs with the completed event report. This assessor reviewed event reports from March – July 2018, less than 30% of these reports contained photographs and actual witness statements. With most of the witnesses identified, no statement was provided, however the witness did sign the actual event report.

8/28/2018	WRPS-PER-2018-2256	FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping	Assessment Report FY2018-ESHQ-R-0166 – Injury & Illness Recordkeeping, Line of Inquire 13 - Injury and Illness Investigation - Were appropriate corrective actions completed? Document reviews on investigations where corrective actions were noted, safety professionals agreed that the corrective actions identified in the event report were appropriate to prevent recurrence. While interviewing safety management, a possible gap was identified. When the investigation team is evaluating the event for corrective actions and more specifically who the responsible manager would be to complete the investigation, event report, and complete the identified corrective actions when an employee is assigned work with another department/group/manager for the day. Concern was voiced that the proper corrective action could possibly be effected and not handled appropriately because the management that is currently responsible for completing the event report might not be familiar with the specifics of the job or work location.
8/28/2018	WRPS-PER-2018-2257	Team building session with 10 planners representing all planning teams.	There was a general consensus that one area of potential improvement would be that planners could use more training/guidance in using the WORD , word processing program. A large part of planning is done in WORD and better knowledge of the program would help with formatting issues that are encountered.
8/28/2018	WRPS-PER-2018-0615	The AW/AN Farm tanks level rise	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. The AW/AN Farm tanks level rise analysis considers the effects of a large magnitude, distant Cascadia Subduction Zone event. The Nuclear Energy Institute (NEI) white paper, "Consistent Site Response/Soil-Structure Interaction Analysis and Evaluation" (NEI 2009) recommended a revised seismic input approach, which has been accepted by the U.S. Nuclear Regulatory Commission and is now specified in ASCE 4 16, Seismic Analysis of Safety-Related Nuclear Structures. This approach has been used in all of the single-shell tank (SST) analyses of record (AOR) since 2011. This event should be considered in all DSTs, with an update to the AOR either after the AN/AW Farm analysis is complete or in 2025 per the conclusion.

8/28/2018	WRPS-PER-2018-0616	The pitting factor formula for assessing chloride levels	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. The pitting factor formula for assessing chloride levels should be used as the basis for assessing tank chemistry samples in the prevention of pitting, with subsequent chemical adjustment and monitoring. The current chemistry specification only addresses stress corrosion cracking.
8/28/2018	WRPS-PER-2018-0618	replacement of failed corrosion probes	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. The Tank Integrity Expert Panel (TIEP), or associated Corrosion Subgroup, has recommended replacement of failed corrosion probes and/or specifically replacing the Tank AY 101 corrosion probe for the last 3 years. The corrosion probes in Tanks AY 101, AW 104, and AW 105 should be replaced or supplemented with a new RCMP to facilitate accurate readings. Tank AY 101 is measuring tank potentials in a potentially unsafe range. WRPS-PER-2015-0735 documented this occurrence. No actions have been taken to replace the probe, and the replacement is not funded for FY 2018. Probes need to be replaced or added. The following list is generally in the order of priority: •Tank AY-101, replace RCMP •Tank AW-105, replace RCMP electrode •Tank AW-102, install new RCMP •Tank AN-101, install new RCMP •Tank AP-102, install new RCMP •Tank AW-104, install new RCMP
8/28/2018	WRPS-PER-2018-0619	Opportunities to extend the life of the DSTs	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. Opportunities to extend the life of the DSTs are being pursued for the primary tank; however, intrusion in the foundation is not currently being addressed and has the potential to reduce corrosion on the bottom of the secondary liner. Cross-connections in the AY and AZ Farms are not plugged, annulus vacuum is not minimized, and pressure testing of an LDP has not been conducted on a test basis. There is no activity to extend secondary liner life by keeping the foundation dry (no mitigation, monitoring, or life extension).

8/28/2018	WRPS-PER-2018-0621	. MIC has not been identified in the Hanford tanks farms	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. MIC has not been identified in the Hanford tanks farms, with the high level of radiation in the tanks potentially preventing MIC from occurring. The conditions specific to the LDP, however, with large attenuation of the radiation, the presence of moisture, and slightly elevated temperature, are more suited for this type of corrosion. The extreme localized wall thinning observed in annulus floor scans could be explained by MIC. SRNL has retained an expert in MIC and has proposed sampling for the LDP and possible scraping of the drain line. If acid-producing microbes are confirmed, sanitation and treatment strategies could be devised. MIC should be investigated with an LDP sample; Tank AZ-102 is a good candidate.
8/28/2018	WRPS-PER-2018-0622	Bottom Plate UT	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. Bottom Plate UT – Ultrasonic Testing of the bottom of the primary tank and secondary liner is necessary to estimate tank useful life with a level of confidence. This entail development of robotic entry to inspect the plate thickness and presence of pitting.
8/28/2018	WRPS-PER-2018-0746	HIHTL's	HIHTL's currently are subject to a WPRS administrative limit of a 10 year total life; the maximum shelf life is 7 years, and the total of shelf life and service life may not exceed 10 years. The current service life evaluation process is based on burst pressure tests that were performed on hose coupons that had been aged at elevated temperatures. Elevated temperatures were used in an attempt to accelerate the hose aging process. Testing has been performed at Florida International University (FIU) starting in 2016 that ages the hoses at temperatures that are closer to what the hoses experience in the field, with caustic solution; however, at this time the results from FIU have not been incorporated into the service life evaluation process. The HIHTL service life evaluation process should be strengthened. The current evaluation process does not consider radiation effects on the hoses. The development of the current process also did not evaluate any combination of temperature and caustic solution, nor synergistic effects between temperature, pressure, caustic and radiation. In addition, the temperatures at which the hoses were tested during the original lifetime evaluation development process were significantly above temperatures that are seen in actual service. This increases uncertainty in the temperature portion of the current hose lifetime evaluation equation.

8/28/2018	WRPS-PER-2018-1732	Update Visual Inspection Plan RPP-7574	RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. Update Visual Inspection Plan – RPP-7574 updated the visual inspection via the annulus to every three years: General visual inspection of each DST annulus shall be conducted nominally every three years through a number of risers necessary for achieving 95% or more coverage of the annulus floor with each inspection. Directed visual inspection shall be conducted as needed to corroborate results of UT inspections/examinations. RPP-PLAN-46847, Visual Inspection Plan for Single-Shell Tanks and Double Shell Tanks should be updated with a revision to match the three year periodicity and integrate with RPP-7574.
8/28/2018	WRPS-PER-2018-2241	Radeco Air Sampler rotometer serial no. #9000 was Out Of Tolerance (OOT) outside +-15% of conventionally true value CTV	Radeco air sampler rotometer was found OOT, outside +-15%, during a routine calibration checks.
8/28/2018	WRPS-PER-2018-2259	Work Order did not have the proper level of Work Planning	Performed WRPS-MOP-2018-2546, identified that Work Order 362925 incorrectly classified the work order as Level 3 work. TFC-OPS-MAINT-C-01 allows work orders to classified as Level 3 using specific criteria. One of the criteria is that the activity must be on a Skill of the Craft list. The work step in this level 3 package was "REPAIR CA-CMP-2A and 2B" . Review of the Skill of the Craft list for Pipefitters does not include "Repair Compressor". Work record entries indicate the cause of the oil leak had not been determined at the time of planning, so troubleshooting was required prior to repair. The work step was not sufficient for the work that needed to be performed. Work order should have been a Level 1 work order, allowing for adequate detailed work instructions.

8/28/2018	WRPS-PER-2018-2258	Continuing movement of CA boundary	2 PERs have been written on this ongoing problem. Again today 5 stanchions were moved off of sidewalk and reducing CA zone at Basin 44. See PERs WRPS-PER-2018-2032 & WRPS-PER-2018-2240. Also see attached pictures.
8/28/2018	WRPS-PER-2018-2073	USE OF IHSP-BERY-150	TFC-ESHQ-STD-33, REV B-1, Implementation of DOE-0342, CBDPP Attachment A, states "IHSP-BERY-150 will be used for sample collection to support and verify the technical basis correlation between rad and beryllium when the response level is met or exceeded." IHSP-BERY-150 was not used exclusively for sample collection to support and verify the technical basis correlation between rad and beryllium when the response level was met or exceeded. There were some instances where IHSP-BERY-133 and IHSP-RETR-C-63 were used for work scope that falls under the requirements of IHSP-BERY-150. This is not compliant with the requirement. Example surveys records: 17-08413, 17-05562, 17-08819, and 18-03964.
8/28/2018	WRPS-PER-2018-2074	IHSP Supporting Documentation	IHSP-BERY-150, Beryllium surface and air sampling to support correlation between radioactivity and beryllium per RPP-RPT-59941 (Technical Basis to correlate Beryllium Concentration to Radioactivity in Hanford Tank Farms) states to document the following in SWIHD: •Record removable alpha or beta/gamma radioactivity associated with sample location in "Location Details" field. •Facility, farm, area, structure ID, etc. (e.g. 241-C-103 riser #001) •Use map or diagram to document specific sample locations. (pit #, riser #, etc.) •Attach photos of sampled locations. •Attach photos of overloaded ghost wipe surfaces if excess dust is present on wipe; describe in SWIHD survey Surveys 17-07941 for the AP06A Pump Pull, 17-08332 for AP106 Pump Pit, 18-00254 for AW103 Pump Pit, 18-00469 for AW103 Pump Pit, 17-04287 for AW06A Pit, and 18-03964 for C-Farm POR 104 do not include photos of wipe samples nor a map or diagram of sample locations IAW IHSP-BERY-150. Deficiencies in radiological correlation data were also noted.

8/28/2018	WRPS-PER-2018-2075	Minimum Sample Volume	DOE-0342 section 6.11.4.1 states, "The following applies to air monitoring conducted in accordance with Sections 6.11.4.2, 6.11.4.3, and 6.11.4.4...The type of sampling pumps used shall have a sufficient flow rate to ensure that collected air volume is adequate to provide a reporting detection limit of less than 0.02 µg/m3 given the expected duration of the work activity." The sample pumps provide flow rates that are allowed by the analytical method; however, the duration of the sample will impact the collected air volume for personal and area samples. Of 169 area air samples taken, 11 (6.5%) did not have a cumulative volume required to provide a reporting detection limit below 0.02 µg/m3.
8/28/2018	WRPS-PER-2018-2095	PLACEMENT OF SAMPLE PUMPS	DOE-0342 section 6.11.4.1 states, "During placement of the sampling pumps, consideration will be given to the prevailing wind flow or air flow path." The team could not confirm that consideration was given for wind flow or air flow path from the reviewed surveys (17-00852, 17-01082, 17-07047, 17-09171). DOE-0342, Section 6.11.4.1 states "The following applies to air monitoring conducted in accordance with Sections 6.11.4.2, 6.11.4.3, and 6.11.4.4." DOE-0342, Section 6.11.4.3 states "Area samples will be collected on a daily basis during intrusive activities for BCA/BRAs that have rope boundaries. For areas equal to or greater than 100 ft2, a minimum of one sample will be collected on each clean side of the rope boundary. A maximum of four samples would be required if the entire perimeter has a rope boundary. If one of the sides with rope boundaries also has a step off pad, only one sample is required on that side. For areas less than 100 ft2, one sample is required." Based on the reviewed surveys, (17-00852, 17-01082, 17-07047, 17-09171) the location of area/boundary sampling was not identified.
8/28/2018	WRPS-PER-2018-2096	REVIEW OF EXPOSURES IN EXCESS OF THE RDL	DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program, section 6.13 states the following: "...ALL activities where breathing zone sample results exceed the Level of Quantification (LOQ) or Reporting Detection Limit (RDL). The review shall include, at a minimum, the work planning for the activity, controls established for the activity, the content of the BWP and feedback from the workers involved in the activity. If the results of this review find that there was unexpected beryllium exposure, the review will be communicated to the CBDPP Committee." A review of the airborne exposures in excess of the RDL were required to be performed, but the team could not confirm a review for the following air sample survey records: 15-01844, 15-01878, 16-07005, 17-00568, 17-03011, and 17-08947. Previously, WRPS-PER-2017-1998 was issued for lack of documentation concerning a review of surveys 17-03011 and 17-00568.

8/28/2018	WRPS-PER-2018-2098	SAMPLING OF BERYLLIUM AFFECTED WORKERS	DOE-0342 section 6.14 states "Sampling shall be performed for each beryllium-affected worker within 60 days of the time the worker receives a diagnosis of beryllium Sensitization and/or Chronic Beryllium Disease in accordance with the Sample Protocols for Beryllium-Affected Workers (Appendix C)." Records for beryllium affected worker sampling were not able to be verified. The SWIHD has the capability to track beryllium affected worker sampling, but it is not consistently used.
8/28/2018	WRPS-PER-2018-2099	(b)(6) Not Verifying Training and Medical Qualification	TFC-ESHQ-S-STD-33, REV B-1, "Implementation of DOE-0342, CBDPP," Section 3.1.8 states that it is the responsibility of the FWS to ensure personnel working on a BWP are appropriately trained and medically qualified prior to entry into a beryllium controlled or regulated area. DOE-0342, Section 6.23 states "Only qualified beryllium workers shall handle plastic wrapped or bagged beryllium contaminated waste/material until such time that the package is disposed of in a sealed hard sided container (i.e., metal drums, ERDF containers, or other shipping containers)." DOE-0342-001, Section 2.3 states "Worker training and medical qualifications are required to be verified by management prior to the worker performing beryllium activities." DOE-0342, Appendix F, Item 2 states: "The Contractor shall have a process that ensures ... Beryllium worker training and medical clearances are verified prior to commencing work..." Based on interviews, several (b)(6) rely on the workers to verify their beryllium worker training and medical evaluations are current. (b)(6) did not observe workers handling plastic wrapped or bagged beryllium contaminated waste/material without adequate training or medical qualification.
8/28/2018	WRPS-PER-2018-2100	DOCUMENTATION OF EVALUATION RESULTS	TFC-MD-098, Rev. C, "Interim Controls During Implementation of DOE-0342," Rev. 2A, Section 3.3 states that Industrial Hygiene is to document the evaluation results in any of the following: •Work record entry in work package •Beryllium Facility Assessment form •Permits (BHA/BWP, excavation permit, asbestos permit etc.) •IHEA •IHA •HSP •Interim Controls Evaluation list •Reports •Email of evaluation results Documenting this information on a pre-established form would ensure consistency, formality, configuration management control, and make the information easier to retrieve

8/28/2018	WRPS-PER-2018-2101	INCORRECT SECTION REFERENCE IN PROCEDURE	TFC-MD-098, Rev. C "Interim Controls During Implementation of DOE-0342" Section 1.0 states, "Interim controls evaluations, categorical evaluations of facilities, and applicable technical documents pertaining to beryllium evaluations will be maintained in accordance with the requirements of section 4.3 Documenting IH Evaluations." Section 4.3 does not exist.
8/28/2018	WRPS-PER-2018-2102	INCONSISTENT DISPOSAL INSTRUCTIONS	Items not placed directly into a sealed container are being bagged/wrapped in accordance with DOE-0342, Resolution 0342-101. The resolution, Section 6.23 specifies waste material not placed immediately in a sealed container or ERDF can shall be bagged and/or wrapped in 6 mil or thicker plastic or other material of equal or better protection. However, DOE-0342-003, Section 4.6.1 states that labeled, bagged waste is to be placed directly into a properly labeled, sealed container or ERDF can. The two directives need to provide consistent instructions.
8/28/2018	WRPS-PER-2018-2104	TFC-ESHQ-S-STD-33 LISTS OLD REVISION REFERENCE TO DOE-0342-001 FOR VERIFICATION	TFC-ESHQ-S-STD-33, Rev. B-1, "Implementation of DOE-0342, CBDPP," Section 3.1.8 references DOE-0342-001, Section 5.3 as the driver. A recent revision to DOE 0342-001 (Rev 2), Section 2.3 specifies management is required to verify worker training and medical qualifications.

8/28/2018	WRPS-PER-2018-2105	RADIOLOGICAL SURVEY REPORT FOR SUPPORT IN SWIHD	IHSP-BERY-150, "Beryllium surface and air sampling to support correlation between radioactivity and beryllium per RPP-RPT-59941 (Technical Basis to correlate Beryllium Concentration to Radioactivity in Hanford Tank Farms)" states to document the following in SWIHD: •Record removable alpha or beta/gamma radioactivity associated with sample location in "Location Details" field. •Facility, farm, area, structure ID, etc. (e.g. 241-C-103 riser #001) •Use map or diagram to document specific sample locations. (pit #, riser #, etc.) •Attach photos of sampled locations •Attach photos of overloaded ghost wipe surfaces if excess dust is present on wipe; describe in SWIHD survey. The Radiological Survey Report is not required to documented in SWIHD to aid in retrieval of radiological data.
8/28/2018	WRPS-PER-2018-2106	STORAGE OF BAGGED AND LABELED BERYLLIUM ITEMS IN UN-POSTED AREA	DOE-0342 section 6.22.1.1 states, "Items to be transferred from one BCA/BRA and staged in another BCA/BRA, shall be wrapped/bagged or contained to prevent the spread of contamination, per IH instructions." DOE-0342-003 section 4.4.5 states, "A BMA is not to be established for the storage of beryllium contaminated items or to be used as a permanent storage area for beryllium containing tools/equipment." DOE-0342 does not provide direction for storing reusable beryllium contaminated items, that are appropriately wrapped and labeled, and in transit from one BCA/BRA to another, or that are awaiting use in another BCA/BRA.
8/28/2018	WRPS-PER-2018-2107	Form BFA-B-00001 NOT FILED IN CORRECT FOLDER IN SWIHD	Form BFA-B-00001 for the document WRPS-1001694 was filed in the folder for MO027, but the document did not mention MO027; the document concerned MO211, which did not have a similar document in its folder. The document was incorrectly filed in the folder for MO-027 when it should have been filed under MO-211 on the Beryllium Facility Assessment site under the Industrial Hygiene website. The document contained information for MO-211, not MO-027.

8/28/2018	WRPS-PER-2018-2108	IDENTIFYING INDIVIDUALS PARTICIPATING IN BFA WALK DOWNS	The Beryllium Facility Assessments (BFAs) included the names of the individuals participating in the site walk down, but they did not consistently identify the individual's function or job title as shown in BFA-B-00101-Rev 0 and BFA-C-00147-Rev 3.
8/28/2018	WRPS-PER-2018-2109	CURRENT BFAs NOT ON WRPS IH WEBSITE	Revisions to two BFAs were not available on the WRPS Industrial Hygiene's beryllium website. The revisions were available on SWIHD and in IDMS.
8/28/2018	WRPS-PER-2018-2191	REQUIRED RESPIRATORS FOR BERYLLIUM WORK	Beryllium work permits are prescribing respiratory protection for hazards other than beryllium. The six BWPsreviewed specified respiratory protection requirements, with justification. Three of six BWPs required respiratory protection due to hazards other than beryllium. This may not be appropriate. If respiratory protection is required for hazards other than beryllium, consideration should be given to address that fact on the respiratory protection form (RPF).

8/28/2018	WRPS-PER-2018-2192	DOCUMENTATION OF BERYLLIUM WORK ACTIVITIES	Some surveys in SWIHD did not have clear documentation on the types of beryllium activities that had taken place. It was difficult to determine if all of the required sampling was completed for a given work evolution.
8/28/2018	WRPS-PER-2018-2193	EVALUATING FLAGGED SAMPLE RESULTS	DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program, section 6.13 states that activities where breathing zone sample results exceed the Level of Quantification (LOQ) or Reporting Detection Limit (RDL) shall be reviewed and include at a minimum: •The work planning for the activity •Controls established for the activity •The content of the BWP and feedback from the workers involved in the activity "If the results of this review find that there was unexpected beryllium exposure, the review will be communicated to the CBDPP Committee." 36 samples above the detection limit were reviewed. 18 of the 36 samples were flagged as estimated results. Five samples had associated blanks equal to or greater than the sample raw data. These five samples were not marked suspect, and the results were accepted as valid by the Project Industrial Hygienist.
8/28/2018	WRPS-PER-2018-2194	MONTHLY SAMPLING PROCEDURE	A procedure is not available to specify the monthly surface sampling requirements.

8/28/2018	WRPS-PER-2018-2195	VERIFICATION OF DECOMTAMINATION	DOE-0342 section 6.22.1 states, "A percentage of all material that will be removed from the BCA/BRA will be sampled to ensure the decontamination method is effective and placed and managed within a Beryllium Material Area (BMA) per DOE-0342-003, Hanford Site Postings and Labeling Procedure." Some WRPS projects are relying on the RPP-RPT-59941 Technical Basis document of <40K disintegrations per minute per one hundred square centimeters for verifying effective decontamination and assisting in validation of the technical report, which is due to be evaluated for update in 2022 IAW RPP-RPT-59941, Section 6.0.
8/28/2018	WRPS-PER-2018-2196	IH REQUIRED READING	Industrial Hygiene Professionals work to instructions/direction contained in the following documents: DOE-0342-001 Revision 1A, Hanford Site Beryllium Work Permit (BWP) and Hazard Assessment Procedure, DOE-0342-002 Revision 2, Hanford Site Assessment & Characterization/Verification of Buildings Procedure, DOE-0342-003 Revision 2, Hanford Site Beryllium Posting and Labeling Requirements Procedure, DOE-0342-004 Revision 1, Hanford Site Assessment & Characterization/Verification of Structures & Conex Boxes Procedure, and DOE-0342-005 Revision 0, Hanford Site Evaluation of Electrical Equipment for Beryllium Procedure.
8/28/2018	WRPS-PER-2018-2197	BERYLLIUM ASSESSMENT SCHEDULE	DOE-0342, Section 6.31 Performance Feedback states "Responsible contractors must conduct periodic analyses and assessments of the effectiveness of the program." WRPS evaluated portions on the program in 2013. While the LOI specifies a review in 3 years, DOE-0342 specifies periodic analysis.

8/29/2018	WRPS-PER-2018-2261	UNNECESSARY EXPENDITURE OF TIME AND CLOGGING UP COMPUTER SYSTEM	TFC-ESHQ-Q_C-C-01, Section 4.3, Originator, Item 14 states "If the PER documents an issue identified by a surveillance, assessment, or audit, ensure a copy of the report is attached. This requirement is an unnecessary expenditure of time by the originator and for an extensive report adds to clogging up the computer storage. The validity of a PER is based on the requirement or on potential improvement. The validity should not be based on whether it was discovered during a surveillance, assessment, or audit. The surveillance, assessment, or audit is identified in the PER and can be accessed, if needed, by the evaluator or manager. At the most, a link to the report should be included, not the entire report.
8/29/2018	WRPS-PER-2018-2263	Tank Farm Lighting does not meet standards	RPP-RPT-53025 Rev 6 Identifies an issue which is inadequate Tank Farm Area Lighting: All DST Farm outdoor lighting levels are inadequate for the required nighttime Ops surveillance activities, based on low foot-candle levels measured by Environment, Safety, Health, and Quality. WRPS Standard TFC-ESHQ-IH-STD-13 provides guidance that illumination be 3-fc or greater, depending on the detail of the task. Additionally, the physical condition of existing Tank Farm pole lighting is poor in all DST Farms except 241-SY Farm and 241-C Farm. An analysis was performed and report released (RPP-RPT-46927, Technical Analysis and Project Definition Assessment for Double-Shell Tank and Waste Transfer System Life Extension) containing the recommendation to update or replace 30-year old area lighting in all farms beginning with AP tank farm.
8/29/2018	WRPS-PER-2018-2265	Aging Electrical infrastructure	RPP-RPT-53025 Rev 6 identified an area of concern associated with the age of the electrical equipment in Tank Farms. This area of concern is the electrical infrastructure in each of the farms in the 200 east area. The existing Motor Control Centers located within the farms are becoming exceeding hard to obtain repair parts. This coupled with the ALARA concept of keeping people out of the farms by changing out the MCC with Distribution Panels the time necessary to go into the farms by Maintenance personnel would be reduced by 50%.

8/29/2018	WRPS-PER-2018-2266	Load Calculations out of date	RPP-RPT-53025 Revision 6 has identified problems with keeping existing load and Arc Flash calculations up to date. NFPA 70E states that calculations needs to updated or at least revisited every 5 years. Currently WRPS does not meet that requirement. There is a re-baseline effort underway to document electrical loads and update Load Calculations for each of the farms. This activity should be based upon anticipated loads as identified in RPP-5228 and industrial standards such as IEEE 141.
8/29/2018	WRPS-PER-2018-2264	Emergency Response Center Board	Out dated Procedures noted on Emergency Response Center Board located in 241 AX egress Tent. The last update for the Abnormal Operation Procedures (AOP) and Emergency Response Procedures was 12-1-2016
8/29/2018	WRPS-PER-2018-2267	Electronic Routing Board and Engineering process integration	On July 30, 2018 TFC-OPS-OPER-C-37, Routing Board, was released for concurrent use of the Routing Board Drawing H-14-107346, "DST Waste Transfer Piping Diagram", and the Electronic Routing Board (HISI #4210). The Electronic Routing Board was developed to support the TOC Engineering process, including processes to support defining the change, capturing current redline changes, reviewing completed work, and incorporating changes into the released configuration. The Electronic Routing Board (ERB) and the Routing Board Drawing require duplicated efforts by Engineering to maintain Waste Transfer System Configuration. Separating the redline process (Operations' owned action) from the engineering drawing or maintaining duplicate sets of configuration both present opportunities for configuration management to diverge. Therefore; the Electronic Routing Board should replace the Routing Board Drawing at the appropriate time. The TOC Engineering procedure set does not support the Electronic Routing Board process. The Electronic Routing Board does not incorporate the full engineering review process, such as defined roles for Engineering Checker and Design Authority. In addition, there were Engineering comments that were unresolved, for various reasons, as part of the V&V process. These items also need to be resolved/addressed prior to replacing the Routing Board Drawing (H-14-107346) with ERB. Training to the applicable Engineers also did not occur prior to release of this process (e.g., R/C, Waste Transfer Engineers, Design Services, 242-A). The Electronic Routing Board should be updated to incorporate the TOC Engineering drawing validation and verification processes. The TOC Engineering procedure set should be updated to support the Electronic Routing Board. As such, the equivocacy statements in RPP-SPEC-61857, "Electronic Routing Board Software Requirements Specification" should be removed until these conditions have been satisfied. Until such time as the process can be fully developed and the ERB updated with all the outstanding comments from V&V, a dual process will occur (i.e., releasing an ERB change and a document revision of the SPF drawing to aid it keeping the two processes as consistent as possible). The SPF drawing plus the redlines will remain the official representation of the facility configuration and ERB will remain in the "pilot" phase from an Engineering perspective.

8/29/2018	WRPS-PER-2018-2270	Property Inventory - Sensitive Property	During performance if FY18 Sensitive Property inventory, 13 items (.39%) were not able to be accounted for. Loss reporting for these items within 30 days of completion is required.
8/29/2018	WRPS-PER-2018-2272	Tumble Weeds inside/outside of S, SX & SY Farms	Tumble weed build up inside and outside of S, SX & SY Farms. SY Change trailer had a faded RMA number. (See Pictures)
8/29/2018	WRPS-PER-2018-2269	Unexpected User/Password prompt on production build in OpsTracker	Discovered during a scheduled move of a new version of code, v1.6-8) to the PROD environment. A compile-time flag that is based on build configuration (dev, debug, prod, etc.) causes different behavior on test and production. The desired behavior is that access to TestController is denied to all users on the production system but allowed on other systems. The issue was discovered after deploying to production was that instead of denying access to the TestController, every access to the OpsTracker site prompted for a username and password. This wasn't discovered in the test deployment (i.e., testing) because it was literally different compiled code due to the compile time flag.

8/29/2018	WRPS-PER-2018-2273	Heise Digital Pressure Indicator was found Out-Of-Tolerance from the Calibration Lab	Heise Digital Pressure Indicator, Serial # 59-19621, Model # 901A DIGITAL (M&TE # 702-35-40-009) "As Found" reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.
8/29/2018	WRPS-PER-2018-2274	AY102-WST-LIT-101 taken out of service	AY102 primary was raised into the riser to support AY102 Rinsing activities over the weekend to prevent damage to the ENRAF. Levels were not taken on 8/24, 8/26 and 8/29/2018.
8/29/2018	WRPS-PER-2018-2275	EAPC Safety Book - 90 Day Trend Only PER	1. Hallway lighting needs to be addressed. Lights are turned off because one employee complains. 2. VPP sign is no longer secure to the fence (on one side) and if a strong wind were to pull it off the rest of the way, it could result in potential harm to a human or could cause damage to a vehicle in the parking lot. 3. During a walkdown, it was noted that a couple of T-posts didn't have the caps on them and people have been sticking trash down them. 4. Expired surgeon gloves in use/service. Expiration date of 5 years date of manufacturer is printed on some, but not others. Some without a printed expiration and a 2011 date of manufacturer are still in service, which may have expired in 2016. Assumptions are made that they may not expire at all. Inner gloves are literally disintegrating under intact outer gloves when worn for a short period of time. They are also no supposed to be stored in areas with UV lighting according to the label, which degrades the material and shortens the shelf life. 5. During a walkdown, it was noted that a scaffold cross member was sticking out around head height. It was discussed to mitigate this hazard, possibly hang some masslinn to warn workers of hazard. 6. 241AN274 has broken step. 7. 241AN primary exhauster skid North stairs are NOT dimensionally uniform as the first step is approximately 9 3/8 inches high and more than an inch higher than the other two steps. Procedure TFC-ESHQ-FP-STD-02 attachment 1 requires stairs to be a maximum height of 9 inches when used to access equipment and dimensionally uniform. A possible solution is to place a steel grate with appropriate thickness at the base of the stairs. 8. MO-284 241BX Change Trailer front stair handrail ("metal pipe") is loose. Probably just need a pipefitter to tighten the handrail. 9. MO-824 241 BX Change Trailer front stair handrail ("metal pipe") is loose. A pipefitter tightened the handrail but the wood is split. Handrail is still loose. Need carpenters to fix. 10. Sidewalks need to be painted around 274-AW and mask station trailer. 11. Ergo chair and desk ordered in April - still not received them in dispatch. 12. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. 13. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Removing rubber mat at base of stairs would possibly get these stairs in compliance with code listed above. 14. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Code of record unknown. Each set needs gravel at base to lower height of bottom riser. 15. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Trailer installed May 2018. West Stairs bottom risers is one inch taller (~7.75") than the other risers. 16. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Pictures are descending risers. Concrete pad has rubber mat at base of stairs. 17. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Pictures of risers are bottom to top showing adjacent riser height difference. Code of record is unknown to me. 18. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. Bottom step ~8.5" on average (8"-9" actual) north set adjacent step is ~7". 19. TFC-ESHQ-FP attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. The bottom step of 241AW stairs over ductwork bottom stair riser is ~9.5 inches above the ground at its base and the next adjacent step is ~7 inches. Adjacent riser height difference exceeds 3/16 inch. Top step of flight is lowest riser. Opposite flight of stairs not measured. code of record may be different. 20. MO-818 241AW change trailer landing adjacent to main egress door and building floor measures 1.625 inches (see attached). TFC-ESHQ-FP-STD-02 attachment 1 states that "landings adjacent to egress door and building floor shall be within 1/2 inch of the building floor level." This landing is approximately 3 times greater than the allowable tolerance. Code of record may be different. 21. MO-818 241 AW change trailer bottom stair riser is 5 times the allowable tolerance for adjacent risers as defined in procedure TFC-ESHQ-FP-STD-02 attachment 1. TFC-ESHQ-FP-STD-02 attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. 22. TFC-ESHQ-FP-STD-02 attachment 1 requires stairs to be dimensionally uniform. The tolerance for adjacent risers is 3/16 inch. See attached pictures for actual adjacent riser difference. SE stair bottom ~2" too low and south stair bottom ~1" too high.

8/29/2018	WRPS-PER-2018-2301	Exceeded Work Hour Limitation (72hrs)	An employee exceeded their work hour limitations (72hrs) without appropriate approvals as specified in the "control of working hours" procedure.
8/29/2018	WRPS-PER-2018-2302	Improving Waste Compatibility Assessment Documentation	RPP-RPT-60783, Waste Compatibility Assessment for the Transfer of Waste from Tank 241-AW-106 to Tank 241-AW-102 for EC-09, discusses water additions, but the WCA does not specifically mention the discharge of over 20,000 gallons from the PB-2 testing activity. The WCA does specifically discusses the movement of a much smaller amount of liquid from 242-A, identifying 5,000 gallons can result from the jetting of the 242-A sump. Documentation shows that the WCA was provided to operations prior to the PB-2 testing activity, although it was not included in the work package, as the intent was to move less than 10,000 gallons. Based on the narrative provided in OA Rpt #36903 from the Facility Representative, there is a strong implication that the description found in WCA could be written to better explain & document that the bounding water volume analyzed applied to DST AW-102 regardless of where the water came from or why it was used. If the narrative found in Section 1.0 or 2.0 of the WCA explained this, some confusion may have been avoided.
8/29/2018	WRPS-PER-2018-2271	WIDS Site Radiological Survey and Inspection Discrepancies	During routine surveys and inspection we found vegetation and small animal burrows on sections of WIDS Transfer line 200-E-114PL, see survey BOS-1800894.

8/29/2018	WRPS-PER-2018-2303	Equipment used while tagged out of service with deficient conditions identified	I was contacted by worker for a safety concern at 2225 dealing with manipulator being used while tagged out of service with known deficiency. If the control cable failed completely the tank sample being handled could have dropped, broke (was in hot cell) and lost. The major concern is with the conduct of operations and procedure non-compliance. The event scene was also not maintained and approval to repair manipulator was given prior to any fact finding or per documenting the incident.
8/29/2018	WRPS-PER-2018-2304	Environmental Records	The listing of environmental records included in Table 1 of TFC-ESHQ-ENV-STD-07 was reviewed and the requirement that causes each document to be produced was not correct in all cases.
8/30/2018	WRPS-PER-2018-2306	The 222-S Facility Operations Manager position is in the wrong location in the Training Implementation Matrix Table.	Review of TFC-BSM-TQ-STD-23, TOC Training Implementation Matrix(TIM) by 222-S personnel has revealed an error in Table 1, WRPS Position/Function Listing. The 222-S Labs Facility Operations Manager (FOM) position should be in the Supervisor Position Classification. Currently the 222-S FOM position is located in the Operations Management Classification. It appears that the word "Manager" in the FOM title caused this position to be placed inadvertently into the wrong classification.

8/30/2018	WRPS-PER-2018-2305	TPM & Rad Hazards for WO378435	It was discovered during the pre-job briefing that the work scope to be performed far exceeded that which was in the work package. There were both IH and Radcon concerns and controls that were not adequately addressed in the work package. Additionally, the RWP was low risk and the work scope proposed could potentially involve higher risk radiological work, which would need to be evaluated before beginning field work. Thus, the TPM and planning phase of the work was not sufficient enough for the current work scope. The RWP risk level was also not appropriate for the desired work scope.
8/30/2018	WRPS-PER-2018-2309	Contaminated Bird Droppings on Gov't Vehicle	Contaminated bird droppings were found during work going on in WRPS-RMA-190. It was a random check of suspected bird droppings. Bird droppings turned out to be contaminated. The vehicle was being used by NCO's and the droppings looked to be old. Vehicle is commonly parked at and around 2704 HV and used to drive to the various tank farm locations.
8/30/2018	WRPS-PER-2018-2311	G63-1349V/2018 F250 Crew Cab Ford. Electrical Fire on Vehicle. Location CTF South.	Government MSA Vehicle Electrical fire.

8/30/2018	WRPS-PER-2018-2247	Updates to TFC-PRJ-PC-D17 Planning and Scheduling Guide	A management directed assessment was conducted during August 2018 on the Effectiveness of the Scheduling Program within WRPS. Specifically, the assessment reviewed the effectiveness of the guidance contained within TFC-PRJ-PC-D-17 Rev C-1 "Planning and Scheduling Guidance". There were zero findings as a result of this assessment. The assessment found that WRPS is in compliance with all requirements, however observations for areas of improvement were noted to better align current process with industry guidance and best practices. A Problem Evaluation Request (PER) was initiated to track the recommendation for improvement relating to needed updates to the Planning and Scheduling Guidance in order to better align with WRPS and Industry requirements and best practices. Specific areas to be reviewed are noted in the "Recommended Correction Actions" section.
8/30/2018	WRPS-PER-2018-2276	During performance of FY2018-ENG-MD-0318 assessment, a Findings and Observation related to the SECD procedures (TFC-ENG-FACSU	PER# WRPS-PER-2018-2276 Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 1 – The requirements for populating MEL, Hazardous Area Classified Location Details and general data fields (as it pertains to the SECD) are not well established. The first step of section 4.4 of TFC-ENG-FACSUP-C-24 requires engineer to ensure information required by TFC-ENG-FACSUP-C-23 has been entered for component. The procedure owner provided an interpretation on which fields must be updated to support activation in the SECD; however, this information has not yet been captured in the procedures. This creates an error trap, and results in engineers validating/entering information differently depending upon whether procedures or procedure owner interpretation is utilized as the basis for MEL critical fields updates. Rather than have this information located in two procedures, it should be maintained in one procedure, with procedure TFC-ENG-FACSUP-C-23 being the preferred location.
8/30/2018	WRPS-PER-2018-2277	During performance of FY2018-ENG-MD-0318 assessment, several components in the SECD were identified as requiring updates	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Finding 2 –"How Met" reference does not adequately address requirement. ANVPA-WT-TE-301: ANVPA-WT-TE-301 was identified as an active component that was missing CGD documents to demonstrate it met requirements. During the Manual Freeze Protection Assessment, it was noticed that a CGD document was tied as a How Met document to multiple thermocouples. A week later when looking at the same components, the CGD document was no longer identified as the How Met document, and the components were still active in SPF with no log of the CGD document being removed. This issue was documented in WRPS-PER-2018-0954. The cause is due to the CGD document being revised and not going through the normal process of SPF workflow. Since the PER was written, it has been closed and the issue has been resolved. However, this PER did not have an action item to reestablish the How Met Document for the affected components.

8/30/2018	WRPS-PER-2018-2278	"How Met" reference in SECD does not adequately address requirement	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 5 –"How Met" reference does not adequately address requirement and wording of requirement does not match FRED. JA-8-[21 to 36] - Though the requirements are included for this jumper, the wording of the requirements do not exactly match those of the FRED. How Met Document H-2-99043 SH 001 for requirement "Physical configuration must be in accordance with RPP-RPT-CALC-530347" is not adequate to show the physical configuration since this drawing has not yet been updated with the ECNs that changed the jumper. ECN-726808 Rev. 1 provides the current jumper configuration. This ECN and the other two identified how met documents (TE-10-010, and TF-10-NCR-014) satisfy this requirement.
8/30/2018	WRPS-PER-2018-2308	Review of Proposal Schedule Development Process	A management directed assessment was conducted during August 2018 on the Effectiveness of the Scheduling Program within WRPS. Specifically, the assessment reviewed the effectiveness of the guidance contained within TFC-PRJ-PC-D-17 Rev C-1 "Planning and Scheduling Guidance". There were zero findings as a result of this assessment. The assessment found that WRPS is in compliance with all requirements, however observations for areas of improvement were noted to better align current processes with industry guidance and best practices. A Problem Evaluation Request (PER) was initiated to track the recommendation to more clearly identify the responsibilities and expectations related to Proposal schedule development. The Planning and Scheduling Guidance does not currently address the responsibilities or expectations for developing proposal schedules, specifically expectations regarding schedule health and quality. With no procedure/guidance to follow, the development of proposal schedules falls outside of the typical rigor and review that a new schedule would go through during a Baseline Change Request (BCR) (i.e., validation checks, schedule health metrics, configuration control, etc.). Project Control Services (Baseline Management) is typically not involved in the Proposal estimate and schedule creation process. The alignment of proposal activities to Baselined PMB activities is often difficult due to increased rigor which is placed on BCR activities that does not occur during the proposal development process. The Planning and Scheduling Guidance and Proposal development instructions should be reviewed and updated as appropriate to include the responsibilities and expectations for developing proposal schedules in order to ensure consistency in our scheduling process and help to support the interface between the Baseline Management and Contracts organizations.
8/30/2018	WRPS-PER-2018-2279	SECD missing Hazard Area Classification Details for waste transfer lines SN-635, SL-167 (AW) and SN-634	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 6 – SECD missing Hazard Area Classification Details. Waste transfer lines SN-635, SL-167 (AW) and SN-634 missing Hazard Area Classification Details.

8/30/2018	WRPS-PER-2018-2280	Active components in the SECD missing correct drawings and key documents	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 8 – Active components missing correct drawings and key documents. SN-610 - missing P&ID. SN-635 (AY). SN-635 - missing PMID-BAS. 242AE1-IA-ACC-001 - Included external document 51832-012-FIT-006, however in log was stated that this document was not able to be found, but was not removed and SSC was activated. The correct document number is 51832-012-SUB-017-006 which provides the furnish/fab pipe supports and Air accumulator tanks. POR342-WT-SS-101 - Missing P&ID H-14-020801 Sh 4.
8/30/2018	WRPS-PER-2018-2281	Approval/rejection process issues encountered	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 9 – Approval/rejection process issues encountered. Once rejected, only the Support Engineer submitting the component for approval who initially submitted it can submit that component again. A rejected component should be available to be modified by all Support Engineers. When a component is rejected for SSCs, the workflow isn't as flexible to allow for reassigning to another qualified DA or Support Engineer. Suggest to allow for flexibility similar to an ECN. (e.g., accidently selected the incorrect DA when proposing an item and not able to change/bypass the incorrectly selected DA, when rejecting a component for activation, the item will go back to the Support Engineer. No other user is able to change or propose the component. This is an issue when the original Support Engineer is unavailable.)
8/30/2018	WRPS-PER-2018-2282	Component lists requirement from FSA does not meet requirements in TFC-ENG-FACSUP-C-24	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 10 - AP08A-WT-PNL-001 provides design requirements from the SRED and the 5-year assessment requirement from the associated FSA, RPP-RPT-59734. The FSA is not a FRED or SRED, therefore it does not meet TFC-ENG-FACSUP-C-24.

8/30/2018	WRPS-PER-2018-2284	All general data fields required for SECD should be locked once component proposed or activated	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 12 - All fields required to activate a SSC in SPF should be locked so that they cannot be modified once submitted to the Design Authority for review. There have been instances where MEL data fields were being changed by a Support Engineer while the Design Authority was in the review and approval process for the same component. These fields should be locked down so that they cannot be changed once an item has been activated and/or submitted for activation.
8/30/2018	WRPS-PER-2018-2283	Changes to comments field on active component changes status to "inactive"	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 11 - Changes to comments field on active component changes status to "inactive." When comments for one component was deleted, it inactivated the component. The comments field should have no impact on component status.
8/30/2018	WRPS-PER-2018-2285	SECD allows for activation of a component with an expired TSR surveillance	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Finding 13 - SECD allows activation of a component with an expired TSR surveillance. The was tested as part of the functionality testing. If SPF automatically inactivates a Safety Significant SSC based on expired TSR surveillance, then the reverse should also be true.

8/30/2018	WRPS-PER-2018-2286	SPF only allows one EIN to be tied to a PMID and the TSR surveillance date is only available on one EIN	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 1 - Currently the SPF is able to track TSR surveillance due dates per PMID and is automatically updated via the OpsTracker and EAM. Currently, only one EIN is able to be tied to the PMID and the TSR surveillance date is only available on one EIN and not all of the components the PMID is supporting. This is an issue since the other components should have also been automatically inactivated and could be overlooked.
8/30/2018	WRPS-PER-2018-2287	SECD requirement documents should be more specific	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 2 - For the newer SREDs it is easy to find the critical characteristics for the components because there is typically a table in the back that lists the critical characteristics per component. However, for older documents such as the SRSs, DVRs, and DARS the safety design requirements will be listed, but not all of them may be necessary to carry forward and track in the SECD. The older documents and new documents should be more specific on items that should be tracked in SPF as a requirement.
8/30/2018	WRPS-PER-2018-2307	LO/TO Boundary/Barrier not installed.	LOTO (8 Criteria) was installed on MPZ per DOE-336 at the south side of AN farm. During (b)(6) notified him that his air bottle was low and needed to be replaced. The alarm sounded and the pair left the farm without a boundary in place.

8/30/2018	WRPS-PER-2018-2288	TFC-ENG-FACSUP-C-24 does not address future systems such as TFSPS	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 4 - For TFSPS equipment like the DST annulus system, there is not any discussion for future use or reason for this system in the SPF SEC. TFC-ENG-FACSUP-C-24 states to fill out all of the necessary information for safety equipment, however the Annulus system does not have any procedure to check it ever again after the initial activation. (Currently, the way that this system would get checked is for the common components shared among Freeze protection as these items are part of a route list per transfer during certain months)
8/30/2018	WRPS-PER-2018-2289	SECD procedures do not describe what to do with all related miscellaneous components	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 5 - Some of the FREDS/SREDS contain items such as bolts or flanges in addition to the larger items in the critical characteristics. Though these bolts, flanges, and/or wires are part of the safety system, they would not individually get a separate and unique EIN. The procedures do not provide guidance on what to do with these components. The old SECD database allowed for a better description on what was also included for the item associated with safety equipment compliance. SPF does not allow for a clear discussion of what all is included in the evaluation of that EIN as safety equipment.
8/30/2018	WRPS-PER-2018-2290	Current SECD process does not allow for more than one DA to be the owner of a component	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 6 - The current process does not allow for more than one DA to be the owner of a component (TFSPS shares similar equipment between three systems, two DAs). It is not clear who would be responsible for the equipment that is part of multiple systems with different DAs. This is not specified in the procedures and SPF does not allow to pick multiple DAs.

8/30/2018	WRPS-PER-2018-2291	Some of the fields in SPF only allows one value to be identified per component	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 7 - Some of the fields in SPF only allows one value to be identified per component, such as the DSA Safety SSC ID. Normally, this is not an issue, however TFSPS shares some equipment between three systems and each system has a different DSA Safety SSC ID. The procedures do not cover SSCs that span multiple systems and SPF does not allow for additional values to be selected. (Currently the Annulus level DSA Safety SSC ID is non-existent because this is a new change. A new Safety SSC ID will need to be created for this system.)
8/30/2018	WRPS-PER-2018-2292	The TFSPS system shares some equipment between three systems with different safety functions	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 8 - The TFSPS system shares some equipment between three systems with different safety functions. The equipment that is used for all three systems have three or more separate SREDs that contain requirements. The DST low flow ventilation system will not be turned over until later in FY2019, however the requirements from the SRED document have been added to some components. In order to approve the TFSPS equipment for temperature monitoring and annulus level, the DST ventilation system requirements needs to be removed from the SSCs. Once the DST low flow ventilation system goes online, the requirements will need to be added to the common TFSPS equipment, thereby inactivating this equipment until it is re-submitted for approval. There is not a way to partially activate a component for a single system.
8/30/2018	WRPS-PER-2018-2315	Replace sink and countertops in 278 AW	The shallow sink in the cleaning room does not prevent water from spraying onto the counter top. The laminate counter top has separated from the wood which allows the water to soak into the cleaning area surface. There is a piece of Plexiglas that is not affixed, that we place towels under it in an attempt to soak up the water that is splashed during the rinsing of the regulators, that needs to be permanently attached. The towels used to even out the surface area become soaked and the Plexiglas is awkward to clean causing mold to grow in the corners. The sink has an eyewash built into it and would also free up some valuable floor space. It would also prevent the portable from being bumped and leaking onto the floor.

8/30/2018	WRPS-PER-2018-2314	Procedure Process Requirement for Managing Extensions of Temporary Modifications Should be Clarified	During a MOP with focus on temporary modification PO-18-001/006, it was noted that this temporary modification got extended and renumbered in the Daily Report which did not clearly reflect the original installation date of 2/6/18 and the extended expiration date of 2/6/19 was actually beyond two periods of 180 days. Another temporary modification, PO-17-003 was noted to have an installation date of 9/26/16 with an expiration date of 9/17/18. During related review of TFC-OPS-OPER-C-11, Equipment Temporary Modifications and Bypasses, it was noted that the process requirements in section 4.3 do not clearly delineate how multiple extensions are allowed or managed. The procedure requirements also don't mention the timing of the Area Engineer steps required during the extension period to either make the temporary modification permanent or proceed to remove the temporary modification. Related discussions with personnel from Engineering and Operations supported the fact that this process is not clearly and consistently understood.
8/30/2018	WRPS-PER-2018-2317	Property Mgmt Procedure Review	Performed a review of Property Management programs procedures listed below to ensure procedure steps, forms and form numbers are consistent with current processes and, if not, identify actions needed to update procedures. Date of review and recommended actions (if any) are contained in the attached matrix and draft revisions. With exception of TFC-BSM-FPM_PR-CD-13, De-Value Facilities and Equipment and TFC-BSM-FPM_PR-D-14, Property Custodian Designation/Guidance, all procedures have been revised with the past two years and changes are administrative in nature (e.g. form name/number changes, org name change, etc.) Revision to TFC-BSM-FPM_PR-C-06, Government Motor Vehicle and Equipment Management is currently in process in WRAP.TFC-BSM-FPM_PR-C-01, Property ManagementTFC-BSM-FPM_PR-C-06, Government Motor Vehicle and Equipment ManagementTFC-BSM-FPM_PR-C-12, Management and Control of Information Technology EquipmentTFC-BSM-FPM_PR-C-16, Management and Control of Radio Communication EquipmentTFC-BSM-FPM_PR-C-18, Management of Precious MetalsTFC-BSM-FPM_PR-C-19, Management of Equipment Held for Future ProjectsTFC-BSM-FPM_PR-C-20, Management of Government Property with Subcontractors/SuppliersTFC-BSM-FPM_PR-C-21, Conex Container ManagementTFC-BSM-FPM_PR-CD-13, De-Value Facilities and EquipmentTFC-BSM-FPM_PR-D-08, Property Management Facility InspectionsTFC-BSM-FPM_PR-D-14, Property Custodian Designation/GuidanceTFC-BSM-FPM_PR-D-15, Physical Inventory GuidelinesTFC-BSM-FPM_PR-D-22, Property Management System OversightTFC-OPS-OPER-C-55, Portable Powered Equipment TFC-PLN-04, Property Management Program PlanTFC-PLN-144, Heat Mitigation Equipment Management PlanTFC-PLN-44, WRPS Storage/Staging AreasTFC-POL-24, Property Management Policy
8/30/2018	WRPS-PER-2018-2318	WRAP History	In January the IH submitted comments in WRAP related to TFC-PLN-119. The comments were never incorporated. In July I requested a copy of the comments from the procedures group and they were not available. Upon investigation when a reviewer is removed from the approval process all comments are deleted.

8/30/2018	WRPS-PER-2018-2310	RO/RO cans loaded without PIN Numbers or Paperwork	Employee's loaded ERDF cans prior to the PIN numbers being installed or the proper paperwork available. Employee's failed to follow sections 5.4.1, 5.4.2 and 5.4.3 of procedure TO-100-052.
8/30/2018	WRPS-PER-2018-2319	Employee received bug bite on left pinky finger	An employee was in MO-511 and received an unknown bug bite on their left pinky finger.
8/30/2018	WRPS-PER-2018-2320	Bench required at event response boxes for PPE donning	During a fire alarm evacuation and response event at 222-S on 8/8/18 it was observed that event support personnel donning PPE to assist with response actions were having to dress inside vehicles, using the curb or supporting each other.

8/30/2018	WRPS-PER-2018-2321	Inconsistent reference to SMP Chapters in tank farms and 242-A Evaporator safety basis	MOP indicates that AC 5.6 in both the tank farms and 242-A Evaporator TSRs (HNF-SD-WM-TSR-006 and HNF-15279, respectively) documents the Tank Operations Contractor (TOC) commitment to establish, maintain, and implement the safety management programs (SMP) as described in Chapters 7.0 through 17.0 in the respective DSAs (RPP-13033 for tank farms and HNF-14755 for the 242-A Evaporator). Consistent with the TSRs, the tank farms and 242-A Evaporator DSAs describe this TOC commitment to establish, maintain, and implement the SMPs as described in Chapters 7.0 through 17.0 in footnotes to Tables 3.3.2.3.2-1 and 3.3.2.3.2-3. Conversely, in Section 3.3.2.3.2 both DSAs indicate that the SMPs described in Chapters 6.0 through 17.0 are applied at the facility and provide additional defense-in-depth for multiple hazards. An evaluation of the regulatory guidance in both 10 CFR 830 and DOE-STD-3009-94 CN 3 indicates that it is internally inconsistent and could be used to support either construct. That is, either of the two constructs (SMPs as described in Chapters 6.0 through 17.0 or SMPs as described in Chapters 7.0 through 17.0) is compliant with 10 CFR 830 and DOE-STD-3009-94 CN 3. Note in this regard that criticality safety will be addressed in DSA Chapter 6 independent of which construct is used. Although the tank farms and 242-A Evaporator use inconsistent nomenclature, the preponderance of the citations (AC 5.6 in the TSRs and two places in the DSAs) refer to DSA Chapters 7.0 - 17.0. Given that there is only one reference to DSA Chapters 6.0 - 17.0 in each DSA, these references should be updated to the "DSA Chapters 7.0 - 17.0" construct.
8/30/2018	WRPS-PER-2018-2322	Mobile device to view the 222-S building systems during emergency response	While responding to a fire alarm and evacuation of the 222-S building on Aug 8th, 2018 the HFD responders requested information on the operating status of the building systems including the ventilation system. The information was not available without entering the maintenance area of the 222-S building.
8/30/2018	WRPS-PER-2018-2245	JMP Software Management Plan Improvements	The Software Managemeent Plan (SMP) for SAS JMP has not been updated since 2015. There is a potential for JMP to not be managed as effectively since there have been updates to TFC-BSM-IRM_HS-C-03 to improve the software life cycle process.

8/30/2018	WRPS-PER-2018-2323	40ml glass Sample vial with unknown liquid found on ground between 222-S and REDOX	A 40ml glass sample vial with unknown liquid was found on the ground between 222-S and REDOX and reported to the 222-S Facility Operations Manager by CHPRC personnel. The vial was not labeled. Where the vial came from and how it came to be on the ground between 222-S and REDOX north of Redox Road are **unknown**. HPT surveys indicated that the sample vial contained non-radiological material and IHT monitoring did not detect VOCs. There was no liquid found outside of the sample vial.
8/31/2018	WRPS-PER-2018-2324	Possible drawing or wiring error identified for power supply to SOV-60G-401 at Polishers	Electricians conducting a Circuit Investigation of the power source to solenoid valve SOV-60G-401 confirmed that the documented power source from IDP-1 / CKT No. 20, per H-2-88909 did NOT remove power from the terminal strip inside the Solenoid / Air cabinet as expected.
8/31/2018	WRPS-PER-2018-2325	Possible gap/weakness in training for (b)(6) unescorted tank farm workers	******THIS IS NOT AN IMMEDIATE SAFETY CONCERN****** I talked with a coworker regarding his recent experience of doing tank farm (b)(6) . He (b)(6) . One topic we discussed was required training. Specifically the 1-Day of unsupervised field experience training (031410), which is one of the last requirements to be qualified for **unescorted tank access. My coworker is** (b)(6) **During our conversation, I felt there were several potential problems worth evaluating that related to this training course.** 1) The only requirement of course 031410 is 1-day (8-hours) of supervised field work. This 8-hr supervised field work may be the very first real field experience a worker could have after initial classroom training. These few hours do not seem adequate for a new worker to become familiar with, or even comfortable with the complexities of tank farm field work. The part of field work where a new worker is most likely to make a mistake is during entry (doning) ,and exit (doffing). Depending on the farm and vapor conditions, it's possible a new worker could complete course 031410 with as few as 4 entries and 4 exits. This does not seem **adequate, especially for workers that do not regularly enter the farms**. 2) The escort involved with completing 031410 does not require additional training or experience beyond the requirements for unescorted tank farm work. This means a worker with only 8hrs of escorted field work could provide a new worker with the 8hrs of escorted field work to satisfy 031410. This sounds very much **like a case of 'the blind leading the blind', and could lead to poor training of the new worker, and possibly mistakes during the escorted field work itself.** 3) Course 031410 can be completed by entering ANY radiological area that is access controlled. Some access controlled areas do not require anti-contamination clothing (anti-c's) or respiratory protection. A newly approved unescorted worker, having never used any of this equipment other than classroom training, can now enter an area requiring anti-c's, respiratory PPE, or BOTH. Furthermore, the classroom training for respiratory protection and radiological protection are not integrated. This means a worker has no classroom experience of donning and doffing anti-c's and a respirator at the same time.

9/4/2018	WRPS-PER-2018-2215	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: A review of requirements flow down from DOE O 422.1 to TFC-PLN-05 to the implementing procedures for Organization and Administration identified some gaps. These include reference to a document that has been cancelled, attributes that are not fully addressed by the stated implementing document and documents that do address attributes but are not listed in TFC-PLN-05. (Note that specifics are included in the body of this assessment and will be included in the PER evaluation that will track update of TFC-PLN-05 to address this issue.)
9/4/2018	WRPS-PER-2018-2216	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: The 222-S Laboratory did not complete the requirements for notifications and documentation as defined by the implementing procedures for reportable occurrences.
9/4/2018	WRPS-PER-2018-2217	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Training course 350340, BASE Operations, is required by TFC-OPS-OPER-C-34, Independent Verification, for personnel who perform independent verification. This course is required for Nuclear Chemical Operators (NCOs) but not for Operations Engineers (OEs) or Stationary Operating Engineers (SOEs) who also perform independent verification.

9/4/2018	WRPS-PER-2018-2218	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: There is no procedural guidance to delineate experience requirements for either planners or procedure writers.
9/4/2018	WRPS-PER-2018-2219	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: There is a lack of evidence that the quarterly audits of operator aids are being done by the AZ Team - only one out of the four active operator aids had a completed audit sheet.
9/4/2018	WRPS-PER-2018-2220	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Finding from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: TFC-ESHQ-S-STD-02, Transportation Safety directs that when equipment is parked on an incline to chock the wheels in addition to setting the parking brake. Based on observations and interviews during this assessment, the above procedure steps are not being followed consistently throughout Tank Farms.

9/4/2018	WRPS-PER-2018-2221	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: While pre-job briefs noted to be thorough with good use of the pre-job brief checklist, personnel may benefit from additional training on how to conduct more interactive briefs ("reverse pre-job briefs") and include discussion of error precursors to improve effectiveness.
9/4/2018	WRPS-PER-2018-2222	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is a Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Recommend TFC-OPS-MAINT-STD-03 be revised to clarify how Skill of the Craft (SOC) activities relate to each of the four planning categories.
9/4/2018	WRPS-PER-2018-2223	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Recommend DOE-0360, Hanford Confined Space Procedure, be revised to include steps to change posting of a confined space from permit required to non-permit required when the space is "Downgraded."

9/4/2018	WRPS-PER-2018-2224	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Recommend revising TFC-OPS-OPER-C-17, Operating Logbooks, to require a "Planned closure action" for red arrows and additional options for red arrow closure such as formalizing the red arrow in an existing process or procedure
9/4/2018	WRPS-PER-2018-2225	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Recommend revising DOE-0336, Hanford Site Lockout/Tagout procedure, to include "Freedom of Thought" as an independent verification attribute.
9/4/2018	WRPS-PER-2018-2226	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Managemen t Program Assessment:	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Recommend including concurrent verification in the following qualification cards: o 172520, 222-S SOE Operations o 350340, BASE Operations o 350570, Tank Farm SOE Operations o 705800, 200 Area ETF Stationary Operating Engineer (SOE) Initial Qualification

9/4/2018	WRPS-PER-2018-2227	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: The inhibited alarm list in the 242-A Evaporator (Operator aid 2018-A-18-01) does not meet the definition of an operator aid. The list is located in a loose leaf binder (not firmly attached) and would be a better fit as an attachment to the shutdown procedure.
9/4/2018	WRPS-PER-2018-2228	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: The AN Teams Operator Aid Log book was found not to have the current copy of the procedure (TFC-OPS-OPER-C-41, Operator Aids).
9/4/2018	WRPS-PER-2018-2229	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Revise TFC-OPS-OPER-C-41, Operator Aids, and 222-S Labs Administrative Procedure ATS-310, Section 11.17, "Operator Aid Postings," to add course 350069, TOC Operational Expectations, as training for the requirement from DOE O 422.1, "..., maintenance staff, and other facility staff are trained on the operator aids process." This is in addition to the computer based training (CBT) course 353540, Operator Aid at TOC, for those that are authorizers, installers, and users of operator aids.

9/4/2018	WRPS-PER-2018-2230	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Issue required reading or briefing for TFC-OPS-OPER-C-10, Vehicle and Dome Load Control in Tank Farm Facilities to assist in consistency of application in Operations.
9/4/2018	WRPS-PER-2018-2231	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Issue required reading or briefing to reinforce expectations about the requirements to ensure that the current revision of a procedure is verified prior to use and the error trap of keeping hard copies of outdated procedures in the work place.
9/4/2018	WRPS-PER-2018-2260	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: Review of requirements flow down from DOE O 422.1 to TFC PLN 05 to the implementing procedures for Independent Verification overall was found to be compliant. Some opportunities for improvement were identified that include revising project documents to clarify implementation. Note that specifics are included in the body of this assessment and will be included in the PER that will track update of TFC PLN 05 to address this issue.

9/4/2018	WRPS-PER-2018-2262	FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment	Conducted a required management assessment on specific Conduct of Operations elements from August 1, 2018 through August 16, 2018. The following is an Observation from FY2018-OPI-R-0105 – Annual Conduct of Operations Safety Management Program Assessment: The 222-S Facility does not employ a consistent, rigorous method to implement the Temporary Label program.
9/4/2018	WRPS-PER-2018-2326	242-A P1 alarm list	I reviewed the 242-A P1 alarm list, as documented in 242-A Tracker EVP-733. The purpose of the tracker is to list all active alarms on the 242-A MCS and track to resolution. The below P1 alarms on the 242-A MCS require Process Control and Engineering support to delete, as they monitor systems or parameters that are no longer in use. 1)PCM1A RI-ARHES, SLY SAMP&LOADOUTAREA RADN, this unit is turned off. Actions to ARP-T-601-023 do not apply to this alarm. 2)PCM1A RI-AREVAP, EVAP ROOM AREA RADN, Per ARP-T-601-023, this Radiation Detector is only active when the Evaporator is shut down and Maintenance will be occurring in the Evaporator Room. This radiation detector is a Portable Detector installed when maintenance activity is occurring in the evaporator room. 3)PCM0A DI-AW-102, AW-102 FEED TANK SPG, here is no ARP addressing this and it has been like this for 30 years. 4)PCM02 II-P-106, CONDSATERECYCLE PUMP CURRENT, this unit is turned off. ARP-T-601-018 does not have any actions for this component in RED alarm. A SCR should be written and executed to remove the above obsolete alarms on the 242-A MCS. In addition, the following alarms are active as P1 alarms: 1)PCM0A LXS-LCH43, BASIN 43LI-LCH43SIGNAL STATUS 2)PCM0A LI-LCH43, BASIN 43LEACHATELEVEL An engineering evaluation should be conducted to determine if these alarms are required to be monitored at 242-A.
9/4/2018	WRPS-PER-2018-2327	Fix basin 44 western CA boundary	CA boundary along the west side of basin 44 is not stable

9/5/2018	WRPS-PER-2018-2329	Deployment of SCR-5956 on Evaporator ICS reveals several issues with system	1. Removal of obsolete points caused several SABL (display code) programs to cease functioning. 2. Acronis backups can not easily be restored on production system due to video splitter.
9/5/2018	WRPS-PER-2018-2330	Housekeeping, Vegetation and Status Map Discrepancies at B-Complex	1. During the performance of Walk Your Spaces for B-Farm, BX-Farm and BY-Farm, vegetation growth, Status Map and housekeeping discrepancies were observed for tumbleweed accumulation and litter/debris. 2. Resources need to be applied to address vegetation growth in the interior of respective farms. 3. Status Map needs to be placed back in MO-299 to provide worker awareness of radiological conditions.
9/5/2018	WRPS-PER-2018-2332	Label Empty drums in the field issued prior to TO-100-010 revision implementation	TO-100-010 has been revised and issued. A review of field empty drum storage areas confirmed that all drums that have been issued since the revision have the required notification on the lid. However there are several containers in the field that were issued prior to the change and do not contain the notification. Placing the notification on the top of these drums will be captured in a PER for tracking purposes..

9/5/2018	WRPS-PER-2018-2333	TFC-PLN-5 Conduct of Operations Implementation Plan	In reviewing TFC-PLN-5 "Conduct of Operations Implementation Plan" to address an internal assessment finding the following issues with PLN-5 were identified and should be considered for inclusion in the assessment. PLN-05 is directed at Operations Organizations programs and processes. The key area for conducting operational activities from a documentation perspective derives from Operational and Maintenance technical procedures. However, the criteria outlined in section 4 EXPECTATIONS has the following requirement. • Ensuring guidance exists that describes safety preplanning requirements for operational activities. This guidance can be found in TFC-ESHQ-S_SAF-C-02, TFC OPS MAINT C-01, TFC OPS MAINT C 02, and TFC-ESHQ-RP_RWP-C-03. The procedure that is listed (TFC-OPS-MAINT-C-01 "TOC Work Control) covers pre-planning of maintenance activities and has no bearing on how to pre-plan and produce Technical Operating or Technical Maintenance procedures. That process is outlined in TFC-OPS-OPER-C-13 "Technical Procedure Control and Use" which is not listed in the procedure set of the referenced Section 4 requirements. This is a critical gap in the expectations of PLN-5 in this key requirement area. PLN-5 is also missing reference to TFC-OPS-OPER-C-13 "Technical Procedure Control and Use" in the References listed in PLN-05 step 5.2. TFC-OPS-OPER-C-13 "Technical Procedure Control and Use" is however referenced in many areas of the Conduct of Operations Matrix, Attachment A, where TFC-OPS-MAINT-C-01 "TOC Work Control" is not listed as an implementing procedure. In other key areas of the matrix where TFC-OPS-MAINT-C-01 is identified as the implementing procedure for the criteria the section is silent on TFC-OPS-OPER-C-13, and the criteria clearly would apply to both maintenance work instructions and technical operating or maintenance procedures produced under TFC-OPS-OPER-C-13. A specific example resides in 2.b.(2)) " Adherence by operating personnel and other workers to established safety requirements" where there is no mention of TFC-OPS-OPER-C-13 for producing technical operating or maintenance procedures. With these observations I recommend that PLN-5 have a thorough review for proper use of these two distinctly independent processes TFC-OPS-MAINT-C-01 "Work Control" for work package driven Maintenance activities and TFC-OPS-OPER-C-13 "Technical Procedure Control and Use" for Operational and Maintenance technical procedure driven activities. TFC-OPS-OPER-C-13 should be the primary target of PLN-5 requirements for establishing operational guidance to operations organizations. TFC-OPS-MAINT-C-01 primarily provides guidance for maintenance organizations conducting corrective and preventative maintenance by a maintenance Field Work Supervisor and not operating the facility.
9/5/2018	WRPS-PER-2018-2334	Drawing Changes to Ensure No Lock and Tag Issues for Event Notification System (PA SYS)	Design of PA SYS was changed to remove at each PA Pole the Manual Transfer Switch (MTS) and receptacle for generator (decision made that generator not needed). As result the MTS and receptacle along with the EIN labels were removed from design and new labels were made for remaining disconnect. Labels at poles for MTSs and receptacles were removed and practically all new labels have been installed on the poles. (42 new labels total). Engineer walk down at B Complex 9/4/2018 found the following (below example applies to all Farms): Drawing H-14-110776, SH 4 lists all EINs for disconnects at multiple Farms located on 42 poles (e.g. BX2411-EN-DS-001). This disconnect is on pole with EIN of BX241-EN-EES-001. The label at disconnect also lists the FED FROM information of "FED FROM BX241-EDS-DP-102, CKT 7". The concern is that the Distribution Panel Drawing H-14-030019, SH 4 as part of ECN-7133304, REV 02 lists the EIN for the Pole & not the Disconnect EIN. This will cause issues with Lock and Tag.
9/5/2018	WRPS-PER-2018-2337	DOE Order Supervisory Skills not contained in applicable Training standards for 3 positions	FY2018-OPI-MD-0301, Effectiveness of Training SMP Findings, found course 354080, WRPS Initial Supervisor Training, to not be listed in the training standard for Person-in-Charge, Construction Field Work Supervisor, and Radiological Controls First Line Manager. This course is the current WRPS mechanism for satisfying the DOE O 426.2 requirement for supervisor basic training topics.

9/5/2018	WRPS-PER-2018-2338	Management observations of on-the-job training performance continue to not be adequately performed.	FY2017-ESHQ-M-0126, Training (SMP) Management Assessment found management observations of on-the-job training performance to not be adequately performed. Effectiveness review assessment FY2018-MD-OPI-0301 found 8 MOP's performed in the month immediately after the Training SMP finding. In the year since that time, only 3 other MOP's have been performed that included observation of on-the-job training performance.
9/5/2018	WRPS-PER-2018-2340	Deficient construction zone safety practices	Needed Hearing protection around multiple type and numbers of heavy equipment; improper donning of high visibility vests in a congested work zone with heavy equipment; lack of apparent spotters for heavy equipment in a small congested work zone.
9/5/2018	WRPS-PER-2018-2335	Issues identified with TFC-ENG-FACSUP-C-10	While addressing issues identified on 8/31/2018 with regards to the Route Map associated with the SX farm ISB project, a review of TFC-ENG-FACSUP-C-10, "Control of Dome Loading and SSC Load Control" was performed. Issues were identified with the clarity of the procedure, references cited in the procedure and editorial changes that needed to be made to the procedure. Some of these had been identified early but are captured in the Recommended actions of this PER. There are no safety concerns associated with this PER.

9/6/2018	WRPS-PER-2018-2331	Stop Work at 219-S	The following stop work was issued: Stop Work issued on safety equipment, survey equipment not being available prior to exiting [219-S] pit CA. 222 SO The safety equipment cited in the Stop Work were hand-held survey instruments for detection of beta/gamma and alpha contamination. Use of the instruments is included in radiological worker II training. The Stop Work Issuer had previously requested that the instruments be made available in the Contamination Area (CA) in 219-S adjacent to the Argos-5 and step off pad, but arrangements for placing the instruments in that location had not been made. The Stop Work was issued prior to entry into the area to perform work under WO# 350281 and no entry was made while the Stop Work was in effect. The scope of work in the location included doffing personnel and handling tools and other material coming out of an adjacent area posted as an HCA/ARA. Hand-held survey meters were to be used by appropriately trained personnel for qualitative surveys. The intended use did not include surveys required for compliance with radiological work permits and other RadCon procedures.
9/6/2018	WRPS-PER-2018-2341	WRPS didn't conduct a review as required when a beryllium breathing zone sample result exceeds the reporting detection limit.	Title: 18276-TF: Operational Awareness Activity Report: Evaluation of Completed WRPS Beryllium Personal Air Sampling Surveys (January 1,2018 through August 14, 2018) Summary: Scope: The U.S. Department of Energy (DOE), Office of River Protection (ORP) conducted an operational awareness activity (OA) on Washington River Protection Solutions LLC (WRPS) beryllium personal air sampling surveys completed between January 1 2018 and August 13, 2018. The purpose of this OA activity was to evaluate the surveys to DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP), Revision 2A related requirements. Requirements Reviewed: 10 CFR 850.10(a)(2), "Development and Approval of the CBDPP," requires Washington River Protection Solutions LLC (WRPS) to have a chronic beryllium disease prevention program plan in place. 10 CFR 850.13(a), "Compliance," requires WRPS to conduct activities in compliance with the Chronic Beryllium Disease Prevention Program. DOE-0342, Hanford Site Chronic Beryllium Disease Prevention Program (CBDPP), Rev. 2A, Section 6.13, "Managing Beryllium Worker Exposure," requires WRPS to review all activities where breathing zone sample results exceed the level of quantification or reporting detection limit. TFC-ESHQ-S-STD-33, Implementation of DOE-0342, Chronic Beryllium Disease Prevention Program, requires a project industrial hygienist to conduct a review and notify the Washington River Protection Solutions LLC beryllium subject matter expert. ..... (18276-TF-F01): Washington River Protection Solutions LLC did not conduct a review as required when a beryllium breathing zone sample result exceeds the reporting detection limit. (Mario Moreno Priority Level 3) Discussion: The ORP CIH found one WRPS completed survey with breathing zone sample weight result above the beryllium RDL (18-01833-1-001). The WRPS Project IH did not have a documented review meeting the requirements of DOE-0342, Section 6.13 or notify the WRPS beryllium SME. This finding was previously identified (Letter 17-TOD- 0041, U.S. Department of Energy, Office of River Protection Assessment of Tank Farms Project Operations, August 2017)
9/6/2018	WRPS-PER-2018-2343	New Hand Trucks (2) all Terrain Damaged Upon Receipt	Received (2) All Terrain Hand Trucks, that were damaged with multiple scraps and chips, and one had a front left axle bent. Both came with green acceptance tags that were inspected by AVS (PO/CO: 60696, CID# t89472, Insp No: 18614.

9/6/2018	WRPS-PER-2018-2345	2nd degree burn from contact with vehicle exhaust pipe	employee stepped onto drivers side platform of a semi cab to talk to the driver and his right forearm made contact with the custom made over sized exhaust pipes.
9/6/2018	WRPS-PER-2018-2346	improper field configuration and reporting	This morning I was contacted by another HAMTC safety rep with concern of non-compliant field condition, (b)(6) were dispatched to re lamp primary stack monitor power indicator light and discovered an 28V bulb had been installed when 120V required. The end was blown off or melted (picture attached). Also bulbs from adjacent stand by enclosure 28V were missing. This was perceived as unauthorized work being performed by unqualified personnel. Also reported this Monday was the AZ-241-VTA-ENC-301 as still needing re lamped all weekend and it was replaced last week (possibly Wed) W.P. #387022.
9/6/2018	WRPS-PER-2018-2349	Basin 44 tear/hole in cover	**Basin 44 cover has holes/tears that were discovered on or about June 26 of 2014. Surface water has been visible on the cover for sometime and does not evaporate during summer months allowing birds to use it for watering.** Numerous PER's have been written over the last several years of contaminated egg shells and feces found throughout the ETF facility, tying up numerous resources on a daily basis.

9/10/2018	WRPS-PER-2018-2336	Discrepancies found at WIDS sites	While performing the radiation/contamination survey and visual inspections on WIDS sites 200-W-98PL and 200-W-99PL the following discrepancies were found : growing vegetation and active anthills.
9/10/2018	WRPS-PER-2018-2350	PER Procedure Clarification	When reading through the PER procedure, I noticed a problem in Attachement A- PER Initiation Examples. Under the Safety section "Items determined to be non satisfactory during a Safety Surveillance" is lined out. In the Safety Inspections Procedure is noted that we should document a PER. During safety inspections we document our inspection using the safety surveillance system.
9/10/2018	WRPS-PER-2018-2351	Date/Time Formatting on eRounds	During a review of eRound data, it was discovered that date/time formatting is inconsistent on eRounds and does not fully implement data recording requirements set forth in TFC-OPS-OPER-C-60 Surveillance Rounds. While the data input time format is 24 hour (military), the review times and report generation times are not in 24 hour military format. TFC-OPS-OPER-C-60 Surveillance Rounds 4.1.2.2 All operations activities shall be recorded using 24 hour (military) time. See attached

9/10/2018	WRPS-PER-2018-2344	EVMS Non-Compliance	Project Controls and Procurement planned and initiated contract change requests for Fiscal Year 2019 (FY19) Service Agreements in conjunction with the FY19 Performance Measurement Baseline (PMB) submitted to the Department of Energy, Office of River Protection (ORP). Contract change requests were issued with the understanding that the associated authorization for execution and funding have not been received from ORP. Invoices were received for FY19 Service Agreement contracts at the 222-S Laboratory at which time the Buyer's Technical Representative (BTR) asked Subcontracts, who in turn asked Finance, whether the invoices should be paid within five (5) days of receipt (as delineated in the BTR procedure) or returned to the vendor. Conversations also took place with the responsible Project Controls Engineer who gave instructions NOT to pay the invoices until October 1, 2018. Finance instructed the BTR to approve the invoices for payment, and stated that the costs would be "moved off contract" in mid-September and then "costed again in October". The invoices were paid by finance and once reports became available in the Hanford Data Integrator (HANDI), the specific account showed costs without performance. Once investigated it was found that the cause was FY19 Service Contract invoices paid without authorization utilizing FY18 funding. Additionally, this resulted in the specific account exceeding authorized funding for FY18. See TFC-PLN-147, REV B-1, Project Controls System Description, Section 5.6 Funds Management, paragraph 3, bullet 5; monthly review, analysis, and reporting to ensure contract compliance.
9/10/2018	WRPS-PER-2018-2085	EP-P 2.2 Program Administration	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element Program Administration "The designated administrator has the authority and resources, commensurate with assigned responsibilities, and has access to top-level management". Define the scope of the Emergency Services Administrator (Manager) in applicable WRPS procedures and/or Plans. (P 2.2) Program Administration
9/10/2018	WRPS-PER-2018-2086	EP-P 5.17 Readiness Assurance	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element Readiness Assurance "The improvement program includes a system for incorporating and tracking lessons learned from training, drills, actual responses, and a site-wide lessons learned program". All SES staff should sign up to receive alerts from the OPEX Lessons Learned Database to ensure that any pertinent and relevant issues are able to be identified and disseminated appropriately. (P5.17) Readiness Assurance

9/10/2018	WRPS-PER-2018-2087	EP-P/E 6.24 Emergency Response Organization (ERO)	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 6.24 "The use of acronyms, code words, convention and/or technical terminology causes no misunderstandings related to the response and associated data". Review TFC-ESHQ-EP-C-01 and TFC-ESHQ-EP-C-02 for potential inclusion of criteria that addresses the use of acronyms, code words, convention and/or technical terminology.
9/10/2018	WRPS-PER-2018-2088	EP - P/E 8.3 Facilities and Equipment	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 8.3 "Characteristics of the dedicated command center, and other auxiliary facilities, are adequate to reliably support the designated functions and assignments". A Track Until Fixed PER should be initiated to ensure the 222-S Alternate ICP location is tracked to completion. Reference WRPS-PER-2017-1459 "2225 annual emergency management internal assessment conducted: alternative location if primary command center N/A".
9/10/2018	WRPS-PER-2018-2089	EP- P/E 9.3 Categorization and Classification	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 9.3 "Recognition/categorization/classification process of OEs is effectively integrated with existing operations, management, emergency response, reporting activities, and the security classification scheme". Revise TFC-ESHQ-EP-C-01 with respect to making section 4.10 more consistent with section 4.9.2 whereby ensuring that the overall process to develop and maintain the listings as well as clearly annotating the categorization authority for General Purpose and Low Hazard facilities at WRPS is well documented.

9/10/2018	WRPS-PER-2018-2092	EP - P/E 10.18 Notification and Communications	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 10.18 "Logs are maintained and other record-keeping methods utilized to support post-event analysis, report production, and a legally defensible chronology of notification and communications activities". Review course 35E001- (ERO) Emergency Response Organization Facility Specific Initial Training to ensure P/E 10.18 is adequately covered in the training materials and instruction.
9/10/2018	WRPS-PER-2018-2093	EP - P/E 12.24 Termination and Recovery	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 12.24 "Reentry activities are performed safely and efficiently, with specific team composition (e.g., minimum of one medically trained member) and equipment that accomplishes the mission". Recommend that during FY 2019 that Program Element 12.24 and Program Element 12.25 be specifically listed as an objective identified to provide a more validation of the reentry process used during WRPS drills and exercises.
9/10/2018	WRPS-PER-2018-2183	EP - P/E 9.11 Categorization and Classification	During the annual emergency management internal assessment conducted by Security and Emergency Services, the following suggestion was identified for program element 9.11 "Classification of an OE involving the actual or potential airborne release of (or loss of control over) hazardous material is accomplished promptly and accurately using a current set of a facility / site specific EALs". Review ERO training courses 35E001, 35E002 and 35E004 to ensure the course material includes enough detail regarding events must be categorized promptly but no more than 15 minutes after obtaining adequate information.

9/10/2018	WRPS-PER-2018-2356	Lack of Proper Training for Maintenance Support (b)(6)	While attempting to perform work on the 219-S Integrity Assessment at 222-S Labs, ChemTech Mask Issuers noticed that (b)(6) did not have training to wear the required Respiratory PPE. After further check, it was noted that numerous (b)(6) did not have FF-PAPR or PAPR Hood listed on their training plan. As several (b)(6) are used for support for facilities such as 222-S, 242-A Evaporator, and ETF, proper training is crucial and needs to be in line with the facility (b)(6) are being sent to for support.
9/10/2018	WRPS-PER-2018-2357	Improper Configuration/Failed Inspection Prior to Usage Inside 5X Farm	At approximately 8:05 am this morning, an individual working for Inland Asphalt was working inside the farm and noticed his mask was fogging up more than usual. The individual left the farm and upon inspection of his RPE, noticed that the exhalation valve and valve cap were missing from the T-Bar assembly. The worker was inside the farm for a total of approximately 15 minutes before exiting the farm. Upon my arrival, the RPE was inspected by myself and positive control was maintained while the individual filled the Issues and Concerns form out. To the best of his knowledge, the components missing from the T-Bar were missing prior to entering the farm.
9/10/2018	WRPS-PER-2018-2352	Staffing/Headcount Data Lacking Consistency, Systems Not Integrated, Manual Updates for Accurate Reporting, & Limited Access	The Assessment Team discerned that there are more systems and reports than previously identified (see Attachment 3 of Assessment for complete report and system list). Even with these additional data points, the results are the same; the staffing/headcount data is lacking in consistency, the systems are not integrated, manual updates need to be performed in order to ensure the output accurate, and organizations in need of the information have limited access. The following examples support the observation above: - Manufactured employees (loosely defined as staff aug personnel that require Hanford Local Area Network [HLAN] access such as Time Information System [TIS], etc.) are not identified separately from direct personnel. HR performs manual coding changes for headcount information. Utilizing the staff aug report and direct employee report could pose the potential for a double-count in the total headcount for these specific individuals. - There is no applicant tracking system. The hiring organization does not have a good grasp on when the department should expect the employee to start without a manually updated Staffing Tracker, which was discontinued by HR in July 2018 as a result of being time-consuming and labor-intensive. - Manual cleanup of antiquated requisitions of all status types is required in order to get an appropriate and accurate projection of approved direct new hires. HR is currently in the process of performing this cleanup. - COCS codes can change from requisition approval to hire as a result of applicant qualifications. - COCS codes for staff augs get applied after a Hanford Identification (HID) has been assigned by MSA. An HID can only be assigned once the contract has been awarded. The Project Controls Engineer does not have the ability to approve the COCS prior to award. In addition, as the COCS is tied to the HID, multiple COCS to HID combinations can exist if individual has moved between other Hanford contractors, thus creating the potential for inaccuracies. - The reports out of ESS (HRT850, HRT851, and HRT852 series) are only accessible by managers. This is an issue as Project Controls needs to allocate funding for new hires and the requisition may have been cancelled. - Multiple reports are utilized in order to confirm if the staff aug personnel is active. The current Subcontracted Contracted Labor Time Recording (CLTR) Users report uses the contract release's end date as the method to remove the individual from the report, which may not be updated for the personnel's official leave date. Badging's Hanford Gone Report should be utilized. - PeopleCore updates are manual and not directly tied to the staff aug contract, thereby allowing errors in COCS, cost center, and end date. - Staff aug and Request for Offsite Services (ROS) attrition is not documented. - There is no report from Badging on new personnel for staff aug. The only report that exists is the New Hire Orientation for WRPS direct employees only. - Performing organizations (cost centers) are only changed to match Hanford Resources Information System (HRIS) updates if Baseline Management fills out form A-6001-193 "Request for Cost Center Change" and sends to Finance. Finance then sends it to MSA to update the various financial systems. Baseline Management is manually notified of cost center changes made by HR. Baseline Management makes the responsible organization changes. - Not all staff aug individuals have the COCS populated in PeopleCore. - Missed opportunity not utilizing the department identification's fourth digit as a smart code for matrixed organizations to assist in staffing evaluations (i.e. TMJ10000 "R&C Construction", TUA30000 "Retrieval Work Planning", TCU40000 "SST Retrieval Project Controls", etc.). - Manual status updates required for direct postings that contain more than one position. The requisition will stay open until all of the positions are filled. - Additional positions can be added to a requisition without ESS documented approvals. This leaves a vulnerability that the funding organization may not be prepared to update projections to align with the new Fulltime Equivalent (FTE) count. - A posting with multiple positions can only be aligned to one cost center, even if the divvying out of personnel has already been determined. An Employee Record Change must then occur upon hire. - There are no inter-prime contractor Hanford Atomic Metal Trades Council (HAMTC)/bargaining unit labor projections to assist in the Labor Assessment Management Program (LAMP) FTE assumptions.

9/10/2018	WRPS-PER-2018-2353	WRPS Does Not Have One Entity to Oversee and Manage TOC Headcount	The Assessment Team considered it to be a weakness for WRPS that no one entity oversees and manages headcount for the TOC. The following examples support the observation above: - There is not a Staffing Board in place, which may be beneficial to drive the terms of use in hiring direct or utilizing a contracted labor resource. - No clear definition of temporary personnel. Staff augs can be extended indefinitely as long as the level 1 manager approves, which could potentially hinder Procurement competition. - Direct employees could potentially leave the company and return as staff aug, performing same job function without an acceptable period of leave. - Direct employees could be converted into task-based subcontractors without the appropriate system administration restrictions in place (i.e. ability to still access TIS). - Determination on whether or not a person should utilize the Hourly Professional Program versus contracted labor resource. - Procurement owns staff aug, HR owns direct employees, while Project Controls owns FTE funding projections. These three groups do not integrate as seamlessly as would be expected. - Reduction of Force is a manual effort between HR and Procurement (i.e. rules on the return of personnel in a six-month timeframe). - Manual emergency preparedness process as the active headcount is not a readily available data point. - Multiple personnel providing attrition and staffing information. Information is not in alignment as data could be pulled from various outlets, timeframes, etc.
9/10/2018	WRPS-PER-2018-2354	Management of Staff Augs from Requisition to Termination Lacks Integration, Communication, and Consistency	The Assessment Team has determined that management of staff aug from requisition to termination lacks integration, communication, and consistency. The following examples support the observation above: - A Control Account Manager (CAM) and Project Controls Engineer (PCE) must approve a staff aug requisition, however a staff aug requisition, by nature is not tied to a cost account charge number (CACN). Thus, no rightful CAM or PCE can be identified. * CAMs are required as they have dollar approval authority while the responsible (hiring) manager is likely to never approve the staff aug requisition nor have access to Asset Suite in which the transaction occurs. - Inconsistent approach being utilized on whether or not the performing (owning) organization or responsible (funding) organization approves a staff aug requisition. - Buyers are only manually notified of the staff aug individual leaving the company by the responsible manager. There is no system check that come from badging to confirm. Thus the individual may stay in PeopleCore longer than acceptable as the update users are not being notified. - Because the Resource Panel in the Asset Suite staff aug contract release is closed to the general public due to proprietary information such as rates, the PeopleCore update users are not able to confirm the COCS codes entered into PeopleCore are consistent with Asset Suite, which feeds the financial systems. - The cost centers are also fed into the financial systems through the Accounting Panel in Asset Suite, which does not always align with the hiring manager's organization. - The current Subcontracted CLTR Users report uses the contract release's end date as the method to remove the individual from the report, which may not be updated for the personnel's official leave date. Badging's Hanford Gone Report should be utilized. * In addition, if staff aug contracts transition to a Basic Ordering Agreement, many individuals could be contracted through one contract release versus a contracted labor resource to one release method, which has been used in the past. The Subcontracted CLTR Users report would need to be updated to document the resource panel end dates for each individual versus using the overarching contract release end date. - PeopleCore update users contact list not readily available.
9/10/2018	WRPS-PER-2018-2355	Staffing Committee Process Not Formally Documented	The Assessment Team deemed it to be an accountability drawback to not have the Staffing Committee process formally documented. The following examples support the observation above: - Staff aug open requisitions are not subject to chair review. - There currently is no formalized startup or completion of the staffing committee. This leaves confusion of when to continue with the review and approvals from the Chair. - ESS currently does not require a documented approval of the Committee's approval when the Staffing Committee is activated.

9/10/2018	WRPS-PER-2018-2358	WIDS deficiencies	While performing routine radiation contamination survey of WIDS site 200-W-97-PL discovered vegetation growing on the transfer line. See attached photo and RSR BOS-1800930.
9/11/2018	WRPS-PER-2018-2360	PIT Operation	Based on a review of the situation, On 9/5 the 616 FWS pulled the Sellick SD-100 forklift in question out of the field and replaced it with Manitou which does not have the same issue. The Waste Operators agreed that the forklift could be used around the 616 yard due to the fact that waste operations uses spotters to compensate for the lack of visibility. A thorough review of TFC-ESHQ-S_IS-C-07, REV A-5 states the following when the driver determines that their is obstructed: Use a spotter: *When the pit operator's view is obstructedOn 9/10/18, this issue was discussed in the morning and based on this discussion management worked with the concerned operators to ensure a plan of action was put into place to manage these forklifts and prevent an accident. These actions can be found in the Action section of this MOP. Please assign this PER to (b)(6) as a TUF
9/11/2018	WRPS-PER-2018-2359	241-BY-107 Enraf Tank Level Discrepancy Problem	On 9/10/2018 the BY-107 Enraf tank level at time 0733 was recorded at 108.25 inches approximately . The Enraf was then calibrated and following calibration the level at time 0935 the tank level was recorded at 132.14. The calibration work was performed under work order, WO-275491. The concern was that there was no associated explanation for the approximate 24 inch level increase which would be equivalent to approximately 65,700 gallons . Investigated the concern on 9/10/2018. The calibration was properly performed after a review of the work order. The Enraf electronic card was reviewed and performed as expected with no issues. Then the Enraf plummet "lift and weigh" was performed three sequential times and the plummet performed as expected with no issues. Although issues with the Enraf were noted it is important to note that the primary monitoring device for the tank is the installed Liquid Observation Well. The 3rd quarter LOW interstitial liquid level (ILL) reading was taken in the field on the same day, 9/10/2018, at the request of the SST CSE. The level was evaluated by the LOW Engineer and was determined to be essentially the same as the 2nd quarter LOW ILL. This confirmed that no additional large volume of liquid had entered the tank

9/11/2018	WRPS-PER-2018-2361	Door Damage Found on Government Vehicle	on 9/11/18 vehicle was picked up from 200 East garage. Damage on the driver's side door near the door upper hinge. Vehicle was not in operation at the time the damage was found. Damage looks like over extension of the door when it was opened and caught by the wind. Damage was found during 360 vehicle inspection.
9/11/2018	WRPS-PER-2018-2364	Electronic Routing Board Improvements	**Two issues were identified during electronic routing board update for ECN-713744 and WO # 375010.** **The first issue is that when a pit is clouded as being under construction, the change table entry is not removed once the cloud is removed. This allows a discrepancy between the ERB "canvas" and the ERB Change Table.** The second issue is that the pump installed in AW03A is a pump with drain, which is a new symbol on the routing board legend. The symbol has not been added to the ERB yet and could not be shown properly. Currently the ERB shows a pump, but not a pump with drain.
9/11/2018	WRPS-PER-2018-2367	Skid Steer Loader Event	**SX farm barrier job.** (b)(6) was using a skid steer to load asphalt waste into the rear of a transfer truck, when the skid steers front windshield made contact with the transfer trucks tub latch causing the windshield to shatter. In the process the door handle fell and made contact with the inside portion of the operators right ankle causing a 1/2 inch abrasion. (b)(6) requested to be evaluated by a licensed physician because of (b)(6) concerns. (b)(6) was released from primary care physician without job restrictions.

9/11/2018	WRPS-PER-2018-2368	Broken Pipe at Air-Lift #16 on AX102	•Today during a visual investigation of the physical integrity of the 102-AX (Air Lift Circulator) ALC 16 1" clean out access port the pipe broke off while an individual bent over and braced themselves to inspect the pipe. •Shift office notified. •Farm evacuated. •Planned reentry at 1200 to post 10' boundary ARA and VCZ and CMS plans to restore farm access with exclusion area around ALC 16 after area posted. •Planning meeting today to generate work steps to: oSeal pipe. oInspect other similar exposed pipes. oContingency work steps if other pipes with questionable integrity are identified or discovered during future work. •Repair pipe on Wednesday 9/12/2018 following approval of work package.
9/11/2018	WRPS-PER-2018-2370	No WIDS ID signs	While performing routine radiation / contamination surveys and inspection on WIDS site 200-W-129PL discovered there were no WIDS ID signs on the site.
9/11/2018	WRPS-PER-2018-2369	WIDS Deficiencies	While performing routine radiation / contamination surveys and inspections for WIDS sites 200-W-129-PL and 200-W-130-PL discovered growing tumbleweeds on both transfer lines. See RSR BOS-1800938 for maps and attached photos.

9/11/2018	WRPS-PER-2018-2371	Contaminated Bird Feces at ETF	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird feces was discovered on southwest corner of 2025ED. One spot was found with Total Contamination readings of: 7,310 dpm/100 cm2 Beta-Gamma and <Detectable dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801858
9/11/2018	WRPS-PER-2018-2373	Contaminated Bird egg shell at ETF	During the performance of LE-D012: Performed a walk down of the building perimeters for 2025E, 2025EA, 2025ED, Verification and Surge Berms, and supporting trailers looking for bird eggs, feces/droppings, nesting material. Contaminated bird egg shell was discovered in gravel south of surge berm barrier. One spot was found with Total Contamination readings of: 41,250dpm/100 cm2 Beta-Gamma and <Detectable dpm/100 cm2 Alpha Survey results are documented in Survey Simple on survey # LE-1801766.
9/11/2018	WRPS-PER-2018-2375	Filter blow down valve leakage.	While performing the A-2 round, the A-2 operator noticed the filter blow down valve, FG-CA1-1, leaking air from the bottom.

9/11/2018	WRPS-PER-2018-2376	242-A water service building water valves leaking.	While performing the A-2 round, the A-2 operator noticed inside the water service building that both HV-RW-20 and HV-RW-40 were leaking water into the floor.
9/11/2018	WRPS-PER-2018-2374	Expectations for crossing danger tape not clearly understood.	Workers use a plant permanent fixed ladder to access the top of a tank to complete assigned tasks. Workers observed red danger tape placed across the ladder rungs used to reach the top of the tank. A facility sign was posted on the ladder directing individuals to contact management prior to use. On multiple occasions, the workers notified management of the need to perform work on top of the tank. In one instance, they were directed to not cross the danger tape. In another instance, they were given permission to cross the tape if they felt comfortable. The workers were concerned that they did not have a clear understanding of the hazards and controls, including personal protective equipment, for crossing danger tape.
9/11/2018	WRPS-PER-2018-2377	AW03A Tank Farm Primary Pump Pit Drain Seal Functional Test Performance	Drain Seal Assemblies are fabricated and installed with no mechanism for ensuring that they are functionally tested. The work order for replacing the pump and drain seal for AW-103 did not provide for a test of the drain seal assembly. The FWS discussed with the ADM that they currently did not have a work order to perform the functional test.

9/12/2018	WRPS-PER-2018-2372	PMID generation process fails to meet needed first due date.	Per MAINT-C-12 planning requires 90 days to generate the first work package for a newly created PMID. New PMIDs with a first due date of near 90days or less do not have a clear process for being successfully generated without going over due prior to the work package being released. Contributing factors: - The PMID cannot be released in SPF without having a first due date listed in the Work Log block. - Historically planning has not begun generation of the work package/WORA process prior to the PMID being released in SPF. - Confusion is caused by the statement "Perform work per attached work instruction" which is directed by Maint-C-12 to be placed in block 16 "Task Description" in SPF. Several reviewers have requested to see the "attached work instructions" in SPF prior to completing the step in SPF. In reality this statement corresponds to an attached work instruction in the work package generated by EAM and does not require an attached work instruction in SPF. In this instance, the AZ02A-WT-P-021 pump rotation PM has a frequency of 92 days and a grace period of 30 days the must be done by date is 9/30/18. The PM is not released in SPF due the above listed contributing factors. This has not left adequate time for work planning to generate the work package and release it in WORA. Work planning requested the first due date be shifted out however this is technically incorrect and was prevented by the DA. Technically, the correct path forward is to release the PM with the first due date unchanged as 9/30/18 and generate a PM deferral to grant additional time to planning to generate the work package.
9/12/2018	WRPS-PER-2018-2380	Improvement Opportunity Inadequate Supply of Protective Clothing for LERF Basin #42 Cover Replacement	During ALARA Review(s) for replacing the cover on LERF Basin #42, was identified by the work force, they continually struggled through-out the project to have the necessary protective clothing to support work, specifically wet-condition type work activities. There were some examples of work delay due to clothing availability. At no time did workers perform their prescribed task not wearing the correct protective clothing, just many examples of having to wait for the correct type or quantity to support the work.
9/12/2018	WRPS-PER-2018-2379	Tumbleweeds Growing in 241-T Water Runoff Basin	While performing routine radiation and contamination surveys and inspections for 241-T Water Runoff Basin RBA, we discovered a significant amount of tumbleweeds growing in the bottom of the basin. For additional information please see RSR BOS-1800944.

9/12/2018	WRPS-PER-2018-2293	Managing data in SPF takes considerably longer than the old SECD database	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 9 - Managing data in SPF takes considerably longer than the old SECD database. This system provides a significant amount more functionality than the old database. However, with this increase in functionality, there appears to be a significant lag introduced for every item that requires an update.
9/12/2018	WRPS-PER-2018-2294	It is not always clear on which requirements are carried over to the SECD requirements for the FREDs/SREDs	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 10 - It is not always clear on which requirements are carried over to the SECD requirements for the FRED/SREDs. It is recommended to include a separate table of items that should specify which requirements should be verified in the SECD.
9/12/2018	WRPS-PER-2018-2295	Creating requirements in SPF for Safety SSCs is not well defined in procedures	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 11 - Per TFC-ENG-FACSUP-C-24, Section 4.2.1, "Creating Requirements in SPF", states that the requirements are created against source documents that are in a "Working" revision state. In addition, SPF Administration can add or modify requirements to source documents in a "Current" revision state. Currently there is not a way for Design Authority or Support Engineer to update the requirements in a current revision state. After reviewing the FRED and SRED procedures, TFC-ENG-DESIGN-C-45 and TFC-ENG-DESIGN-P-43, there is not clear direction to update the requirement changes in SPF during the working revision of the prior to approval, nor is there direction to see TFC-ENG-FACSUP-C-24 for requirement management. The steps on updating the requirements are not clear as to what is expected when changing or removing a requirement from the working revision. There is also not direction for updating/maintaining the requirements of the source document if that document was changed, while the requirements were not updated in SPF.

9/12/2018	WRPS-PER-2018-2296	SECD Assessment Observation 12	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 12 - TFC-ENG-FACSUP-C-24, Sections 4.1.3, 4.2.1.2.a, and 4.5. 4.b, discuss that the critical characteristics are identified as the requirements from the FRED/SRED. Some of the requirements identified for the different safety components come from requirements such as the key design attributes, safety design requirements, critical characteristics, or requirements identified from the Design Safety Analysis (DSA). Reviewing a few of the FRED/SRED shows that the layout of the requirements varies based on the system and the age of the document. For example, the freeze protection SRS, RPP-RPT-53037, does not specifically have a critical characteristics table, and only include a few of the design requirements, therefore not providing a clear need for the requirements to be included in the SECD for those components. Another example is RPP-RPT-54583, Design Analysis Report for the 242-A Evaporator C-A-1 Vessel Flammable Gas Control System. This DAR includes a table for the Key Design Attributes, and a table for the Critical Characteristics. The requirements identified in SPF for RPP-RPT-54583 include the key design attributes and one critical characteristics. The "critical characteristics" does not seem to be consistent across the FRED/SREDs and is not clear on what should be included as a requirement for the SECD.
9/12/2018	WRPS-PER-2018-2297	SPF should be modified to add a work flow for the SECD route lists	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 13 - SPF should be modified to add a work flow for the route lists so the second engineer review can be documented and verified. TFC-ENG-FACSUP-C-24 requires a second engineer review the "route list" prior to use to ensure that all required components are included. SPF does not have work flow for review and approval of "route lists" so this is not easily checked. Engineering typically prints off a copy of the "route list" when used so that it can be reviewed and signed to demonstrate this requirement is met.
9/12/2018	WRPS-PER-2018-2299	SECD process improvement	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 15 - If a requirement is removed from a FRED, then deleting it from the SECD should allow for an easier process than automatically inactivating the SSC. For example, there is no longer a minimum temperature requirement for DVI valves or Primary Piping. Deleting this requirement from previously Activated components would automatically Inactivate all of those components as it is a "Req Number" and a "Source Doc. No.". A "request" process, for example, should be allowed to remove that requirement and not inactivate all of those Safety Significant SSCs if approved by the Proposer and DA responsible for the SSC as the physical changes/Proposal/Activation process takes a large amount of time.

9/12/2018	WRPS-PER-2018-2298	The SECD process should be described in only one procedure	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 14 - The SECD process should be described in only one procedure. Currently both TFC-ENG-FACSUP-C-23 and TFC-ENG-FACSUP-C-24 must be utilized. This can create an HPI error trap.
9/12/2018	WRPS-PER-2018-2300	There is no way to look at a report in SPF as to what has been submitted for approval or not	Safety systems assessment RPP-ASMT-62529 was written to evaluate implementation of the SECD into SPF. Transition of data from the old database into SPF began in September of 2017 with use of the SECD in SPF required beginning on or after January 1, 2018. Use of the old SECD database was not evaluated in this assessment. The SECD in SPF was evaluated to ensure it is adequately documenting the compliance of safety significant SSCs managed by the TOC to the requirements specified in the applicable FREDs and SREDs. This assessment will evaluate process improvements associated with the transition of the SECD into SPF and assess compliance of the new system. This includes evaluating the processes that the TOC relies upon to manage the SECD in SPF in accordance with procedures TFC-ENG-FACSUP-C-23, "Engineering Equipment Identification and Data Management" and TFC-ENG-FACSUP-C-24, "Safety Equipment Compliance Management." Thirteen findings and sixteen observations / opportunities for improvement were identified during performance of this assessment, including the following finding: Observation 16 - SPF doesn't currently have the ability to generate a report that identifies which components have been submitted for approval. Currently, the Support Engineer has to put in a lot of time and effort for each component on the route to determine if the components need to be submitted for approval. In the "old" SECD it says "in review" so it's obvious that the Safety Significant SSC has been submitted for approval. In the current SECD it is harder.
9/12/2018	WRPS-PER-2018-2381	Needed AW-02E pit heater not installed	Project to install pit heaters in required pits in AW Farm did not include AW-02E. Creates a potential risk for not being able to perform Test Bed Initiative or operate 242-A during winter months.

9/12/2018	WRPS-PER-2018-2382	AY102-WST-LIT-101 taken out of service for AY102 Rinsing Activities	AY102 primary ENRAF was raised into the riser to support AY102 Caustic Rinsing activities over the weekend to prevent damage to the ENRAF. Levels were not taken on 9/7, 9/8 and 9/9.
9/12/2018	WRPS-PER-2018-2384	Erounds / esoms flaw	On an eround that is not a daily required reading, a certain reading cannot be uploaded to the PI database until the eround (tour) is completely filled out. The problem with is that a reading could go multiple months from actually being taken in the field to being entered into PI for Engineering to do it's trending and monitoring. If a reading is taken in the field and the shift manager approves it, it should be entered into PI right then. It doesn't make sense to take a reading and sit on that data out of few for any period of time. On quarterly erounds, a reading could be taken on day 1 of the quarter and not be uploaded/accepted/approved until the very last day of the quarter, 90 days later, while the tour waits for the other tank readings to be taken throughout the quarter.
9/12/2018	WRPS-PER-2018-2385	Employee Failed to Wear Hi-Vis PPE While Exposed to Approaching Vehicles.	Title: Observed Work Outside A Complex Summary: The FR was driving on Buffalo Street when they observed a worker sweeping gravel off the edge of the road on the west side of Buffalo street outside A Complex. The employee was wearing a black t-shirt and no traffic vest and was difficult to see. The FR pulled over and advised the employee that he was not easily visible to traffic. He stated his co-worker did not have a traffic vest in his truck so he was sweeping and looking both ways and getting off the road whenever a vehicle was approaching. The FR advised him of the importance of wearing Hi-Vis PPE. The FR also notified the Central Shift Manager of the incident (37090-TF-F01). ---------- Issue Type: Finding Statement: 37090-TF-F01: Employee Failed to Wear Hi-Vis PPE While Exposed to Approaching Vehicles. Discussion: The FR observed an employee on the west side of Buffalo street across from the A Complex, sweeping the roads without wearing Hi-Vis PPE. The individual was difficult to see as he was wearing a black t-shirt. The FR approached the employee advising him that he was difficult to see and asked him if he had a traffic vest. The employee stated his co-worker did not have a vest in his truck so he was looking both ways and getting out of the road whenever a vehicle approach. The employee was exposed to approaching vehicles while performing a task that diverted his attention away from the approaching vehicles.

9/12/2018	WRPS-PER-2018-2378	Molded Base Damage Found on Square D DS-206H Breaker	During preventative maintenance on the 242-A Evaporator main breaker, A242-EDS-ENCL-100 (BKR-4A), the molded bases for each of the three sets of breaker terminals were found to be damaged. Each showed cracking around the lower terminal, and on one base, the lower terminal had broken free and pulled through the molded base, likely when the breaker was opened (see attached photos). Procedure S-EDS-359 does not specifically call for the CTs to be removed from the breaker terminals prior to inspecting the breaker for worn or damaged parts. Electricians performing the maintenance said the CTs could hide the damage from view during an inspection as they are not typically removed prior to the inspection.
9/12/2018	WRPS-PER-2018-2386	Reporting requirements for radiological air emission equipment	Some of the regulatory notification requirements in TFC-ESHQ-ENV_F5-C-01, Section 4.5, Step 3, are not accurate in all instances. Of particular note are the bullets pertaining to: (1) "Planned and unplanned bypasses of equipment listed on Table 1" and (2) "Any problem with emission control equipment listed on Table 1." There are also differing interpretations regarding the reporting requirements associated with the bullet, "Unplanned failure, or degraded performance, of the record sampler and/or CAM exceeding 4 hours. Request from Operations OOS hours for Record Sampler/CAM (limit: 72 hours/month or 432 hours/year total)." Applicable examples can be found in the Environmental On-Call Logbook during the week of Sept. 5-12, 2018.
9/12/2018	WRPS-PER-2018-2387	Missed Procedure Step to Post Exclusion Zone during AW Farm Pressure Testing	While performing observation of Encasement Pressure Testing in AW farm utilizing work package 378435 and associated procedure TO-140-170, noted that (b)(6) had not posted the testing area as an exclusion area as required by step 5.1.18 of TO-140-170. (b)(6) indicated that he ensured that the Exclusion zone was established by ensuring the personal in the area had all been at the pre-job.

9/12/2018	WRPS-PER-2018-2389	Opportunity for Improvement: LOTO Binder	During the monthly TAF review, an opportunity for improvement was noted with regards to the Active LOTO binder at 222-S. There are a large number of completed Index sheets behind a single tab in the front of the binder. This makes the binder somewhat cumbersome.
9/12/2018	WRPS-PER-2018-2312	WIDS Site Radiological Survey and Inspection Discrepancies	During routine surveys and inspection we found vegetation on sections of WIDS Transfer line 200-E-145PL & 147PL, see survey BOS-1800899.
9/18/2018	WRPS-PER-2018-2167	MY2018-MAINT-R-190 Observation 6	While performing flow down review of requirements from DOE 0 433.1B and DOE G 433.1-1A to TFC-PLN-29 Section 3.8 Procurement, under the description of TFC-BSM-CP_CPR-C-18 new procedures have been added replacing some of this outline as follows: – Controlling convenience storage material inventory. TFC-BSM-FPM_PR-C-19 Management of Equipment Held for Future Projects has been issued to address this subject. – Removing and reusing existing parts and assemblies. TFC-OPS-MAINT-C-14 Removing and Reusing Operational Parts and Assemblies has been issued to address this subject.

9/13/2018	WRPS-PER-2018-2168	FY2018-MAINT-R-190 Observation 3	Observation: While performing flowdown review of requirements for ANSI/NSCL Z540.3-2006 from DOE 0 433.1B and DOE G 433.1-1A to TFC-PLN-29 to TFC-PLN-02 Quality Assurance Program Description Chapter 12 to TFC-OPS-MAINT-C-07 the DOE G 422.1-1A Section J.2.3 M&TE requirement could not be followed or compliance demonstrated until a review of the bottom section of a Calibration Certificate from Energy Northwest revealed the following: he calibration program of the Energy Northwest Standards Laboratory is accredited by the American Association of Laboratory Accreditation (A2LA) to ANSI/NCSL Z-540-1-1994 and ANS/ISO/IEC 17025:2005, and complies with the requirements of 10 CFR50 Appendix B, ASME N.QA-1, and the Energy Northwest Standards Laboratory Quality Manual, QM-1 Rev.IO (13 November2014). The standards used in this calibration as described above, and their associated uncertainties or tolerances, are traceable to the National InstiTtute of Standards and Technology (NIST), International System of Units (SI), accepted intrinsic standards, or ratio type measurements. The total uncertainties or tolerances of the standards used are no greater than 25% of the tolerance of the unit tested, unless otherwise noted. This Report may not be reproduced, except in full, without the permission of the Energy Northwest Standards Laboratory. The results stated in this report relate only to item identified in the Asset Information part of this report. A internet search for ANSI/NCSL Z540.3-2006 resulted in the following article dated July 29, 2008. BOULDER, CO, July 24-The American National Standards Institute (ANSI) and the National Conference of Standards Laboratories (NCSL) International announce that ANSI/NCSL Z540.3-2006 Requirements for the Calibration of Measuring and Test Equipment has been published. This standard was developed to prescribe the requirements of an organization's calibration system including the test and measuring equipment inventory, calibration requirements, calibration intervals and calibration procedures. It is for use by organizations that own or use test and measuring equipment to manufacture, modify or test products, or to perform services where the accuracy of measurements is important. ANSI/NCSL Z540.3-2006 replaces Part II of ANSI/NCSL Z540.1-1994(R2002), which was withdrawn in July 2007. Part I of ANSI/NCSL Z540.1-1994(R2002) has been replaced by ANSI/ISO/IEC 17025: 2005 General Requirements for the Competence of Testing and Calibration Laboratories. Organizations that included Z540.1-1994(R2002) in contracts for procurement of products and services would generally substitute ANSI/NCSL Z540.3-2006 as a direct replacement for ANSI/NCSL Z540.1-1994(2002). If an organization was contracting only for accredited calibration or testing laboratory services, the contract should prescribe ANS/ISO/IEC 17025: 2005 as the appropriate standard. The ILAC Process is described in Q-ADM-C-09 reference paragraphs 4.11, 4.11.2 and Figure 3.
9/13/2018	WRPS-PER-2018-2169	DOE G 433.1 implementation improvements to TFC-PLN-29	TFC-PLN-29, Section 3.3, text could be expanded with bullets to better align with priority examples listed in DOE G 433.1. In addition, DOE Order 433.1B is listed in both Sections 4.1 and 4.2; it should be deleted from Section 4.2. Finally, TFC-PLN-29 table of contents lists an Attachment A that is not found in the current version of the released plan on the website.
9/13/2018	WRPS-PER-2018-2390	WIDS Survey and Inspection Deficiencies	While performing routine radiation / contamination survey and inspection for WIDS site transfer line 200-W-143-PL discovered growing tumbleweeds on the transfer line also found signs of animal intrusion. See RSR BOS-1800948 for maps and attached photos.

9/13/2018	WRPS-PER-2018-2391	Facility Chair Replacements - EAPC Safety Book 616-010 - Over 60 Days	"15 new facility chairs promised, old broken chairs unsafe and very out dated."
9/13/2018	WRPS-PER-2018-2392	Internal Periodic Review Process Improvement	During the internal review, mistakes/errors were found in procedures that had been through completed internal periodic reviews. The internal periodic review question sets could be improved to better implement the existing standard and changing objectives. With changing requirements, more timely communication could be provided to procedure writers for changes to the standard.
9/13/2018	WRPS-PER-2018-2388	Insufficient technical rigor and errors due to reuse of previous designs	Per procedure TFC-ENG-DESIGN -C-56, Design Engineering reviewed several new modification travelers produced by the Tank Farm Projects group before release. These modification travelers capture the installation of new wireless leak detector transmitters in the AW, AY, and AZ farms. Nearly identical wireless transmitter installations have been previously analyzed for installation in other farms such as AP. The new designs for AW, AY, and AZ farms are anticipated to be nearly identical to that of AP farm. Therefore the new modification travelers were written to save time by re-using the design previously developed for AP Farm. While reviewing the modification travelers, it was discovered that errors existed in RPP-CALC-61928, which is an AP farm design document. The cursory review of RPP-CALC-61928 found the following errors/deficiencies; Although required per TFC-ENG-STD-06, the calculation did not address seismic loading imposed on the equipment being analyzed. There were also discrepancies between the revision of procedures that were referenced, and what revision was current when the calculation was originated. The calculation did identify assumptions, but it did not provide technical justifications for those assumptions, nor did it identify a RPP-TBD number if the assumptions required verification. If this error was not discovered, the new designs in AW, AY, and AZ farm would also contain the error and consequently fail to meet facility design requirements.

9/13/2018	WRPS-PER-2018-2363	Original scans to be utilized for data collection on rounds/data sheets	The quality of records scanned into IDMS is dependent on grayscale shading, color (red circles), and darkness of the recorded data on rounds/data sheets. Whenever a copy is made, the quality and shading of the rounds/data sheet is affected. TF-OPS-005 is completed daily and the data is often submitted on copies of originals (or copies of copies). Data/rounds sheets are to be printed directly from the procedures website per TFC-OPS-OPER-C-13 and TFC-BSM-IRM_DC-C-02.
9/13/2018	WRPS-PER-2018-2362	Original scans to be utilized for data collection on rounds/data sheets	The quality of records scanned into IDMS is dependent on grayscale shading, color (red circles), and darkness of the recorded data on rounds/data sheets. Whenever a copy is made, the quality and shading of the rounds/data sheet is affected. ETF-OR-DR-CR Rounds Sheet 2 is completed daily and the data is often submitted on copies of originals (or copies of copies). Data/rounds sheets are to be printed directly from the procedures website per TFC-OPS-OPER-C-13 and TFC-BSM-IRM_DC-C-02.
9/13/2018	WRPS-PER-2018-2339	Personal Protective Equipment Approval Committee Charter (PPEAC) expectations need to be communicated to the affected users	While conducting an apparent cause analysis on a 222-S Laboratory PPE type issue (PER-2018-1289) an extraneous condition was identified. New PPE approvals are needed when requesting PPE that hasn't been approved before or if the item isn't on the approved or rejected listing currently being put together by Safety Program services . TFC-CHARTER-72, Rev A-0 was issued on March 14, 2018 but the expectations were not announced to the employees affected by the new requirements. In May of 2018 a different type of PPE was procured and, the requestor, cost account manager and the approvers were unaware of the new process to have new PPE approved before buying it. At the time this issue was discovered and up until just recently while conducting investigative interviews with many people involved in the approval process they still do not know about the PPE approval committee and how it functions to approve PPE. **See recommended corrective actions.

9/13/2018	WRPS-PER-2018-2393	Electrical disconnect panel blocked	Material stored in front of electrical disconnects in MO734 and MO733.
9/13/2018	WRPS-PER-2018-2394	Housekeeping	**Ladders in storage area for out of use ladders were not tagged or designated "Do Not Use"** Gasoline can stored by cigarette butt can in what appeared to be a smoking area.
9/13/2018	WRPS-PER-2018-2395	Workers not ACE'd in under correct RWP	On 9/13/18 (b)(6) were called together by the Operations Manager and had an interactive discussion to remind them on the procedure requirements and to always check the rooms and RWP requirements and not to assume day to day or tour by tour that the access is still valid.

9/13/2018	WRPS-PER-2018-2396	Conduct inspections as required by RCRA Permit	In the Ecology inspection report for the April 2018 inspection a requirement was made to "Conduct inspections seen in Table 6.1 through Table 6.4 of the Permit as directed (e.g. Verify systems are working properly) and within the frequencies specified. No further action required." One of the quarterly inspections of the PAX system was scheduled for the beginning of the quarter but could not be performed due to an electrical outage. The inspection was not performed later in the month but the reason it could not be performed was documented. This practice is consistent with historical practice but was not accepted by the current inspector.
9/13/2018	WRPS-PER-2018-2398	Update daily rounds for drain inspections	The report for the April 2018 Ecology inspection of the 242-A Evaporator identified a concern related to daily rounds of the Loading Room drains. The concern states "Consider updating daily rounds for the Loading Room, to reflect the room inspection requirements found in Table 6.1 of the Permit.
9/13/2018	WRPS-PER-2018-2399	Work Package issues identified During Post Job Discussion (WRPS-MOP-2018-2679)	During a post job discussion for WO# 350281, it was discovered that the confined space entry permit in the work package did not match the approved copy attached to WORA. It was also identified that an incorrect confined space hazard ID for cell B was included in the work package. An issue with the sequence of confined space downgrade and subsequent ladder inspection was also identified, that requires an additional change to the work package to correct. Also identified that pen and ink change 1 had not been reviewed and approved by the JRG chairman. The work package steps associated with these discrepancies had not been executed yet, but the concern remains with the number of errors made within a JRG approved work package.

9/13/2018	WRPS-PER-2018-2383	Inadequate overhead lighting in Thin Film Dryer room	The overhead lighting inside the Thin Film Dryer room is inadequate to perform work safely on platforms.
9/13/2018	WRPS-PER-2018-2400	Current 242-A Evaporator Operator Training Simulator Graphics Control Code Not transferred During Hardware Replacement.	**The operator training simulator CDCM for the 242-A Evaporator was recently replaced. During this replacement two recently updated graphics control files were unintentionally replaced with older versions.** This error is preventing several graphics (related to used raw water and Vessel Vent) from operating properly.
9/13/2018	WRPS-PER-2018-2401	Electronic Routing Board Revision Request not Available for (H-14-107346) Sheet 3	H-14-107346 Sheet 3 was released on 9/12/18. The afternoon of 9/13/18, the revised drawing was replaced on the 274AW routing board. (b)(6) and (b)(6) then proceeded to approve and publish the revision request on the ERB; however, the revision request was not processed by (b)(6) thus was not available to **publish. This has left the electronic routing board not showing the current configuration.** The electronic routing board is currently going through a pilot testing phase and is not being used for configuration control purposes. Configuration Control is still being managed via the paper routing board.

9/13/2018	WRPS-PER-2018-2403	Expired hot work permit and inadequate controls.	Concern raised from (b)(6) the exhaust ventilation for 272AW Instrument shop had been isolated (recommended from EP for take cover) and when performing hot work was causing discomfort. Upon investigation I discovered the hot work permit expired 8/30/18 and had not been updated. Also review of GHA states soldering is not skill based - JHA required in which I could not find. Review of TFC-ESHQ-FP-C-01 and discussion with FPE Fire Protection Engineer soldering is considered low hazard hot work which includes adequate ventilation (already working on update). Discussion with maintenance planner and SME for JHA's one for this work could not be identified.
9/13/2018	WRPS-PER-2018-2402	Degraded Sleeving at AP-02A Pit	While setting up for AP-02A Pit work HPT noticed a camera installed in a top hat at riser 026 next to the pit had sleeving that had been left in the sun for what seemed like a long time judging by the looks of the plastic. Upon further inspection the sleeving had holes and was very brittle to the touch. Also the tape was breaking down and falling off the seals. After taking smears and checks of the top hat the shield plug that was originally in the riser was noticed laying down near the riser. The shield plug also had sleeving that was very degraded with holes and breaks.
9/13/2018	WRPS-PER-2018-2397	Contamination Detected on WIDS Site	While performing routine radiation / contamination surveys and inspections for WIDS sites 200-W-115 discovered Contamination . See RSR BOS-1800949 for maps and photos.

9/13/2018	WRPS-PER-2018-2404	AX Farm ERSS Units - Non-Code Welds NCR Closure	Technical justification for closing NCRs (TF-18-NCR-014 and TF-18-NCR-015) lacked engineering rigor did not support the conclusion of accepting the items As-Is. There is no impact to the closure of the NCRs to the prompt corrective actions.
9/16/2018	WRPS-PER-2018-2406	242-A Courtyard North Main Gate Bottom Hinge Broken	242-A Courtyard North Main Gate bottom hinge is broken which makes it difficult to open/close the gate.
9/17/2018	WRPS-PER-2018-2407	Druck Rejected from Energy Northwest	Druck,, Serial # T6013973405, Model # DPI601 (M&TE # 819-35-40-008) "As Found" reading during calibration was "Out-Of-Tolerance. Item was Rejected beyond economical repair.

9/17/2018	WRPS-PER-2018-2408	ATI Aerosol Photometer found Out-Of-Tolerance	ATI Aerosol Photometer, Serial# 18897, Model# 2HA-N, (M&TE # 817-23-10-007) "As Found" reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.
9/17/2018	WRPS-PER-2018-2410	Shift Instructions Authenticati on	At the direction of the Records Officer, Performance Assurance performed a review of TFC-OPS-OPER-C-40 Timely Instructions/Orders and the record Shift Instructions/Intermittent Shift Instructions from ETF, 242A, CSO, and R/C to determine if records management requirements are being implemented appropriately; focusing on authentication and submittal of the instructions as record material.The requirements set forth in OPER-C-40 are lacking in regard to authentication. First, Records Management has determined that initials alone do not constitute authentication. There must exist a means to identify the initials. Second, there is an inconsistency in approval requirements. While Shift Instructions require an approval signature, Intermittent Instructions only require an Operations Manager/Delegate e-mail approval. OPER-C-40 also states that Shift Instructions are record material in the records section however does not mention Intermittent Instructions as record material in the records section. This is clearly just an oversight as 4.1.2.8 Intermittent Shift Instructions states "Submit the Shift Instruction to the File Custodian located at 274-AW for records submission in accordance with TFC-BSM-IRM_DC-C-02. "242A Shift Instructions (See attached)* Only initials required for shift managers; no identification.* Operations Manager approval signature, printed name (first initials), however no authentication date.* Sections include: Issue date, 242A SM Review, 242A SM Actions, Engineering On-Call, Discussion Points, and Approval Signature* 242A Shift Instructions have been submitted as record material on a semi-regular basis. ETF Intermittent Shift Instructions (See attached)*Shift Manager review includes Print (first and last), Sign, Initial, Date (initial requirement is included as initials are often required in the body of the instructions).* Operations Manager Approval includes print, sign, date* Sections include: Issue date, Ongoing Activities, Info< Administrative Activities, Plant Configuration Communication, Planned Overtime, Standing Orders and Red Arrows, Notifications, Shift Managers review, Approval Signature.* ETF Intermittent Shift Instructions have never been submitted through the Performance Assurance review for records submittal. CSO Shift Instructions*Shift Manager review includes initials only; *CSM Approval includes printed name and signature but not date of authentication* Sections include: Issue Date, CSM Actions including any Issued Standing Orders, Waste Transfer Shift Objectives, Information, and Approval*CSO Shift Instructions are submitted as record on a non-regular basis. Retrieval Operations Shift Instructions* Oncoming Operations Engineer/Delegate Review includes initial line only* Retrieval Operations Manager Approval includes printed name (emailed approval)* Sections include: Issue Date, Oncoming Review, Actions, Shift Objectives, Maintenance, Information (new procedures, etc.), and Approval* Retrieval Operations Shift Instructions are submitted to record on a non-regular basis.
9/17/2018	WRPS-PER-2018-2411	Charcoal dusting using Scott 7422-SC1 Cartridges	On September 13, 2018, a worker experienced charcoal dusting when using Scott 7422-SC1 (Chemical) cartridges. A Stop Work was initiated and Red Arrow issued, restricting use of 7422-SC1 and 7422-SD1 cartridges until concern regarding cartridge filter media is addressed.

9/18/2018	WRPS-PER-2018-2413	WRPS Event Investigation Processes Do Not Comply With DOE O 422.1 Conduct of Operations	Title: Reviewed the Event Investigation Process Summary: The DOE ORP Tank Operations Division Director and the Facility Representative discussed the finding in this report with WRPS Contractor Assurance management personnel in a meeting on 9/11/2018. Benchmarking of industry standards at operational nuclear facilities and other DOE EM sites is appropriate in developing a path forward in standardizing an event investigation process that will fully support the continuous, safe and compliant operation of Direct Feed Low Activity Waste. ..... Issue Type: Finding Significance Level: 2 Statement: WRPS Event Investigation Processes Do Not Comply With DOE O 422.1 Conduct of Operations (Priority Level 3) (Ciola, 9/12/2018) Discussion: With continuous operations in support of Direct Feed Low Activity Waste just over the horizon, event investigations must be conducted when required and utilize and include appropriate sources of objective information. DOE O 422.1, Conduct of Operations, Chg. 2, Attachment 2, Appendix A, provides that, "the operator must establish and implement operations practices for investigating events to determine their impact and prevent recurrence." In May of 2017, the U.S. Department of Energy, Office of River Protection (DOE-ORP) Tank Operations Division (TOD) identified a concern with non-conservative decision-making after the failure to investigate the unplanned movement of over 2,000 gallons of liquid from 242-A to 241-AW-102. Washington River Protection Solutions LLC (WRPS) Problem Evaluation Request (PER) WRPS-PER-2017-1082 relates.
9/18/2018	WRPS-PER-2018-2414	Technical Procedure Quality	A recent Core Procedures review of a sampling of Tank Farm technical procedures exposed certain document flaws that closer writer attention to detail and more exacting peer reviews might have prevented. Procedures elects to use the discoveries as a learning opportunity to challenge its own quality control mechanisms to a higher standard. Review results suggest that writers may benefit from revisiting those process basics adopted to avert lapses in product quality, attention to detail, etc. Another consideration offered: a more individualized training approach customized to help each writer reexamine the basics of the craft, and reemphasize the peer review step and its crucial role in the final quality checking of each work product.
9/18/2018	WRPS-PER-2018-2415	EAPC Safety Book Detail Sheet - LAB-010	07/18/2018: A concern was raised regarding the dirt/dust that has accumulated on the ventilation ducts throughout the RBA/CA. Individual that raised concern has environmental allergies and felt that with all the dirt/dust blown from the ventilation system down into the areas was causing an increased health concern for them. 07/20/2018: Issue was discussed at the monthly EAPC/VPP Meeting. Concern was given #LAB-010. 08/07/18: Discussed this issue with the Shift Office. Set a follow-up email regarding the concern. 09/13/18: Requested update from the Shift Office. 09/13/18: Shift Office responded stating that this issue would be turned over to 222-S Engineering for a path forward. It was stated that Mr. (b)(6) could be the contact for this concern. 09/13/18: Received a call from the 222-S Engineering Manager and discussed this issue with him. I was told that Mr. (b)(6) would be my contact for this issue.

9/18/2018	WRPS-PER-2018-2416	Time to LFL Analysis for Transfer Line Encasements	Section 6.3 of HNF-SD-WM-HC-017 states that potential flammability issues in the encasements of SL-167 and SL-168 are a concern only more than 21 ft from the vented end of the encasement. The reference provided for this value is RPP-RPT-59770, Equation 2-28. Examination of RPP-RPT-59770 shows that this value is not documented in the engineering calculation; discussions with the author of RPP-RPT-59770 reveal that the value was provided in an email to the originator of HNF-SD-WM-HC-017. Because this value is being used for definition of the classified location, which is used for application of ignition Controls under Tank Farms AC 5.8.2, the value should be derived via a process that provides appropriate check and review (e.g., via a published engineering calculation) rather than via email.
9/18/2018	WRPS-PER-2018-2417	Sewage Leak from Restroom Piping Valve	A foul sewage-like odor was reported near Bldg. MO-173/200E. It was discovered that the trailer waste water discharge valve had leaked approximately 5 gallons of sewer water onto the ground, resulting in the bad odor.
9/18/2018	WRPS-PER-2018-2419	LEAN RIE on LOTO Locking Devices	A LEAN Rapid Improvement Event (RIE) was held on 8/29/17 to identify improvements to the selection and identification process for LOTO locking devices. The team identified several improvement initiatives. The attached presentation documents the LEAN event and proposed solutions. This PER is to track the improvement initiatives to completion.

9/19/2018	WRPS-PER-2018-2421	Emergency Equipment Surveillance	WRPS Emergency Management performed a procedure review to determine how DOE/RL-94-02 emergency equipment inspection/surveillance requirements are flowed down to facility specific implementing procedures. The requirements in DOE/RL-94-02 include inventory, inspection and maintenance of emergency equipment to ensure it is available for use. Several functional areas manage emergency equipment supporting their various disciplines and as such, procedural direction governing emergency equipment readiness varies between the functional areas and various facilities. Observations made regarding emergency equipment operational readiness: 1.Procedures that direct emergency equipment inspections at the various facilities all vary in format, information and direction provided. 2.Procedures are inconsistent and omit identifying what is required by DOE/RL-94-02 and the basis for additional direction provided (i.e. regulatory, best management practice, manufacturer recommendation, etc). 3.Forms documenting emergency equipment inspections are not consistent across the various functional areas and facilities making them difficult to retrieve efficiently. 4.Emergency equipment inspection facility and functional area accountability cannot be readily determined without lengthy procedure search efforts.
9/19/2018	WRPS-PER-2018-2422	TIS station required for personnel not assigned to building	Terminal drive training facility hosts a number of personnel for training classes. There is no dedicated location for personnel not permanently assigned to the Terminal drive location. A sign implies there is a TIS station in room 109 which is the computer classroom. Whenever there is a class using the classroom personnel are unable to find a location to comply with time keeping procedures. Previously an office was available for use as a turn around cube where personnel could TIS. When Safety Programs occupied the office no provision was made for the displaced TIS station. 4 cubicles are available on the other end of the building as "training specialist turnaround" cubicles. They are frequently occupied by training personnel and other personnel needing longer computer access. Personnel trying to find a TIS computer are often disruptive to others working in their offices and interrupt classes while they try to find a computer to comply with timekeeping procedures.
9/19/2018	WRPS-PER-2018-2423	Contamination found outside of contamination area	While performing routine surveillance COO-W041 (Contamination survey of contamination area boundaries), a speck of contaminated soil (200,000 dpm/probe area) was discovered outside the boundary along Canton Ave on the east side of A Farm.

9/19/2018	WRPS-PER-2018-2424	TFC-ESHQ-FP-STD-03 Correction/ Update	TFC-ESHQ-FP-STD-03 does not reference the current revision of DOE STD 1066.
9/19/2018	WRPS-PER-2018-2425	TFC-PLN-13 Clarification	Found a term used in TFC-PLN-13 inconsistent with terminology used in DOE STD 1066-2012.
9/19/2018	WRPS-PER-2018-2426	TFC-ESHQ-FP-STD-02, BCO & FCO	TFC-ESHQ-FP-STD-02 should include language similar to that found in MGT-ENG-IP-05, Rev. 3, describing the Building Code Official (BCO) and Fire Code Official (FCO). These are not found in TFC-ESHQ-FP-STD-02.

9/19/2018	WRPS-PER-2018-2427	Question/Clarification: Application of Table 1, Item 1	TFC-ENG-DESIGN-C-52, Table 1, Item 1 has the heading, "All design documents requiring DOE or other regulatory agency approval . . . ," followed by identifying several disciplines to include Industrial Safety, Radiological Monitoring, Criticality Safety, Nuclear Safety, and Fire Protection. Are each of the named disciplines required to approve all documents (within the scope of TFC-ENG-DESIGN-C-52) being transmitted for DOE approval? The issue is fire protection review of documents such as facility documented safety analyses (DSA). The specific application is to modifications with fire protection impact. Such DSA changes may impact the facility fire hazards analysis (FHA).
9/19/2018	WRPS-PER-2018-2428	TFC-ESHQ-FP-STD-06: Transmitting Equivalency/ Exemption Requests to DOE-ORP	TFC-ESHQ-FP-STD-06, Section 3.4, is found to lack specific guidance to transmit equivalency or exemption requests through the appropriate ORP contracting officer, as required by MGT-ENG-IP-05.
9/19/2018	WRPS-PER-2018-2429	TFC-ESHQ-FP-STD-06: Assumptions in FHA's	TFC-ESHQ-FP-STD-06, Section 3.1.1, requires modification to specifically state, "Where assumptions are made in the fire hazards analysis regarding the combustible loading of a facility, facility-specific controls shall be developed which will prevent exceeding the limits analyzed." This text comes from MGT-ENG-IP-05, Rev. 3 and is required of the TOC Fire Protection Program.

9/19/2018	WRPS-PER-2018-2430	TFC-ESHQ-FP-STD-06: Informal Transmittal of FHA to DOE-ORP	TFC-ESHQ-FP-STD-06, DOE-ORP does not require a draft FHA to be transmitted for approval per MGT-ENG-IP-05, Rev. 3. Text in Section 3.2.4 should be modified to state the guidance in MGT-ENG-IP-05, Rev. 3.
9/19/2018	WRPS-PER-2018-2431	Opportunity for Improvement - TFC-PLN-13: Engineering Staffing Level	Existing fire protection engineering staffing in the WRPS Industrial Safety organization is no longer adequate to meet current and known new work commitments.
9/19/2018	WRPS-PER-2018-2432	Opportunity for Improvement: TFC-PLN-13: Contact Number	TFC-PLN-13, Section 3.1.4 includes a fire protection contact number. The number is no longer functional and should be updated or removed.

9/19/2018	WRPS-PER-2018-2433	Opportunity for Improvement: TFC-PLN-13, subsection numbers out of sequence	TFC-PLN-13, Section 3.2.1, some subsection numbers are out of sequence.
9/19/2018	WRPS-PER-2018-2434	TFC-ESHQ-FP-STD-02, Section 4.1: Should vs Shall	TFC-ESHQ-FP-STD-02, Section 4.1 needs to be modified to include the following clarification: New project and facility design, construction, and modifications shall comply with design requirements contained in DOE STD 1066-2012. All statements utilizing the word "should" in DOE-STD-1066-2012 are not considered mandatory but recommended guidance which must be considered. This text originates in MGT-ENG-IP-05, Rev. 3.
9/19/2018	WRPS-PER-2018-2435	TFC-ESHQ-FP-STD-02, Section 1.0 Clarification	MGT-ENG-IP-05, Rev. 3 includes guidance to clarify use of "should" and "Shall" in applying DOE STD 1066-2012, Appendix C. TFC-ESHQ-FP-STD-02 should needs to include this guidance.

9/19/2018	WRPS-PER-2018-2436	TFC-ESHQ-FP-STD-02: Consultation w/TOC Fire Protection	TFC-ESHQ-FP-STD-02: TFC-PLN-13, Section 3.3.3, directs users to consult with TOC fire protection. This guidance should also be in TFC-ESHQ-FP-STD-02, Section 4.1.
9/19/2018	WRPS-PER-2018-2437	Opportunity for Improvement - TFC-ESHQ-FP-STD-02 FHA's for facilities of $150 Million	TFC-ESHQ-FP-STD-02, Section 3.1.7.a, should state that a FHA is required for new facilities or major modifications to existing facilities with a value greater than $150 million. This guidance is missing.
9/19/2018	WRPS-PER-2018-2438	Opportunity for Improvement - TFC-ESHQ-FP-STD-02: Adding definitions	TFC-ESHQ-FP-STD-02 lacks definitions for: Building, Combustible, Noncombustible, Permanent, Relocatable Structure, Structure, and Temporary. These are definitions often quoted in design and field applications.

9/19/2018	WRPS-PER-2018-2439	Examination revision frequency not established in WRPS Procedure	TFC-BSM-TQ_IMP-C-05 does not define how much or how frequently examinations are changed to prevent compromise as directed in DOE-STD-1070-94. This was identified as an Opportunity for Improvement in FY2018-MD-OPI-0334.
9/20/2018	WRPS-PER-2018-2418	HEPA Vacuum usage requirements confusing	It was brought to my attention that there was confusion amongst some members of the work team performing cleaning and inspection of electrical cabinets over the weekend in 241-AN farm as to what form or procedure is required for using a HEPA vacuum. After discussion in the field, the work team decided on the need for usage of the A-6005-960 HEPA Vacuum Usage Data Sheet 1 form. Note , due to the confusion, a vacuum was not used on 9/17/18, however, when it was used recently on 9/14/18, proper radiological monitoring of the vacuum was performed during this work scope. Further discussion with the observer of the issue and (b)(6) on 9/17/18 determined that there are two procedures at tank farms discussing the use of HEPA vacuums; TFC-ESHQ-ENV_RM-P-11 Using Filtered Vacuum Cleaners for removing radiological surface contamination and TO-060-007 Operate Portable Temporary Radioactive Air Emission Unit (PTRAEU) Vacuums. It is unclear which if either procedure the work team was working to in addition to the work order, or whether TF-100 was screened for this activity due to the "special equipment" nature of the HEPA Vacuum, (see TFC-OPS-MAINT-STD-02). It appears that each of the above mentioned procedures effectively implement the requirements in HNF-5183 (Rad Manual) to monitor the vacuum in use, however, it was difficult to determine which procedure was applicable in this situation, and if TF-100 effectively implemented the requirement of HNF-5183 Article 464.3 (b) "controlled by an RWP." It was also determined that there is inconsistent language in some WRPS RWPs for using HEPA Vacuums. TF-100 does not talk about use of a vacuum. LE-003 states "includes use of HEPA vacuum" in the job description section, and requires air sampling "when using HEPA Vacuum outdoors or in unfiltered ventilated facilities". S-883 states to "follow applicable procedures for use of HEPA Vacuums." It appears that any of these RWPs in use with the aforementioned procedures would be compliant with the requirements of HNF-5183 article 464, however, the inconsistent language could lead to confusion. Additionally, TFC-ESHQ-ENV_RM-C-10 Rev A2 (Operate Portable Temporary Radioactive Air Emission Unit (PTRAEU) Vacuums) had two references contained within that were cancelled. This was brought to the attention of environmental department management, who is working through correcting this; no further tracking suggested in relation to this PER.
9/20/2018	WRPS-PER-2018-2440	Finger rings worn but not issued in ACES - repeat issue	One set of finger rings from TFP were found to be worn but not issued in ACES. The finger rings could not be linked to the worker who wore them. This is a repeat incident (ref: PER-2018-2004) and demonstrates the project is not demonstrating adequate control for the issue of finger rings.

9/20/2018	WRPS-PER-2018-2442	Ground Wire Tripping Hazard	Ground wire for transfer lines is sticking out of a yellow jacket, creating a tripping hazard.
9/20/2018	WRPS-PER-2018-2443	Loose Handrail	Loose handrail on the outside of BX change trailer.
9/20/2018	WRPS-PER-2018-2444	Parking Curb Replacement	In front of MO- 159 the parking curb (wheel stop) needs to be removed and replaced by a new one.

9/20/2018	WRPS-PER-2018-2445	Finger Rings worn but not issued in ACES	A set of 3rd Qtr finger rings were found to be worn but were not issued in ACES. The finger rings could not be linked to the workers who wore them. This creates difficulties assigning dose and keeping accurate records of dosimeters worn. This has been a repeat occurrence with in the Closure and Retrieval projects.
9/20/2018	WRPS-PER-2018-2447	Evaluate and provide long-term resolution for asphalt areas and gas bottle storage around the 222-S Maintenance Annex	Areas where bottles are daily moved by craft personnel have cracked, missing, and damaged asphalt. Special consideration needs to be made to transition areas where asphalt meets the concrete in front of the 222S annex doors and the bottle storage locations at 222S (both the locked cage and the bas bottle docks) In addition, the caged storage area is at a lower elevation than the rest of the complex paved areas, causing water to pool in the bottle storage location. This causes rust on the bottles which either prevents the bottles from being used in the lab CA, or requires cleaning the rust or sleeving the bottle prior to the bottle entering the CA.
9/20/2018	WRPS-PER-2018-2450	ROUTING BOARD	During updating of the routing board and electronic route board is was noted that new rev of H-14-107364 Sheet 8, Rev 31 indicates C Farm pits with no connected transfer lines and the electronic routing board not matching. Electronic routing board canvas verified with no pits or transfer lines. Additionally, Riser 6, Sluicer Box #1 did not match the field condition, Refer to ECN's-714172 and 714173.

9/20/2018	WRPS-PER-2018-2420	Improving the WRPS Trending Program	An extensive trending program exists at WRPS, however the issues raised in the finding 'Proceeding in the Face of Uncertainty Prevalent in Recent Events (Priority Level 2) (Ciola, July 31, 2018) represents a behavioral expectation that is not specifically trended. As a result of the Common Cause analysis completed for the Level 2 finding, it was determined that the WRPS trending program should be modified to include trending of the issues identified in the Level 2 Finding. This PER has been submitted to track this action as a Condition Extraneous to Cause. The referenced Level 2 finding is documented as WRPS-PER-2018-2080. See attachment 18-2080 CARB Presentation, last slide.
9/20/2018	WRPS-PER-2018-2409	The 242-A Evaporator Technical Baseline is not clearly defined in SmartPlant Foundation (SPF)	The 242-A Evaporator Technical Baseline is not clearly defined in SmartPlant Foundation (SPF) leading to the generation of inaccurate system health reports (configuration management status metrics). A system health report was run for Design Authority (DA) designator "SYS – 242A Evaporator Facility Systems". The report returned 33 Essential drawings. A review of this report found 3 of the 9 sheets of H-2-829563, 242-A Ventilation System, drawings, were included as Essential 242-A Drawings. Of the six remaining sheets of this set, 5 drawings were Essential and one was Support. None were identified as belonging to the 242-A Technical Baseline and none of these drawings had a DA assigned. The Design Authority Delegation Table identifies is (b)(6) as the DA for the 242-A Ventilation system. Other 242-A Evaporator essential drawings do not have a DA designator assigned. The fire suppression system drawings, H-2-79865 sheets 1-5 have a blank DA designator.
9/20/2018	WRPS-PER-2018-2452	Samples taken at ETF for Volatile Organic Analysis (VOA) have headspace making them unusable	An email from the GEL laboratory on 9/19/18 indicated VOA samples taken on 9/10/18 had headspace in the bottles. The ETF permits require sampling per 40 CFR 136, which requires no headspace in VOA bottles for volatile organics to escape. The procedure for filling samples, ETF-65J-002, provides the steps for filling **VOA bottles.** The sample on 9/10/18 was a process sample, not a permit-required sample. However, a review of ETF sampling events from May through September (attached) shows several instances where one or more of the three bottles taken for VOA analysis had headspace.

9/21/2018	WRPS-PER-2018-2453	unusual taste in mouth.	Individual from Fowler General Construction was wearing PAPR hood working as a spotter for the asphalt barrier project. The individual said he had a unusual taste in mouth and said he felt slightly dizzy.
9/22/2018	WRPS-PER-2018-2455	Suspect PSV-211 Relieved/Lifted During Blowdowns	•At 1040 hours the SOE was performing Daily Blowdowns PER 60I- ETF-60I-003, Section 5.8. When performing step 5.8.3.2 the SOE opened 60I-213 drained water below sight glass LG-60I-303 completed steps through 5.8.3.5 and re-closing 60I-213. At this point, the SOE felt something on his hard hat and felt hot water drops on the side of his face/neck area. SOE reported issue to the SOM. Contacted CSM to report event and requested CSM-OE to take SOE to HPMC. ETF Management contacted. Event Investigation 2018-034 will be conducted per direction from (b)(6) to (b)(6) It appears that PSV-60I-211 may have opened momentarily. Found small drops of residual moister on top of insulation at PSV-211 piping leading to Sump. Photo's taken. SOE returned from HPMC, no restrictions. SOE writing his statements for Event Investigation. When completed, Evap Boiler will be shutdown.
9/24/2018	WRPS-PER-2018-1982	CRAD NO. 03: Vehicle Barriers or Vehicle Restrictions (DSA Table 3.3.2.3.2-2, Item 5) (Rev 0, 4/10/18).	An opportunity for improvement would be to add TFC-ENG-STD-27 to the Engineering Technical Staff qualification card to ensure these requirements are well understood.

9/24/2018	WRPS-PER-2018-2459	Fluke Pressure Calibrator found Out-Of-Tolerance	Fluke Pressure Calibrator, Model# 718 30G, Serial # 8327027 (M&TE# 817-35-40-079) "As Found" reading during calibration was Out-Of-Tolerance. It was adjusted to manufacturer spec.
9/24/2018	WRPS-PER-2018-2461	RMA posted without unique RMA #	An RMA containing an ERDF container (#3149) is posted to the South of RMA 171. The RMA containing the ERDF container does not have a unique serial number anywhere along the rope around the ERDF container.
9/24/2018	WRPS-PER-2018-2405	Interstitial liquid (ISL) and solids in at least 12 DST's have not been adequately sampled.	Interstitial liquid (ISL) in DST solids needs to be sampled according to RPP-13639, Caustic Limits Report for Period Ending March 30, 2017 (Rev 13 and 14), and RPP-ASMT-62082, Implementation of DOE O 435.1 in Double-Shell Tank Integrity. Report RPP-13639. These documents rely on best-basis inventory (BBI) estimation and sampling results, which do not change for chemical and nuclear reactions in nuclear waste tanks, or mass transfer due to time. Core samples are needed and recommended in at least three DST's per year for 5 years as noted in the 3 Source Documents above. Only 3 core samples have been taken in the last 10 years. Two of these cores used a new technique that detected lower concentrations of hydroxide in the solids near the bottom of the tank. The 3 cores were taken in 2014 and 2015. No core samples have been taken or scheduled since that time. No cores are scheduled per the T-4 schedule dated 9-12-18. Chemical and nuclear reactions plus mass transfer change the chemical content of the waste, so solids and ISL are recommended to be sampled as outlined in RPP-13639 to avoid corrosion and premature failure of DST's. If the ISL Tank contents were known they could be better modeled over time and treated by addition of chemicals and mixing to avoid further Tank corrosion and failure.

9/24/2018	WRPS-PER-2018-2462	Radiological Control Logbook	During the performance of ETF and COMS Logbook review, opportunities for improvement noted in the accuracy and detail of entries documented.
9/24/2018	WRPS-PER-2018-2456	Informal routes of communication bypass the formality of the PER process	FY2018-OPS-R-0194 was an assessment on the Washington River Protection Solutions (WRPS) Tank Operations Contractor implementation of the Technical Safety Requirements (TSR) Safety Management Program (SMP) and was conducted between August 13, 2018 and September 21, 2018. The assessment found that the compliance can go up to the last barrier before it is caught and that PERs are not catching such issues because they are often not recorded in the PER system. TSR compliance for Tank Farms controls relies mainly on administrative controls which involves personnel following procedures, knowing the requirements, and recognizing when the requirements apply. That implies that redundant layers of checks and balances are also required to maintain compliance. Interviews reveal that Operations and Engineering often call Nuclear Safety with questions about compliance. This seems to be a good practice to maintain compliance especially when dealing with some of the finer points of interpretation, but it actually bypasses the PER process and deprives management of vital information with respect to holes in knowledge and communication about compliance questions across organizational lines. When PERs are reviewed during assessment, the absence of Operations' and Engineering's PERs documenting questions and answers about compliance obscures how well the layers of redundancy are working and what questions need answered in training and qualification processes. It is understood that many questions that Engineering and Operations has of Nuclear Safety cannot wait for the PER process to work through its steps, but the questions submitted by Operations and Engineering directly to Nuclear Safety should be documented after the fact so the information can be shared with all personnel tasks with maintaining TSR compliance within the company.
9/24/2018	WRPS-PER-2018-2457	Publish a summary of the FY2018 TSR Assessment to Operations, Engineering, and Work Control	FY2018-OPS-R-0194 was an assessment on the Washington River Protection Solutions (WRPS) Tank Operations Contractor implementation of the Technical Safety Requirements (TSR) Safety Management Program (SMP) and was conducted between August 13, 2018 and September 21, 2018. During a review of relevant PERs from 2018, there are some issues in these PERs that might be useful to Operations, Engineering, and Work Control. WRPS-PER-2017-1946: Ignition control screening form in work package 263518 didn't address going into the farm. WRPS-PER-2017-1971 :Ignition source controls implementation aspects were reviewed WRPS-PER-2017-2499 : Ignition Source Controls in a Level 3 Work Package WRPS-PER-2017-2785: 241-S-304, 241-TX-302C and 241-UX-302A ISCSF WRPS-PER-2018-0866: DCRT Passive Ventilation Maximum Level Calculation WRPS-PER-2018-1329:Flammable Gas Controls Implementation Documents WRPS-PER-2018-1765: Greater than 20,000 Gallons of water was transferred to tank 241-AW-102 without authorization/approval in the work package

9/24/2018	WRPS-PER-2018-2458	Action Identified in FY2017 TSR Assessment Was Not Closed Appropriately	FY2018-OPS-R-0194 was an assessment on the Washington River Protection Solutions (WRPS) Tank Operations Contractor implementation of the Technical Safety Requirements (TSR) Safety Management Program (SMP) and was conducted between August 13, 2018 and September 21, 2018. An action was identified in FY2017 to specify who was required to sign Step 5.26.3 in a TSR Functional Test procedure, TF-FT-680-022. The PER was given a significance of "Trend Only" since the procedure was currently in the revision work flow. The action was not captured in the 2017 work flow and the signatory remains unspecified.
9/24/2018	WRPS-PER-2018-2463	INDUSTRIAL HYGIENE SAMPLING PLANS (IHSPs) WITH SAMPLING METHODS NEEDING REVISION	The MOP entailed a review of WRPS-PER-2017-0718, Industrial Hygiene Sampling Plans (IHSPs), Site Wide Industrial Hygiene Database (SWIHD), WRPS procedures and documents, and manufacturer literature. Twelve IHSPS were reviewed that involved stack or filter sampling. Some areas were noted that need to be addressed, such as specifying incorrect or out of date sampling methods on the IHSP. IHSPs reviewed: IHSP-ENV-AP-01 (01-29-2018), IHSP-CMHZ-42 (02-03-2016), IHSP-CMHZ-49 (07-26-2016), IHSP-CMHZ-77 (04-17-2018), IHSP-PART-05 (09-05-2017), IHSP-RETR-AX-34 (02-27-2018), IHSP-RETR-C-64 (05-24-2018), IHSP-RETR-AY-16 (11-05-2015), IHSP-RETR-AY-21 (12-15-2015), IHSP-CMHZ-32 (07-06-2015), IHSP-RETR-AY-22 (01-19-2016), IHSP-PART-04 (12-03-2015). Evaluation: IHSP-ENV-AP-01, R6 (01-29-2018) – For acetaldehyde, the IHSP specifies either National Institute for Occupational Safety and Health (NIOSH) method 2016 or Environmental Protection Agency method TO-11A (as part of the aldehyde panel). The laboratory used TO-11A for analysis. NIOSH method 2016 is for formaldehyde, not acetaldehyde. The appropriate NIOSH methods for acetaldehyde are 2018, 2538, 2539, or 3507. IHSP-CMHZ-77 (04-17-2018) and IHSP-CMHZ-32 (07-06-2015) – The IHSPs specify NIOSH method 7903 for inorganic acids; however, no samples have been obtained under these IHSPs as shown in SWIHD. This method was listed as HISTORICAL by NIOSH as of 07-15-2015 and replaced NIOSH 7906, NIOSH 7907, or NIOSH 7908, which were effective 05-20-2014. IHSP-PART-05 Rev 4 (09-05-2017) – Two samples were specified. One sample was for Particulates, NOR, Respirable Dust and Metals Scan by ICP using NIOSH 0600 for respirable dust and NIOSH 7300 metals. The other sample was for total dust using NIOSH 0500. While no samples have been collected, the process was for a HEPA filter replacement, which would not generate metal fumes. The exposure standard for metal dust would be based on the NIOSH 7300 method collected using the same media and flow rate used for NIOSH 0500, not NIOSH 0600. IHSP-PART-04 (12-03-2015) – The method specified for particulate sampling prior to changing the filter media at 222-SE is ATS-LT-103 for use of the Scanning Electron Microscope (SEM). The procedure for use of the SEM does not specify the sample media (Gunshot Residue Lift) for sample collection.
9/24/2018	WRPS-PER-2018-2464	PROCEDURES TO DETERMINE PURGE RATE FLOW IN TUBING FOR IH MONITORING	The MOP entailed a review of WRPS-PER-2017-0718, Industrial Hygiene Sampling Plans (IHSPs), Site Wide Industrial Hygiene Database (SWIHD), WRPS procedures and documents, and manufacturer literature. The procedures were for use by Industrial Hygiene Technicians. The manufacturer literature was for determining the purge flow time through monitoring/sampling tubing. Some areas were noted that need to be addressed, such as an incorrect calculation and including example instructions on calculating or selecting purge flow time through tubing for Industrial Hygiene Technicians (IHTs). Procedures reviewed: TF-OPS-IHT-007, TF-OPS-IHT-024, and ATS-LT-161-103 Manufacturer Literature: RAE Systems Technical Note TN-140, "The Effect of Extension Tubing Volume and Vacuum on Sample Flow for RAE Systems Instruments"

9/24/2018	WRPS-PER-2018-2465	Exempting Administrative Facilities and Maintenance Shops from Ignition Source Control Screenings	TFC-ENG-FACSUP-P-17, Flammable Gas Activities Ignition Control, states in the Purpose and Scope that it is not applicable to any Work Packages, PMIDs, or Technical Procedures for work at Effluent Treatment Facility (ETF), Liquid Effluent Retention Facility (LERF), Treated Effluent Disposal Facility (TEDF), or 222-S Laboratory. These faculties cannot have flammable gas atmospheres. The instructions for the ISC Screening form, A-6003-774, notes that the form is not required for these facilities. In the instructions for filling out Blocks 1 and 3 in Section I, these facilities as well as maintenance shops and administrative facilities are listed as not requiring ignition controls and are outside of tank farm fences or the 242-A Evaporator. The 5 prescreening questions are marked "No" and the form still needs approvals. This form is not applicable to work being done in Administrative Facilities or Maintenance shops and could be considered additional paperwork that may be adding no real value to the work packages. I would like to request that Administrative Facilities and Maintenance Shops be exempted from the ISC Screening.
9/24/2018	WRPS-PER-2018-2467	Ecology finding regarding RPP-9937 and TX-302C	On February 28, 2018, Ecology initiated a dangerous waste compliance inspection of the SST system. The focus area for the inspection was RPP-9937, Single Shell Tank Leak Detection Functions and Requirements. On September 5, 2018, Ecology issued an inspection report citing a "compliance problem" (Number 2), regarding a TX-302C intrusion event that caused a change in TX-302C status with respect to the "interim stabilized" status reflected in RPP-9937. Ecology contends they should have been notified in 2015 when a heavy precipitation event caused an increase in TX-302C liquid levels, above the interim stabilization criteria. The Ecology inspection report required two actions: "Within 60 days of receipt of this compliance report, conduct an M-45-056 Milestone meeting including discussions of the course of actions to be taken to address the intrusion into Catch Tank 241-TX-302C and submit meeting minutes to Ecology. Additionally, provide a notification indicating that intrusion was detected in Catch Tank 241-TX-302C."
9/24/2018	WRPS-PER-2018-2471	Ecology finding regarding missing MO-2250 Signage	On February 28, 2018, Ecology initiated a dangerous waste compliance inspection of the SST system. On September 5, 2018, Ecology issued an inspection report citing a "compliance problem" (Number 1), regarding TSD signage on MO-2250. On February 28th, Ecology toured A and AX tank farms. The tour included a visit to the newly installed MO-2250 change trailer. Ecology looked for, but did not find a sign reading "Danger - Unauthorized personnel Keep Out".

9/24/2018	WRPS-PER-2018-2473	Potential Improvements to reduce Non-Conformances	Non-Conformance Report TF-18-NCR-014, regarding welding issues associated with AX Farm Extended Reach Sluicers (ERSS) units was final dispositioned, approved, and closed. Subsequently, the Quality Assurance Inspection Plan (QAIP) and Commercial Grade Dedication (CGD) were approved, and the units successfully green – tagged for use. However, a few observations that may not have been captured elsewhere are noted below along with suggested recommendations. Observation 1: The supplier associated with the referenced non-conformance was previously approved and placed on the Evaluated Suppliers List (ESL) for welding practices that did not meet WRPS requirements. Consider improvements to the evaluation process to ensure a supplier's less than adequate (LTA) welding practices are identified upfront and corrected prior to adding them to the list. Observation 2: Comments were submitted by the QA department after final approvals, causing rework in the acquisition process. Consider improvements that would allow comments to be dispositioned prior to final approvals. Observation 3: The Subject Matter Expert (SME) for welding identified code deficiencies on the last three (3) of 12 ERSS units. However, the same SME had already approved the previous nine (9) ERSS units of like and kind design/fabrication. Consider improvements which would allow SME deficiencies to be identified on earlier like and kind units.
9/24/2018	WRPS-PER-2018-2474	FCA label at threshold of Door #13 needs to be replaced.	Fixed Contamination Area (FCA) label is starting to peel off of the threshold at the Door#13 entrance (picture attached).
9/24/2018	WRPS-PER-2018-2475	Electronic Routing Board issue with POR412 Installation	Construction was installing POR412 diversion box per step 5.5 of work package WO-374980. Construction did not place the POR412 diversion box in the correct spot (90 degrees out) because they could not complete step 5.6 by the end of the shift. Step 5.6 states NOTE -Steps 5.6 and 5.7 may be completed at any time prior to end of shift of the day installation work was completed 5.6 (b)(6) 5 (b)(6) and (b)(6) UPDATE Routing Board and Electronic Routing Board per ECN-712016 R1 pg. 4 to add POR412 diversion box By installing the diversion box in this configuration the electronic routing board did not need to be updated. (b)(6) and (b)(6) could not draw a complex diversion box by the end of the shift. Since the diversion box is not in the correct position it will need to be lifted and rotated to the correct position.

9/25/2018	WRPS-PER-2018-2476	Vehicle license plate	Worker in the field had asked a question to his supervisor and was not able to get an answer so he asked if I would put this in as a PER. License on the government vehicle has expired tabs and was wondering if this was an issue for him as a driver.
9/25/2018	WRPS-PER-2018-2477	Provide oversight for the release of M&E, observe personnel exiting CA, and perform general area housekeeping walk-down.	I noted that the Ludlum Model 3030E Alpha/Beta scalar had been source checked on 9/19/18 and 9/20/18 but the background count data had not been updated on the instrument since 9/18/18- and the beta source calibration due date was incomplete.
9/25/2018	WRPS-PER-2018-2484	IH instruments received and green tagged by AVS with calibration certificate not NIST traceable	IH instruments (CAT ID 685594, MR-18-03368, 150 items) received and accepted by AVS with calibration certificate not NIST traceable

9/25/2018	WRPS-PER-2018-2486	Insufficient Helium Gas Supply to He-103 at 222-S Lab	On 7/15/18 select instruments in Room 4TUV were requested to be powered up by management to allow for equilibration for the next day's work. It was found that there was no helium supply to the room and the He-103 bottles at the supply dock were registering on the gas gages as empty (0 psi). The helium supply valves at the instruments were not closed off because it was an expected normal operating condition that the instrument supply gases would be maintained. Instruments require clean (ultra high purity), consistent helium flow in order to maintain proper functioning. Gas cylinders supplying the instrument should not be used below 500psi in order to prevent oily residue from the bottom of the cylinder to contaminate the gas lines. In addition, the He-103 gas supply also ran out on 12/12/17; this was not previously noted in the PER system (see WRPS-PER- 2018-1759 for an additional occurrence). It is of note that most of the instruments that are supplied with He-103 will not produce an error log when helium supply is lost. If helium supply is lost and then re-supplied during times when the instrument user is not present, the user would not know to monitor for possible issues that may arise when helium supply has been lost due to empty gas cylinders.
9/25/2018	WRPS-PER-2018-2487	August Production Operations Radiological Control Radiological Survey Report (RSR) Review	1. During the performance of the August Production Operations Radiological Control Radiological Survey Report (RSR) Review, discrepancies were identified with 3 Radiological Survey Reports. 2. Discrepancies were communicated to respective RCFLMs and corrected.
9/25/2018	WRPS-PER-2018-2316	During drill response incorrect protective actions were directed	EP-PE 12.11 - Onsite PAS On July 19th 2018, Emergency Preparedness conducted an ICP Limited Drill that included 222-S Complex ERO personnel and a simulated fire inside the 222-S building in 200W (EM-2225-ICP-2018-07-01). During the course of the drill the evaluation team identified the following suggestion: When the 222-S building fire alarm activated the FOM directed 222-S Labs building personnel to conduct an orderly exit of the building rather than an immediate evacuation.

9/25/2018	WRPS-PER-2018-2313	Event Scene personnel directed to take cover without approval during drill response	**EP-PE 6.18 ERO Operations** **On July 19th 2018, Emergency Preparedness conducted an ICP Limited Drill that included 222-S Complex ERO personnel and a simulated fire inside the 222-S building in 200W (EM-2225-ICP-2018-07-01). During the course of the drill the evaluation team identified the following suggestion:** Event scene personnel were directed by the RHA to take cover in 2705-S when wavering sirens were heard outside, the direction to take cover was not approved by the BED prior to being conducted.
9/25/2018	WRPS-PER-2018-2488	Universal Waste not properly stored	On Monday 9-24-2018 (b)(6) was walking through the Universal Waste storage and accumulation area and noticed a bulb in a plastic bag labeled "Burnt Out bulb" with a date of 9/22/2018 sitting on the shelf, not in a closed accumulation container. There was no other information with the bulb, no waste planning checklist, or inventory that would give a description of the type of bulb. No (b)(6) were working over the weekend of 9/22/2018. It appears someone opened the Universal waste accumulation and storage area and left the bulb from work over the weekend. Signs on the door of the Universal waste accumulation area say "Caution Authorized Personnel Only".
9/25/2018	WRPS-PER-2018-2489	Identification of drain lines on the Routing Board	**Using different definitions for "drain lines" versus waste transfer lines results in inconsistencies between the Routing Board and the final status permit for the 242-A Evaporator.** The 2016 DSTAR classified drain lines based on a definition from a 2002 USDOE letter to Ecology and identifies DR-334, DR-335, DR-338, DR-343 as drain lines. The 2002 definition of drain lines was further defined in 2006, as documented in RPP-20960, Rev.1, p. 9, which states, "Drain lines were further defined as not being pressurized to greater than the potential static head of the component they are draining, and are not used to store waste." This refinement was necessary to clarify the 2002 definition that inferred these lines are never under any pressure. This distinction is important because the integrity integrity assessment **and secondary containment requirements are different for drain lines that are part of a secondary containment system and pipelines used to transfer dangerous waste that is pressurized by a pump.** The 242-A Evaporator Permit states, "The four lines are sloped to drain about 560 feet to feed tank 241-AW-102 via the drain pit (241-AW-02D). Although WAC 173-303-640(1)(c) exempts systems that serve as secondary containment from requiring secondary containment, drain lines DR-334, DR-335, and DR-338 have **outer encasement piping and are part of the DST System."** **RPP-16922 states the four drain lines from 242-A to the 241-AW-02D drain pit are drain lines and are exempt from WAC 173-303-640(1)(c) secondary containment requirements.** General Note 5 on the Routing Board classifies DR-335 as a Waste Transfer Line (assuming the last sentence in this note c is a typo and "DR-355" should be "DR-335"), however there is no data in the 2016 DSTAR to indicate this line was subjected to and passed the required pressure testing to be used for waste transfers. Per the engineer drawings, the encasement on drain lines DR-334, DR-335, and DR-338 do not penetrate the wall of the 242-A Evaporator building. These drain lines do not have a variance from secondary containment standards, therefore they cannot be used for waste transfers. This is not a problem because these are **defined as drains in the DSTAR and RCRA Permit and are only used as drain lines; however the Routing Board indicates DR-334, DR-35, and DR-338 are RCRA-Compliant Encased Waste Transfer Lines.** **The Routing Board does not provide a unique symbol to distinguish non-compliant wall penetrations.** The DSTAR (RPP-27591, Rev. 1, p. A-18) does not recognize that drain line DR-338 is a 3" line with a 6" encasement, as show on drawings H-2-69352, H-2-69354, and H-2-69183. .

9/25/2018	WRPS-PER-2018-2490	Drain line encasement not identified in DST Pipeline Data Table.	The DSTAR (RPP-27591, Rev. 1, p. A-18) does not recognize that drain line DR-338 is a 3" line with a 6" encasement, as show on drawings H-2-69352, H-2-69354, and H-2-69183.
9/25/2018	WRPS-PER-2018-2485	Vehicle Accident	On 09/18/2018 while backing up in the area south of MO-524 (b)(6) driving a government vehicle struck a personal vehicle causing minor damage. (b)(6) performed a walk around of his vehicle but the vehicle that was struck was a distance back and not noticed.
9/25/2018	WRPS-PER-2018-2492	Ignition Source Screening for AY-102 Annulus Pumping	As part of a MOP, the Ignition Source Control Requirements Screening of Work Activities and Equipment Used in Performing Work Activities checklist for Procedure TO-250-050 AY-102 Annulus to Riser 52 Pumping was reviewed. Section III of the checklist requires that ignition controls be implemented unless there is an approved evaluation to demonstrate: Steady-State flammable gas generation cannot results in a flammable gas concentration greater than 25% of LFL AND A spontaneous or induced release of flammable gas cannot occur or cannot result in a flammable gas concentration of greater than 25% of LFL. The checklist for TO-250-050 refers to HNF-SD-WM-HC-017 Rev.11, NFPA Flammable Vapor and Gas Hazard Classification for the Tank Farms, as the basis for the statement that AY-102 annulus will not exceed 13% of LFL during the final rinse and annulus pumping. HNF-SD-WM-HC-017 states that this is a maximum steady-state concentration. Neither HNF-SD-WM-HC-017 nor the ignition control checklist discusses a spontaneous or induced release of flammable gas in the AY-102 annulus. It should be noted that the solids and liquid level in the AY-102 annulus are below the de minimus depths for a spontaneous gas release (RPP-CALC-45085). Additionally, an induced gas release that released all retained gas (using assumptions from the HNF-IP-1266, Section 5.8.1 DST Induced Gas Release Event Evaluation) would be well below 25% of LFL.

9/25/2018	WRPS-PER-2018-2493	Incorrect Process Information on PI Coresight	When looking at AZ ventilation equipment status on the Chiller screen of PI System/DST Ventilation/AZ Exhauster/Primary Cooling/Chiller it was noticed that the coolant flow was indicated as flowing through both pumps simultaneously even though Pump AZ-CW-P-1B was shown as "OFF". Also, Pump AZ-CW-P-1A , which was shown as "ON" was drawing 0 amps and Pump AZ-CW-P-1B that was shown as "OFF" was drawing about 5.6 amps. The indicated current consumption and/or operating status is incorrect and flow arrows are shown for both the active and inactive lines.
9/25/2018	WRPS-PER-2018-2495	Organizational Property Data Review	Performed a review/comparison between WRPS Organizational Data (e.g. Org Code, Name) received from WRPS HR with active Organizational Codes and Names in Sunflower Asset Management System (SAMS) accountable property database for WRPS. This review compared the data from HR ("WRPS Department Table, 080218" attached) with active organization data from SAMS ("WRPS Org Review, SAMS Data" also attached) to identify which organizations in SAMS were no longer active/applicable for current WRPS employees. Because property accountability is assigned at an Organizational Level (e.g. Level 2), it is important that organization codes and names are current and accurate in the property database. The review identified a total of 166 active organizations for WRPS in SAMS. Of these orgs, 76 were identified as "Inactive", i.e. not on HR listing and not verifiable in Popfon. Additionally, 35 active orgs had incorrect or partially incorrect org names and one(1) active org (2Q300 - Lean Management) was not listed in SAMS. Finally, a review of current assets in SAMS was reviewed against the "Inactive" org listing and 366 assets were identified to be linked with an incorrect org/org code.
9/26/2018	WRPS-PER-2018-2510	Lights Needed	AP change Tent and AN change Tents; where night routines are done, source checking the Ludlums and surveying the SOP; have no lights or anyway to turn lights on. Walking into a dark tent or semi dark tent poses greater chances for tripping hazards, or various safety scenarios. I left notes in AN tent last week , and bought the issue up in shift turnover.

9/26/2018	WRPS-PER-2018-2511	Leaking sink at 278AW mask issue station	The sink used to clean SCBA regulators at the 278 AW mask station was identified as leaking under the cabinet. This has been a repeat problem as it was previously corrected a few months ago.
9/26/2018	WRPS-PER-2018-2513	isolating electricity in a tabletop drill	On August 21, 2018 WRPS Security and Emergency Services (SES) conducted an emergency preparedness tabletop drill to evaluate emergency response actions involving a fire at the Effluent Treatment Facility. During the drill the fire department Incident Commander asked if we could isolate power to the compressor room, so that the firefighters could enter the room and check for hot spots. Personnel gave several suggestions to isolate the power, but there was some confusion about the best way to complete this task. (P/E 8.1) Facilities and Equipment
9/26/2018	WRPS-PER-2018-2514	222-S Operator Aid, ATS-2009-002, Was Not Removed After It Was Canceled In 2010.	Title: Attended 222-S Ecology Annual Dangerous Waste Compliance Inspection Summary: The FR went on a walkdown with Ecology and the ORP Environmental Representative for an Annual Dangerous Waste Compliance Inspection. The focus of the inspection were the TSD's and 90 Days area. Areas inspected included room 4E, 2D, and 2B. Ecology took a number of photos, wrote down packaging label information and reviewed paperwork. During the walkdown the FR noted Operator Aid located inside the TSD on the backside of the fume hoods, labeled 2009-002. The FR followed up with a review of the Operator Aid binder located in 222-S room 3 B. In reviewing the binder there was no ATS-2009-002. The FR followed up with the Operator Aid coordinator who determined the operator aid was canceled on 06-29-2010. The Operator Aid was not removed after being canceled in 2010 and remains posted in 222-S/2B/Hood 16 (37188-TF-F01). ---------- Issue Type: Finding Statement:: 222-S Operator Aid, ATS-2009-002, Was Not Removed After It Was Canceled In 2010. Discussion: During the Annual Ecology Dangerous Waste Compliance Inspection the FR entered the TSD in room 2 Band observed Operator Aid ATS-2009-002 posted on the side of Hood #16. As a follow-up the FR reviewed the Operator Aid Binder located in 222-S room 3B. The Operator Aid was not in the Binder so the FR spoke with the OA Coordinator who verified it was canceled on 06/29/2010. After cancellation Operator Aids are required to be removed in accordance with ATS-310, Section 11.17. Requirements: ATS-310, Section 11.17, Rev F-2 Section 4.6 Operator Aid Cancellation and Removal : 5. When all cancellation and approvals have been collected, ensure that the posted Operator Aid is removed. Revision 7 of procedure ATS-310, Section 11.17, was in effect when the operator aid was canceled and also required the removal of the posted Operator Aid. REF: TOD Weekly 09/17/18;K Ebert; Finding; OA37243

9/26/2018	WRPS-PER-2018-2515	Pen-and-Ink Changes Were Not Made to a Work Control Document Prior to Field Implementation.	Title: Attended Prejob for SX Asphalt Work and Observed Compaction Testing Summary: On August 31, the FR arrived at 630 to attend the prejob briefing for WO#387155, Perform Asphalt Paving Over SX Farm. The prejob was delayed as the MatCon representatives who had performed compaction testing and acceptance the day before decided last night that they wanted to perform additional compaction testing before work began. As this was considered work scope associated with WO#390576, Prepare SX Farm for Asphalt Paving, they were directed to wear SCBA inside the SX fence line, in the RBA/SCA. The FR observed the compaction testing. While the crews waited for the prejob to begin the FR observed a good practice. One of the mask issuers performed a demonstration to the workers on how to properly test and assemble their PAPRs and Hoods. This was performed as a reminder to the individuals that had received training eight months prior, but had not worn them since. The FR reviewed the SX Tank Farm Route (map) 241-SX-101 thru 241-SX-115 Drawing (Attachment 1) and spoke with (b)(6) about the planned exclusion areas on the map. During the discussion (b)(6) stated the exclusion areas had been reduced in size and provided a copy of (b)(6) email (Attachment 2) describing the changes based on RPP-CALC-62139. The FR questioned if the exclusion areas had been marked based on the e-mail or from an issued work document. (b)(6) stated they were marked in the field in accordance with the direction provided in the email. During further review and discussion with the Project Manager the FR determined, although the calculation was issued, the Route Map had not been updated in accordance with work control requirements (37091-TF-F01). After the FR notified (b)(6) of the finding (b)(6) came into the office on August 31, and made pen-and-ink changes to the Route Map (Attachment 3) (b)(6) contacted the FR on Tuesday September 4, stating they were told I had questions on the route drawing and they could clarify the difference between the route drawing and route map. The FR agreed to meet with (b)(6) to further discuss the identified Finding. During the discussion the Route Map revision from August 31 was provided. During further review of the revised route map and the Tank Operations Contractor Work Control procedure the FR determined the revision did not receive required approvals from (b)(6) and (b)(6) as required (37091-TF-F02).
9/26/2018	WRPS-PER-2018-2516	Failure to Obtain Required Approvals for Changes Made to the Route Map.	Title: Attended Prejob for SX Asphalt Work and Observed Compaction Testing Summary: On August 31, the FR arrived at 630 to attend the prejob briefing for WO#387155, Perform Asphalt Paving Over SX Farm. The prejob was delayed as the MatCon representatives who had performed compaction testing and acceptance the day before decided last night that they wanted to perform additional compaction testing before work began. As this was considered work scope associated with WO#390576, Prepare SX Farm for Asphalt Paving, they were directed to wear SCBA inside the SX fence line, in the RBA/SCA. The FR observed the compaction testing. While the crews waited for the prejob to begin the FR observed a good practice. One of the mask issuers performed a demonstration to the workers on how to properly test and assemble their PAPRs and Hoods. This was performed as a reminder to the individuals that had received training eight months prior, but had not worn them since. The FR reviewed the SX Tank Farm Route (map) 241-SX-101 thru 241-SX-115 Drawing (Attachment 1) and spoke with (b)(6) about the planned exclusion areas on the map. During the discussion (b)(6) stated the exclusion areas had been reduced in size and provided a copy of (b)(6) email (Attachment 2) describing the changes based on RPP-CALC-62139. The FR questioned if the exclusion areas had been marked based on the e-mail or from an issued work document. (b)(6) stated they were marked in the field in accordance with the direction provided in the email. During further review and discussion with the Project Manager the FR determined, although the calculation was issued, the Route Map had not been updated in accordance with work control requirements (37091-TF-F01). After the FR notified (b)(6) of the finding (b)(6) came into the office on August 31, and made pen-and-ink changes to the Route Map (Attachment 3) (b)(6) contacted the FR on Tuesday September 4, stating they were told I had questions on the route drawing and they could clarify the difference between the route drawing and route map. The FR agreed to meet with (b)(6) to further discuss the identified Finding. During the discussion the Route Map revision from August 31 was provided. During further review of the revised route map and the Tank Operations Contractor Work Control procedure the FR determined the revision did not receive required approvals from (b)(6) and (b)(6) as required (37091-TF-F02).
9/26/2018	WRPS-PER-2018-2518	Failure to Request USQ Screening for Revision Made to SX Farm Route Map.	Title: Attended Prejob for SX Asphalt Work and Observed Compaction Testing Summary: On August 31, the FR arrived at 630 to attend the prejob briefing for WO#387155, Perform Asphalt Paving Over SX Farm. The prejob was delayed as the MatCon representatives who had performed compaction testing and acceptance the day before decided last night that they wanted to perform additional compaction testing before work began. As this was considered work scope associated with WO#390576, Prepare SX Farm for Asphalt Paving, they were directed to wear SCBA inside the SX fence line, in the RBA/SCA. The FR observed the compaction testing. While the crews waited for the prejob to begin the FR observed a good practice. One of the mask issuers performed a demonstration to the workers on how to properly test and assemble their PAPRs and Hoods. This was performed as a reminder to the individuals that had received training eight months prior, but had not worn them since. The FR reviewed the SX Tank Farm Route (map) 241-SX-101 thru 241-SX-115 Drawing (Attachment 1) and spoke with (b)(6) about the planned exclusion areas on the map. During the discussion (b)(6) stated the exclusion areas had been reduced in size and provided a copy of (b)(6) email (Attachment 2) describing the changes based on RPP-CALC-62139. The FR questioned if the exclusion areas had been marked based on the e-mail or from an issued work document. (b)(6) stated they were marked in the field in accordance with the direction provided in the email. During further review and discussion with the Project Manager the FR determined, although the calculation was issued, the Route Map had not been updated in accordance with work control requirements (37091-TF-F01). After the FR notified (b)(6) of the finding (b)(6) came into the office on August 31, and made pen-and-ink changes to the Route Map (Attachment 3) (b)(6) contacted the FR on Tuesday September 4, stating they were told I had questions on the route drawing and they could clarify the difference between the route drawing and route map. The FR agreed to meet with (b)(6) to further discuss the identified Finding. During the discussion the Route Map revision from August 31 was provided. During further review of the revised route map and the Tank Operations Contractor Work Control procedure the FR determined the revision did not receive required approvals from (b)(6) and (b)(6) as required (37091-TF-F02).

9/26/2018	WRPS-PER-2018-2519	WRPS should revise procedure TFC-ESHQ-Q_ ADM-C-09 to include Section 4.1 because it was omitted.	Scope: The U.S. Department of Energy, Office of River Protection (ORP) Quality Assurance Division conducted a quality assurance independent surveillance (QAIS) of Washington River Protection Solution LLC's (WRPS) implementation of ASME NQA-1-2008, Quality Assurance Requirements for Nuclear Facility Applications, and ASME NQA-1a-2009, Addenda to ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications, Requirement 7, "Control of Purchased Items and Services." Executive Summary: The ORP QAIS team evaluated the adequacy of requirements flow-down into procedures, the implementation of those procedures, and the program's effectiveness in the area of "Control of Purchased Items and Services." The ORP QAIS team reviewed seven bias-selected purchase orders (PO) of Quality Level (QL)-1 and 2 items from a population of 141. Also the ORP QAIS team reviewed four subcontracts of QL-1 and 2 work items from a population of 81. In both POs and subcontracts the population was selected from October 2016 to present. Additionally, the ORP QAIS team conducted interviews of WRPS procurement staff. Requirements Reviewed: •Control Documents -TFC-PLN-02, Quality Assurance Program Description, Rev. 1-0, dated February 7, 2018 -TFC-PLN-50, Quality Implementation Plan, Rev. A-0, dated February 7, 2018 -TFC-BSM-CP_CPR-C-03, Buyer's Subcontractor's Technical Representative, Rev. D-2, dated January 3, 2018 -TFC-BSM-CP_CPR-C-05, Procurement of Services, Rev. K, dated July 13, 2017 -TFC-BSM-CP _CPR-C-06, Procurement of Items (Materials), Rev. H-17, dated February 26, 2018 TFC-BSM-CP CPR-C-09, Supply Chain Process, Rev. C-12, dated March 29, 2018 -TFC-BSM-CP_CPR-P-02, Solicitation Process, Rev. B-14, dated February 13, 2018 -TFC-BSM-CP_CPR-P-03, Selection and Award, Rev. A-24, dated August 8, 2017 -TFC-BSM-IRM_DC-C-07, Vendor Processes, Rev. A-11, dated August 8, 2018 -TFC-ESHQ-Q_ADM-C-09, Supplier Quality Assurance Program Evaluation, Rev. D-2, dated February 2, 2017. •Purchase Order Documents (Items)
9/26/2018	WRPS-PER-2018-2521	WRPS should add procedures TFC-BSM-CP_CPR-C-05 and TFC-BSM-CP_CPR-C-06to the TFC-PLN-50	Scope: The U.S. Department of Energy, Office of River Protection (ORP) Quality Assurance Division conducted a quality assurance independent surveillance (QAIS) of Washington River Protection Solution LLC's (WRPS) implementation of ASME NQA-1-2008, Quality Assurance Requirements for Nuclear Facility Applications, and ASME NQA-1a-2009, Addenda to ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications, Requirement 7, "Control of Purchased Items and Services." Executive Summary: The ORP QAIS team evaluated the adequacy of requirements flow-down into procedures, the implementation of those procedures, and the program's effectiveness in the area of "Control of Purchased Items and Services." The ORP QAIS team reviewed seven bias-selected purchase orders (PO) of Quality Level (QL)-1 and 2 items from a population of 141. Also the ORP QAIS team reviewed four subcontracts of QL-1 and 2 work items from a population of 81. In both POs and subcontracts the population was selected from October 2016 to present. Additionally, the ORP QAIS team conducted interviews of WRPS procurement staff. Requirements Reviewed: •Control Documents -TFC-PLN-02, Quality Assurance Program Description, Rev. 1-0, dated February 7, 2018 -TFC-PLN-50, Quality Implementation Plan, Rev. A-0, dated February 7, 2018 -TFC-BSM-CP_CPR-C-03, Buyer's Subcontractor's Technical Representative, Rev. D-2, dated January 3, 2018 -TFC-BSM-CP_CPR-C-05, Procurement of Services, Rev. K, dated July 13, 2017 -TFC-BSM-CP _CPR-C-06, Procurement of Items (Materials), Rev. H-17, dated February 26, 2018 TFC-BSM-CP CPR-C-09, Supply Chain Process, Rev. C-12, dated March 29, 2018 -TFC-BSM-CP_CPR-P-02, Solicitation Process, Rev. B-14, dated February 13, 2018 -TFC-BSM-CP_CPR-P-03, Selection and Award, Rev. A-24, dated August 8, 2017 -TFC-BSM-IRM_DC-C-07, Vendor Processes, Rev. A-11, dated August 8, 2018 -TFC-ESHQ-Q_ADM-C-09, Supplier Quality Assurance Program Evaluation, Rev. D-2, dated February 2, 2017. •Purchase Order Documents (Items)
9/26/2018	WRPS-PER-2018-2522	WRPS should standardize cost or price analysis to suffice TFC-BSM-CP _CPR-P-03 Section 4.3, "Selection Process," step	Scope: The U.S. Department of Energy, Office of River Protection (ORP) Quality Assurance Division conducted a quality assurance independent surveillance (QAIS) of Washington River Protection Solution LLC's (WRPS) implementation of ASME NQA-1-2008, Quality Assurance Requirements for Nuclear Facility Applications, and ASME NQA-1a-2009, Addenda to ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications, Requirement 7, "Control of Purchased Items and Services." Executive Summary: The ORP QAIS team evaluated the adequacy of requirements flow-down into procedures, the implementation of those procedures, and the program's effectiveness in the area of "Control of Purchased Items and Services." The ORP QAIS team reviewed seven bias-selected purchase orders (PO) of Quality Level (QL)-1 and 2 items from a population of 141. Also the ORP QAIS team reviewed four subcontracts of QL-1 and 2 work items from a population of 81. In both POs and subcontracts the population was selected from October 2016 to present. Additionally, the ORP QAIS team conducted interviews of WRPS procurement staff. Requirements Reviewed: •Control Documents -TFC-PLN-02, Quality Assurance Program Description, Rev. 1-0, dated February 7, 2018 -TFC-PLN-50, Quality Implementation Plan, Rev. A-0, dated February 7, 2018 -TFC-BSM-CP_CPR-C-03, Buyer's Subcontractor's Technical Representative, Rev. D-2, dated January 3, 2018 -TFC-BSM-CP_CPR-C-05, Procurement of Services, Rev. K, dated July 13, 2017 -TFC-BSM-CP _CPR-C-06, Procurement of Items (Materials), Rev. H-17, dated February 26, 2018 TFC-BSM-CP CPR-C-09, Supply Chain Process, Rev. C-12, dated March 29, 2018 -TFC-BSM-CP_CPR-P-02, Solicitation Process, Rev. B-14, dated February 13, 2018 -TFC-BSM-CP_CPR-P-03, Selection and Award, Rev. A-24, dated August 8, 2017 -TFC-BSM-IRM_DC-C-07, Vendor Processes, Rev. A-11, dated August 8, 2018 -TFC-ESHQ-Q_ADM-C-09, Supplier Quality Assurance Program Evaluation, Rev. D-2, dated February 2, 2017. •Purchase Order Documents (Items)

9/26/2018	WRPS-PER-2018-2524	Washington River Protection Solutions LLC should standardize the filing process located in procedure TFC-BSM-CP_CPR-P-03	Scope: The U.S. Department of Energy, Office of River Protection (ORP) Quality Assurance Division conducted a quality assurance independent surveillance (QAIS) of Washington River Protection Solution LLC's (WRPS) implementation of ASME NQA-1-2008, Quality Assurance Requirements for Nuclear Facility Applications, and ASME NQA-1a-2009, Addenda to ASME NQA-1-2008: Quality Assurance Requirements for Nuclear Facility Applications, Requirement 7, "Control of Purchased Items and Services." Executive Summary: The ORP QAIS team evaluated the adequacy of requirements flow-down into procedures, the implementation of those procedures, and the program's effectiveness in the area of "Control of Purchased Items and Services." The ORP QAIS team reviewed seven bias-selected purchase orders (PO) of Quality Level (QL)-1 and 2 items from a population of 141. Also the ORP QAIS team reviewed four subcontracts of QL-1 and 2 work items from a population of 81. In both POs and subcontracts the population was selected from October 2016 to present. Additionally, the ORP QAIS team conducted interviews of WRPS procurement staff. Requirements Reviewed: •Control Documents -TFC-PLN-02, Quality Assurance Program Description, Rev. 1-0, dated February 7, 2018 -TFC-PLN-50, Quality Implementation Plan, Rev. A-0, dated February 7, 2018 -TFC-BSM-CP_CPR-C-03, Buyer's Subcontractor's Technical Representative, Rev. D-2, dated January 3, 2018 -TFC-BSM-CP_CPR-C-05, Procurement of Services, Rev. K, dated July 13, 2017 -TFC-BSM-CP _CPR-C-06, Procurement of Items (Materials), Rev. H-17, dated February 26, 2018 TFC-BSM-CP CPR-C-09, Supply Chain Process, Rev. C-12, dated March 29, 2018 -TFC-BSM-CP_CPR-P-02, Solicitation Process, Rev. B-14, dated February 13, 2018 -TFC-BSM-CP_CPR-P-03, Selection and Award, Rev. A-24, dated August 8, 2017 -TFC-BSM-IRM_DC-C-07, Vendor Processes, Rev. A-11, dated August 8, 2018 -TFC-ESHQ-Q_ADM-C-09, Supplier Quality Assurance Program Evaluation, Rev. D-2, dated February 2, 2017. •Purchase Order Documents (Items)
9/26/2018	WRPS-PER-2018-2528	Arc Flash PPE requirements	There is uncertainty as to whether Arc Flash PPE is required for Safe Condition checks but NOT for Safe-to-Work checks.
9/26/2018	WRPS-PER-2018-2448	Complete and document WRPS' IT requirements through the IBM Rational DOORS software application	During the Internal Audit 18-06 Information Technology Governance audit, the following opportunity for improvement was identified: Complete and document WRPS' IT requirements through the IBM Rational DOORS (DOORS) software application. Using this software will help identify and capture requirements, communicate and manage change control and impacts, trace requirements, and verify a systematic review of IT requirements across a distributed IT structure. WRPS IT structure includes management in Engineering, Mission Integration, Business Operations, and other areas making IT investment decisions. During the course of the audit, there were many interpretations of IT requirements and definitions. There will be future changes to the requirements to include the Total Business Management requirements before contract closure. Using DOORS will help reduce the risk for noncompliance to IT requirements across a distributed IT structure. For any requirement clarifications, WRPS should obtain DOE Contracting Officer written direction on definitions or requirement flow-downs.

9/26/2018	WRPS-PER-2018-2449	Implement an IT "turn down" process between WRPS and MSA	During the Internal Audit 18-06 Information Technology Governance audit, the following opportunity for improvement was identified: Consider implementing an IT "turn down" process between WRPS and MSA' to ensure any scope of IT work performed by WRPS which could be interpreted as MSAs' responsibility under the J.3.66 "Information Systems" clause has documented releases from Mission Support Alliance (MSA). The Mission Support Contract service description includes database management, software and systems engineering, system development, operations, maintenance, testing and configuration management. WRPS and Mission Support Alliance (MSA) have an agreement that non-critical systems, which MSA does not have the subject matter expert staff, can be developed and maintained by WRPS. WRPS develops and maintains software systems specific to the tank farms and business operations. A potential and unrealized risk exists that DOE, other audit organizations, or future MSA management could interpret the software and systems development, operations and maintenance, and testing performed by WRPS are within MSA' scope of work. To mitigate this risk, WRPS participates in the Contractor Interface Board. To further mitigate the risk, it is recommended that WRPS implement a "turn down" process for any software or system development, operation and maintenance, or testing by WRPS personnel. Maintaining records detailing communications and agreements between MSA and WRPS for specific software development, operation and maintenance, and testing which would not be performed by MSA will provide additional risk mitigation.
9/26/2018	WRPS-PER-2018-2466	Lack of OUO Markings	FY2018-WRPS-I-0014, Finding 1 - During review of 3rd party dedication documents associated with Contract 58777, it was learned that the documents were inaccessible as they were classified as Official Use Only (OUO) within SmartPlant. Documents classified as OUO are controlled in accordance with MSC-PRO-SEC-54603. Permission to view specific documents was requested and granted. Once viewed it was noted that the documents were not marked as OUO in accordance with procedure requirements which states that it is the responsibility of the information owner to mark the documents.
9/26/2018	WRPS-PER-2018-2468	Missing Requirement Flow-Down	FY2018-WRPS-I-0014, Observation 1 - WRPS is required by contract (DE-AC27-08RV14800) and TFC-PLN-02 to identify and flow-down applicable requirements into implementing procedures in accordance with TFC-BSM-AD-C-01. For this commercial grade dedication (CGD) assessment, requirements are derived from ASME NQA-1 (2009), Subpart 2.14 via TFC-PLN-02. Flow-down and implementation of CGD requirements belong in TFC-ENG-DESIGN-C-15. All of the requirements were accounted for in TFC-ENG-DESIGN-C-15 except paragraph 402 (NQA-1) which addresses "Like-for-Like." The term Like-for-Like only appears in the definitions section of the procedure. The procedure contained no wording for implementation. This issue was reported on the previous assessment (FY2015-ESHQ-I-0007, Item #3) and not addressed. PER was closed on 12/7/15.

9/26/2018	WRPS-PER-2018-2469	CGD 3rd Party Dedication Report Approvals	FY2018-WRPS-I-0014, Observation 2 - Dedication activities being performed by a third-party dedicator shall be in accordance with TFC-ENG-DESIGN-C-34 (Section 4.5.2). The 3rd bullet clearly lists those individuals that are required to approve the 3rd party dedication PLAN. However, bullet #4 states that the completed 3rd party dedication Final Report shall be submitted for TOC review and approval. It does not clearly state who must approve the final report.
9/26/2018	WRPS-PER-2018-2470	Inconsistent Application of CGD Methods of Acceptance	FY2018-WRPS-I-0014, Observation 3 - Section II of the CGD form identifies the methods used to verify the critical characteristics (Methods 1, 2, 3, or 4). Section III of the CGD form is to elaborate on how those same methods are applied. In several CGD packages the methods listed were not consistent between Sections II and III. Examples are: CGD-50106: CC#2 mentions use of Method 2; but in Section III, #2 shows use of Methods 1 & 2 CGD-50136: CC#2 mentions Methods 1 & 2, but in Section III shows use of Method 1; and, CC#3 mentions Method 2, but in Section III shows use of Method 1 CGD-50243: CC#2, 3 & 6 each mention use of Methods 1 & 2, but in Section III shows use of Method 2; and, CC#7 mentions use of Methods 1 & 2, but in Section III shows use of Method 1 CGD-50255: CC#2 mentions use of Method 1; but in Section III shows use of Methods 1 & 2
9/26/2018	WRPS-PER-2018-2472	CGD Support Document Updates	FY2018-WRPS-I-0014, Observation 4 - The NOTES (Section V) of CGD-50268 lists two engineering reports (RPP-RPT-54583 & 54584) that will eventually require updates. This information rests solely in the CGD package and has the potential to be overlooked. However, updates to those reports may not be needed until there is a need to install the item. That could take months or years. Not prudent to keep a PER open for that long.

9/26/2018	WRPS-PER-2018-2538	WRPS-PI-R-0125 "WRPS FY2018 EVMS Annual Surveillance"	WRPS-PI-R-0125 "WRPS FY2018 EVMS Annual Surveillance" Opportunities for Improvement (OFI)
9/26/2018	WRPS-PER-2018-2537	Radiological Instrument Out of Tolerance Report	Radiological Instrument Out of Tolerance Report. 2360/43-93 Barcode Number SCLL8-1192/DTLLP-1310. As found measurements during calibration determined that as found Pu-239 efficiency were less than the minimum specified efficiency. PU-239 efficiency as found was 13.4% with the acceptable limit being 14%. See attached file SCLL8-1192- DTLLP-1310 OOT.pdf.
9/26/2018	WRPS-PER-2018-2525	ALARA Analysis of High Radiation Areas forms (A-6005-939) was not completed for One HRA	The ALARA Analysis of High Radiation Areas form (A-6005-939) was not completed after 90 days for one high radiation area listed on the HRA inventory log in accordance with procedure TFC-ESHQ-RP_MON-C-11, High Radiation Area Controls. The current HRA Inventory Log lists the following HRAs where the ALARA analysis form could not be located: WRPS-HRA-067, AX-104 D Pit. [Finding 001]

9/26/2018	WRPS-PER-2018-2527	High Radiation Area Inventory Log not Up-to-Date with HRA Status in the Field	Procedure TFC-ESHQ-RP_MON-C-11, High Radiation Area Controls requires that a High Radiation Area Inventory Log be maintained. As HRAs are established and disestablished, the inventory log is required to be updated accordingly. This has not been accomplished for the following HRA: WRPS-HRA-073, AX-102 02C Pit Riser 001A. During an internal assessment it was determined that this HRA was disestablished in June 2018 but had not been removed from the inventory log. [Finding 002]
9/26/2018	WRPS-PER-2018-2530	High Radiation Area Inventory Log Format and Maintenance Process are not Well Defined	Procedure TFC-ESHQ-RP_MON-C-11, High Radiation Area Controls requires that an accurate inventory of high radiation area be maintained. The list is maintained on the Radcon webpage using an Excel spreadsheet. A review of the inventory log indicated that measures could be taken to improve that usability and accuracy of the inventory log. The following conditions were noted in the inventory log: • In listing dose rates for some HRAs that are not known both "N/A" and "Unknown" are used. • HRA WRPS-HRA-001 for the BY Tank 101 Condenser lists the dose rates as N/A but the access control is maintained using postings and an unlocked barricade. If the dose rates were truly unknown, then the more conservative approach would be to assume they are greater than 1 Rem/hr and control access with a locked barricade. However, interviews with field personnel indicated that the dose rates are known and they are less than 1 Rem/hr. The inventory log should reflect this information. • Based on field interviews it appears that the organization identified for routine surveillance is not always accurate in the inventory log. • HRA WRPS-HRA-029 for the C-102 demister indicates dose rates that are well below 100 mrem/hr. This area should be evaluated for downposting from HRA status. (After completion of the assessment it was stated that the C-102 Demister currently has up to 720 lbs of lead blankets for temporary shielding. Since the shielding is considered temporary, it is a good practice to maintain this as a HRA. However, this information should be stated on the inventory log.) • WRPS-HRA-045 and WRPS-HRA-059 do not have entries regarding the completion of the establishment checklist. (Corrected during the assessment) • WRPS-HRA-072 lists a higher contact dose rate than the dose rate at 30 cm. (Corrected during the assessment) • Some individuals in the field did not know who was responsible for updating the inventory log. • HRAs that are no longer active could be moved to a separate list which would make the spreadsheet more user friendly. [Observation 001]