AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 4

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO. *(If applicable)*
P00126	See Block 16C		

6. ISSUED BY CODE 893042

EM-Idaho
Department of Energy
Office of Environmental Management
Idaho Cleanup Project
1955 Fremont Avenue
Idaho Falls ID 83415

7. ADMINISTERED BY *(If other than Item 6)* CODE 00701

U.S. Department of Energy
Idaho Operations Office
1955 Fremont Avenue
Idaho Falls ID 83415

8. NAME AND ADDRESS OF CONTRACTOR *(No., street, county, State and ZIP Code)*

IDAHO ENVIRONMENTAL COALITION LLC
Attn: Laura McGee
600 William Northern Blvd
Tullahoma TN 373884729

CODE LQ5ZLNE3EM27 FACILITY CODE

(x) 9A. AMENDMENT OF SOLICITATION NO.

9B. DATED *(SEE ITEM 11)*

x 10A. MODIFICATION OF CONTRACT/ORDER NO.
89303321DEM000061
89304223FEM400000

10B. DATED *(SEE ITEM 13)*
09/08/2023

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

☐ The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offers ☐ is extended, ☐ is not extended.
Offers must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended , by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted ; or (c) By separate letter or electronic communication which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGEMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted , such change may be made by letter or electronic communication, provided each letter or electronic communication makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA *(If required)*

13. THIS ITEM ONLY APPLIES TO MODIFICATION OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

CHECK ONE	
	A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: *(Specify authority)* THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.
	B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES *(such as changes in paying office, appropriation data, etc.)* SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(b).
X	C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF: C. FAR 43.103(a) Bilateral
	D. OTHER *(Specify type of modification and authority)*

E. IMPORTANT: Contractor ☐ is not ☒ is required to sign this document and return 1 copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION *(Organized by UCF section headings, including solicitation/contract subject matter where feasible.)*

UEI: LQ5ZLNE3EM27
The purpose of this modification is to update the Risk Registers for Task Order 3.2, Integration and Mission Continuity, Task Order 5.1, Naval Reactors S1W D&D, Task Order 6.1, Non-Defense Project, and Task Order 7.2, Integrated Waste Treatment Unit Operations as of FY 2026 1st quarter (see below for details).

Attachments:
1. SF30_Final_P00126
2. FY26 Q1 TO3 Phase 2 DOE Transfer Risk Register Updates – Incorporated
3. FY26 Q1 TO3 Phase 2 DOE Transfer Risk Register Updates – Redlined
4. FY26 Q1 TO3 Phase 2 Risk Register Updates – Incorporated
Continued ...

Except as provided herein, all terms and conditions of the document referenced in Item 9 A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER *(Type or print)*	16A. NAME AND TITLE OF CONTRACTING OFFICER *(Type or print)*
KIMBERLI SOUTHWICK (Affiliate) Digitally signed by KIMBERLI SOUTHWICK (Affiliate) Date: 2026.02.19 18:09:54 -07'00'	Marianne Boline
15B. CONTRACTOR/OFFEROR	15C. DATE SIGNED
(Signature of person authorized to sign)	
16B. UNITED STATES OF AMERICA	16C. DATE SIGNED
MARIANNE BOLINE Digitally signed by MARIANNE BOLINE Date: 2026.02.20 08:58:47 -07'00'	
(Signature of Contracting Officer)	

Previous edition unusable

STANDARD FORM 30 (REV. 11/2016)
Prescribed by GSA FAR (48 CFR) 53.243

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	5. FY26 Q1 TO3 Phase 2 Risk Register Updates – Redlined 6. FY26 Q1 TO5.1 DOE Transfer Risk Register Updates – Incorporated 7. FY26 Q1 TO5.1 DOE Transfer Risk Register Updates – Redlined 8. FY26 Q1 TO5.1 Risk Register Updates – Incorporated 9. FY26 Q1 TO5.1 Risk Register Updates – Redlined 10. FY26 Q1 TO6.1 DOE Transfer Risk Register Updates – Incorporated 11. FY26 Q1 TO6.1 DOE Transfer Risk Register Updates – Redlined 12. FY26 Q1 TO6.1 Risk Register Updates – Incorporated 13. FY26 Q1 TO6.1 Risk Register Updates – Redlined 14. FY26 Q1 TO7.2 Risk Register Updates – Incorporated 15. FY26 Q1 TO7.2 Risk Register Updates – Redlined Payment: VIPERS https://vipers.doe.gov Any questions, please contact by call/email 888-251-3557 or Payments@hq.doe.gov Period of Performance: 10/01/2023 to 09/30/2031 Change Item 00005 to read as follows(amount shown is the total amount):				
00005	CLIN 05 SUBTASK 0501 NAVAL REACTORS D&D (TASK ORDER 5.1) Line item value is: $278,054,550.00 Incrementally Funded Amount: $72,720,928.00 Item 5.1 In accordance with Section B.9, Basis for Changes, TOs issued shall clearly identify the risk ownership for both the Government and the Contractor such that contract changes are reduced to the maximum extent practicable. This modification updates the Risk Registers for Task Order 5.1, Naval Reactors S1W D&D, as of FY 2026 1st quarter. All other terms and conditions remain unchanged. Change Item 00302 to read as follows(amount shown is the total amount): Continued ...				278,054,550.00

NAME OF OFFEROR OR CONTRACTOR
IDAHO ENVIRONMENTAL COALITION LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
00302	CLIN 03 SUBTASK 0302 INTEGRATION AND MISSION CONTINUITY (TASK ORDER 3.2) Line item value is: $1,372,376,166.00 Incrementally Funded Amount: $850,081,190.39 Items: 3.2 In accordance with Section B.9, Basis for Changes, TOs issued shall clearly identify the risk ownership for both the Government and the Contractor such that contract changes are reduced to the maximum extent practicable. This modification updates the Risk Registers for TO 3.2, Integration and Mission Continuity, as of FY 2026 1st quarter. All other terms and conditions remain unchanged. Change Item 00601 to read as follows(amount shown is the total amount):				1,372,376,166.00
00601	CLIN 06 SUBTASK 0601 NON-DEFENSE PROJECT (TASK ORDER 6.1) Line item value is: $34,515,345.36 Incrementally Funded Amount: $18,635,232.27 Item 6.1 In accordance with Section B.9, Basis for Changes, TOs issued shall clearly identify the risk ownership for both the Government and the Contractor such that contract changes are reduced to the maximum extent practicable. This modification updates the Risk Registers for Task Order 6.1, Non-Defense Project, as of FY 2026 1st quarter. All other terms and conditions remain unchanged. Change Item 00702 to read as follows(amount shown is the total amount):				34,515,345.36
00702	CLIN 07 SUBTASK 0702 IWTU OPERATIONS (TASK ORDER 7.2) Line item value is: $391,807,712.00 Incrementally Funded Amount: $48,989,139.65 Continued ...				391,807,712.00

NAME OF OFFEROR OR CONTRACTOR
IDAHO ENVIRONMENTAL COALITION LLC

ITEM NO. (A)	SUPPLIES/SERVICES (B)	QUANTITY (C)	UNIT (D)	UNIT PRICE (E)	AMOUNT (F)
	Item 7.2 In accordance with Section B.9, Basis for Changes, TOs issued shall clearly identify the risk ownership for both the Government and the Contractor such that contract changes are reduced to the maximum extent practicable. This modification updates the Risk Registers for Task Order 7.2, Integrated Waste Treatment Unit Operations, as of FY 2026 1st quarter. All other terms and conditions remain unchanged.				

TO3 Phase 2 Risk Register: DOE Transfer Risks

Idaho Cleanup Project Programmatic Risk Register

Updated : 2.3.26

															Cost Impacts			Schedule Impacts (in days)					
Risk ID	Task Order	WBS	Responsible Organization	IEC POC	Risk Title	Risk Description	Trigger Event	Status	Risk Type	Handling Strategy	Probability	Risk Event Likelihood	Risk Impact	Risk Rating	Best Case	Most Likely	Worst Case	Best Case	Most Likely	Worst Case	Basis of Impacts	Mitigation/Enhancement Activities	Notes
ASD315	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	DOE	Chapple, Jason Lee	RWMC SDA CAP: Funding Impacts	Funding constraints could impact progress delaying the current work. Delays could cascade with a potential impact in starting CAP construction.	Work scope required to support CAP construction is not funded or authorized for performance by DOE-ID.	Open	Threat	Transfer	0.83	Likely	Critical	5-Very High	$ 500,000	$ 750,000	$ 1,500,000	48	180	360	**Best Case**: Work Delay of 48 days as a result of no funding. Project resources would be reallocated to other projects. Once funding was provided there would time needed to get the project back up running and resources assigned to the project. **Most Likely Case**: Work delay of 180 days as a result of no funding. Project resources would be reallocated to other projects. Once funding was provided there would time needed to get the project back up running and resources assigned to the project. **Worst Case**: Work delay of 360 days as a result of no funding. Project resources would be reallocated to other projects. Once funding was provided there would time needed to get the project back up running and resources assigned to the project.	Propose transfer to DOE.	This risk was previously identified under ASD300. Continue to work with DOE on a funding profile.
CAL322	TO3.2	D.3.05.44 D.3.05.45	DOE	Kimbro, Valerie Marie	CDP Line Item - CD-1: Change in Codes and Standards	Changes in federal codes and standards as implemented by IEC contract (e.g., International Building Code, etc.) may impact cost and schedule for the CDP.	Legal or regulatory change.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 28,000	$ 87,500	$ 175,000	32	100	200	Worst case scenario changes in federal codes and standards require extensive rework of documentation. Rework could include expensive change orders or revisions internally, or with external subcontractors. Best case 1 FTE for 32 days Most likely 1.5 FTE's for 100 days Worst case 1.5 FTE's (Environmental & Senior management)	Propose transfer to DOE.	This risk was previously identified under CAL007OR2.
CAL323	TO3.2	D.3.05.41	DOE	Kimbro, Valerie Marie	CDP Line Item - CD-1: Change in Definition Interpretation of High-Level Waste-Opportunity	The high-level waste definition interpretation may impact the overall project strategy to process and dispose of calcine waste. For example, if direct disposal becomes an option, then portions or all of calcine may be eligible for this disposal alternative. This, consequently, may impact or reprioritize ongoing work (e.g., retrieval demonstration and conceptual designs for calcine processing).	Legal or regulatory change.	Open	Opportunity	Transfer	0.05	Rare	Critical	3-Moderate	$ (150,000)	$ (100,000)	$ (80,000)	(150)	(150)	(60)	In the rare likelihood that this occurs, the most likely scenario is that the HLW interpretation provides opportunity for the CDP to forego immediate work scope outside of direct disposal and prioritize retrieval and conceptual designs, pulling those activities forward in the schedule.	Propose transfer to DOE.	This risk was previously identified under CAL007TR2.
CAL324	TO3.2	D.3.05.41	DOE	Kimbro, Valerie Marie	CDP Line Item - CD-1: Change in Definition Interpretation of High-Level Waste-Threat	The high-level waste definition interpretation may impact the overall project strategy to process and dispose of calcine waste. For example, if direct disposal becomes an option, then portions or all of calcine may be eligible for this disposal alternative. This, consequently, may impact or reprioritize ongoing work (e.g., retrieval demonstration and conceptual designs for calcine processing).	Legal or regulatory change.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 80,000	$ 100,000	$ 150,000	60	150	150	In the rare likelihood that this occurs, the most likely scenario is that the HLW interpretation requires additional work outside of authorized task order scope to comply with revised regulations.	Propose transfer to DOE.	
CAL329	TO3.2	D.3.05.41	DOE	Kimbro, Valerie Marie	CDP Line Item - CD-1: Governing Interpretation of Requirements	Currently, there is a void or lack of a governing body to interpret High Level Waste (HLW) programmatic requirements. Because calcine is HLW, not having a governing body to interpret the HLW programmatic requirements may negatively impact cost and schedule for the CDP.	Legal or regulatory change.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 70,000	$ 140,000	$ 233,333	60	120	200	Programmatic requirements could be interpreted in a disadvantageous way requiring significant rework, incurring schedule delays and additional expenses. Primarily labor costs, likely 2 FTE's ($17K/ea/mon, Environmental & PM/Eng/SrMgmt) for a year.	Propose transfer to DOE.	
CAL345	TO3.2	D.3.02.30 D.3.05.41	DOE	Kimbro, Valerie Marie	CDP Line Item and Retrieval: Regulatory Changes	Changes to specific DOE regulations, directives, or policies (e.g., DOE O 435.1, waste repository, NWPA, or RCRA) that requires rework or additional work according to the new requirements may negatively impact cost and schedule for the CDP.	Legal or regulatory change.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 70,000	$ 116,667	$ 233,333	60	100	200	Programmatic requirements could be interpreted in a disadvantageous way requiring significant rework, incurring schedule delays and additional expenses. Primarily labor costs, likely 2 FTE's ($17.5K/ea/mon, Environmental & PM/Eng/SrMgmt) for a year.	Propose transfer to DOE.	
CAL352	TO3.2	D.3.05.40	DOE	Kimbro, Valerie Marie	CDP Line Item - CD-1: Schedule Delays Developing CD-1 Documentation Due to Availability of External Reviewers	DOE will be the lead and establish the schedule for CD-1 package reviews, such as the Independent Cost Review, Independent Project Review, Analysis of Alternatives, Record of Decision, etc. The CDP will provide support as needed and assumes DOE will meet their established review schedule. Failure of DOE to meet their established schedule may cause cost overruns or schedule delays for the project.	Availability of qualified resources or vendors.	Open	Threat	Transfer	0.18	Unlikely	Minor	2-Low	$ 12,500	$ 25,000	$ 50,000	5	10	20	Project realized approximately 20 days of delay in FY 2022 because resources external to IEC were unavailable. This is the basis for the worst-case scenario for a document that needs to be reviewed external to DOE ICP. As such, it was assumed the project could realize 5 days of delay as the best case and 20 days as the worst case. Additionally, schedule delays realized by this activity should be categorized as moderate to low, regardless of the cost and schedule impacts, because timing or sequencing of publishing these living documents can be aligned with DOE's commitment to progress to CD-1 approval.	Propose transfer to DOE.	
CAL353	TO3.2	D.3.02.30	DOE	Kimbro, Valerie Marie	CDP - Retrieval:Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international tariffs the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.5	Possible	Minor	2-Low	$ 30,000	$ 60,000	$ 240,000	8	16	64	The most likely impact of tariff implementation is increased costs for foreign procurements related to calcine retrieval. These procurements are few, and therefore the most likely impact is $60K to budget.	Propose transfer to DOE.	
CC313	TO3.2	D.1.21.30	DOE	Biorn, Scott Dee	Core Car: Tariffs and Supply Chain Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Pending	Threat	Transfer	0.9	Likely	Major	4-High	$ 650,000	$ 1,300,000	$ 1,365,000	30	60	90	Best Case based on 25% of the monthly material cost average.	Propose transfer to DOE.	This risk was previously Identified under TO3P2004. Project cancellation letter received 11/25/25. Path forward is still in discussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
DST318	TO3.2	Multiple Projects	DOE	Perry, Scott William	Global: A New Revision of DOE-STD-5506 Result in Safety Basis Changes	DOE Nuclear Safety is driving the implementation of a new revision of DOE-STD-5506 with IEC. If IEC is required to implement this new revision, there may be significant changes to the current Safety Basis resulting in significant cost increases and schedule delays.	DOE Nuclear Safety mandates new version of DOE-STD-5506 be implemented.	Open	Threat	Transfer	0.5	Possible	Critical	4-High	$ 3,000,000	$ 5,000,000	$ 7,000,000	96	192	288	Cost and schedule impacts are estimated based on the cost and labor to revise the following documents: RPT-DSA-02/RPT-TSR-03 for AMWTPSAR-4/TSR-4 for ARPSAR-103/TSR-103 for RH-TRU waste processing operations at INTECSAR-103 Addendum A for RH-TRU waste storage and handling at INTECPLN-1851 for on-site transport of TRU waste.	Propose transfer to DOE.	
DST321	TO3.2	D.2.03.35.09	IEC/DOE	Hubler, Rachelle Bernice	Direct Nuclear Material Control & Accountability: Alternative Approach Required for LANMAS	If IEC is unable to continue using BEA's Local Area Nuclear Material Accountability Software (LANMAS) after BEA support ceases, IEC will be forced to find an alternative approach to implementing LANMAS. In this scenario, IEC will accrue unforeseen costs and experience schedule delays to find an alternative approach.	BEA ceases allowing IEC to use LANMAS system.	Open	Threat	Share	0.18	Unlikely	Serious	2-Low	$ 40,000	$ 900,000	$ 9,000,000	16	16	92	**Best Case**: Cost impacts are based on paying BEA a fee to continue using their system. Schedule impact is based on time to set up agreement. **Most Likely Case**: Cost impact is based on paying BEA a fee to continue this service for IEC. Schedule impact is based on time to set up the agreement. **Worst Case:** Cost and Schedule impacts are based on SME assumptions in the scenario that IEC is forced to pay WIPP to perform the Attractiveness Level Determination.	Propose share with DOE.	Work with DOE to implement a phased approach to minimize delays to other scope. The long-term effects of this risk are estimated to cost $20M+ and require 3,328 days worked into IEC's schedule. These numbers have been reduced to adhere to a Task Order Contract, but the significant impacts should be recognized. This risk was previously identified under DST300.
DST322	TO3.2	D.2.03.35.09	IEC/DOE	Hubler, Rachelle Bernice	Direct Nuclear Material Control & Accountability: Loss of BEA Training Support	BEA provides optional services to IEC, which supports our work at the INL. Some of these services have been discontinued. If training provided for the Nuclear Material Representative (NMR) ceases, IEC will be forced to find alternative training resources which will increase costs.	BEA ceases to offer optional training services to IEC for Nuclear Material Representative (NMR) position.	Open	Threat	Share	0.05	Rare	Moderate	1-Low	$ 10,000	$ 20,000	$ 30,000	16	32	48	BEA provides optional services to IEC, which supports our work at the INL. Some of these services have been discontinued. If training provided for the Nuclear Material Representative (NMR) ceases, IEC will be forced to find alternative training resources which will increase costs.	Propose share with DOE.	ORIGINAL RISK: TO3P2001
IEC303	TO3.2	Project Wide	DOE	Multiple CAMs	Global: Vendor Supplied Diesel Rates Increase	There is potential of an unforeseen cost increase for vendor supplied diesel which will cause significant cost increases for the project.	An unforeseen cost increase of vendor supplied diesel.	Open	Threat	Transfer	0.95	Almost Certain	Minor	3-Moderate	$ -	$ 132,504	$ 416,440	0	0	0	**Best Case**: No cost increase to the project. **Most Likely**: 0.1 - 0.044 = 0.56$2,366,140.03 * 0.56 = $132,503.84. **Worst Case**: 0.22 - 0.044 = 0.176$2,366,140.03 * 0.176 = $416,440.66.	Propose transfer to DOE.	Original Risk: TO3005R2
IEC304	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Indirect Services: Mandatory Service Cost Increases	BEA provides multiple services to IEC, which support our work at the INL. Some of which IEC cannot seek alternative providers for. There is potential for unforeseen increase in cost for these mandatory services.	Increased Costs of Mandatory Services are applied.	Open	Threat	Share	0.96	Almost Certain	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	0	0	0	Costs are based on fees associated with BEA FY23 Forecast.	Propose share with DOE.	
IEC305	TO3.2	Project Wide	DOE	Multiple CAMs	Indirect Services: General Services Administration (GSA) Vehicle Surcharge Increase	There is potential for an unforeseen increase in costs for GSA Vehicles.	Unforeseen cost increase is applied to GSA Vehicles.	Open	Threat	Transfer	0.96	Almost Certain	Minor	3-Moderate	$ -	$ 58,752	$ 117,504	0	0	0	**Best Case**: No cost impacts **Most Likely case**: $24/month * 204 Vehicles*12 months **Worst Case**: $24/month * 204 vehicles * 24 months	Propose transfer to DOE.	

IEC306	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Global: Approval of Business Systems	IEC has multiple systems utilized that need to be approved by DOE. In some cases, approval may not be granted, resulting in corrective actions that could be costly. Additionally, there will be reviews/audits done that could require additional steps or potential re-work of associated procedures. This could lead to purchasing different systems, acquiring subcontractors to help complete re-work, and potentially going through additional reviews and audits.	Any utilized business system does not meet required standards and gain approval.	Open	Threat	Share	0.5	Possible	Minor	2-Low	$ 80,000	$ 100,000	$ 120,000	0	0	0	Impact based on expected software or subcontract costs related to corrective actions.	Propose share with DOE.	
IEC307	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Indirect Services: Loss of Optional Services Provided by BEA	BEA provides optional services per the contract to IEC to support the execution of our scope. If IEC is notified that BEA is discontinuing the optional service, IEC will be forced to find alternative options to support the scope. The alternative options may incur additional costs to replace the service currently provided by BEA.	Notification by BEA that the optional service will not be continued.	Open	Threat	Share	0.86	Likely	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	0	0	0	Additional costs incurred would be associated with alternative resources to maintain the similar type of service that BEA is currently providing.	Propose share with DOE.	Original Risk: INTEC210
IEC308	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Indirect Services: Loss of DOE Critical Software Licensure	DOE provides critical software licenses for IEC, which supports all work at the ICP. If they cease to provide these licenses, IEC will have to procure licenses to continue supporting INL. Procuring critical software licenses will accrue additional costs.	Loss of DOE provided critical software licensure.	Open	Threat	Share	0.91	Almost Certain	Moderate	4-High	$ 270,000	$ 337,500	$ 675,000	0	0	0	Costs are based on fees associated with IEC procuring critical software licenses. **Best Case:** Reducing the number of users to 60 and IEC does not have to buy Cobra licenses. **Most Likely**: IEC has to buy P6 licenses. $4500 (P6 license cost) * 75 users = $337,500 **Worst Case**: This number is double most likely, assuming that IEC has to buy Cobra licenses as well and they are similar cost to P6 licensure.	Propose share with DOE.	
IEC309	TO3.2	Project Wide	DOE	Multiple CAMs	Global: Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.91	Almost Certain	Major	5-Very High	$ 1,031,806	$ 2,063,612	$ 3,095,418	30	60	90	**Best Case** based on 25% of the monthly material cost average. **Most Likely** based on best case x2 (2 months). **Worst Case** based best case x3 (3 months).	Propose transfer to DOE.	
IEC311	TO3.2	Project Wide	DOE	Multiple CAMs	Global: Stop Work Due to External Events	External event(s) at other INL locations or DOE sites cause a stop work.	External event(s) at other INL locations or other DOE sites cause a work stoppage. Events include, but are not limited to; contamination events that shut down other facilities, any crisis that is found at another facility that could potentially exist at Idaho Cleanup Project (ICP) causing a stop work, etc.	Open	Threat	Transfer	0.18	Unlikely	Serious	2-Low	$ 500,000	$ 1,000,000	$ 7,000,000	1	1	7	**Best Case**: Complete Site Shut Down for .5 days. **Most Likely**: Complete Site Shut down for 1 day. **Worst Case**: Complete Site Shut down for 7 days.	Propose transfer to DOE.	This risk was previously identified under IT308.
IEC315	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Global: Line-Item Project Funding	Due to the amount of line-item projects being worked at the Idaho Environmental Coalition (IEC), limitation of base scope execution may be experienced as a direct result of variability in funding. Inability to execute base scope under the end state contract model will result in longer durations required to reach the desired end-states. This will increase the overall costs of the Idaho Cleanup Project (ICP), and could impact staffing levels.	Impacts from line-item project funding causes limitations that impact the execution of the base scope.	Open	Threat	Share	0.95	Almost Certain	Critical	5-Very High	$ 1,000,000,000	$ 1,350,000,000	$ 1,700,000,000	900	1350	1800	Cost/ Schedule based on extended durations for project completion for line-item projects.	Propose share with DOE.	This Risk was previously identified under IT309. IEC pays for a support contract from a 3rd party if the software can be fixed. This contract is a limited support contract that only covers software defects and licensing.
IEC316	TO3.2	Project Wide	DOE	Multiple CAMs	Global: Fiber Optic Line Installation	Fiber optic lines are to be installed on the INL property. BEA has been directed by DOE to allocate costs, of which IEC will be held responsible for a share of this cost. This presents potential unforeseen increased costs to IEC.	Increased costs are applied for fiber line installation.	Open	Threat	Transfer	0.95	Almost Certain	Critical	5-Very High	$ 3,500,000	$ 6,000,000	$ 11,489,100	0	0	0	Worst Case based on: INL Strategic Fiber Plan budgetary cost estimate.	Propose transfer to DOE.	This risk was previously identified under IT310. The WTS application is protected through many network mitigations.
IEC317	TO3.2	Project Wide	DOE	Multiple CAMs	Global: Fiber Optic Internet Service Rates	There is potential of an unforeseen cost for fiber optic internet services costs once the fiberoptic lines are installed. Historically, BEA has been directed by DOE to allocate costs, of which IEC will be held responsible for a share of this cost. This presents potential unforeseen increased costs to IEC.	Increased Costs are applied for fiber optic internet services.	Open	Threat	Transfer	0.95	Almost Certain	Moderate	4-High	$ 200,000	$ 300,000	$ 400,000	0	0	0	Based off historicals for telecom services. Most Likely: 25,000 x 12 months.	Propose transfer to DOE.	Flag DOE-owned risk; escalate early if reprioritization occurs. Retain a dedicated team on OLD to minimize disruption. Document task order commitment to shield team from external pulls. Backfill developers from among existing team or supplement with subcontractors.
IEC318	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	Global: Force Account Pension	IEC utilizes the Davis-Bacon applicability process to determine if repair/construction type work goes to the jurisdiction of IEC's Force Account (unions) or subcontracted to an outside competitor. Due to potential budget constraints, there is possibility that IEC's Force Account will be minimized resulting in pension collection. The pension collection can either be partial or full, depending on the use of IEC's Force Account personnel and IEC's contribution to the pension plan.	DOE cuts funding reducing or eliminating work for IEC's Force Account. Reduced workforce due to decreased work.	Open	Threat	Share	0.6	Possible	Critical	4-High	$ 1,700,000	$ 3,100,000	$ 12,300,000	0	0	0	Cost impacts only. The worst-case cost reflects IEC's potential liability assuming a full payout. Best Case: $1.7M Most Likely: $3.1M Worst Case: $12.3M	Propose share with DOE.	Monitor inventory and place order as soon as possible; consider alternate vendors if feasible.
IND307	TO3.2	K.1.03.08	IEC/DOE	Chapple, Debbie Lynn	Training: Training Platform Transition Fails	The Records and Information Network TRAIN system is a service IEC relies on for training management. BEA has selected a new Learning Management System (LMS) and is transitioning away from TRAIN. During this transition period, IEC will be required to maintain the existing TRAIN system while implementing and supporting the new LMS. BEA may significantly increase the cost associated with supporting TRAIN system during the transition period. The combined effect of supporting two training platforms and significant cost increases the risk that IEC will not have adequate funding or personnel resources to support both systems during the transition.	BEA will: 1. Transition to a new training platform with different LMS support model than the current one 2. Discontinues IEC support of the current TRAIN software making IEC step in to support it.	Realized	Threat	Share	0.5	Possible	Critical	4-High	$ 3,000,000	$ 13,500,000	$ 28,900,000	0	0	0	Information provided by for 5 years: Best Case $= $3M Most Likely $= $13.5M Worst Case $= $28.9M (NOTE: There is $10M in the "Most Likely" and "Worst Case" for vendor costs of the LMS and TMS that is an assumption)	Propose share with DOE.	
INFSTR337	TO3.2	D.3.03.41, D.3.03.42, D.3.03.43, D.3.03.47, D.3.03.49, D.3.03.50	DOE	Inns, Ryan Douglas	INTEC Infrastructure Project Support: Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.9	Likely	Moderate	3-Moderate	$ 72,000	$ 144,000	$ 216,000	16	32	48	**Best Case** based on 25% of the monthly material cost average. **Most Likely** based on best case x2 (2 months). **Worst Case** based best case x3 (3 months). Annual non labor cost for project: $3,500,000.	Propose transfer to DOE.	
INTEC324	TO3.2	D.3.03.40.08	DOE	Baisch, Kasey Don	Radiological Controls: External Requirements Change	Radiological Controls external requirements are subject to change. Examples of external requirements are: DOE 0151.1C, OSHA, EPA, FEMA, and state and local laws. When external requirements are modified, the project may be required to make significant equipment upgrades, supply employees with additional training, update work control, etc., which could result in unforeseen costs and schedule slippage.	IEC is notified of changes made to external requirements.	Open	Threat	Transfer	0.5	Possible	Major	4-High	$ 250,000	$ 500,000	$ 1,000,000	48	96	192	Cost to update programs, cost to implement the program and cost to train personnel on the changes.	Propose transfer to DOE.	Assumptions: This Does Not Include Operational Costs (DNIOC) assumed to be $13K/Day IEC to work DOE-ID to work with DOE-HQ and other regulatory agencies to clearly define acceptance criteria for a Road Ready acceptable cask. Additionally, IEC is developing a regulatory strategy to present for our stance for packaging, transportation, and storage of SNF. Utilize the Framework from NNPP SNF Packaging, OCRWM and Hanford Data Packages as a basis for the data package criteria.
INTEC328	TO3.2	D.3.03.40.02	DOE	Baisch, Kasey Don	Corrective Maintenance: External Requirements Change	Corrective Maintenance external requirements are subject to change. Examples of external requirements are: DOE 0151.1C, OSHA, EPA, FEMA, and state and local laws. When external requirements are modified, the project may be required to make significant equipment upgrades, supply employees with additional training, update work control, etc., which could result in unforeseen costs and schedule slippage.	IEC is notified of changes made to external requirements.	Open	Threat	Transfer	0.5	Possible	Major	4-High	$ 250,000	$ 500,000	$ 1,000,000	48	96	192	Cost to update programs, cost to implement the program and cost to train personnel on the changes.	Propose transfer to DOE.	***Funding is a Corporate-wide Risk also being tracked in the Road Ready Risk Register*** Work with DOE to place RRDP Shipping Cask as a priority for funding to allow procurement of items as scheduled. Shipping Cask has a 2 year lead time which is critical path for the project. IEC will address crew reassignment in order to minimize cost impacts.
INTEC338	TO3.2	D.3.03.40	DOE	Baisch, Kasey Don	ROP CM: Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.9	Likely	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	0	0	0	Most Likely based on 25% of the monthly material cost average.	Propose transfer to DOE.	SNF will be packaged according to current requirements and known criteria. Any changes will be addressed when a repository is in beginning stages of accepting Packaged SNF.

IT316	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Phone Systems is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA maintains phone services for IEC in some site areas, which includes Fire Panels and RCRA phones. IEC IT would have to rearchitect our voice system for redundancy and to relocate to INTEC and RWMC. We would need to extend our current services to INTEC and RWMC. We would need to develop in-house support for analog services.	BEA discontinues voice services to IEC.	Open	Threat	Share	0.5	Possible	Moderate	2-Low	$ 32,000	$ 350,000	$ 974,000	25	25	144	Best case 50 handsets @ $250 ea. No fire panels No additional systems No Call Manager licensing change - can absorb additional phones 1FTE x 25 days = $20K Most Likely Analog lines No fire panels purchase analog gear - 4 V6450 @$30K ea. 250 handsets @ $250 ea. 250 licenses @ $250 ea. 3 FTE x 25 days = $60K Worst Case Rearchitect voice system to include RWMC, INTEC, Town local services. Deploy VM hosts for voice to RWMC and INTEC. 150,000 hardware, labor 1.5 FTEs, 9 months Transition analog services. Purchase and deploy hardware throughout buildings. $350,000 hardware, $150,000 copper infrastructure, 1.5 >FTEs 6 months Services Monthly services for SIP/PRI lines. Add $2000 per month. Costs to get SIP services to RWMC and INTEC are reliant on fiber build-out. Ongoing	Propose share with DOE.	
IT317	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Internet is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides internet services for IEC. IEC IT would have to procure internet services from two providers. This requires re-IPing 11000+ IP addresses and procuring external DNS services.	BEA discontinues voice services to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 2,342,000	$ 2,342,000	$ 2,342,000	416	416	416	Activities Re-IP Internally, 2 years, 2 FTEs, ICS/DCS impacts /28 external (IPv4), IPv6 /40 $200 year. IF internet services, 10G 1,500 per Gb, 15k per month Arco Internet services and fiber build, 10G 1500 per Gb, 15k per month Hardware: border routers, $250,000, 2 HA pairs for second internet link $1,000,000 DNS service, cost? Edge Security, Cyber FTE Total Labor: 3.5 FTEs, 2 years Total Materials/Services: $1.25M Monthly: $30k	Propose share with DOE.	
IT318	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Land Mobile Radios is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA maintains land mobile radio services for IEC in site areas. IEC IT would have to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider. We do not know the cost to install radio repeaters. IEC IT does not currently have the expertise to support this service.	BEA discontinues land mobile radio services to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 656,000	$ 656,000	$ 656,000	208	208	208	Activities $400,000 gear purchase, 3k per month service Repeater install costs $100k + Handset costs, 3k per radio. Currently 75+ radios out in the field. Total Labor: 1 FTEs, 1 year Total Materials/Services: $500k	Propose share with DOE.	
IT319	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Computer Account Provisioning is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides computer account provisioning services for IEC. IEC IT would need to procure and implement a new identity management software system. This would require a rearchitect of user onboarding and termination workflows to integrate with current systems.	BEA discontinues computer account provisioning services to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 1,218,000	$ 1,218,000	$ 1,218,000	208	208	208	Activities Evaluation of current ICP/BEA integration, 3 FTEs 6 months Replacement of BEA services, 3 FTEs 6 months User Identity Management Software Procurement and Implementation $750,000 Additional FTE ongoing	Propose share with DOE.	
IT321	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Computer Account Provisioning is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic services for computer network connectivity to from town to the site. This would require IEC IT to procure fiber optic strands from a service provider to connect our town facilities to the site.	BEA discontinues fiber optic services for computer network connectivity to IEC.	Open	Threat	Share	0.5	Possible	Major	4-High	$ 800,000	$ 800,000	$ 800,000	96	96	96	RWMC Turn to N 35th W $22 /strand/mile/Month $500 /month Maintenances About 44 Miles We would need 4 strands Total would be $6000 per Month Some City of Idaho Falls Fiber work to get from N35th W to our network $100K in build cost and a $500 / Month Equipment costs - $700k Site to town: $800k and $6500 / month	Propose share with DOE.	
IT322	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Fiber Service to RWMC is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic service to the RWMC campus. This would require IEC IT to bury new fiber cable from the highway to the RWMC campus.	BEA discontinues fiber optic services for computer network connectivity to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 340,000	$ 340,000	$ 340,000	208	208	208	Underground work could be completed in 1 year. Above ground work will take up to 2 years for permits Underground $10 / foot RWMC to Highway 19k feet cost would be about $190,000 Would need to keep a maintenance cost on the cable. $500 / month equipment cost -$150k	Propose share with DOE.	
IT323	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: BEA Optional Service for Fiber Service to INTEC and NRF is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic service to the INTEC and NRF campus. This would require IEC IT to bury new fiber cable from the highway to NRF and INTEC.	BEA discontinues fiber optic services for computer network connectivity to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 1,100,000	$ 1,100,000	$ 1,100,000	208	208	208	NRF picking up INTEC Underground work could be completed in 1 year. Above ground work will take up to 2 years for permits Highway to INTEC to NRF about 90k feet cost would be about $950,000 Would need to keep a maintenance cost on the cable. $500 / month equipment cost - $150k	Propose share with DOE.	This risk was previously identified under TRU014R2.
IT326	TO3.2	K.1.02.04.02	DOE	Anderson, Jade Michael	IND-Infrastructure and Operations: Fiber Replacement Capabilities	The fiber that was put in place 20 plus years ago has deteriorated to less than 30% of what was originally there in some of the lines. If the fiber cannot be replaced prior to it breaking, there would be an extensive disruption in Internet and communication services.	Work to replace the fiber is not turned on in time to replace the fiber and the fiber breaks.	Open	Threat	Transfer	0.83	Likely	Critical	5-Very High	$ 3,000,000	$ 5,000,000	$ 7,000,000	4	32	208	We have already experienced interruptions due to unintentional cuts and local areas breaks in fiber. In most cases, it has been several days of interruptions to reroute traffic and repair. These cases have been resolved by splicing the existing fiber. In the instance that there are no more viable strands of fiber in the cable, which is an eventuality with aging fiber, new cable must be pulled and connected, extending the outage.	Propose transfer to DOE.	This risk was previously identified under TRU028.
IT327	TO3.2	K.1.02.04.04	IEC/DOE	Anderson, Jade Michael	IND-Enterprise Architecture: BEA Optional Service for All Software is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides services to at least 47 applications used by IEC, including TRAIN, EDMS, and Argus. In order to replace these applications, IEC IT would have to purchase off-the-shelf software or create custom applications. IT would have to staff up and purchase equipment for that staff.	BEA discontinues application services to IEC.	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 15,403,914	$ 63,652,050	$ 94,088,772	416	416	416	In November 2024, talks were underway between BEA and IEC to remove IEC from BEA's TRAIN system as they upgraded to a LMS service provider. IEC IT created a ROM at that time to calculate the impact of IEC creating their own TRAIN system. We are using that impact study to estimate the impact of the taking over the remaining 46 apps from BEA. This impact is for the first two years of the software take over.* Best Case (each application takes 10% of the effort of the TRAIN estimate) Labor = 2 years * 37 developers * $206,661 average annual salary = $15,292,914 Equipment = 37 PC's, monitors, etc. * $3000 ea. = $111,000 Total Best Case = $15,403,914 and 2 years Most Likely Case (each application takes 66% of the effort of the TRAIN estimate) Labor = 2 years * 154 developers * $206,661 average annual salary = $63,651,588	Propose share with DOE.	This risk was previously identified under TRU016R2.
IT330	TO3.2	D.2.05.31.15	DOE	Anderson, Jade Michael	Waste Tracking - WTS Support: End of Life Software	The ICS at AMWTP runs on end-of-life software called Factory Link that is no longer available. The company that it was purchased from no longer exists and the company that purchased it offers a completely different system now. If the software reaches a point where it can no longer be fixed then IEC will need to purchase a new system.	A software defect is found that halts operations, which the 3rd party support company is unable to resolve.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 1,000,000	$ 2,000,000	$ 3,000,000	120	360	416	The last estimate for the cost of the software was $450K plus the installation and customization costs. Replacing then customizing will be time consuming and labor intensive. The worst case scenario is scaled to this two year task order. The full scale of this worst case scenario is 720 days.	Propose transfer to DOE.	
IT331	TO3.2	D.2.05.31.15	DOE	Anderson, Jade Michael	Waste Tracking - WTS Support: Waste Tracking System Failure	The Waste Tracking System (WTS) is an Oracle forms 6i application. Oracle forms 6i considered an end-of-life system and is no longer compatible with current databases. This means it cannot be patched for cybersecurity purposes. This leaves the forms and database at risk of attack as they are stagnant with no alternative to move forward.	The WTS application is attacked through the vulnerabilities associated with the EOL software.	Open	Threat	Transfer	0.05	Rare	Critical	3-Moderate	$ 166,000	$ 1,246,000	$ 3,161,200	90	180	416	This does not include operational downtime. Worst Case: Storage Array = $18K Computing Equipment = $148K 6 FTE -Vendors or consultants- @ $7,200 per day for 416 days= $2,995,200 This impact has been scaled for two years. The full impact is as follows: 6 FTE -Vendors or consultants- @ $7,200 per day for 540 days= $3,888,000 Most Likely: Storage Array = $18K Computing Equipment = $148K 5 FTE- Vendors and consultants- @ $6,000 per day for 180 days= $1,080,000 Best Case: Storage Array = $18K Computing Equipment = $148K	Propose transfer to DOE.	

IT352	TO3.2	K.1.05.01.08	DOE	Anderson, Jade Michael	IND - QLD Software Application Rewrite in Modern Platform: Competing Priorities/Executive Order Risk	Executive directives or DOE reprioritization could shift team focus away from QLD. This could bring the project to a halt leaving it incomplete and causing schedule delays and potential missed milestones.	Change in executive directives or DOE prioritization.	Open	Threat	Transfer	0.5	Possible	Minor	2-Low	$ 19,200	$ 19,200	$ 33,600	8	8	120	**Best case:** Able to backfill developers internally and only requiring onboarding time: 2FTE - IT Developers - 8 days x 10 HRs @ $ 120 hourly rate = $19,200 **Most Likely:** Able to backfill developers internally and only requiring onboarding time and have resources from other projects that can change priorities: 2FTE - IT Developers - 8 days x 10 HRs x @ $120 hourly rate = $19,200 **Worse case:** Require 2 new developers backfilled with either new employees or subcontractors, historically required multiple passes to find subcontractors able to meet our needs: 4 Months waiting for talent to apply and be vetted 3FTE - IT Developers for Interviews - 4days x 10 HRs @ $120 hourly rate = $14,400 2FTE - IT Developers - 8 days x 10 HRs x @ $120 hourly rate = $19,200	Propose transfer to DOE.	
IT361	TO3.2	D.6.02.38	DOE	Anderson, Jade Michael	Direct IT AI Lab: Supply Chain Delays	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire materials, services, personnel, and NVIDIA components (e.g., H100 cards).	Weekly delivery did not arrive when expected. Emerging national and international events impact supply chain and tariff implementation.	Open	Threat	Transfer	0.5	Possible	Minor	2-Low	$ 9,600	$ 38,400	$ 685,215	4	16	96	**Best Case:** Small delay on shipping causing schedule slip 1 FTE - IT Cybersecurity - 4 days @ $1,200 per day = $4,800 1 FTE - IT Server Ops - 1 day @ $1,200 per day = $4,800 **Most Likely:** Delay on availability for shipping causing schedule slip 1 FTE - IT Cybersecurity - 16 days @ $1,200 per day = $19,200 1 FTE - IT Server Ops - 16 day @ $1,200 per day = $19,200 **Worst Case**: Substantial Delay on availability causing schedule slip and purchase of alternative hardware 1 FTE - IT Cybersecurity - 96 days @ $1,200 per day = $115,200 1 FTE - IT Server Ops - 1 day @ $1,200 per day = $115,200 Alternative Hardware = $454,814.80	Propose transfer to DOE.	
LWFC301	TO3.2	D.3.04.31.09	DOE	DeMott, Ryan Blake	LWF Closure: Supply Chain Delays and Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain.	Open	Threat	Transfer	0.5	Possible	Serious	3-Moderate	$ 14,400	$ 43,200	$ 86,400	21	63	126	Additional FTE for procurement personnel is needed to find alternate suppliers.	Propose transfer to DOE.	
RHTRU305	TO3.2	D.2.04.30.14	IEC/DOE	O'Connell, Thomas Abiah	Processing Operations: Containers for FY25 PBI.	BEA is responsible for all activities required to prepare waste for shipment. Battle Energy Alliance, LLC (BEA) is not able to provide containers to process enough waste to meet the current PBI.	Containers from BEA unavailable.	Open	Threat	Share	0.5	Possible	Serious	3-Moderate	$ 300,000	$ 441,500	$ 653,750	16	48	96	Cost is based off delays for containers. **Best case** 1 Month 4 Additional containers. **Most Likely** 3 months 2 original containers plus 4 additional containers. **Worst case** 6 months 5 original containers and 4 additional containers.	Propose share with DOE.	
SNF310	TO3.2	D.1.04.02.02	DOE	Cotterell, Jaksen Pickett	Staging Facility: Removal of Cask Transfer Station Cover	If it is determined that the cask transfer station Rubb structure is no longer needed for the staging facility project the long-range plan/cost for the project will be reduced.	Project evaluations show that the cask transfer station cover doesn't benefit the project as anticipated.	Open	Opportunity	Transfer	0.2	Unlikely	Major	3-Moderate	$ (3,521,494)	$ (2,201,443)	$ (1,000,000)	0	0	0	The subcontractor quote is for complete install is 2,201,443. With our markup in the DCES it is 3,521,494.	Propose transfer to DOE.	
SNF325	TO3.2	D.1.02.36.25	DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Packaging Criteria	During development of a Compliance Strategy or Data Package for the Road Ready Demonstration, IEC is unable to obtain necessary resources (key personnel) or required documents to develop a data package or compliance strategy that meets all requirements.	IEC developed Compliance Strategy or Road Ready Demonstration Data Package is rejected by DOE-ICP due to lack of resources or required documents producing inadequate documentation	Open	Threat	Transfer	0.5	Possible	Critical	4-High	$ 3,000,000	$ 4,500,000	$ 6,000,000	192	288	384	**Best case:** Administrative efforts to provide acceptable documentation. **Most Likely:** Administrative efforts to provide acceptable documentation as well as some modifications to repackaging efforts. **Worst Case:** Compete repackaging of SNF for the specific canister is required along with acceptable documentation.	Propose transfer to DOE.	
SNF327	TO3.2	D.1.02.36.24	IEC/DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Delay of Delivery of DOESCs	A delay in the delivery of DOE Standard Canisters (DOESC) will cause a delay to the Road Ready Demonstration Project.	DOESC fabrication not completed according to IEC/BEA schedule.	Open	Threat	Share	0.5	Possible	Major	4-High	$ 750,000	$ 1,500,000	$ 3,000,000	48	96	192	**Best case**: Delivery of DOESC is minimally delayed causing a delay in the overall project. **Most Likely**: Delivery of DOESC is significantly delayed causing a delay in the overall project. **Worst Case**: Delivery of DOESC is unable to meet project needs requiring a replan of overall project.	Propose share with DOE.	None
SNF328	TO3.2	D.1.02.36.16	DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Lack of Funding Causes Delays in Procurement of Long Lead Items	Lack of funding will delay the Road Ready Demonstration Project due to the 2 year lead time for the procurement of a shipping cask.	Congress/DOE does not provide appropriate funding for procurement of the commercially provided items (Road Ready System provided by ORT/Holtec).	Open	Threat	Transfer	0.5	Possible	Critical	4-High	$ 1,500,000	$ 3,000,000	$ 6,000,000	96	192	384	**Best Case**: Project experiences minimal delay requiring re-baseline of project. **Most Likely**: Project experiences significant delay requiring re-baseline. **Worst Case:** Project experiences major delay causing a re-plan of overall project schedule. The costs listed from delays are based on a $13k/day cost to operate a SNF crew.	Propose transfer to DOE.	None
SNF331	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Failed Root Weld	If the BEA/Liburdi weld repair machine cannot successfully repair a failed root weld, then the project will have to find alternative methods to repair the weld or a complete repackaging of the fuel in a new canister will be required.	Root weld fails UT inspection.	Open	Threat	Share	0.25	Unlikely	Serious	2-Low	$ 300,000	$ 600,000	$ 1,800,000	16	32	64	**Best case**: Cost of weld repair without requiring usage of additional equipment and resume operations with minimal waste. **Most Likely**: Cost of weld repair with minimal additional equipment and disposal of unusable items. **Worst Case:** Cost of complete repackaging of SNF in new canister with disposal of unusable items.	Propose share with DOE.	This risk was previously identified under IWTU051.
SNF332	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: BEA Leak Testing Fails	BEA Leak testing cannot successfully seal on DOESC causing a delay in the project.	Bell jar seals fail successful sealing	Open	Threat	Share	0.25	Unlikely	Major	3-Moderate	$ 600,000	$ 1,200,000	$ 2,400,000	24	48	96	**Best case**: Leak testing device requires minimal redesign to achieve acceptable results. **Most Likely**: Leak testing device requires significant redesign to achieve acceptable results. **Worst Case:** Leak testing device requires complete redesign to achieve acceptable results.	Propose share with DOE.	This risk was previously identified under IWTU052. *Trent wanted this risk geared towards catastrophic failure (blowers) beyond what spare parts can fix. Major design efforts/ modifications will be needed.
SNF339	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Insufficient Maintenance Funding	Road Ready Project schedule may be delayed in the event that Insufficient maintenance funding is available to update facilities, systems, equipment, and infrastructure or recover from significant system failures.	Failure of components, system, equipment, or structures.	Open	Threat	Share	0.2	Unlikely	Major	3-Moderate	$ 1,000,000	$ 2,000,000	$ 4,000,000	48	96	192	**Best case** - Repairs of critical systems or components are minimal with minimal procurement of replacement components and minimal downtime **Most Likely** - Repairs of critical systems or components are significant with procurement of replacement components and downtime **Worst Case** - Repairs of critical systems or components are severe with major procurement of replacement components and extensive downtime.	Propose share with DOE.	
SNF365	TO3.2	D.1.02.36.25	DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: SNF DOESC Waste Canister Repackaging	A change in the waste acceptance criteria for a future repository (i.e. n-stamp requirement, engineering code changes, regulatory changes, equipment life cycle changes) may drive repackaging of SNF.	Road Ready SNF package is rejected at off-site facility due to a failure of meeting certain packaging requirements.	Open	Threat	Transfer	0.05	Rare	Major	2-Low	$ 1,000,000	$ 2,000,000	$ 6,000,000	48	96	220	**Best case** - A change in acceptance criteria requires only administrative/documentation changes or additions. **Most Likely** - A change in acceptance criteria requires administrative/documentation changes or additions with minimal repacking operations. **Worst Case** - A change in acceptance criteria requires a complete repackaging of SNF with documentation This risk will only impact RR Demonstration. Once a data package is defined, future operations will follow.	Propose transfer to DOE.	This risk was previously identified under ASD305a.
SNF377	TO3.2	D.1.04.02.10	DOE	Cotterell, Jaksen Pickett	Staging Facility: Safety Design Strategy Revision	A revised safety design strategy results in only one DSA (SAR) being revised to incorporate the ID SNF-SF will result in positive cost and schedule variances.	The revised SDS only requires SAR-112 to be revised.	Open	Opportunity	Transfer	0.25	Unlikely	Moderate	2-Low	$ (950,000)	$ (450,000)	$ -	(50)	(25)	0	Activities SNFSF05507 and SNFSF05521 is removed from the project. SAR-114 does not have to be revised. The schedule time saved is a reflection of effort and does not reflect a project days saved. This could also reduce DOE's review time.	Propose transfer to DOE.	This risk was previously identified under DST303.
SNF386	TO3.2	D.1.04.02.02	DOE	Cotterell, Jaksen Pickett	Staging Facility: DOE CD-1 Review Duration	The duration of the DOE review of CD-1 for the Staging Facility is longer than planned, thus pushing subsequent work scope.	ICR, IPR, and PMRC duration exceed original schedule durations which delay CD-1 approval.	Realized	Threat	Transfer	0.83	Likely	Moderate	3-Moderate	$ 120,000	$ 180,000	$ 270,000	16	24	36	**Best Case**: the schedule is impacted by 1 month (16 working days) and changes need to be made prior to CD-1 approval. Additional costs for 16 days x 10 hrs./day x 10 FTEs x $75/hr. **Most Likely Case**: 2-month review delay (32 working days) and changes to CD-1 prior to approval. Additional costs for 24 days x 10 hr./day x 10 FTEs x $75/hr. **Worst Case**: 4 months review delay. Additional costs for 36 days x 10 hr./day x 10 FTEs x $75/hr.	Propose transfer to DOE.	This risk was previously identified under DST316. Currently CAM will speak the variance with a potential BCP to realign in the future.
SNF390	TO3.2	D.1.02.42	IEC/DOE	Johnson, Walter Jacob	SNF Facilities Surveillance and Maintenance: Security Requirement Changes	Project activities are postponed due to evolving security requirements at CPP-749, CPP-2707 and CPP-603.	Requirements derived from planned security related vulnerability assessments impose more restrictive security controls.	Open	Threat	Share	0.3	Possible	Minor	2-Low	$ 45,864	$ 214,032	$ 428,064	3	14	28	Impacts based on 13 FTEs working 12 hr. shifts. **Best Case**: 3 days * 13 FTEs *12hr. * $98/hr. **Most Likely:** 14 days * 13 FTEs * 12hr. * $98/hr. **Worst Case**: 28 days * 13 FTEs * 12hr. * $98/hr.	Propose share with DOE.	ORIGINAL RISK: IND001
SNF398	TO3.2	D.1.02.42, D.1.02.43	DOE	Johnson, Walter Jacob	SNF Facilities Surveillance and Maintenance/ CPP-603 Shield Door Repair: Tariffs and Supply Chain Cost Increases	SNF relies on single vendors for critical components or services. Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.95	Almost Certain	Serious	5-Very High	$ 45,000	$ 90,000	$ 180,000	30	60	96	Based on best case scenario, rails for shield door. $180K. (25% for tariff implementation) Worst case based on replacing shield doors entirely.	Propose transfer to DOE.	Original Risk: IND009
SNF418	TO3.2	D.1.02.36.25	DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Significant Document Revisions	During review of Nuclear and Criticality safety documents, it is determined that significant revisions to the SAR/TSR/Lists is required by DOE resulting in a significant cost and schedule impact to the project.	Review of Nuclear and Criticality Safety documents identifies an update to documents is required.	Open	Threat	Transfer	0.8	Likely	Moderate	3-Moderate	$ 200,000	$ 300,000	$ 500,000	30	32	48	Based on efforts for previous revisions of SARs.	Propose transfer to DOE.	Original Risk: IND301

SNF419	TO3.2	D.1.02.41.02	DOE	Johnson, Walter Jacob	HBURC: Scope and Requirement Changes	The High Burn Up Cask (HBURC) project has several unknowns. If a plan is not solidified due to frequent changes the project timeline will be significantly impacted.	Any changes to project scope that delays deadline.	Open	Threat	Transfer	0.5	Possible	Critical	4-High	$ 750,000	$ 1,250,000	$ 2,250,000	50	100	200	Based on the time required to rework analysis and document revisions.	Propose transfer to DOE.	Original Risk: IND302
SNF421	TO3.2	D.1.02.36	DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.8	Likely	Serious	4-High	$ 14,400	$ 43,200	$ 86,400	12	36	72	Additional FTE for procurement personnel is needed to find alternate suppliers. **Best Case**: 1 FTE for 120 hrs at $120/hr for a cost of $14,400. **Most Likely Case**: 1 FTE for 360 hrs at $120/hr for a cost of $43,200. **Worst Case**: 1 FTE for 720 hrs at $120/hr for a cost of $86,400.	Propose transfer to DOE.	ORIGINAL RISKS: TO3P2005A/ TO3P2005B
SNF424	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Road Ready Demonstration Project: DOE-NE Supplied Equipment	The Department of Energy - Nuclear Energy (DOE-NE) provides critical equipment for the Road Ready Demonstration Project. If DOE-NE ceases to provide necessary equipment for the RRDP will be required to procure a subcontractor to fabricate and/or provide necessary equipment resulting in negative cost/schedule variances.	DOE-NE fails to provide critical equipment for RRDP. DOE-NE decides to stop funding the fabrication of DOESCs.	Open	Threat	Share	0.8	Likely	Critical	5-Very High	$ 356,000	$ 1,200,000	$ 3,000,000	96	288	480	Best Case: Bell Jar 356K (6-month fabrication/test) Most Likely: DOESCs $120k/10 total (1.5-2 years to fabricate) Worst Case: All DOE-NE supplied equipment. Welder: 1.5 million Bell Jar: 356K DOESCs: $120k/10 total (2.5 years)	Propose share with DOE.	
TRU319	TO3.2	D.2.03	DOE	Byram, George Trevor	CH-TRU Waste Disposition: Unable to Certify/Ship Waste for Disposal at Waste Isolation Pilot Plant (WIPP)	IEC may not be able to certify and/or ship waste for disposal, for several reasons: If WIPP's Waste Data System (WDS) were to fail, if WIPP is unable to transport waste, if CCP flam-gas sampling/data upload is not available, if the WIPP makes changes to their requirements or makes new interpretations of existing requirements, etc.	Waste cannot meet certification requirements for WIPP disposal.	Open	Threat	Transfer	0.5	Possible	Serious	3-Moderate	$ 50,000	$ 500,000	$ 1,000,000	16	48	96	Will not be able to certify and/or ship waste for disposal.	Propose transfer to DOE.	
TRU327	TO3.2	D.2.03.31.06	DOE	Byram, George Trevor	Waste Certification: Waste Container Overpack Availability Issues	If commodities (slip sheets, TDOP and SWB) are limited and shipments cannot be completed as planned, then the need for overpack of waste containers into larger and larger overpacks increases and the overpacks may not be authorized for WIPP disposal.	Commodities provided by DOE are not available to support final certification and/or WIPP shipments.	Open	Threat	Transfer	0.18	Unlikely	Critical	3-Moderate	$ 192,000	$ 384,000	$ 768,000	64	128	256	Overpacks will not be authorized for WIPP disposal.	Propose transfer to DOE.	Original Risk: IND004
TRU328	TO3.2	D.2.03.31.08	IEC/DOE	Byram, George Trevor	Classification Analyst: BEA Cannot Complete Potential Classified Document Reviews	If BEA is not available to complete potential classified document reviews, then reviews of required Waste Isolation Pilot Plant (WIPP) documents cannot be completed.	Funding or personnel are not available for BEA classified document reviews.	Open	Threat	Share	0.83	Likely	Critical	5-Very High	$ 156,000	$ 312,000	$ 468,000	104	208	312	Without reviews being performed, required documents cannot be provided for review and approvals. Could impact waste stream document approvals, necessary procedure revisions, etc., which could impact shipments and STP milestones.	Propose share with DOE.	BEA currently provides these services to IEC. IEC would have to create the infrastructure needed to support these services on our own. Our response actions would be to build the infrastructure needed to support. IEC IT would have to rearchitect our voice system for redundancy and to relocate to INTEC and RWMC. We would need to extend our current services to INTEC and RWMC. We would need to develop in-house support for analog services.
TRU330	TO3.2	D.2.03.32.05	DOE	Martin, David Wayne	Treatment of Additional Waste Streams: Waste Isolation Pilot Plant (WIPP) Interpretations or Requirements Change	Changes to the WIPP requirements or new interpretations of existing requirements could result in a need to reprocess the waste, rework containers, or recertify waste that has already been certified in order to update the waste to the new requirements.	WIPP requires detailed acceptable knowledge that does not exist and/or permit changes.	Open	Threat	Transfer	0.05	Rare	Moderate	1-Low	$ 300,000	$ 500,000	$ 1,750,000	16	32	96	**Best Case**: 16 days Plus fees **Most Likely Case**: 32 days plus fees **Worst Case**: 96 days plus fees	Propose transfer to DOE.	BEA currently provides these services to IEC. IEC would have to procure internet services on our own.
WM016	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	DOE	Martin, David Wayne	CH-TRU Waste Disposition: Tariffs and Supply Chain Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain. Tariff implementation.	Open	Threat	Transfer	0.9	Likely	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	16	32	48	Most likely based on 25% of the monthly material cost average.	Propose transfer to DOE.	Our response actions would be to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider. We do not know the cost to install radio repeaters. IEC IT does not currently have the expertise to support this service. BEA currently provides these services to IEC. IEC would have to would have to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider.

TO3 Phase 2 Risk Register

Idaho Cleanup Project Programmatic Risk Register

Updated : 2.3.26

Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	P6 Activity (where is this risk likely to occur)	Status	Risk Type	Handling Strategy	Risk Event Likelihood Percent	Risk Event Likelihood	Risk Impact	Risk Rating	Cost Impacts			Schedule Impacts (in days)			Basis of Impacts	Mitigation Actions	Mitigation Activities (P6 activity that points to your mitigation action)	Response/Recovery Actions	Reason for Closure	Notes
																	Best Case	Most Likely	Worst Case	Best Case Days	Most Likely Days	Worst Case Days						
ASD317	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	IEC	Chapple, Jason Lee	Balsmeier, Gregery E	RWMC SDA CAP: Supply Chain Issues	Delays or cost increases for materials required to complete construction activities. (Examples - Increase in fuel prices, cost of equipment rentals)	Increases or delays are realized.	AHAUL-1000	Open	Threat	Accept	0.05	Rare	Moderate	1-Low	$ 100,000	$ 500,000	$ 1,000,000	1	15	30	**Best Case:** Delay of 1 day as a result of cost increases. Fuel prices and equipment availability are continually in flux. **Most Likely Case**: Delay of 15 days as a result of cost increases. Fuel prices and equipment availability are continually in flux. **Worst Case**: Delay of 30 days as a result of cost increases. Fuel prices and equipment availability are continually in flux.	N/A		N/A	N/A	N/A	This risk was previously identified under ASD306.
ASD319	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	IEC	Chapple, Jason Lee	Balsmeier, Gregery E	RWMC SDA CAP: Excavation of Unanticipated Objects	Excavation in Borrow sources uncovers unanticipated objects - Artifacts, unexploded ordinances, basalt, etc. While doing excavation there is a chance of unforeseen circumstances to occur that can cause a delay in the schedule or a need to assess a new path forward.	Unanticipated objects are realized.	AHAUL-1000	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 30,000	$ 75,000	$ 1,200,000	2	5	80	**Best Case:** Delay of 2 days as a result of equipment availability and having to work with other projects to return equipment or work with rental equipment stores to rent equipment. **Most Likely Case**: Delay of 5 days as a result of equipment availability and having to work with other projects to return equipment or work with rental equipment stores to rent equipment. **Worst Case**: Delay of 80 days as a result of equipment availability and having to work with other projects to return equipment or work with rental equipment stores to rent equipment.	N/A		N/A	N/A	N/A	This risk was previously identified under ASD308.
ASD320	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	IEC	Chapple, Jason Lee	Balsmeier, Gregery E	RWMC SDA CAP: Drainage Issues in the SDA	Upon completion of the D&D work due to the expected configuration of the SDA there is anticipated to be Ponding, Erosion & subsidence's.	Ponding, erosion or subsidence's occur in the SDA.	GRA-FY26-1	Open	Threat	Accept	0.83	Likely	Minor	2-Low	$ 5,000	$ 20,000	$ 60,000	1	4	12	**Best Case:** Delay of 1 days as a result of personal having to pump ponding water. **Most Likely Case**: Delay of 4 days as a result of personal having to pump ponding water. **Worst Case**: Delay of 12 days as a result of personal having to pump ponding water.	N/A		N/A	N/A	N/A	This risk was previously identified under ASD309. Personnel and pumps will be on location to remove standing water.
ASD321	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	IEC	Chapple, Jason Lee	Balsmeier, Gregery E	RWMC SDA CAP: Sage Grouse Nesting and Leks in Pits	There are established Sage Grouse Leks in pits that invoke time restrictions on work. If a nest is discovered to be in the pit areas work in the areas will be stopped.	Discovery of a nesting or mating birds.	AHAUL-1000	Open	Threat	Mitigate	0.5	Possible	Moderate	2-Low	$ 258,652	$ 329,194	$ 423,249	11	14	18	**Best Case:** Work delay of 11 days as a result of identified sage grouse lek, artifact or unexploded ordinance. Labor resources leased equipment retained during this delay. **Most Likely Case:** Work delay of 14 days as a result of identified sage grouse lek, artifact or unexploded ordinance. Labor resources leased equipment retained during this delay. **Worst Case**: Work delay of 18 days as a result of identified sage grouse lek, artifact or unexploded ordinance. Labor resources leased equipment retained during this delay.	Work will be staged to allow for workers to work during restricted hours. If a nest is discovered work will be shifted to other areas. Identified sage grouse LEK, unexploded ordinance, or artifact delays SDA CAP Preparations (RISK MITIGATION)	CAP-PREP-RM	N/A	N/A	This risk was previously identified under ASD310.
ASD323	TO3.2	D.4.16.30.12 D.4.16.30.14 D.4.16.30.16	IEC	Chapple, Jason Lee	Balsmeier, Gregery E	RWMC SDA CAP: Resource Availability	We currently have the resources to complete the SDA cap construction activities. If there are delays with this scope and resources are reallocated to other scopes of work they may not be available when this scope start back up.	Delays in start of construction or lack of skilled workers is realized.	AHAUL-1000	Open	Threat	Accept	0.18	Unlikely	Minor	2-Low	$ 20,000	$ 80,000	$ 160,000	4	16	32	**Best Case**: Delay of 4 days as a result of lack of available skilled resources. **Most Likely Case**: Delay of 16 days as a result of lack of available skilled resources. **Worst Case**: Delay of 32 days as a result of lack of available skilled resources.	N/A		N/A	N/A	N/A	This risk was previously identified under ASD313. The project will continue to be proactive and work with DOE on issues that could cause delays in construction.
CAL325	TO3.2	D.3.02.30	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP - Retrieval: Discovery of Unknown Radiological Hazards	It is possible unknown radiological hazards may be discovered during field verifications at CSSF. Such unknown radiological hazards may require additional costs and schedule to address and complete planned work.	Discovery of new information or unknown conditions.	CDP.30.22.040 CDP.30.22.060	Open	Threat	Avoid	0.18	Unlikely	Minor	2-Low	$ 80,000	$ 120,000	$ 300,000	8	12	30	Radiological hazard mitigations will in the best case result in brief project delays and additional engineering and operations support to implement hazard mitigations. Worst case these mitigations may require external support and significantly delay schedule and increase costs. Assume $10k per day for labor between operations, engineering, and environmental.	N/A		N/A	N/A	N/A	N/A
CAL326	TO3.2	D.3.05.41	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP CD-1: Establish a Comprehensive LDR Strategy	Establishing a comprehensive LDR compliance strategy may have a favorable impact on cost and schedule for the CDP. For example, the project could identify a comprehensive LDR compliance strategy that does not require further treatment of calcine.	Compliance with regulatory requirements.	CDP.41.01.010	Open	Opportunity	Enhance	0.5	Possible	Critical	4-High	$ (175,000)	$ (105,000)	$ (78,750)	(200)	(120)	(90)	Assuming this is a matter of environmental paperwork and communications with DOE, this is most likely to take a year to complete. Best case, the impact is some kind of a 90-day review, worst and most likely it's a full year delay requiring 1.5 FTE's between environmental personnel and senior management reviews.	N/A		N/A	N/A	N/A	N/A
CAL327	TO3.2	D.3.02.30	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP - Retrieval: Failure of Existing Operating Systems	It is expected existing CPP-691 operating systems will continue to perform within the established design parameters. Preventative and minor corrective maintenance will be sufficient for system operating health. Failure of existing operating systems may negatively impact cost and schedule. There are single points of failure on the system, such as the pre-filter and blower, that could have significant costs or schedule delays if the equipment were to fail. General maintenance costs for the CPP-691 facility and full-scale mockup were included in the Task Order 3.2 budget; however, it does not account for costs above the general maintenance budget.	Equipment failure or damage.	CDP.30.20.330	Open	Threat	Mitigate	0.18	Unlikely	Moderate	2-Low	$ 101,000	$ 172,000	$ 585,000	20	30	88	**Best Case:** Replace cyclone and elbows (20 days of downtime X 10 hr/day X 4 FTE X $75/hr plus 16 days to install X 10 hr/day X 3 FTE X $75/hr plus $5K in materials **Most Likely Case:** Replace fittings (30 days of downtime X 10 hr/day X 4 FTE X $75/hr plus 24 days to install X 10 hr/day X 4 FTE X $75/hr plus $10K in materials **Worst Case:** Replace pre-filter (88 days of downtime X 10 hr/day X 4 FTE X$75/hr plus 12 days to install pre-filter X 10 hr/day X 4 FTE X $75/hr plus $28K in materials	Perform preventative and corrective maintenance at required intervals to prevent failures during operations.	CDP.30.20.340RM CDP.30.20.350RM CDP.30.20.360RM	N/A	N/A	N/A
CAL328	TO3.2	D.3.05.44	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Flexible and Beneficial Retrieval Strategy	CDP can design a flexible but beneficial retrieval, design, and construction strategy (for example, retrieve from the easiest bin first), utilizing learned efficiencies necessary to meet current scope, schedule, and budget.	Project execution failure.	CDP.44.01.010	Open	Opportunity	Exploit	0.5	Possible	Serious	3-Moderate	$ (58,333)	$ (29,167)	$ -	(100)	(50)	0	Engineering has invested time and effort into this that should provide a smooth path forward, eliminating potential delays due to unknown conditions or equipment requirements. Therefore, best case scenario these efforts save about 1 FTE of engineering time for about 100 days. Worst case, the work must occur anyway and there is no opportunity to exploit.	N/A		N/A	N/A	N/A	N/A
CAL330	TO3.2	D.3.05.41	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Impact of Regulatory Timing on Design Sequencing	Timing for establishing and sequencing the LDR compliance strategy may impact design requirements to enable acceptability of waste form per RCRA.	Compliance with regulatory requirements.	CDP.41.01.010	Open	Threat	Avoid	0.18	Unlikely	Major	3-Moderate	$ 35,000	$ 105,000	$ 140,000	20	90	120	Sequencing of the LDR strategy could delay design work and result in increased costs for rework. Assuming in-house designers, 2 FTE's (between engineering, senior management, and environmental) could be required to perform rework: **Best case:** this requires 20 days of rework/delays **Worst case:** 120 days of rework/delays **Most likely:** 90 days	N/A		N/A	N/A	N/A	N/A
CAL331	TO3.2	D.3.05.40	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Impacts to Project Cost and Schedule from External Drivers	External drivers, such as, but not limited to, a decision to direct dispose of calcine or changes to strategic business decisions or funding profiles, could require updating milestones, conducting reviews by external stakeholders, or redoing design work. This additional or unplanned work may impact cost and schedule.	Impacts from external drivers.	CDP.40.02.010 CDP.40.02.020	Open	Threat	Mitigate	0.5	Possible	Critical	4-High	$ 116,667	$ 233,333	$ 233,333	100	200	200	External drivers that implement scope changes could require extensive work above what was budgeted in the task order. These changes are difficult to quantify, but we will assume 2 FTE's ($17k/ea/mon, one PM/Project Engineer and one Sr.PM)	This risk will have a mitigation activity that will be quantified.	CDP.43.03.010RM CDP.43.03.020RM CDP.43.03.030RM CDP.43.03.040RM CDP.43.03.050RM CDP.43.03.060RM CDP.43.04.010RM CDP.43.04.020RM CDP.43.04.030RM CDP.43.04.040RM	N/A	N/A	N/A	N/A
CAL332	TO3.2	D.3.02.30 D.3.05.44	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item and Retrieval: Inaccurate As-Build Conditions	It is possible as-build conditions don't match the expected/assumed conditions. Though the CDP anticipates to verify the as-build conditions, timing to validate the expected/assumed conditions is uncertain. Discovering as-build conditions that don't match the expected/assumed conditions, may result in the CDP redoing work.	Discovery of new information or unknown conditions.	CDP.30.22.010 CDP.44.01.010 CDP.44.02.010	Open	Threat	Avoid	0.18	Unlikely	Serious	2-Low	$ 26,250	$ 52,500	$ 105,000	30	60	120	Assume 1.5 FTE's of engineering support to rework designs.	N/A		N/A	N/A	N/A	N/A
CAL333	TO3.2	D.3.02.30, D.3.05.41, D.3.05.44	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item and Retrieval: Loss of Specialty Resources	Loss of qualified specialty resources could result in schedule delays.	Availability of qualified resources or vendors.	CDP.30.13.010 CDP.41.01.010 CDP.44.01.010	Open	Threat	Accept	0.83	Likely	Major	4-High	$ 48,000	$ 80,000	$ 160,000	48	80	80	Cost and schedule impacts are based on the time it takes to backfill a position. Basis is estimated as follows: **Best Case:** Backfill one position (48 days x 10 hr./day x 1 FTE x $100/hr.) **Most Likely Case:** Backfill one position (80 days x 10 hr./day x 1 FTE x $100/hr.) **Worst Case:** Backfill two positions (80 days x 10 hr./day x 2 FTE x $100/hr.)	N/A		N/A	N/A	N/A	This risk was previously identified under CAL024.
CAL334	TO3.2	D.3.05.44 D.3.05.45	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Inadequate Understanding and Identification of Design Requirements	Failure to identify significant design requirements early in the design process (i.e. backup power, min-safe requirements, fail-safe conditions, etc.) may negatively impact cost and schedule for the CDP.	Project execution failure.	CDP.44.01.010 CDP.45.04.010	Open	Threat	Avoid	0.18	Unlikely	Serious	2-Low	$ 26,250	$ 52,500	$ 105,000	30	60	120	Assume 1.5 FTE's of engineering support to rework designs.	N/A		N/A	N/A	N/A	N/A
CAL343	TO3.2	D.3.05.44 D.3.05.45	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Physical Facility Constraints from Modifications, Retrofits, and Updates to Existing Facilities	As the CDP evaluates the CSSF bin sets for retrieval or the feasibility of repurposing an existing facility for treatment, it is possible constraints will be implemented or identified that may impact design requirements or execution of work during construction. Examples included space limitations or load restrictions of large equipment near facilities, buried utilities, utility tunnels, etc. Such constraints may negatively impact cost and schedule for the CDP. Though this risk is more likely to have impacts later in the project (final design and construction), near-term impacts would be discoveries during the conceptual design work that requires rework.	Discovery of new information or unknown conditions.	CDP.44.01.010 CDP.45.01.010	Open	Threat	Avoid	0.18	Unlikely	Serious	2-Low	$ 17,500	$ 35,000	$ 140,000	30	60	120	Best case scenario these are matters of timing (30 days, 1 FTE), worst case scenario the project must delay the project due to repairs to impacted INTEC systems/infrastructure AND redesign CDP systems to meet new conditions (120 days, 2 FTE's)	N/A		N/A	N/A	N/A	N/A
CAL344	TO3.2	D.3.05.44 D.3.05.45	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Radiological Protection Strategies	Establishing radioactive protection strategies early to minimize ALARA concerns, and costly retrofits may favorably impact cost and schedule for the CDP. Additionally, there is potential for more advanced/modern systems that could be incorporated into the CDP designs as well as advanced remote tooling to support maintenance and repairs and use of mockup facility for developing techniques and tooling, and for maintenance mockup practice. Though this risk is more likely to have impacts later in the project (final design and	Project execution failure.	CDP.44.01.010 CDP.45.01.010	Open	Opportunity	Enhance	0.5	Possible	Critical	4-High	$ (233,333)	$ (140,000)	$ (105,000)	(200)	(120)	(90)	Planning ahead for potential radiological concerns using modern equipment and strategies could save the project cost and schedule. **Best case:** 90 days, 2 FTE's (engineering) **Worst case:** 200 days, 2 FTE's **Most likely:** 120, 2 FTE's	N/A		N/A	N/A	N/A	N/A
CAL346	TO3.2	D.3.02.30	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP - Retrieval: Shortage of Qualified Vendors or Suppliers of Materials and Equipment	It is possible for the CDP to realize a shortage of qualified vendors or suppliers of materials and equipment when competing against other nuclear projects at both the local and national levels. This could include competing NQA-1 priorities or other unique DOE requirements that would be applicable to the CDP.	Availability of qualified resources or vendors.	CDP.30.19.050	Open	Threat	Avoid	0.05	Rare	Critical	3-Moderate	$ 10,000	$ 100,000	$ 200,000	30	100	200	Specialized vendors have extended lead times and the CDP would be required to pay a premium for expedited work and delivery. The costs incurred would most likely be for materials/equipment and vary significantly depending on the items in question. Best case another vendor has the same item but a premium must be paid for it, plus expedited delivery. Worst case items are both unavailable for an extended period of time AND CDP must pay a premium.	N/A		N/A	N/A	N/A	N/A

CAL347	TO3.2	D.3.05.41 D.3.05.44 D.3.05.45 D.3.05.47	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Shortage of Qualified Resources and Work Space/Equipment	An insufficient work force including a shortage of equipment and facilities required (office space, computers, etc.) to support their work function may negatively impact cost and schedule for the CDP. Insufficient workforce could be realized by a shortage of specialized resources, such as nuclear, electrical, and chemical engineers or qualified oversight personnel that have experience in the DOE complex.	Availability of qualified resources or vendors.	CDP.41.01.010 CDP.44.01.010 CDP.45.01.010 CDP.47.10.010	Open	Threat	Accept	0.05	Rare	Critical	3-Moderate	$ -	$ 116,667	$ 583,333	0	100	200	Assume 15 total employees on the project currently, and a requirement for 5 additional FTE's to meet project work load demands. **Best case:** all 5 employees can be found internally with no change to the schedule or budget. **Worst case:** all 5 must be brought on as subcontractors at higher than average rates. **Most likely:** most of them can be found internally and two must be subcontracted at higher than average rates. Assume $35K for staff aug and $17.5K for in-house employees.	N/A	N/A	N/A	N/A	N/A	N/A
CAL348	TO3.2	D.3.02.30	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP - Retrieval: Software Upgrades Impacts on Full-Scale Mockup Compatibility	Software upgrades at the full-scale mockup may impact the functions of systems and equipment causing impacts to project costs and schedule. The project has previously experienced negative impacts to cost and schedule from software upgrades.	Equipment failure or damage.	CDP.30.20.010	Open	Threat	Accept	0.18	Unlikely	Minor	2-Low	$ 7,500	$ 30,000	$ 60,000	2	8	16	Cost and schedule impacts are based on the possible scenarios of software upgrades at the full-scale mockup. Basis is estimated as follows: **Best Case:** No software upgrades. This is possible because the system is off-network and can function as is without the software upgrade; minor adjustment may be necessary (2 days of downtime x 10 hr /day x 5 FTE x $75/hr.) **Most Likely Case:** Upgrade software (8 days of downtime x 10 hr /day x 5 FTE x $75/hr) **Worst Case:** Upgrade software (16 days of downtime x 10 hr /day x 5 FTE x $75/hr.)	N/A	N/A	N/A	N/A	This risk was previously identified under CAL320. Install software upgrade to resume scheduled testing.
CAL349	TO3.2	D.3.02.30 D.3.05.41 D.3.05.47	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item and Retrieval: Subcontractor Costs May Exceed Planned Budget	Proposals from the subcontractors to complete work may exceed the planned budget. This may result in work not being executed or the project exceeding the planned budget.	Inadequate funding.	CDP.30.19.050 CDP.30.19.120 CDP.30.19.190 CDP.41.01.010 CDP.47.10.010	Open	Threat	Accept	0.5	Possible	Moderate	2-Low	$ 250,000	$ 500,000	$ 1,000,000	0	0	0	**Best Case:** $250K **Most Likely Case:** $500K Project has already received proposal stating that the project has exceeded the current planned budget cost. **Worst Case:** $1.0M	N/A	N/A	N/A	N/A	This risk was previously identified under CAL317. Monitor vendors costs and across the project to identify potential efficiencies or savings within the line-item fund source. The project will continue to include the cumulative CPR in the IPT agenda and vendors budget tracking to keep DOE informed of the project performance and vendors costs.
CAL350	TO3.2	D.3.02.30	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP - Retrieval: Supply Chain Disruptions or Long-Lead Procurement of Materials and Equipment	Supply chain disruptions that cause delays or lack of availability of materials or equipment may negatively impact cost and schedule for the CDP. At this time there are no known materials or equipment that are sensitive to supply chain delays or requires long-lead procurement, however, it is possible that the project may realize schedule or cost impacts as designs are updated and finalized, such as for the welder-cutter system, and bill of materials are issued.	Supply chain delays or disruptions.	CDP.30.19.050 CDP.30.19.120 CDP.30.19.190	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 30,000	$ 60,000	$ 240,000	8	16	64	**Best Case:** 2-week schedule delay (8 days of downtime x 10 hr/day x 5 FTE x $75/hr). **Most Likely Case:** 4-week schedule delay (16 days of downtime x 10 hr/day x 5 FTE x $75/hr). **Worst Case:** 16-week schedule delay (64 days of downtime x 10 hr/day x 5 FTE x $75/hr).	N/A	N/A	N/A	N/A	Utilize vendors that have traditionally been able to perform procurements in accordance with their stated timeframes. If shortages are anticipated, then we may seek a broader range of suppliers to improve the likelihood of finding required materials/equipment.
CAL351	TO3.2	D.3.05.44 D.3.05.45	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Timing of Technology Selection	Selecting a retrieval or treatment technology too slow (e.g., spend too much time) or too quick (e.g., requirement is missed) may negatively impact cost and schedule for the CDP because of the impacts to design requirements. Selecting and acquiring a control system, for example, is likely the most sensitive technology that could result in a system that no longer meets design requirements because of the timing of its selection.	Project execution failure.	CDP.44.01.010 CDP.45.01.010	Open	Threat	Avoid	0.05	Rare	Moderate	1-Low	$ 50,000	$ 200,000	$ 1,000,000	16	32	64	In the rare likelihood that this occurs, the most likely scenario is that the project has procured equipment that is then either obsolete or inadequate for the project needs based upon the advancement of the design, strategy, or requirements. Most likely these early procurements would be substantial and result in a $200K impact to budget.	N/A	N/A	N/A	N/A	CDP will acquire equipment properly specified for the work scope in accordance with the anticipated schedule. Any purchases made for equipment that is later deemed obsolete due to changes in work scope or project direction fall under this risk.
CAL360	TO3.2	D.3.05.45	IEC	Kimbro, Valerie Marie	Balsmeier, Gregery E	CDP Line Item - CD-1: Canister Sizing, Handling, and Count Assumptions and Impacts	A key design assumption and cost driver is the expected canister sizing, handling, and the number of canisters that will be produced. Early in the design process, the CDP will have to assume an estimate or range of values for the canister count using preliminary information based on canister sizing and handling. The basis for this assumption will likely be refined later in the design process and could have either positive or negative impacts.	Project execution failure.	CDP.45.04.010	Open	Threat	Avoid	0.05	Rare	Moderate	1-Low	$ 50,000	$ 200,000	$ 1,000,000	16	32	64	Impacts are based on the potential range of values for the canisters. These numbers will be refined during the design process.	N/A	N/A	N/A	N/A	N/A
CC008	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Fuel Leak Outside of RSC	Upon receipt of the Core Car, it is determined that fuel has leaked outside the Removable Shipping Container (RSC) while in long-term storage at Naval Reactor Facility which will result in negative cost and schedule variances to return work to a safe configuration.	Aug 2025-July 2029 Radiological monitoring discovers elevated levels of contamination during the removal of the shipping shield lid.	NCASKREC300	Pending	Threat	Accept	0.05	Rare	Moderate	1-Low	$ 100,000	$ 250,000	$ 500,000	4	17	34	Based on costs to procure necessary radiological controls equipment/ boundaries and additional radiological controls oversight.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. Documentation provided by NNPP to explain risk level available for review in the secure room. Installation of the water filtration system will capture contamination during rinse, blowdown and processing. Rad monitoring, and radiological training will minimize likelihood and impact of high levels of contamination discovered when the
CC021	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Navy As-Built Drawings do not Reflect Correct Physical Dimensions of Equipment	Improper fit up or engagement of IEC equipment with legacy features due to inaccurate drawings (not as-built) and/or incorrectly assembled legacy equipment will require procurement or replacement of incompatible equipment.	2025-2029 Improper fit up or engagement of equipment identified during operations.	NCASKREC300	Pending	Threat	Accept	0.18	Unlikely	Moderate	2-Low	$ 160,000	$ 320,000	$ 480,000	16	32	48	Worst Case based on SME providing cost to replace main gantry on basin crane or water treatment system in CPP-666 and/or other support systems needed for the core car project. Best Case based on procuring spare part to have on hand for main gantry crane.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. Perform fit up testing, mock-ups, and conduct training prior to starting into operations. Develop back up methods to address contact points that are suspect (grinding, cutting). Mitigation Activity Status: Core Lift Plate Fabrication scheduled to complete February 2025. RSC Mockup testing to complete May 2025. Complete integrated testing at Premier in December 2025.
CC300	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Engineering/Safety Analysis Determines Core Cannot be Safely Removed From RSC or Processed	Design/Safety analysis determines the core cannot be safely removed from the removable shipping container (RSC) and transported to the laydown station without extensive modifications to the equipment/basin/process.	FEBRUARY 2025-2027 Completion of drop/safety analysis reveals scenario(s) that result in unacceptable risk or consequence. Engineering analysis to allow operations to take place in a neutron absorbing environment results in need to design and fabricate additional equipment.	NCORDAna300	Pending	Threat	Accept	0.2	Unlikely	Critical	3-Moderate	$ 750,000	$ 2,100,000	$ 3,100,000	238	309	412	Cost and schedule impacts will be dependent upon analysis results and the new strategy/controls required to move the core. Changes to the base materials used to build the laydown system were required to be changed due to the new pool environment. This significantly impacts the cost of the materials and required prep/ machining time.	N/A	N/A	N/A	N/A	Results of initial drop analyses concluded adding Mechanically Fastening will not be necessary, but additional analysis will be required. Modifications to existing equipment, new equipment design, and changes to the processing plan will be needed to safely move the core. (11/12/24) Perform additional drop and accident scenario analyses to ensure the core can be safely moved and processed (including CSE Evaluations).
CC301	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Hydrogen Levels Inside the Shipping Shield Exceed HAD Limits	High hydrogen gas levels between the shipping shield and the removable shipping container (RSC) could indicate water inside the shipping shield. Due to potential RSC seal degradation, a hydrogen sample of the RSC will be required, potentially requiring a purge of the RSC to meet HAD requirements. RSC sampling will require removal of the shipping shield lid which will require additional radiological controls to keep work in a safe configuration, resulting in additional cost and delays in schedule to implement the necessary controls.	August 2025 Performance of shipping shield cavity hydrogen sampling after the railcar is in place at CPP-666.	CCMO1220	Pending	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 374,000	$ 534,500	$ 695,000	8	12	16	Best Case: based on fabrication of glove box attached to shipping shield. Worst Case: fabrication of full tent containment April 2025- Fire Safety determined need for an explosion proof Hepa filter to be required for initial opening/testing of the shipping shield which impacts cost.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. MITIGATION ACTIONS: Fire Safety determined need for an explosion proof Hepa filter to be required for initial opening/testing of the shipping shield. -Fabricate glovebox with explosion proof Hepa filter to be attached to shipping shield. -Procure scaffolding, tent materials, and tooling to be ready to sample. -Upon opening shipping shield a sample will be taken and tested. The shipping shield will be back filled with nitrogen awaiting sample results. Sampling and backfill will be determined from sample results until processing starts. ADDITIONAL ACTIONS: EDF-11382, Drop Analysis of the SS Lid completed 8/22/24. We can safely remove the lid to allow IEC to address high hydrogen levels. SAR-113 Rev. 1 approval will provide requirements and controls to safely address high hydrogen inside of the shipping shield.
CC303	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Failure to Meet Cutting Station Integrated Testing Performance Criteria	Integrated testing of the cutting station must meet the performance and acceptance criteria documented in SPC-3256. Failure of equipment during integration testing at IPM would result in a failure to meet these criteria and will result in cost and schedule delays to make necessary repairs to the cutting station.	2025-2026 Failure of equipment during integrated testing of the cutting station at IPM.	NCUTTINGST310	Pending	Threat	Mitigate	0.2	Unlikely	Major	3-Moderate	$ 110,000	$ 210,000	$ 575,000	86	94	122	Integrated testing at IPM and Premier is scheduled to complete in 94 days (Most likely). 30% increase 122 days (Worst Case). 10% more efficient 86 Days (Best Case). IPM provided ROM Cost Estimate (09/1/24) to pay for top 7 possible testing failures. Information used to provide cost impacts.	IRCO-018, Procurement of Long Lead Electrical Components submitted to expedite procurement of servo motors, encoders, PLCs, HMI, and servo drives to allow early bench testing. Bench testing will decrease risk and early procurement of spares will allow expedited repair if needed.	CC2CSFAB244RM	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. MITIGATION ACTIVITY STATUS: IRCO-018 has been submitted and processed to address the procurement of long lead electrical and mechanical components.
CC304	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Failure of Cutting Station Components During Integrated Testing at IPM	Failure of mechanical or electrical equipment during integrated testing of the cutting station will require replacement or repair before testing can be completed at IPM.	2025-2026 Component fails or is damaged during integrated testing at IPM.	NCUTTINGST310	Pending	Threat	Mitigate	0.3	Possible	Serious	3-Moderate	$ 50,000	$ 150,000	$ 325,000	12	48	103	Based on In-Place Machining provided BOA (basis of estimate) for abnormal they had encountered during previous manufacturing and testing at their testing facility.	IRCO-013, Procurement of Long Lead Precision Mechanical Components submitted to expedite procurement of lead screws, trucks, and ball screw assembly replacements. Early procurement of spares will allow expedited repair if needed at IPM.	CC2CSFAB243RM	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. MITIGATION ACTIVITY STATUS: IRCO-013 approved 12/10/24. IPM submitted order of replacement components. 12/11/24.
CC306	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Vendor refuses to accept IEC roll down terms and conditions.	Sub-contract vendor refuses to accept roll down requirements from primary sub-contractor which result in negative cost and schedule variances to redesign or find another vendor.	2025-2027 Vendor refuses to acknowledge purchase requisition because they take exception to required terms and conditions.	NFLDC300	Pending	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 150,000	$ 250,000	$ 600,000	24	64	102	Kolmorgen servos, encoders, and control systems were used to perform prototype testing to validate equipment performance. Kolmorgen refuses to comply. Worst Case: Kolmorgen refuses to comply and project has to revert to the design phase. Best Case: TE Connections refuses to certify the underwater connections. IEC has to find another vendor to verify connections.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. IRCO 23-6783-022 initiated by IPM to expedite shipping of ball screws to recover schedule at a base cost of $21,100 in April 2, 2025. Removed screws from critical path to positively impact schedule. Clarify contract required terms and conditions roll down with IPM. Met with IPM to determine quality clause requirements for materials. Lead a meeting with IPM and subcontract vendor to understand exceptions.
CC307	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Unforeseen Radiological Incident and/or Loss of Contamination Control.	An unexpected radiological incident and/or loss of contamination control outside the controlled area realized during the receipt or during processing of the core car may result in personnel decontamination and extended shutdown/recovery actions.	AUG 2025-MARCH 2030 Unexpected contamination levels or radioisotopes found upon receipt of the shipping shield or while processing. Unexpected dose rates during processing of the core car.	NCASKREC300	Pending	Threat	Accept	0.2	Unlikely	Serious	2-Low	$ 500,000	$ 1,000,000	$ 2,000,000	16	32	64	Cost and schedule impacts based on recovery actions/ shut down due to varying severity of a loss of contamination control/ radiation exposure.	N/A	N/A	N/A	N/A	Keeping Risk ID from TO3.2 Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CC308	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Failure of Components during Integrated Testing at Premier	Failure of equipment during integrated testing of the cutting station, laydown station, and other systems at Premier will result in negative cost and schedule variances to repair/replace equipment.	2026 Component fails or is damaged during integrated testing at Premier.	NCUTTINGST300	Pending	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 500,000	$ 1,000,000	$ 2,000,000	16	32	64	Cost and schedule impacts based on recovery actions/ shut down due to varying severity of a loss of contamination control/ radiation exposure.	Perform fit up testing, mock-ups, and training prior to placing equipment into operations.	CC2CSTST100RM	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CC309	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: LCC Drop Analysis Unfavorable Results	The drop analysis for the LCC determines that an additional spacer is needed in the basket which adds additional cost and schedule delays to the project.	2025-2026 The drop analysis identifies an additional spacer is needed.	NLCCDEDF300	Pending	Threat	Accept	0.5	Possible	Major	4-High	$ 500,000	$ 1,000,000	$ 2,000,000	60	80	120	Cost and schedule impacts based on recovery actions to add an additional spacer to the LCC basket.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination. Perform analysis to bound new requirements and the impacts to the basket design as well as existing tools. Provide information to the navy regarding unfavorable results to assist them in a possible redesign in their basket configuration.
CC310	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Failure of Machining Equipment	Failure of major pieces of equipment to support fabrication, machining and/or maintenance activities during integrated testing at Premier requiring necessary recovery actions and/or purchase of new equipment to support ongoing fabrication.	Failure of any major equipment during integrated testing at Premier.	NFFRD300	Pending	Threat	Accept	0.8	Likely	Moderate	3-Moderate	$ 300,000	$ 400,000	$ 500,000	16	32	64	Cost and schedule impacts based on recovery actions/ shut down due to varying severity of a loss of contamination control/ radiation exposure.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CC311	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Cutting Station Requires Redesign	The Cutting Station requires additional design, analysis, or modifications after arrival at Premier resulting in additional cost and design time added to the schedule.	2026-2027 It is found that the cutting station needs additional design and/or analysis upon arrival at premier.	NCUTTINGST300	Pending	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 250,000	$ 600,000	$ 1,250,000	16	32	64	Cost and schedule impacts based on recovery actions.	Perform re-design/analysis of the Cutting Station to address necessary modifications.	CC2CSINST100RM	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.

CC312	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Rework of Existing Analysis for the Laydown and Work Platform	During integrated testing at Premier the design analysis determines that additional rework is needed during and after construction of the Laydown System and the Work Platform resulting in negative cost and schedule variances.	2026-2027 Design analysis at Premier determines additional rework will be needed for the Laydown System and Work Platform.	NTFHUMOCK300	Pending	Threat	Accept	0.5	Possible	Major	4-High	$ 500,000	$ 1,000,000	$ 2,000,000	60	80	120	Cost and schedule impacts based on recovery actions.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CC314	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: CPP-666 Critical Legacy Equipment or Infrastructure Failure	CPP-666 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failing equipment and/or infrastructure. Failure of HVAC or electrical system.	NINSNF-1375	Pending	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 75,000	$ 250,000	$ 500,000	32	64	128	Impacts adjusted forecasting what has been realized so far this fiscal year.	Inspect and cycle all accessible equipment. Create WO to address individual failures as needed. Procure spares to prepare for replacement. Complete scheduled preventative maintenance on all equipment.	RINSNF-1375RM	N/A	N/A	Previously identified as CC020. Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CC315	TO3.2	D.1.21.30	IEC	Biorn, Scott Dee	Thompson, Brady James	Core Car: Heavy Haul Vendor Reconfiguration	The contract to ship the heavy haul system was initially awarded to Bennett Heavy Haul. The contract was canceled, and a future shipment date will be provided by the Navy for the heavy haul receipt. The assumption is that Bennett will be awarded the contract. The equipment Bennett will use to transport the shipping shield will not be modified and be bounded by the current transport analysis. If the contract is awarded to someone else or Bennett changes the configuration the project will have significant cost and schedule impacts to include changes in approved configuration and re-work of technical documents.	IECC is informed there is a change in the heavy haul transport contract. April 2026.	CCMO1220	Pending	Threat	Accept	0.8	Likely	Critical	5-Very High	$ 650,000	$ 1,300,000	$ 1,700,000	48	112	192	Cost and schedule impacts based on recovery actions to secure new heavy haul vendor and reconfiguration. **Best Case**: Criticality Safety Engineering Analysis. 3 months. **Most Likely**: Update to Criticality Safety Engineering Analysis, revision to SAR-113 and additional engineering analysis. 7 months. **Worst Case**: Criticality Safety Engineering Analysis and significant equipment or building modification of CPP-666. 1 year.	N/A	N/A	N/A	N/A	Project cancellation letter received 11/25/25. Path forward is still in duiscussion with DOE; risks will be marked as "pending" and will be updated upon final determination.
CERCLA300	TO3.2	D.4.05.30.08	IEC	Whitmore, Erik Justin	Tremelling, Aubrey	WAG 3 Reporting and Monitoring: Evaporation Pond Liner Damage	Existing CERCLA Evaporation liner tears which would require subcontractor support to complete necessary repairs.	Existing liner is damaged.	ER2608038	Open	Threat	Mitigate	0.18	Unlikely	Moderate	2-Low	$ 62,532	$ 312,658	$ 468,987	0	0	0	No schedule delays as all other work associated would continue while repairs are done. Costs are based on subcontractors completing repairs.	Allocation of materials and resources to complete necessary repairs of the failed pond liner that bring the liner back to the current acceptable condition.	ER2609062RM, ER2608038RM, ER2608064RM, ER2608065RM, ER2608066RM, ER2608078M	N/A	N/A	This risk was previously identified under CERCLA001.
CERCLA301	TO3.2	D.4.05.32	IEC	Chapple, Jason Lee	Larsen, Eric Charles	Cercla D&D: Samples on Contaminated Soil	Soil removal from contaminated footprints doesn't successfully remove targeted contamination and additional material removal is required.	Sample results are not favorable	RCE-30	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ -	$ -	$ 250,000	0	0	8	Labor and non-labor costs to cover up contaminated soil. Estimating 8 days total.	Remove additional material and perform an additional round of verification sampling.	RCE-RM	N/A	N/A	N/A
DST321	TO3.2	D.2.03.35.09	IEC/DOE	Hubler, Rachelle Bernice	Jenkins, Talley Wallace	Direct Nuclear Material Control & Accountability: Alternative Approach Required for LANMAS	If IEC is unable to continue using BEA's Local Area Nuclear Material Accountability Software (LANMAS) after BEA support ceases, IEC will be forced to find an alternative approach to implementing LANMAS. In this scenario, IEC will accrue unforeseen costs and experience schedule delays to find an alternative approach.	BEA ceases allowing IEC to use LANMAS system.	NMCA-LOE-2601, NMCA-LOE-2701	Open	Threat	Share	0.18	Unlikely	Serious	2-Low	$ 40,000	$ 900,000	$ 9,000,000	16	16	92	**Best Case**: Cost impacts are based on paying BEA a fee to continue using their system. Schedule impact is based on time to set up agreement. **Most Likely Case:** Cost impact is based on paying BEA a fee to continue this service for IEC. Schedule impact is based on time to set up the agreement. **Worst Case:** Cost and Schedule impacts are based on SME assumptions in the scenario that IEC is forced to pay WIPP to perform the Attractiveness Level Determination.	Propose share with DOE.	N/A	N/A	N/A	This risk was previously identified under DST303.
DST322	TO3.2	D.2.03.35.09	IEC/DOE	Hubler, Rachelle Bernice	Jenkins, Talley Wallace	Direct Nuclear Material Control & Accountability: Loss of BEA Training Support	BEA provides optional services to IEC, which supports our work at the INL. Some of these services have been discontinued. If training provided for the Nuclear Material Representative (NMR) ceases, IEC will be forced to find alternative training resources which will increase costs.	BEA ceases to offer optional training services to IEC for Nuclear Material Representative (NMR) position.	NMCA-LOE-2601, NMCA-LOE-2701	Open	Threat	Share	0.05	Rare	Moderate	1-Low	$ 10,000	$ 20,000	$ 30,000	16	32	48	BEA provides optional services to IEC, which supports our work at the INL. Some of these services have been discontinued. If training provided for the Nuclear Material Representative (NMR) ceases, IEC will be forced to find alternative training resources which will increase costs.	Propose share with DOE.	N/A	N/A	N/A	This risk was previously identified under DST316.
ICDF301	TO3.2	D.4.07.31.03	IEC	Orme, Jason Conrad	Tremelling, Aubrey	ICDF Operations and MaintenanceCell 1 & 2): Equipment Failure	If equipment fails, it will need to be repaired or the project will need to procure a replacement. This equipment includes but is not limited to; road graders, excavators, front end loaders, diesel fuel trailer, water trucks, hook trucks, telehandlers, pumps, liners, Digital Control System Equipment, and Waste processor.	Failure of any equipment (i.e. road graders, excavators, front end loaders, diesel fuel trailer, water trucks, hook trucks, telehandlers, pumps, liners, Digital Control System Equipment, and Waste processor) necessary to perform operations.	ICDF-REC-TEL	Open	Threat	Mitigate	0.83	Likely	Serious	4-High	$ 175,600	$ 341,000	$ 475,000	30	60	90	Equipment Costs per DCES sheet / Lease Rates for Equipment Total $81,845 - 20% Equipment Potential Failures - Daily Rates 20% Higher than Monthly Rates / ICDF Contamination Zone Risk of Leased Equipment - Lease to Buy / Work Case would be the D9N Dozer Lease $33,000	Rent or Purchase Replacement Equipment	ICDF-EQUIP-FY26-RM, ICDF-EQUIP-FY27-RM	N/A	N/A	This Risk was previously identified under ICDF001.
ICDF302	TO3.2	D.4.07.31.04	IEC	Orme, Jason Conrad	Tremelling, Aubrey	ICDF Waste Receipts (Cell 1 & 2): Treatment, Storage, and Disposal Facility (TSDF) Closure	ICDF is unable to receive waste, transportation of that waste will be delayed. It may then become necessary for the project to incorporate actions to recover schedule.	ICDF discontinues receiving of waste.	ICDF-CELL12-FY26, ICDF-CELL12-FY27	Open	Threat	Accept	0.83	Likely	Minor	2-Low	$ 79,200	$ 118,800	$ 158,400	8	12	16	**Best Case:** 8 days x 10 hr./day x 6 FTEs X ($110/hr. + OT = $165/hr.) **Most Likely Case:** 12 days x 10 hr./day x 6 FTEs X ($110/hr. + OT = $165/hr.) **Worst Case:** 16 days x 10 hr./day x 6 FTEs X ($110/hr.+ OT = $165/hr.)	N/A	N/A	N/A	N/A	This Risk is Previously identified under ICDF002.
ICDF303	TO3.2	D.4.07.31.05	IEC	Orme, Jason Conrad	Tremelling, Aubrey	ICDF Operations and Maintenance (Cell 3): Waste Container Treatment, Storage and Disposal Facility (TSDF) Certification Failure	During the verification process, if a waste container(s) is found to not be in accordance with the ICDF WAC, the waste will need to be reworked.	A container(s) is identified as damaged, packaged incorrectly, containing uncertified waste, containing prohibited items, etc.	ICDF-INSP3-FY27, ICDF-CELL12-FY26, ICDF-CELL12-FY27	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 54,000	$ 81,000	$ 108,000	8	12	16	**Best Case:** 8 days x 10 hr./day x 6 FTEs X ($75/hr.+ OT = $112.50/hr.) **Most Likely Case:** 12 days x 10 hr./day x 6 FTEs x ($75/hr.+ OT = $112.50/hr.) **Worst Case:** 16 days x 10 hr./day x 6 FTEs x ($75/hr.+ OT = $112.50/hr.)	N/A	N/A	N/A	N/A	This risk was previously identified under ICDF003.
IEC304	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Indirect Services: Mandatory Service Cost Increases	BEA provides multiple services to IEC, which support our work at the INL. Some of which IEC cannot seek alternative providers for. There is potential for unforeseen increase in cost for these mandatory services.	Increased Costs of Mandatory Services are applied.	N/A	Open	Threat	Share	0.96	Almost Certain	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	0	0	0	Costs are based on fees associated with BEA FY23 Forecast.	Propose share with DOE.	N/A	N/A	N/A	ORIGINAL RISK: IND001
IEC306	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Global: Approval of Business Systems	IEC has multiple systems utilized that need to be approved by DOE. In some cases, approval may not be granted, resulting in corrective actions that could be costly. Additionally, there will be reviews/audits done that could require additional steps or potential re-work of associated procedures. This could lead to purchasing different systems, acquiring subcontractors to help complete re-work, and potentially going through additional reviews and audits.	Any utilized business system does not meet required standards and gain approval.	N/A	Open	Threat	Share	0.5	Possible	Minor	2-Low	$ 80,000	$ 100,000	$ 120,000	0	0	0	Impact based on expected software or subcontract costs related to corrective actions.	Propose share with DOE.	N/A	N/A	N/A	Original Risk: IND009
IEC307	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Indirect Services: Loss of Optional Services Provided by BEA	BEA provides optional services per the contract to IEC to support the execution of our scope. If IEC is notified that BEA is discontinuing the optional service, IEC will be forced to find alternative options to support the scope. The alternative options may incur additional costs to replace the service currently provided by BEA.	Notification by BEA that the optional service will not be continued.	N/A	Open	Threat	Share	0.86	Likely	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	0	0	0	Additional costs incurred would be associated with alternative resources to maintain the similar type of service that BEA is currently providing.	Propose share with DOE.	N/A	N/A	N/A	Original Risk: IND301
IEC308	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Indirect Services: Loss of DOE Critical Software Licensure	DOE provides critical software licenses for IEC, which supports all work at the INL. If they cease to provide these licenses, IEC will have to procure licenses to continue supporting INL. Procuring critical software licenses will accrue additional costs.	Loss of DOE provided critical software licensure.	N/A	Open	Threat	Share	0.91	Almost Certain	Moderate	4-High	$ 270,000	$ 337,500	$ 675,000	0	0	0	Costs are based on fees associated with IEC procuring critical software licenses. **Best Case**: Reducing the number of users to 60 and IEC does not have to buy Cobra licenses. **Most Likely**: IEC has to buy P6 licenses. $4500 (P6 license cost) * 75 users = $337,500 **Worst Case**: This number is double most likely, assuming that IEC has to buy Cobra licenses as well and they are similar cost to P6 licensure.	Propose share with DOE.	N/A	N/A	N/A	Original Risk: IND302
IEC310	TO3.2	Project Wide	IEC	Multiple CAMs	TBD	Global: Work Delay Due to Abnormal Weather Conditions	Severe weather conditions that go above and beyond the historical norms is experienced, resulting in project delays from Site closure. These days would have impacts to the cost and schedule.	Events that are above average or severe weather conditions occur, based on historical precedents that would lead to Site closure.	Anticipated to impact multiple projects.	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 500,000	$ 1,000,000	$ 7,000,000	1	1	7	**Best Case**: Complete Site Shut Down for .5 days. **Most Likely**: Complete Site Shut down for 1 day. **Worst Case**: Complete Site Shut down for 7 days.	N/A	N/A	N/A	N/A	Original risk: TO3002R2
IEC315	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Global: Line-Item Project Funding	Due to the amount of line-item projects being worked at the Idaho Environmental Coalition (IEC), limitation of base scope execution may be experienced as a direct result of variability in funding. Inability to execute base scope under the end state contract model will result in longer durations required to reach the desired end-states. This will increase the overall costs of the Idaho Cleanup Project (ICP), and could impact staffing levels.	Impacts from line-item project funding causes limitations that impact the execution of the base scope.	N/A	Open	Threat	Share	0.95	Almost Certain	Critical	5-Very High	$ 1,000,000,000	$ 1,350,000,000	$ 1,700,000,000	900	1350	1800	Cost/ Schedule based on extended durations for project completion for line-item projects.	Propose share with DOE.	N/A	N/A	N/A	ORIGINAL RISKS: TO3P2005A/ TO3P2005B
IEC318	TO3.2	Project Wide	IEC/DOE	Multiple CAMs	TBD	Global: Force Account Pension	IEC utilizes the Davis-Bacon applicability process to determine if repair/construction type work goes to the jurisdiction of IEC's Force Account (unions) or subcontracted to an outside competitor. Due to potential budget constraints, there is possibility that IEC's Force Account will be minimized resulting in pension collection. The pension collection can either be partial or full, depending on the use of IEC's Force Account personnel and IEC's contribution to the pension plan.	DOE cuts funding reducing or eliminating work for IEC's Force Account. Reduced workforce due to decreased work.	N/A	Open	Threat	Share	0.6	Possible	Critical	4-High	$ 1,700,000	$ 3,100,000	$ 12,300,000	0	0	0	Cost impacts only. The worst-case cost reflects IEC's potential liability assuming a full payout. **Best Case**: $1.7M **Most Likely**: $3.1M **Worst Case**: $12.3M	Propose share with DOE.	N/A	N/A	N/A	N/A
IND304	TO3.2	K.1.01.05	IEC	Coletti, Sean Jeffrey	TBD	Legal: Miscellaneous Litigation	Potential for an unanticipated lawsuit which, would require resources to be allocated for the initial answer and planning of the lawsuit.	New lawsuit is filed against IEC.	N/A	Open	Threat	Accept	0.3	Possible	Moderate	2-Low	$ 25,000	$ 50,000	$ 100,000	15	30	60	No Schedule Delay. Costs represent initial responses.	N/A	N/A	N/A	N/A	Original Risk: LEG001R2
IND305	TO3.2	K.1.01.05	IEC	Coletti, Sean Jeffrey	TBD	Legal: General Litigation	Any arising lawsuit against IEC regarding Government contracts, environmental matters, and employment law that would require appropriate resources for litigation.	New Lawsuit is filed against IEC.	N/A	Open	Threat	Accept	0.3	Possible	Moderate	2-Low	$ 25,000	$ 50,000	$ 100,000	15	30	60	No Schedule Delay. Costs represent initial responses.	N/A	N/A	N/A	N/A	Original Risk: LEG002R2
IND306	TO3.2	K.1.01.05	IEC	Coletti, Sean Jeffrey	TBD	Legal: General Labor and Arbitration	The possibility of diverging resources or obtaining outside counsel to assist with unforeseen arbitrations involving General Employment and Labor Relations matters (i.e., pensions, employee health, and welfare plans).	A grievance is filed requesting for arbitration.	N/A	Open	Threat	Accept	0.45	Possible	Moderate	2-Low	$ 25,000	$ 50,000	$ 75,000	15	30	60	Each arbitration is estimated to cost approximately $2SK. The most likely occurrence to happen under the IEC contract is roughly two.	N/A	N/A	N/A	N/A	Original Risk: LEG003R2
IND307	TO3.2	K.1.03.08	IEC/DOE	Chapple, Debbie Lynn	TBD	Training: Training Platform Transition Fails	The Records and Information Network TRAIN system is a service IEC relies on for training management. BEA has selected a new Learning Management System (LMS) and is transitioning away from TRAIN. During this transition period, IEC will be required to maintain the existing TRAIN system while implementing and supporting the new LMS. BEA may significantly increase the cost associated with supporting TRAIN system during the transition period. The combined effect of supporting two training platforms and significant cost increases the risk that IEC will not have adequate funding or personnel resources to support both systems during the transition.	BEA will: 1. Transition to a new training platform with different LMS support model than the current one 2. Discontinues IEC support of the current TRAIN software making IEC step in to support it. 3. Increase the annual TRAIN system cost exceeding IEC's planned budget allocation.	N/A	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 3,000,000	$ 13,500,000	$ 28,900,000	0	0	0	Information provided by for 5 years: **Best Case** $= $3M **Most Likely** $= $13.5M **Worst Case** $= $28.9M (NOTE: There is $10M in the Most Likely and !!Worst Case for vendor costs of the LMS and TMS that is an assumption)	Propose share with DOE.	N/A	N/A	N/A	Original Risk: IND004
IND308	TO3.2	K.1.03.08	IEC	Chapple, Debbie Lynn	TBD	Training: Inefficient Personnel Growth	IEC employs various disciplines. There is potential of not being able to adequately fund courses geared towards personnel development and growth in individual career fields. If IEC is unable to adequately fund these programs for personnel, there is potential of losing personnel seeking more professional growth. There is also the risk of having a less efficient work force.	Funding is not adequate to support sending personnel to train and attend developmental courses geared towards their career field.	N/A	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 100,000	$ 600,000	$ 3,000,000	0	0	0	**Best Case**: Lose 1 person **Most Likely**: Lose 12 people **Worst Case**: Lose 30 people at approximately $100k/person	N/A	N/A	N/A	N/A	Original Risk: IND005
IND309	TO3.2	K.1.02.09.01	IEC	Trotta, Eric Daniel	TBD	Liability Insurance: Increases to Insurance Costs	Insurance costs increase due to additional collateral requirements, premium costs, or insurance claims.	IEC is notified by its insurance providers or insurance broker that costs have increased above planned amounts.	N/A	Open	Threat	Accept	0.5	Possible	Moderate	2-Low	$ 250,000	$ 500,000	$ 500,000	0	0	0	Impacts are based on historical collateral requirements and potential adjustments to premium costs based on actual insurance costs for previous years	N/A	N/A	N/A	N/A	N/A

IND310	TO3.2	K.1.04.01	IEC	Lilya, Stacey Walter Hoge	TBD	IND - Infrastructure: Critical Legacy Equipment or Infrastructure Failure	SSF and INTEC have a significant amount of legacy infrastructure and equipment (including GSA vehicles). Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failing equipment and/or infrastructure. Failure of HVAC or electrical system. Loss or failure of GSA vehicle.	N/A	Open	Threat	Accept	0.93	Almost Certain	Major	5-Very High	$ 350,000	$ 850,000	$ 2,000,000	48	96	208	**Best Case** 3 monthly delay $350K **Most Likely** 6 months delay $850K **Worst Case** 1 year delay $2M	N/A	N/A	N/A	N/A	N/A
IND311	TO3.2	K.1.04.01.17 K.1.04.01.23	IEC	Lilya, Stacey Walter Hoge	TBD	General Facility Management: Insufficient Parking at SSF	All telework employees have been required to return to onsite work at SFF resulting in an increase in onsite employees and cars in the parking lot. If there is insufficient parking at SSF additional offsite parking and shuttle service may be required resulting in additional cost.	Insufficient parking at SSF.	N/A	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 800,000	$ 877,000	$ 978,000	0	0	0	Based off of 2 FTE'S D&D skilled, leased transportation equipment/ fuel and off-site parking lot. This also includes snow removal and maintenance of off-site parking lot.	N/A	N/A	N/A	N/A	N/A
IND312	TO3.2	K.1.04.01.23	IEC	Lilya, Stacey Walter Hoge	TBD	IND - Transportation: GSA Leased Vehicles	General Service Administration (GSA) vehicle/equipment leases are planned and budgeted within the direct work scope. As the scope reaches completion, or a project is unable to utilize the GSA vehicle/equipment any longer, the lease may be transferred from the direct project to the Indirect Transportation account. It is possible that this account will incur the remaining lease costs and maintenance of the GSA vehicle/equipment until it is placed elsewhere or returned to the fleet.	A project is completing earlier than planned and/or the GSA vehicle/equipment is no longer needed.	N/A	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 50,000	$ 150,000	$ 300,000	0	0	0	Impacts are based on the average lease and maintenance cost of GSA vehicles/equipment. These impacts reflect multiple vehicles/equipment turned over at any given point during the task order ranging from 2 months to the duration of this Task Order.	N/A	N/A	N/A	N/A	N/A
INDRP001	TO3.2	K.1.03.03.08	IEC	Chapple, Debbie Lynn	TBD	Radiation Protection: Spare Rad Instrument Disposal	IEC has several cargo containers that are filled with old radiological instruments and out of service instruments in the facilities at INTEC. The instruments are currently being kept for use as spare parts to keep instruments running until older units can be replaced. Once old instruments are replaced, the spare instruments must undergo a proper disposal process. Once the stored instruments can no longer be used for spare parts, they become waste and require a hazardous disposal path due to lead and other metals used. If the project is directed to dispose of the spare instruments under strict disposal timelines, the amount of spares to be disposed of could potentially raise a need to become its own identified work scope with specific allocated resources to complete the work.	Spares are determined to be disposed under a strict timeline.	N/A	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ 1,500,000	$ 3,000,000	$ 5,000,000	0	0	0	**Best Case**: they only require a dispose of current inventory of spares. **Most Likely**: require disposal of current spares and spares that come from current projects. **Worst Case**: require disposal of current spares and spares that come from current projects.	N/A	N/A	N/A	N/A	Radcon has a complete list of inventory of all instruments. Keeping original ID from TO3.2 24/25
INFSTR302	TO3.2	D.3.03.43	IEC	Klukis, Venita MaRee	Balsmeier, Gregery E	UTI-671 Deep Well Replacement: Well Integrity	During the replacement of UTI-671 Deep Well it is found that the integrity of well casing is compromised resulting in negative cost and schedule variances.	The integrity of UTI-671 Deep Well is found to be compromised.	INTEC-RWP-160	Open	Threat	Accept	0.2	Unlikely	Minor	2-Low	$ 10,000	$ 40,000	$ 100,000	4	8	12	**Best Case** $10,000 and 4 days - replace part of the casing **Most Likely** $40,000 and 8 days - replace half of casing **Worst Case** $100,000 and 12 days - replace all well casing	N/A	N/A	N/A	N/A	The well casing will be scoped/ inspected to check the integrity of the casing prior to pump being replaced.
INFSTR304	TO3.2	D.3.03.42	IEC	Klukis, Venita MaRee	Balsmeier, Gregery E	UTI-660 Potable Water Pump: Well Casing Integrity	During replacement of UTI-660 Potable Water Pump it is determined that the casing will not support the replacement of the pump resulting in negative cost and schedule variances.	The integrity of the well casing is found to be compromised.	INTEC-PWP-110	Open	Threat	Accept	0.2	Unlikely	Minor	2-Low	$ 10,000	$ 25,000	$ 100,000	4	8	12	**Best Case** $10,000 and 4 days - Replace some casing **Most Likely** $25,000 and 8 days - Replace half of casing **Worst Case** $100,000 and 12 days - Replace all casing	N/A	N/A	N/A	N/A	The well casing with be scoped/inspected to check the integrity of the well casing prior to pump being replaced.
INFSTR311	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Material Procurement Delay	Materials are delayed or not available as scheduled resulting in negative schedule and cost variances.	Materials are backordered or have excessive lead times.	INFW-PIV-140, INFW-PIV-210	Open	Threat	Accept	0.25	Unlikely	Minor	2-Low	$ 45,000	$ 60,000	$ 120,000	12	16	32	Supply chain impacts due to current economy and tariff impacts.	N/A	N/A	N/A	N/A	N/A
INFSTR312	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Excavation Uncovers Unanticipated Objects	Excavation reveals unidentified objects and/or utilities resulting in a stop work to determine any remediation prior to proceeding with excavation.	An unknown utility or object is discovered during excavation.	INFW-PIV-150, INFW-PIV-160, INFW-PIV-170, INFW-PIV-180, INFW-PIV-190, INFW-PIV-200, INFW-PIV-220, INFW-PIV-230, INFW-PIV-240, INFW-	Open	Threat	Accept	0.25	Unlikely	Minor	2-Low	$ 8,000	$ 32,000	$ 96,000	1	4	8	Past experience with project excavation sites.	N/A	N/A	N/A	N/A	N/A
INFSTR313	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Clay Layer Discovered During Excavation	If a clay layer/unstable soil is found during excavation for the firewater PIV replacement, additional excavation may be required under the designated repair area and replaced with a compactable base. This will result in additional cost and schedule delays.	Discovering a clay layer/unstable soil during excavation.	INFW-PIV-150, INFW-PIV-160, INFW-PIV-170, INFW-PIV-180, INFW-PIV-190, INFW-PIV-200, INFW-PIV-220, INFW-PIV-230, INFW-PIV-240, INFW-	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 8,000	$ 16,000	$ 32,000	1	2	8	Based on replacing unstable soil with compactable base	N/A	N/A	N/A	N/A	N/A
INFSTR314	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Firewater Piping Inadequate	During PIV replacement activities, it is discovered that the firewater piping is deteriorated at excavation site and more excavation is required to replace the bad section of piping for tie-in.	Discovery of deteriorated pipe at excavation location.	INFW-PIV-150, INFW-PIV-160, INFW-PIV-170, INFW-PIV-180, INFW-PIV-190, INFW-PIV-200, INFW-PIV-220, INFW-PIV-230, INFW-PIV-240, INFW-PIV-250	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 381,344	$ 536,500	$ 693,000	16	48	80	Past project complications with deteriorated piping causing more excavation to obtain a suitable tie-in location causing longer rental costs, more labor, and possibility of more equipment in location drives schedule into winter months for tie-in recovery. DCES estimate for (worst case) 5 months rental & labor for project recovery.	Notify management of findings that could cause realization of risk causing impacts to schedule and costs.	INFW-PIV-150-RM	N/A	N/A	N/A
INFSTR315	TO3.2	D.3.03.49.01	IEC	Klukis, Venita MaRee	Renevitz, Joseph Andrew	Lift Station Control Panels: Unknown Condition during Control Panel Replacement	Any unknown condition found while replacing the control panel will cause schedule delays and accrue additional costs.	Any unknown condition found during installation of control panel.	TO3INTEC-30349011	Open	Threat	Mitigate	0.05	Rare	Minor	1-Low	$ 10,000	$ 50,000	$ 50,000	8	16	32	Impacts based on parts and labor to fix issue dependent on severity of issue.	Investigate vendor and previous installations to discover issues.	TO3INTEC-30349011RM	N/A	N/A	N/A
INFSTR316	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Equipment Lease/Procurement Delays	Equipment is delayed/not available as scheduled or does not function as needed for the project.	Equipment is backordered or has excessive lead times. Equipment arrives and does not function as needed.	INFW-PIV-140, INFW-PIV-210	Open	Threat	Accept	0.25	Unlikely	Minor	2-Low	$ 45,000	$ 60,000	$ 120,000	12	16	32	Not able to use equipment as scheduled or equipment that won't work as intended will push out the schedule for time lost on the project and may need over time to recover schedule. Added rental costs may be incurred for equipment upgrade for project needs that are unexpected.	N/A	N/A	N/A	N/A	N/A
INFSTR317	TO3.2	D.3.03.47	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC CPP-606 HVAC/ Break Facility: Material Procurement Delays	Materials are delayed or not available as scheduled resulting in negative schedule and cost variances.	Materials are backordered or have excessive lead times.	IN606-BHA-150, IN606-BHA-200	Open	Threat	Accept	0.25	Unlikely	Minor	2-Low	$ 45,000	$ 60,000	$ 120,000	12	16	32	Long lead times on materials could impact schedule start time in FY26 and could run into FY27.	N/A	N/A	N/A	N/A	Evaluate as necessary to complete per scheduled.
INFSTR318	TO3.2	D.3.03.47	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC CPP-606 HVAC/ Break Facility: Excavation Uncovers Unanticipated Objects	Excavation reveals unidentified objects and/or utilities resulting in a stop work to determine any additional remediation prior to proceeding with excavation.	An unknown utility or object is discovered during excavation.	IN606-BHA-200	Open	Threat	Accept	0.25	Unlikely	Minor	2-Low	$ 8,000	$ 16,000	$ 96,000	1	2	12	Based on lost days worked on project to find a path forward.	N/A	N/A	N/A	N/A	N/A
INFSTR319	TO3.2	D.3.03.47	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC CPP-606 HVAC/ Break Facility: Clay Layer Discovered During Excavation	If a clay layer/unstable soil is found during excavation for the CPP-606 HVAC replacement, additional excavation may be required under the designated repair area and replaced with a compactable base. This will result in additional cost and schedule delays.	Discovering a clay layer/unstable soil during excavation.	IN606-BHA-200	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 8,000	$ 16,000	$ 32,000	1	2	16	Days of work lost due to material being removed and replaced for proper compaction.	N/A	N/A	N/A	N/A	N/A
INFSTR320	TO3.2	D.3.03.47	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC CPP-606 HVAC/ Break Facility: Equipment Lease/ Procurement Delays	Equipment is delayed/not available as scheduled or does not function as needed for the project.	Equipment is backordered or has excessive lead times. Equipment arrives and does not function as needed.	IN606-BHA-200	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 45,000	$ 60,000	$ 120,000	12	16	32	Not able to use equipment as scheduled or equipment that won't work as intended will push out the schedule for time lost on the project and may need over time to recover schedule. Added rental costs may be incurred for equipment upgrade for project needs that are unexpected.	N/A	N/A	N/A	N/A	N/A
INFSTR321	TO3.2	D.3.03.47	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC CPP-606 HVAC/ Break Facility: Discovery of Asbestos	The risk of asbestos being discovered during HVAC installation requires additional controls to safely complete the installation.	Asbestos is discovered during HVAC installation.	IN606-BHA-190	Open	Threat	Accept	0.1	Rare	Minor	1-Low	$ 10,000	$ 20,000	$ 40,000	1	2	4	Cost and schedule delays based on additional controls being added to safely remove asbestos.	N/A	N/A	N/A	N/A	Maintain necessary asbestos training.
INFSTR322	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Soil Contamination	During excavation soil testing, if contaminated soil is found, Environmental will be notified and determine the extent of soil to be removed and recovery actions to be taken to return area to a safe configuration.	During excavation unexpected radiation/contamination is found.	INFW-PIV-150, INFW-PIV-160, INFW-PIV-170, INFW-PIV-180, INFW-PIV-190, INFW-PIV-200, INFW-PIV-220, INFW-PIV-230, INFW-PIV-240, INFW-	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 31,000	$ 62,000	$ 124,000	4	8	16	Based on recovery to remove contaminated soil.	N/A	N/A	N/A	N/A	N/A
INFSTR323	TO3.2	D.3.03.41	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	INTEC Firewater PIV Replacement: Discovery of Bondstrand Piping During Excavation	During PIV replacement activities, it is discovered that the firewater piping is Bondstrand at excavation site and more excavation is required to replace the Bondstrand section of piping for tie-in. Replacing piping with Bondstrand will add additional cost and schedule delays.	Discovery of Bondstrand piping at excavation site	INFW-PIV-150, INFW-PIV-160, INFW-PIV-170, INFW-PIV-180, INFW-PIV-190, INFW-PIV-200, INFW-PIV-220, INFW-PIV-230, INFW-PIV-240, INFW-	Open	Threat	Accept	0.1	Rare	Minor	1-Low	$ 30,000	$ 60,000	$ 120,000	8	16	32	Based on historical data from Bondstrand project.	N/A	N/A	N/A	N/A	N/A
INFSTR325	TO3.2	D.3.03.34	IEC	Inns, Ryan Douglas	Balsmeier, Gregery E	INTEC Fuel Oil & Electricity: Usage Volatility	Estimates were baselined using historical data from previous two years; however, fuel oil prices are volatile which creates a potential for unforeseen cost increases. Additionally, electricity usage is seasonally dependent and can fluctuate wildly if an abnormally cold or hot season is experienced.	Fuel oil or electricity usage spike.	N/A	Open	Threat	Accept	0.5	Possible	Major	4-High	$ 535,572	$ 1,338,930	$ 1,874,502	0	0	0	Used 10% incremental cost increase for Best Case Used 25% incremental cost increase for Most Likely Used 35% incremental cost increase for Worst Case *No schedule impacts.	N/A	N/A	N/A	N/A	N/A
INFSTR338	TO3.2	D.3.03.50	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	CPP-663 HVAC Repair: Incompatible Wiring	The project assumes the wiring of the new HVAC system will be compatible with the current system in place at CPP-663. If the wiring needs to be updated, it will cause rework with design drawings, accrue additional costs by having to order more materials and add additional schedule time with installation activities.	Installation activities cannot proceed due to incompatible wiring.	INTEC-HVAC-680	Open	Threat	Accept	0.09	Rare	Serious	2-Low	$ 50,000	$ 50,000	$ 300,000	44	44	96	Based on wiring costs for partial or full building plus labor to update drawings and installation.	N/A	N/A	N/A	N/A	N/A
INFSTR339	TO3.2	D.3.03.3C.02	IEC	Klukis, Venita MaRee	Balsmeier, Gregery E	CPP-603 Crane Upgrades: Resource Availability	If resources are not available for the crane upgrades in CPP-603, the project cannot be worked and completed. This will result in significant schedule delays.	Maintenance does not have the personnel to complete the project	CR.603.PR.351a	Realized	Threat	Accept	1	Almost Certain	Critical	5-Very High	$ -	$ -	$ -	96	192	288	Schedule impacted by current workload and priorities set for maintenance. Best Case: 6 months Worst Case: 18 months	N/A	N/A	Extend the project schedule to complete once resources are available.	N/A	
INFSTR340	TO3.2	D.3.03.47.01	IEC	Wilcox, Christopher Brent	Balsmeier, Gregery E	CPP 606 Boiler House HVAC: Change in Project Design	If the design for CPP-606 break room is not accepted and requires redesign the project will experience schedule delays and accrue more cost to modify/ construct the new break room to the new requirements.	CPP-606 requires redesign.	IN606-BHA-100	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 140,000	$ 200,000	$ 400,000	32	48	80	Based on schedule impacts to redesign and costs associated with additional requirements/ modifications to existing design plan.	N/A	N/A	N/A	N/A	

INFSTR341	TO3.2	D.3.03.38.09	IEC	Klukis, Venita MaRee	Balsmeier, Gregery E	DCS Upgrades: Software Development Delay	Software development for an aged system could prove to be more complicated than originally planned leading to additional man hours and schedule changes that will delay the project.	Software development does not finish within scheduled period.	T03IN-DCS-6045	Realized	Threat	Accept	0.8	Likely	Serious	4-High	$ 8,000	$ 16,000	$ 32,000	24	48	96	Design engineering labor hours will be the only impact so their time is assumed to be $100 per hour. Schedule impacts are estimates only and could vary.	N/A	N/A	CAM to speak to a schedule variance for now, if needed management reserve may be requested.	N/A	Original Risk: INTEC312
INTEC329	TO3.2	D.3.03.40.09	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP PM: Failure to Follow Process Steps and/or Expectations Results of Major Noncompliance Issue	In the event that the project experiences a major noncompliance issue for Balance and Plant (BOP) Preventive Maintenance (PM), it could result in additional resources required, changes to work control, additional training required, etc.	A major noncompliance event occurs.	INBOP-PM-2000	Open	Threat	Accept	0.83	Likely	Major	4-High	$ 250,000	$ 500,000	$ 1,000,000	48	96	192	Cost of subcontract mentors, cost to refurbish program, cost for retraining.	N/A	N/A	N/A	N/A	Original risk: INTEC211
INTEC330	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: INTEC Critical Legacy Equipment or Infrastructure Failure	INTEC has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failure of equipment and/or infrastructure.	INBOP-CMT-2000 (FY26) INBOP-MNT-2010 (FY27)	Open	Threat	Mitigate	0.95	Almost Certain	Critical	5-Very High	$ 6,000,000	$ 8,000,000	$ 12,000,000	96	192	288	Impacts adjusted forecasting what has been realized so far this fiscal year. Based on 616 compressor replacement actuals, potable water wiring actuals, 1647 piping actuals, cathodic protection replacement actuals.	Perform routine periodic maintenance on all equipment and infrastructure.	INBOP-CMT-2000RM (FY26) INBOP-MNT-2010RM (FY27)	N/A	N/A	Original Risk: INTEC212
INTEC331	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: CPP-606 Critical Legacy Equipment or Infrastructure Failure	CPP-606 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failure of boilers, raw water pumps, fire water pumps, deaerator tanks, water softeners. Any equipment or infrastructure failure.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	60	90	120	Impacts adjusted forecasting what has been realized so far this fiscal year.	N/A	N/A	N/A	N/A	N/A
INTEC332	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: CPP-659 Critical Legacy Equipment or Infrastructure Failure	CPP-659 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failure of Sodium Bearing Waste (SBW) pumps, piping and valve loops. Failure of blowers, electrical or any other equipment.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Serious	5-Very High	$ 500,000	$ 1,000,000	$ 1,500,000	30	60	90	Impacts adjusted forecasting what has been realized so far this fiscal year.	N/A	N/A	N/A	N/A	N/A
INTEC333	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: CPP-663 Critical Legacy Equipment or Infrastructure Failure	CPP-663 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failing equipment and/or infrastructure. Failure of HVAC or electrical system. Failure of fabrication shop equipment.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Major	5-Very High	$ 1,000,000	$ 1,500,000	$ 2,000,000	60	90	120	Impacts adjusted forecasting what has been realized so far this fiscal year.	N/A	N/A	N/A	N/A	N/A
INTEC334	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: CPP-1684 Critical Legacy Equipment or Infrastructure Failure	CPP-1684 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failing equipment or infrastructure. Failure of diesel generators.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Major	5-Very High	$ 800,000	$ 1,600,000	$ 2,400,000	30	60	90	Impacts adjusted forecasting what has been realized so far this fiscal year. 1 generator costs $800k.	N/A	N/A	N/A	N/A	N/A
INTEC335	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: Fire Water/Potable Water System Failure	The fire water, Raw water, and potable water systems at INTEC have exceeded their life expectancy. If they fail it will cause significant cost and schedule delays.	Failure of fire water, raw water, and potable water systems.	INBOP-CMT-2000	Open	Threat	Accept	0.7	Possible	Critical	4-High	$ 1,000,000	$ 2,000,000	$ 3,000,000	90	120	240	Based on actuals from firewater and bondstrand replacement in FY24/25.	N/A	N/A	N/A	N/A	N/A
INTEC337	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: Failure of Transformers, Underground Electrical and/or Process Piping	Failure of transformers, PCCs MCCs and underground electrical and process piping at INTEC will result in significant cost and schedule delays.	Failure of piping or underground wiring. Failure of transformers, PCCs and MCCs.	INBOP-CMT-2000	Open	Threat	Accept	0.9	Likely	Critical	5-Very High	$ 3,000,000	$ 6,000,000	$ 9,000,000	60	120	240	Based on actuals from FY24/25.	N/A	N/A	N/A	N/A	N/A
INTEC339	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: Roads and Grounds Early Degradation	Unforeseen early degradation of roads and grounds including manholes at INTEC may require unplanned repairs and/or replacement which may cause unplanned schedule and cost variances to return grounds and roads to a safe configuration.	Early degradation or failure of any road/ground at INTEC.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Serious	5-Very High	$ 625,000	$ 1,500,000	$ 2,500,000	30	60	90	Actuals from FY/24 and FY/25 re-paving activities and manhole replacements. Best Case: Project repairs 25% fallout of 307 manholes Most Likely: Project repairs 60% fallout of 307 manholes Worst Case: Project repairs 100% fallout of 307 manholes	N/A	N/A	N/A	N/A	N/A
INTEC340	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: Raw Water, Fire Water and/or Diesel Tanks Failure	INTEC raw water, fire water, and diesel tanks have the potential of failing due to their age. Unforeseen failure can cause unscheduled outages to repair/replace and turn the facility/equipment back over to operations.	Failure of raw water, fire water or diesel tanks.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ 2,000,000	$ 4,000,000	$ 6,000,000	60	120	240	Based on SME & Engineering input regarding replacement of existing tanks.	N/A	N/A	N/A	N/A	N/A
INTEC342	TO3.2	D.3.03.40.02	IEC	Baisch, Kasey Don	Balsmeier, Gregery E	BOP CM: Obsolete Equipment	INTEC utilizes many pieces of legacy equipment. Legacy equipment has the potential of becoming obsolete due to the nature of its age. If obsolete equipment is no longer serving a purpose, it may cause unscheduled outages to repair or procure new equipment and turn the equipment back over to operations.	Current legacy equipment is found to be obsolete. Lathe in fabrication shop is found to be obsolete.	INBOP-CMT-2000	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ 6,000,000	$ 8,000,000	$ 12,000,000	96	192	288	Impacts based on actuals for replacing other legacy equipment.	N/A	N/A	N/A	N/A	Original Risk: INTEC341
IT316	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Phone Systems is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA maintains phone services for IEC in some site areas, which includes Fire Panels and RCRA phones. IEC IT would have to rearchitect our voice system for redundancy and to relocate to INTEC and RWMC. We would need to extend our current services to INTEC and RWMC. We would need to develop in-house support for analog services.	BEA discontinues voice services to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Moderate	2-Low	$ 32,000	$ 350,000	$ 974,000	25	25	144	**Best case:** 50 handsets @ $250 ea. No fire panels, No additional systems, No Call Manager licensing change - can absorb additional phones 1FTE x 25 days = $20K **Most Likely:** Analog lines, No fire panels, purchase analog gear - 4 V6450 @$10K ea., 250 handsets @ $250 ea. 250 licenses @ $250 ea., 3 FTE x 25 days = $60K **Worst Case** • Rearchitect voice system to include RWMC, INTEC, Town local services. Deploy VM hosts for voice to RWMC and INTEC. 150,000 hardware, labor 1.5 FTEs, 9 months • Transition analog services. Purchase and deploy hardware throughout buildings. $350,000 hardware, $150,000 copper infrastructure, 1.5 >FTEs 6 months Services • Monthly services for SIP/PRI lines. Add $2000 per month. Costs to get SIP services to RWMC and INTEC are reliant on fiber build-out. Ongoing - 1 FTE - voice engineer Total Labor: 3 FTEs 9 months Total Materials/Services: $650,000 Monthly: $2k	Propose share with DOE.	N/A	N/A	N/A	BEA currently provides these services to IEC. IEC would have to create the infrastructure needed to support these services on our own. Our response actions would be to build the infrastructure needed to support. IEC IT would have to rearchitect our voice system for redundancy and to relocate to INTEC and RWMC. We would need to extend our current services to INTEC and RWMC. We would need to develop in-house support for analog services.
IT317	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Internet is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides internet services for IEC. IEC IT would have to procure internet services from two providers. This requires re-IPing 11000+ IP addresses and procuring external DNS services.	BEA discontinues voice services to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 2,342,000	$ 2,342,000	$ 2,342,000	416	416	416	Activities Re-IP Internally, 2 years, 2 FTEs, ICS/DCS impacts /28 external (IPv4), IPv6 /40 $200 year. IF internet services, 10G 1,500 per Gb, 15k per month Arco Internet services and fiber build, 10G 1500 per Gb, 15k per month Hardware: border routers, $250,000, 2 HA pairs for second internet link $1,000,000 DNS service, cost? Edge Security, Cyber FTE Total Labor: 3.5 FTEs, 2 years Total Materials/Services: $1.25M Monthly: $30k	Propose share with DOE.	N/A	N/A	N/A	BEA currently provides these services to IEC. IEC would have to procure internet services on our own.
IT318	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Land Mobile Radios is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA maintains land mobile radio services for IEC in site areas. IEC IT would have to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider. We do not know the cost to install radio repeaters. IEC IT does not currently have the expertise to support this service.	BEA discontinues land mobile radio services to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 656,000	$ 656,000	$ 656,000	208	208	208	Activities $400,000 gear purchase, 3k per month service Repeater install costs $100k + Handset costs, 3k per radio. Currently 75+ radios out in the field. Total Labor: 1 FTEs, 1 year Total Materials/Services: $500k Ongoing costs: 2FTEs ongoing Monthly: $3k	Propose share with DOE.	N/A	N/A	N/A	Our response actions would be to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider. We do not know the cost to install radio repeaters. IEC IT does not currently have the expertise to support this service. BEA currently provides these services to IEC. IEC would have to would have to engage a local commercial LMR provider, purchase new LMR radios for ICP staff supported by LMR service provider.
IT319	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Computer Account Provisioning is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides computer account provisioning services for IEC. IEC IT would need to procure and implement a new identity management software system. This would require a rearchitect of user onboarding and termination workflows to integrate with current systems.	BEA discontinues computer account provisioning services to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 1,218,000	$ 1,218,000	$ 1,218,000	208	208	208	Activities • Evaluation of current ICP/BEA integration, 3 FTEs 6 months • Replacement of BEA services, 3 FTEs 6 months • User Identity Management Software Procurement and Implementation $750,000 • Additional FTE ongoing	Propose share with DOE.	N/A	N/A	N/A	BEA currently provides these services to IEC. This would require a rearchitect of user onboarding and termination workflows to integrate with current systems. Our response actions would be to rearchitect the user onboarding and termination workflows to integrate with current systems.
IT321	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Computer Account Provisioning is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic services for computer network connectivity to from town to the site. This would require IEC IT to procure fiber optic strands from a service provider to connect our town facilities to the site.	BEA discontinues fiber optic services for computer network connectivity to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Major	4-High	$ 800,000	$ 800,000	$ 800,000	96	96	96	RWMC Turn to N 35th W $22 /strand/mile/Month $500 /month Maintenances About 44 Miles We would need 4 strands Total would be $6000 per Month Some City of Idaho Falls Fiber work to get from N35th W to our network $100K in build cost and a $500 / Month Equipment costs - $700k Site to town: $800k and $6500 / month	Propose share with DOE.	N/A	N/A	N/A	This would require IEC IT to procure fiber optic strands from a service provider to connect our town facilities to the site.
IT322	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Fiber Service to RWMC is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic service to the RWMC campus. This would require IEC IT to buny new fiber cable from the highway to the RWMC campus.	BEA discontinues fiber optic services for computer network connectivity to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 340,000	$ 340,000	$ 340,000	208	208	208	Underground work could be completed in 1 year. Above ground work will take up to 2 years for permits Underground $10 / foot RWMC to Highway 19k feet cost would be about $190,000 Would need to keep a maintenance cost on the cable. $500 / month equipment cost -$150k	Propose share with DOE.	N/A	N/A	N/A	This would require IEC IT to bury new fiber cable from the highway to the RWMC campus.
IT323	TO3.2	K.1.02.04.02	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: BEA Optional Service for Fiber Service to INTEC and NRF is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides fiber optic service to the INTEC and NRF campus. This would require IEC IT to bury new fiber cable from the highway to NRF and INTEC.	BEA discontinues fiber optic services for computer network connectivity to IEC.	IND-K102040226, IND-K102040227	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 1,100,000	$ 1,100,000	$ 1,100,000	208	208	208	NRF picking up INTEC Underground work could be completed in 1 year. Above ground work will take up to 2 years for permits Highway to INTEC to NRF about 90k feet cost would be about $950,000 Would need to keep a maintenance cost on the cable. $500 / month Equipment cost - $150k	Propose share with DOE.	N/A	N/A	N/A	This would require IEC IT to bury new fiber cable from the highway to NRF and INTEC.

IT324	TO3.2	K.1.02.04.02	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: Unforeseen Structural Issues During Operations	Unforeseen structural issues would require involving our facilities and the schedule is at risk of being pushed to their timeline. The expectation is minimal structural issues, a sizeable structural concern will cause delays, possible engineering contractors, structural contractors, electricians, and increased costs.	A sizeable structural concern is discovered.	IND-K102040226, IND-K102040227	Open	Threat	Accept	0.18	Unlikely	Critical	3-Moderate	$ 320,000	$ 960,000	$ 1,920,000	40	120	240	**Best Case**: 40 days x 10 hrs/day x 4 FTEs x $200/hr = $320,000 **Most Likely**: 120 days x 10 hrs/day x 4 FTEs x $200/hr = $960,000 **Worst Case**: 240 days x 10 hrs/day x 4 FTEs x $200/hr = $1,920,000	N/A	N/A	N/A	N/A	N/A	This risk was previously identified under IT005.
IT325	TO3.2	D.6.02.37	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Direct IT -IPv6: Incompatibility of Software and/or Hardware	Incompatibility of software and hardware with IPv6 Upgrade.	Software/Hardware is incompatible.	A1980, A2010, A2060	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 216,000	$ 576,000	$ 1,296,000	24	64	144	**Best Case**: 24 days x 10 hrs/day x 4 FTEs x $225/hr = $216,000 **Most Likely**: 64 days x 10 hrs/day x 4 FTEs x $225/hr = $576,000 **Worst Case**: 144 days x 10 hrs/day x 4 FTEs x $225/hr = $1,296,000	N/A	N/A	N/A	N/A	N/A	This risk was previously identified under IT011.
IT327	TO3.2	K.1.02.04.04	IEC/DOE	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Enterprise Architecture: BEA Optional Service for All Software is Discontinued	An effort is underway to remove optional services from the BEA -IEC agreement. BEA provides services to at least 47 applications used by IEC, including TRAIN, EDMS, and Argus. In order to replace these applications, IEC IT would have to purchase off-the-shelf software or create custom applications. IT would have to staff up and purchase equipment for that staff.	BEA discontinues application services to IEC.	IND-K102040335, IND-K102040345	Open	Threat	Share	0.5	Possible	Critical	4-High	$ 15,403,914	$ 63,652,050	$ 94,088,772	416	416	416	In November 2024, talks were underway between BEA and IEC to remove IEC from BEA's TRAIN system as they upgraded to a LMS service provider. IEC IT created a ROM at that time to calculate the impact of IEC creating their own TRAIN system. We are using that impact study to estimate the impact of the taking over the remaining 46 apps from BEA. This impact is for the first two years of the software take over.* Best Case (each application takes 10% of the effort of the TRAIN estimate) Labor = 2 years * 37 developers * $206,661 average annual salary = $15,292,914 Equipment = 37 PC's, monitors, etc. * $3000 ea. = $111,000 Total Best Case = $15,403,914 and 2 years Most Likely Case (each application takes 66% of the effort of the TRAIN estimate) Labor = 2 years * 154 developers * $206,661 average annual salary = $63,651,588 Equipment = 154 PC's, monitors, etc. * $3000 ea. = $462,000 Total most likely case = $63,652,050 and 2 years Worst Case (each application takes best guess estimate the % effort of the TRAIN estimate) Labor = 2 years * 226 developers * $206,661 average annual salary = $93,410,772 Equipment = 226 PC's, monitors, etc. * $3000 ea. = $678,000 Total Worst Case = $94,088,772 and 2 years *These impacts were scaled to fit the constraints of a Task Order but the full impacts are as follows: Best Case (each application takes 10% of the effort of the TRAIN estimate) Labor = 4 years * 37 developers * $206,661 average annual salary = [illegible]	Propose share with DOE.	N/A	N/A	N/A	N/A	This risk was previously identified under IT320.
IT328	TO3.2	K.1.02.04.02	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: Sourcing Hardware	Due to supporting legacy and aging systems needed for on-going operations, items needed may be discontinued by the manufacturer. Cannot locate items that are of limited supply.	Unable to source Hardware.	IND-K102040226, IND-K102040227	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 216,000	$ 576,000	$ 1,296,000	24	64	144	**Best Case**: 24 days x 10 hr /day x 4 FTEs x $225/hr.= $216,000 **Most Likely**: 64 days x 10 hr /day x 4 FTEs x $225/hr.= $576,000 **Worst Case**: 144 days x 10 hr /day x 4 FTEs x $225/hr.= $1,296,000	N/A	N/A	N/A	N/A	N/A	This Risk was previously identified under IT012.
IT329	TO3.2	K.1.02.04.02, K.1.02.04.03, K.1.02.04.04	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Information Technology: Unforeseen Technical Issues	Unforeseen technical issues or major failures can impact the planned schedule, e.g., ransomware.	Technical issues or major failures occur.	IND-K102040226, IND-K102040227, IND-K102040335, IND-K102040345, IND-K102040426, IND-K102040427	Open	Threat	Accept	0.5	Possible	Critical	4-High	$ 288,000	$ 864,000	$ 1,728,000	36	108	216	**Best Case**: 36days x 10 hr./day x 4 FTEs x $200/hr.= $288,000 **Most Likely**: 108 days x 10 hr./day x 4 FTEs x $200/hr.= $864,000 **Worst Case**: 216days x 10 hr./day x 4 FTEs x $200/hr.= $1,728,000	N/A	N/A	N/A	N/A	N/A	This risk was previously identified under IT013.
IT332	TO3.2	K.1.02.04.02, K.1.02.04.03, K.1.02.04.04	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Information Technology: Cyber Vulnerabilities	Cyber Vulnerabilities create an attack vector for hackers to penetrate the network. After penetrating the network, hackers can then steal information, lock the network for ransom, or delete or destroy information.	A hacker is able to penetrate the network.	IND-K102040226, IND-K102040227, IND-K102040335, IND-K102040345, IND-K102040426, IND-K102040427	Open	Threat	Mitigate	0.05	Rare	Moderate	1-Low	$ 1	$ 500,000	$ 10,000,000	0	14	180	Cyber vulnerabilities are potential weaknesses in an organization's cybersecurity defenses that can be exploited by hackers to gain unauthorized access to sensitive information and systems. When these vulnerabilities are not properly addressed, they can lead to a wide range of negative consequences, including data theft, ransomware attacks, and even complete network destruction. Best case: attack is thwarted, no impact Most likely case: Attacker is able to launch an attack resulting in data theft or ransomware. Worst Case: Attacker is a Cyber terrorist, resulting in destruction of the network.	The first strategy is to patch the vulnerable network item. The second is to employ a configuration that removes the attack vector. The third is to place the item behind firewalls to protect them. These strategies are employed daily by the IT staff.	IND-K102040226, IND-K102040227, IND-K102040335, IND-K102040345, IND-K102040426, IND-K102040427	N/A	N/A	N/A	This Risk was previously identified under IT311. To prevent the consequences of cyber vulnerabilities, organizations should take proactive steps to secure their networks and systems. Mitigations include: Implementing access controls Regularly patch software and operating systems Using firewalls and intrusion detection/prevention systems: Implement firewalls and intrusion detection/prevention systems to help identify and block unauthorized access attempts. Conducting regular vulnerability assessments Training employees on cybersecurity best practices Additionally, we should stay up to date with the latest security patches and updates for their software and operating systems (this is work that is preformed daily by IT staff). Finally, it is important for IEC to have a clear understanding of the risks associated with cyber vulnerabilities, and to take proactive steps to mitigate those risks before they become a problem. All this work is preformed daily by IT staff, but new vulnerabilities and events emerge constantly and that poses risk.
IT333	TO3.2	K.1.02.04.02	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Infrastructure and Operations: Aging Wireless Hardware at AMWTP Poses Risk to Operations	The wireless infrastructure (Wi-Fi) at AMWTP used for waste movement, characterization and shipping activities is aging. We no longer have like-for-like spare parts on hand to replace and repair the wireless if the hardware fails.	Aging hardware fails and does not come back up.	IND-K102040226, IND-K102040227	Open	Threat	Accept	0.9	Likely	Moderate	3-Moderate	$ 18,000	$ 293,000	$ 266,000	8	24	24	This justification of impacts DOES NOT account for negative impacts to mission due to operations being impeded or stopped. Worst Case: Both wireless controllers fail at the same time. Two wireless controllers @ $100K ea. = $200K 40 Access Points @ $1.2K ea. = $48K 4 weeks shipping 2 FTE - IT Network Engineers 1 week @ $3K per week = $6K 2 FTE Electricians 2 weeks @ $3K per week = $12K Most Likely: One wireless controller goes down. Wi-Fi is at 50% coverage. IT would reconfigure Wi-Fi to areas for operations as needed. Two wireless controllers @ $100K ea. = $200K 40 Access Points @ $1.2K ea. = $48K 4 weeks shipping 2 FTE - IT Network Engineers 1 week @ $3K per week = $6K 2 FTE Electricians 2 weeks @ $3K per week = $12K .25 FTE IT Network Engineer to reconfigure Wi-Fi 6 weeks @ $3K per week = $4500 Best Case Wi-Fi stays working until it can be replaced. Current plan is to repurpose the SSF Wi-Fi for AMWTP. SSF Wi-Fi is being replaced during Network Refresh project. 2 FTE - IT Network Engineers 1 week @ $3K per week = $6K 2 FTE Electricians 2 weeks @ $3K per week = $12K	N/A	N/A	N/A	N/A	N/A	This risk was previously identified under IT312.
IT334	TO3.2	K.1.02.04.02	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: Disaster at EROB Poses Risk to IEC Data Center	The main IEC Data Center is located in the EROB building. This data center houses the primary servers for the IEC business. This data center also houses the offline ransomware backup system. If a disaster hits the EROB building, such as a fire, much of IEC's business function would be shut down or impaired. Data replication to the site does not cover 100% of the data housed in the data center.	A disaster hits the EROB building, such as a fire.	IND-K102040226, IND-K102040227	Open	Threat	Mitigate	0.25	Unlikely	Major	3-Moderate	$ 306,750	$ 1,412,000	$ 7,420,000	11	24	32	This justification of impacts DOES NOT account for negative impacts to mission due to operations being impeded or stopped. Worst Case: All equipment is destroyed and not salvageable. Storage Array = $1.4M Computing Equipment = $3M Networking Equipment = $1M Ransomware backup = $1.3M 4 weeks shipping 6FTE - IT Network Engineers 4 weeks @ $3K per week = $72K Most Likely: Partial loss of equipment, such as the storage array Storage Array = $1.4M 4 weeks shipping 2 FTE - IT Network Engineers 2 weeks @ $3K per week = $12K Best Case: Network redundancy stays intact, and damaged equipment is ordered and replaced. Equipment = ~$300K 3 FTE - IT Network Engineers 3 days @ $750 per day = $6,750	IEC would find space in existing IEC buildings or lease space to create a new temporary data center until the EROB data center could be reconstructed.	IND-K102040226 RM, IND-K102040227 RM	N/A	N/A	N/A	This risk was previously identified under IT313.
IT335	TO3.2	K.1.02.04.02, D.6.02.3D	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: Aging Fiber at the INTEC Campus Risks Network Outage	Fiber at the INTEC campus between buildings is 20+ years old. Currently, IT fixes communication issues by finding unused strands of fiber that are still functional. The older the fiber becomes the fewer the strands of fiber available. The eventuality is that the fiber will become unusable and new fiber will need to be pulled or trenched to repair communications.	IT will not be able to find usable strands of fiber and will require new fiber to be pulled or trenched.	IND-K102040226, IND-K102040227	Open	Threat	Accept	0.75	Possible	Minor	2-Low	$ 2,000	$ 20,000	$ 200,000	12	16	96	This justification of impacts DOES NOT include impacts to mission due to impeded or stopped operations. Worst case -Multimode trunk damaged that supplies fiber path to multiple buildings with multimode fiber, direct buried. Causing network loss to multiple buildings. Fiber leaving CPP-1631, CPP-659, CPP-698 at highest risk. $200k materials and labor, 4 to 6 months. Most Likely -Single Mode Fiber in existing conduit degraded or damaged causing network loss to a building or buildings. $20k materials and labor, 3 to 4 weeks repair time. Best Case -Legacy fiber installation techniques, i.e. mechanical splice. Lifetime short than life of fiber, causes degraded or full network loss to a building or buildings. $2k materials and labor, and 2 to 3 weeks to repair.	N/A	N/A	N/A	N/A	N/A	This Risk was previously identified under IT314.
IT336	TO3.2	K.1.02.04.02, D.6.02.3D	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND-Infrastructure and Operations: Aging Fiber at RWMC Campus Poses Operational Risk	Fiber at the RWMC campus between buildings is 20+ years old. Currently, IT fixes communication issues by finding unused strands of fiber that are still functional. The older the fiber becomes the fewer the strands of fiber available. The eventuality is that the fiber will become unusable and new fiber will need to be pulled or trenched to repair communications. RWMC/AMWTP has a larger amount of older OM1 multimode fiber which is no longer manufactured. As it continues to degrade and gets damaged it requires full fiber runs to be replace with new single mode fiber. It is also becoming more difficult to run modern network gear as the fiber is out of spec. Switches and fiber optic modules no longer support the slower speeds on this fiber infrastructure.	IT will not be able to find usable strands of fiber and will require new fiber to be pulled or trenched.	IND-K102040226, IND-K102040227	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 2,000	$ 20,000	$ 200,000	12	16	96	This justification of impacts DOES NOT include impacts to mission due to impeded or stopped operations. Worst case -Multimode trunk damaged that supplies fiber path to multiple buildings with multimode fiber, direct buried. Causing network loss to multiple buildings. Fiber leaving CPP-1631, CPP-659, CPP-698 at highest risk. $200k materials and labor, 4 to 6 months. Most Likely -Single Mode Fiber in existing conduit degraded or damaged causing network loss to a building or buildings. $20k materials and labor, 3 to 4 weeks repair time. Best Case -Legacy fiber installation techniques, i.e. mechanical splice. Lifetime short than life of fiber, causes degraded or full network loss to a building or buildings. $2k materials and labor, and 2 to 3 weeks to repair.	N/A	N/A	N/A	N/A	N/A	This risk was previously identified under IT315.
IT338	TO3.2	D.6.03.33	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS AB Implementation: Software Changes Request (SCR) Process Delays	The internal software change request (SCR) process (approvals, documentation, builds) might slow project testing or deployment. Process delays may cause schedule delays.	Change of software or hardware.	D.6.03.33.03.06 D.6.03.33.03.12 D.6.03.33.03.18 D.6.03.33.01.07	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 5,000	$ 10,000	$ 15,000	8	16	24	Schedule Delays **Best case:** 8 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **Most likely case:** 16 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **worst case:** 24 days x 10 HRs x 1 FTE x $ 62.50 hourly rate	Engage the engineering team early in the project to set timelines and necessary resource expectations and scheduling of outage windows as needed. Other activities can be worked concurrently so this risk should not affect the entire schedule.	D.6.03.33.03.01	N/A	N/A	N/A
IT339	TO3.2	D.6.02.3A	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Direct IT Containerization: Acquisition of New Software May Be Delayed/Rejected by the ARB	Any new software necessary for the project will need to be approved by the ARB. The approval process may delay the acquisition of the software causing delays in the schedule. The ARB may also not approve a request which would cause schedule delays while a suitable replacement is found.	Addition of new software tool or library needed for test application development	D.6.02.3A-2.1	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 5,600	$ 11,200	$ 72,800	8	16	104	**Best case:** 8 days x 10 HRs x 1 FTE x $ 70 hourly rate **Most likely case:** 16 days x 10 HRs x 1 FTE x $ 70 hourly rate **Worst case:** 104 days x 10 HRs x 1 FTE x $ 70 hourly rate	Identify probable software tools or libraries that may be needed and present those to ARB before the project start date.	D.6.02.3A-1.04	N/A	N/A	N/A
IT340	TO3.2	D.6.03.33	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS AB Implementation: Engineering Team Outage Windows Aligns with Project Schedule	When working with INTEC and RWMC engineering teams the planned project outage windows may not align with outage windows required by the engineering team. This may cause schedule delays.	Starting execution of project activities that require the ICS teams resources.	D.6.03.33.03.06 D.6.03.33.03.12 D.6.03.33.03.18 D.6.03.33.01.07	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 5,000	$ 5,000	$ 15,000	8	8	24	Schedule Delays **Best case:** 8 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **Most likely case:** 8 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **Worst case:** 24 days x 10 HRs x 1 FTE x $ 62.50 hourly rate	Engage the engineering team early in the project to set timelines and necessary resource expectations and scheduling of outage windows as needed. Other activities can be worked concurrently so this risk should not affect the entire schedule	D.6.03.33.03.01	N/A	N/A	N/A

IT341	TO3.2	D.6.03.33	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS AB Implementation: Availability of Engineering Team Resources	When working with INTEC and RWMC engineering teams the resources needed from those team may have conflicting priorities or are not available to work on the project tasks. This may cause schedule delays.	Starting execution of project activities that require the ICS teams resources.	D.6.03.33.03.06 D.6.03.33.03.12 D.6.03.33.03.18 D.6.03.33.01.07	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 5,000	$ 5,000	$ 15,000	8	8	24	Schedule Delays **Best case:** 8 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **Most likely case:** 8 days x 10 HRs x 1 FTE x $ 62.50 hourly rate **Worst case:** 24 days x 10 HRs x 1 FTE x $ 62.50 hourly rate	Engage the engineering team early in the project to set timelines and necessary resource expectations. Other activities can be worked concurrently so this risk should not affect the entire schedule.	D.6.03.33.03.01	N/A	N/A	N/A
IT342	TO3.2	D.6.02.3A	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Direct IT Containerization: Single Point of Failure For Linux Admin Role	There is only 1 Linux admin resource in IT. Without this resources availability there are no other Linux administrators to complete this project.	The Linux admin leaves the company, goes on std, or some other unexpected absence.	D.6.02..3A-1.04	Open	Threat	Mitigate	0.18	Unlikely	Serious	2-Low	$ 21,000	$ 51,200	$ 83,200	30	60	104	Worse case - Require 2 new developers backfilled with either new employees or subcontractors, historically required multiple passes to find subcontractors able to meet our needs:	There is a training activity in the schedule for 2 resources to mitigate this risk. Also mitigated by working with pro services on architecting and implementing the system.	D.6.02..3A-1.04 D.6.02..3A-1.08 D.6.02..3A-1.09 D.6.02..3A-1.10 D.6.02..3A-1.11 D.6.02..3A-1.13	N/A	N/A	N/A
IT343	TO3.2	D.6.02.37	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Direct IT IPv6: Unknown Windows Operating System Behavior	When enabling the dual stack mode for windows to have both an IPV4 and IPV6 address the windows operating system may exhibit unknown behavior. This may cause schedule delays.	Adding an IPV6 address and enabling dual stack mode on devices running Windows.	A1980, A2010, A2060	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 50,000	$ 150,000	$ 350,000	30	60	180	**Best Case**: 30 days x 10 hrs/day x 2 FTEs x $83/hr (plus materials) **Most Likely**: 60 days x 10 hrs/day x 2 FTEs x $83/hr (plus materials) **Worst Case**: 180 days x 10 hrs/day x 2 FTEs x $83/hr (plus materials)	Testing on the different windows OS versions will be done during the testing phase.	A1860	N/A	N/A	N/A
IT344	TO3.2	D.2.05.30.20	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Waste Tracking - WTS system Upgrade: Vendor Availability Misalignment (WTS PROJECT)	The selected vendor may not be available to start on planned date or may propose a conflicting time. Project launch delays, cascading schedule issues, and increased coordination complexity.	Vendor timeline misaligned with project	WTS-1000	Open	Threat	Mitigate	0.11	Unlikely	Major	3-Moderate	$ 57,600	$ 288,000	$ 960,000	16	80	160	This does not include operational downtime. **Worst Case**: 5 FTE Vendors or consultants- @ $6,000 per day for 160 days= $960,000 **Most Likely**: 3 FTE Vendors or consultants- @ $3,600 per day for 80 days= $288,000 **Best Case**: 3 FTE Vendors or consultants- @ $3,600 per day for 16 days= $57,600	Identify and at vet at least two backup vendors from the RFP process.	WTS-1010	N/A	N/A	Confirm vendor availability during contract negotiation. Include schedule commitment clauses in the contract. Be prepared to choose another vendor if delays are significant or unacceptable.
IT345	TO3.2	D.2.05.30.20	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Waste Tracking - WTS system Upgrade: Vendor Failure or Dropout (WTS PROJECT)	The selected vendor may fail to deliver, go out of business, or withdraw from the project partway through execution. Project delays, increased cost, and loss of prior work progress.	Vendor fails to deliver or drops out	WTS-1000	Open	Threat	Mitigate	0.11	Unlikely	Serious	2-Low	$ -	$ 480,000	$ 1,152,000	30	60	180	This does not include operational downtime. **Worst Case**: 6 FTE Vendors or consultants- @ $7,200 per day for 160 days= $1,152,000 **Most Likely**: 5 FTE Vendors or consultants- @ $6,000 per day for 80 days= $480,000 **Best Case** $0	Identify and at vet at least two back up vendors from the RFP process. Include exit clauses in the contract allowing for reassignment. Consider the option of self-performing if a suitable vendor cannot be reengaged. Ensure clear knowledge transfer and documentation from the vendor throughout the project.	WTS-1010	N/A	N/A	N/A
IT346	TO3.2	D.2.05.30.20	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Waste Tracking - WTS system Upgrade: Operational Down time Constraints	Operational teams may restrict downtime to specific windows (e.g., during curtailment periods). Deployment delays or rescheduling, increased coordination overhead.	Downtime windows missed or shifted	WTS-1020	Open	Threat	Mitigate	0.2	Unlikely	Minor	2-Low	$ -	$ 25,200	$ 960,000	0	7	14	This does not include operational downtime. **Worst Case:** 6 FTE Vendors or consultants- @ $6,000 per day for 14 days= $960,000 **Most Likely**: 3 FTE Vendors or consultants- @ $3,600 per day for 7 days= $25,200 **Best Case**: $0	Proactive Scheduling and planning activities with operations team	WTS-1010	N/A	N/A	Proactive Scheduling and planning activities with operations team. Engage operations early to identify blackout windows. Align rollout phases with permissible outage periods. Build schedule buffers to accommodate operational needs.
IT349	TO3.2	D.6.02.37	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Direct IT IPv6: Ability to Source and Hire Staff Aug/Sub Contractors	For the IPv6 project we need to be able to source and hire staff aug/subcontractors with an appropriate level of knowledge and experience with network switches, firewalls, DNS/DHCP appliances and IPv6 addressing scheme.	Unable to Hire Subs with the appropriate level of experience	A1030	Open	Threat	Mitigate	0.11	Unlikely	Major	3-Moderate	$ 150,000	$ 300,000	$ 1,000,000	30	90	120	Most Likely - Able to backfill developers internally and only requiring onboarding time and have resources from other projects that can change priorities.	Start early on the hiring process Start date to be October 1st 2025. May need to go to professional consulting services which would be more expensive.	A1030RM	N/A	N/A	N/A
IT350	TO3.2	K.1.05.01.08	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND - QLD Software Application Rewrite in Modern Platform: Loss of Skilled Developers Due to Attrition	Loss of experienced team members during development could bring the project to a halt leaving it incomplete and causing schedule delays and potential missed milestones.	Loss of skilled developers.	IND-K1050108.01LOE IND-K1050108.02LOE IND-K1050108.03LOE IND-K1050108.07LOE	Open	Threat	Mitigate	0.11	Unlikely	Minor	2-Low	$ 19,200	$ 19,200	$ 33,600	8	8	120	**Best case:** Able to backfill developers internally and only requiring onboarding time: 2FTE - IT Developers - 8 days x 10 HRs @ $ 120 hourly rate = $19,200 **Most Likely:** Able to backfill developers internally and only requiring onboarding time and have resources from other projects that can change priorities: 2FTE - IT Developers - 8 days x 10 HRs x @ $120 hourly rate = $19,200 **Worse case:** Require 2 new developers backfilled with either new employees or subcontractors, historically required multiple passes to find subcontractors able to meet our needs: 4 Months waiting for talent to apply and be vetted 3FTE - IT Developers for Interviews - 4days x 10 HRs @ $120 hourly rate = $14,400 2FTE - IT Developers - 8 days x 10 HRs x @ $120 hourly rate = $19,200	Backfill developers from among existing team or supplement with subcontractors.	IND-K1050108.01LOE IND-K1050108.02LOE IND-K1050108.03LOE IND-K1050108.07LOE	N/A	N/A	N/A
IT351	TO3.2	K.1.05.01.08	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	IND - QLD Software Application Rewrite in Modern Platform: Security Compliance Risk	Changes in cybersecurity protocols could render the software non-compliant. This could cause changes in cost or delays in schedule.	Increased development scope.	IND-K1050108.03LOE	Open	Threat	Mitigate	0.11	Unlikely	Minor	2-Low	$ 19,200	$ 38,400	$ 115,200	8	16	48	**Best case:** 8 days x 10 Hrs x 2 FTE x $120 hourly rate **Most Likely:** 16 days x 10 Hrs x 2 FTE x $120 hourly rate **Worst Case:** 48 days x 10 Hrs x 2 FTE x $120 hourly rate	Organized development in sprints allowing for changes in requirements along the way.	IND-K1050108.03LOE	N/A	N/A	Build current DOE/IT cybersecurity standards into project assumptions. Maintain communication with cybersecurity team to adapt to changes promptly.
IT354	TO3.2	D.2.05.30.25	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS System Upgrades: Procedural Changes Unaccounted For	Changes to ICS system/WTS forms might require updates to operational procedures, especially for end users. Updates that are not timed correctly may cause schedule delays, noncompliance, confusion among users, and/or rework after deployment.	Operations tries to use the system and realizes it does not align with their procedure.	ICS-WTS-1090	Open	Threat	Mitigate	0.83	Likely	Minor	2-Low	$ 1,200	$ 3,600	$ 12,000	1	3	10	This does not include operational downtime. **Worst Case**: 1 FTE -Vendors or consultants- @ $1,200 per day for 10 days= $12,000 **Most Likely**: 1 FTE -Vendors or consultants- @ $1,200 per day for 3 days= $3,600 **Best Case:** 1 FTE -Vendors or consultants- @ $1,200 per day for 1 day= $1,200	The changes are being implemented in parallel with operational updates to ensure there is no downtime.	ICS-WTS-1050	N/A	N/A	Engage operational SME during UAT to detect necessary changes early. Start drafting or updating procedures concurrently with testing. Plan training sessions based on updated procedures. The changes are being implemented in parallel with operational updates to ensure there is no downtime. Engage operational SME during UAT to detect necessary changes early. Start drafting or updating procedures concurrently with testing. Plan training sessions based on updated procedures.
IT355	TO3.2	D.2.05.30.25	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS System Upgrades: Security and Firewall Issues	External vendors may struggle to access internal systems due to firewall restrictions or lack of secure remote access. This restriction may cause schedule delays. Delays in developing/testing, incomplete deliverables, compliance risks.	External vendors try to access our network and discover they cannot.	ICS-WTS-1090	Open	Threat	Mitigate	0.83	Likely	Moderate	3-Moderate	$ -	$ 64,920	$ 454,440	0	32	224	This does not include operational downtime. **Worst Case:** Travel for 3 FTE vendors or consultants- for 224 days @ $2,705.00 per day = $454,440.00 **Most Likely:** Travel for 3 FTE- vendors or consultants- for 32 days @ $2,705.00 per day = $64,920.00 **Best Case**: $0	Use VPN access to securely connect remote users to the internal network before they arrive onsite.	ICS-WTS-1050	N/A	N/A	Vet vendors for technical capability to work within the site's cyber policies. Include secure remote access solutions in project planning. Work with IT security and infrastructure teams to pre-configure access pathway's.
IT356	TO3.2	D.2.05.30.25	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS System Upgrades: Operational Downtime Constraints	Operational teams may restrict downtime to specific windows (e.g., during curtailment periods). Deployment delays or rescheduling, increased coordination overhead.	Operational needs do not align with the outage requested by the WTS upgrade team, and the outage is scheduled later in the calendar than the project schedule.	ICS-WTS-1090	Open	Threat	Accept	0.83	Likely	Minor	2-Low	$ -	$ 25,200	$ 960,000	0	7	14	This does not include operational downtime. **Worst Case**: 6 FTE Vendors or consultants- @ $6,000 per day for 14 days= $960,000 **Most Likely**: 3 FTE Vendors or consultants- @ $3,600 per day for 7 days= $25,200 **Best Case**: $0	N/A	N/A	N/A	N/A	Engage operations early to identify blackout windows. Align rollout phases with permissible outage periods. Build schedule buffers to accommodate operational needs. Proactive Scheduling and planning activities with operations team.
IT357	TO3.2	D.2.05.30.25	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS System Upgrades: Vendor Availability Misalignment	The selected vendor may not be available to start on planned date or may propose a conflicting time. Project launch delays, cascading schedule issues, and increased coordination complexity.	Vendor availability does not align with the project schedule.	ICS-WTS-1060	Open	Threat	Mitigate	0.11	Unlikely	Major	3-Moderate	$ 57,600	$ 288,000	$ 960,000	16	80	160	This does not include operational downtime. **Worst Case**: 5 FTE Vendors or consultants- @ $6,000 per day for 160 days= $960,000 **Most Likely**: 3 FTE Vendors or consultants- @ $3,600 per day for 80 days= $288,000 **Best Case**: 3 FTE Vendors or consultants- @ $3,600 per day for 16 days= $57,600	Identify and at vet at least two backup vendors from the RFP process. Identify and at vet at least two backup vendors from the RFP process.	ICS-WTS-1060	N/A	N/A	Confirm vendor availability during contract negotiation. Include schedule commitment clauses in the contract. Be prepared to choose another vendor if delays are significant or unacceptable.
IT358	TO3.2	D.2.05.30.25	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	ICS System Upgrades: Vendor Failure Dropout	The selected vendor may fail to deliver, go out of business, or withdraw from the project partway through execution. Project delays, increased cost, and loss of prior work progress.	Vendor Fails to deliver or drops out.	ICS-WTS-1050	Open	Threat	Mitigate	0.11	Unlikely	Major	3-Moderate	$ -	$ 480,000	$ 1,152,000	16	80	160	This does not include operational downtime. **Worst Case**: 6 FTE Vendors or consultants- @ $7,200 per day for 160 days= $1,152,000 **Most Likely**: 5 FTE Vendors or consultants- @ $6,000 per day for 80 days= $480,000 **Best Case:** $0	Maintain a list of at least two backup vendors from the RFP process. Include exit clauses in the contract allowing for reassignment. Consider the option of self-performing if a suitable vendor cannot be reengaged. Ensure clear knowledge transfer and documentation from the vendor throughout the project .	ICS-WTS-1060	N/A	N/A	N/A
IT359	TO3.2	D.6.03.35	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Zero Trust: Integration With Existing Systems	Risk of incompatibility or policy conflicts with legacy systems. May require additional time or resources to resolve.	Incompatible legacy systems.	ZT1.2-STD	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 24,000	$ 96,000	$ 691,200	4	8	96	**Best Case**: Small delay on complexity of configuration 1 FTE - IT Cybersecurity - 4 days @ $1,200 per day = $4,800 2 FTE's - IT Server Ops - 4 days @ $1,200 per day = $9,600 2 FTE's - ICS Engineer - 4 days @ $1,200 per day = $9,600 **Most Likely:** Delay on complexity of configuration 1 FTE - IT Cybersecurity - 16 days @ $1,200 per day = $19,200 2 FTE's - IT Server Ops - 16 day @ $1,200 per day = $38,400 2 FTE's - ICS Engineer - 16 day @ $1,200 per day = $38,400 **Worst Case:** Substantial Delay on complexity of configuration 2 FTE's - IT Cybersecurity - 96 days @ $1,200 per day = $230,400 2 FTE's - IT Server Ops - 96 day @ $1,200 per day = $230,400 2 FTE's - ICS Engineer - 96 day @ $1,200 per day = $230,400	Conduct a pre-implementation assessment to flag potential gaps.	ZT1.4-LAM	N/A	N/A	N/A
IT360	TO3.2	D.6.03.35	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Zero Trust: Implementation Complexity	Zero Trust models can be complex to configure across different systems and networks. Risk of misalignment with existing infrastructure or delayed enforcement. This would cause schedule delays.	Unforeseen Complexity is experienced while implementing Zero Trust.	ZT1.2-STD	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 14,400	$ 57,600	$ 345,600	4	16	96	**Best Case**: Small delay on complexity of configuration 1 FTE - IT Cybersecurity - 4 days @ $1,200 per day = $4,800 1 FTE - IT Server Ops - 4 days @ $1,200 per day = $4,800 1 FTE - ICS Engineer - 4 days @ $1,200 per day = $4,800 **Most Likely:** Delay on complexity of configuration 1 FTE - IT Cybersecurity - 16 days @ $1,200 per day = $19,200 1 FTE - IT Server Ops - 16 day @ $1,200 per day = $19,200 1 FTE - ICS Engineer - 16 day @ $1,200 per day = $19,200 **Worst Case**: Substantial Delay on complexity of configuration 1 FTE - IT Cybersecurity - 96 days @ $1,200 per day = $115,200 1 FTE - IT Server Ops - 96 day @ $1,200 per day = $115,200 1 FTE - ICS Engineer - 96 day @ $1,200 per day = $115,200	Engage experienced security personnel or vendors for deployment planning.	ZT1.4-LAM	N/A	N/A	N/A
IT363	TO3.2	D.2.05.30.20	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Waste Tracking - WTS system Upgrade: Procedural Changes Unaccounted For	Changes to WTS forms might require updates to operational procedures, especially for end users. Updates that are not timed correctly may cause schedule delays, noncompliance, confusion among users, and/or rework after deployment.	Procedure changes identified late in the process	WTS-1030	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 1,200	$ 3,600	$ 12,000	1	3	10	This does not include operational downtime. **Worst Case**: 1 FTE -Vendors or consultants- @ $1,200 per day for 10 days= $1,200 **Most Likely**: 1 FTE -Vendors or consultants- @ $1,200 per day for 3 days= $36,000 **Best Case**: 1 FTE -Vendors or consultants- @ $1,200 per day for 1 day= $12,000	The changes are being implemented in parallel with operational updates to ensure there is no downtime.	WTS-1000	N/A	N/A	The changes are being implemented in parallel with operational updates to ensure there is no downtime. Engage operational SME during UAT to detect necessary changes early. Start drafting or updating procedures concurrently with testing. Plan training sessions based on updated procedures.
IT364	TO3.2	D.2.05.30.20	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	Waste Tracking - WTS system Upgrade: Security and Firewall Issues	External vendors may struggle to access internal systems due to firewall restrictions or lack of secure remote access. Delays in developing/testing, incomplete deliverables, compliance risks.	Firewall or access control blocks vendor activities	WTS-1020	Open	Threat	Mitigate	0.3	Possible	Moderate	2-Low	$ -	$ 64,920	$ 454,440	0	32	32	This does not include operational downtime. Worst Case: Travel for 3 FTE vendors or consultants- for 224 days @ $2,705.00 per day = $454,440.00 **Most Likely:** Travel for 3 FTE- vendors or consultants- for 32 days @ $2,705.00 per day = $64,920.00 Best Case: $0	Use VPN access to securely connect remote users to the internal network before they arrive onsite. Use VPN access to securely connect remote users to the internal network before they arrive onsite.	WTS-1000	N/A	N/A	Vet vendors for technical capability to work within the site's cyber policies. Include secure remote access solutions in project planning. Work with IT security and infrastructure teams to pre-configure access pathways. Use VPN access to securely connect remote users to the internal network before they arrive onsite.
IT365	TO3.2	D.6.02.34	IEC	Anderson, Jade Michael	O'Malley, Russell Wayne	EBI DATA Center CSN Refresh: Back up System End of Life End of Support.	The DELL Avamar IDPA and Data Domain are End of Life (EoL) and End of Support (EoS) in August 2026. Without active software and hardware support there is a significant risk that a system failure is unrecoverable with DELL technicians and engineers. In the past we have relied heavily on support to apply security patches and recover from failures. These appliances are complex systems and have a variety of hardware and software components. Many of these components require root access that only DELL has. In the case of an unrecoverable failure, ICP would lose the ability to backup or restore servers, including servers that contain over 20TB of data. SQL Server and Oracle databases would also not be able to be backed up or restored. This would be realized within two days of a failure as Oracle DBs require log archives to occur to prevent hard disks from getting full and causing database servers to crash. The EROB backup system also manages offsite replication and an entry point for data into the DELL Cyber Vault malware/ransomware solution. These would also become non-functional.	Hardware or software failure after August 2026.	TBD	Open	Threat	Accept	1	Almost Certain	Critical	5-Very High	$ 1,000,000	$ 2,000,000	$ 12,000,000	48	128	312	Best Case: Single component goes down and are able to source it out and fix it. Most Likely: Have replacement system completed before August. Worst Case: Total system failure after August 2026 along with the loss of critical data, would result in an operational shutdown until a new system can be implemented and lost data manually re-entered.	N/A	N/A	N/A	N/A	N/A

LWFC302	TO3.2	D.3.04.31.09	IEC	DeMott, Ryan Blake	Neville, Trent Scott	LWF Closure: Unforeseen Radiological Incident and/or Loss of Contamination Control	An unexpected radiological incident and/or loss of contamination control outside the controlled area during processing of Sodium Bearing Waste (SBW) may result in personnel decontamination and extended shutdown/recovery actions.	Unexpected loss of contamination or increase in dose rates during processing.	N/A	Open	Threat	Accept	0.2	Unlikely	Major	3-Moderate	$ 50,000	$ 100,000	$ 4,000,000	96	96	416	Additional resources needed to perform decontamination efforts.	N/A	N/A	N/A	N/A	N/A
LWFC303	TO3.2	D.3.04.31.09	IEC	DeMott, Ryan Blake	Neville, Trent Scott	LWF Closure: Critical Legacy Equipment/Infrastructure Failure	Liquid Waste Facility (LWF) has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failure of legacy infrastructure or equipment.	TF304310926 TF304310927	Open	Threat	Mitigate	0.95	Almost Certain	Moderate	4-High	$ 50,000	$ 100,000	$ 200,000	12	24	48	Impacts adjusted forecasting what has been realized over the last 2-year contract.	Perform schedule periodic maintenance.	TF304310926RM TF304310927RM	N/A	N/A	N/A
RHTRU302	TO3.2	D.2.04.30.14	IEC	O'Connell, Thomas Abiah	Larsen, Rotjanee	Processing Operations: RH-TRU Waste Disposition: Achieving FY26/27 Processing Lot 11 Containers Due to Critical Failure of Equipment	Achievement of the FY26 of processing 10 Lot 11 containers and the FY27 of processing 10 Lot 11 containers, due to critical failure of equipment, impacts the Idaho Settlement Agreement (ISA) and Delay to site treatment plan scheduled agreement with DEQ to have all the STP waste out of the State of Idaho.	Critical failure of facility support equipment and lack of funding specific to: 1. Procure manipulators 2. Design, procure, and modify FDPA in-cell crane from analog to digital.	RHTRU-OPS-5000, RHTRU-OPS-5010, RHTRU-OPS-5020, RHTRU-OPS-5030, RHTRU-OPS-5040, RHTRU-OPS-5050, RHTRU-OPS-5060,	Open	Threat	Accept	0.18	Unlikely	Moderate	2-Low	$ 200,000	$ 300,000	$ 600,000	16	32	64	Costs are based on fees associated with missed delivery dates. **Best Case**: 16 days down time X 20 FTEs x $41.50/hr. X 10hr. = $132,800 + fee **Most Likely**: 32 days down time x 20 FTES X $41.50/hr. X 10hr. = $265,600 + fee **Worst Case**: 64 days down time x 20 FTES X $41.50/hr. X 10hr. = $531,200 + fee	N/A	N/A	N/A	N/A	This was previously identified under RHTRU001R2.
RHTRU303	TO3.2	D.2.04.30.14	IEC	O'Connell, Thomas Abiah	Larsen, Rotjanee	Processing Operations: Achieving FY26/27 Milestones for Processing Lot 11 Containers Due to Complex Geometries	Achievement of the FY26-27 milestone of processing 10 Lot 11 containers, due to inability to treat sodium in waste with complex geometries, impacts the Idaho Settlement Agreement (ISA) and Delay to site treatment plan scheduled agreement with DEQ to have all the STP waste out of the State of Idaho.	Complex geometries containing sodium or waste containing significant quantities (100g) of NaK are found in repackaging Lot 11 waste.	RHTRU-OPS-5000, RHTRU-OPS-5010, RHTRU-OPS-5020, RHTRU-OPS-5030, RHTRU-OPS-5040, RHTRU-OPS-5050, RHTRU-OPS-5060,	Open	Threat	Accept	0.18	Unlikely	Minor	2-Low	$ 16,600	$ 33,200	$ 66,400	8	16	32	Schedule impact is based off SDS system being down and in need of repair. **Best Case**: 8 days down time X 5 FTEs X $41.50/hr. X 10hr. = $16,600 **Most Likely**: 16 days down time x 5 FTES X $41.50/hr. X 10hr. = $33,200 **Worst Case**: 32 days down time x 5 FTES X $41.50/hr. X 10hr. = $66,400	N/A	N/A	N/A	N/A	This was previously identified under RHTRU002R2.
RHTRU304	TO3.2	D.2.04.30.14	IEC	O'Connell, Thomas Abiah	Larsen, Rotjanee	Processing Operations: Processing Lot 11 Containers	Processing lot 11 containers are taking longer than planned due to inaccurate generator information. Causing the use of OT to catch up.	Inaccurate generator information.	RHTRU-OPS-5000, RHTRU-OPS-5010, RHTRU-OPS-5020, RHTRU-OPS-5030, RHTRU-OPS-5040, RHTRU-OPS-5050, RHTRU-OPS-5060,	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 99,600	$ 199,200	$ 398,400	8	16	32	**Best Case**: 8 days OT X 20 FTEs X $41.50/hr. X 10hr. X 1.5 OT = $99,600 **Most Likely**: 16 days OT X 20 FTEs X $41.50/hr. X 10hr. X 1.5 OT = $199,200 **Worst Case**: 32 days OT X 20 FTEs X $41.50/hr. X 10hr. X 1.5 OT = $398,400	Implement overtime to recover schedule slippage and reduce further schedule interruptions.	RHTRU-FY26-RM, RHTRU-FY27-RM	N/A	N/A	This was previously identified under RHTRU003.
RHTRU305	TO3.2	D.2.04.30.14	IEC/DOE	O'Connell, Thomas Abiah	Larsen, Rotjanee	Processing Operations: Containers for FY25 PBI.	BEA is responsible for all activities required to prepare waste for shipment. Battle Energy Alliance, LLC (BEA) is not able to provide containers to process enough waste to meet the current PBI.	Containers from BEA unavailable.	RHTRU-OPS-5000, Alliance, LLC (BEA) is not able to provide containers to process enough waste to meet the current PBI. RHTRU-OPS-5010, RHTRU-OPS-5020, RHTRU-OPS-5030, RHTRU-OPS-5040, RHTRU-OPS-5050, RHTRU-OPS-5060,	Open	Threat	Share	0.5	Possible	Serious	3-Moderate	$ 300,000	$ 441,500	$ 653,750	16	48	96	Cost is based off delays for containers. **Best case** 1 Month 4 Additional containers. **Most Likely** 3 months 2 original containers plus 4 additional containers. **Worst case** 6 months 5 original containers and 4 additional containers.	Propose share with DOE.	N/A	N/A	N/A	This was previously identified under RHTRU301.
SNF042	TO3.2	D.1.04.02.02, D.1.04.02.06	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Security System and Facility Design Contract	There are two design aspects considered for the ID SNF-SF: 1) BEA will perform the security design for the ID SNF-SF, 2) The SNF-SF pad design will be performed via subcontract. Work performed for the interdependent designs exceed scheduled duration(s).	Agreements/contracts are not established as planned. The designs do not maintain the schedule duration. BEA does not perform the security design causing for additional time to setup a contract.	SNFSF03225	Open	Threat	Mitigate	0.5	Possible	Moderate	2-Low	$ 200,000	$ 500,000	$ 1,000,000	24	32	56	Develop a second SOW, work through a second contract through subcontract administration. Additional coordination for IEC to manage two engineering firms and process paperwork. **Best Case**: 2 weeks @ 40hr./week x 1 FTE @ $100/hr.+ 4 weeks @ 95 hr. for sub administration @ $80/hr. **Most Likely**: 4 weeks @ 40hr./week x 1.5 FTE @ $100/hr.+4 weeks @ 95 hr. for sub administration @ $80/hr. **Worst Case**: 8 weeks @ 40hr./week x 2 FTE @ $100/hr.+ 6 weeks @ 95 hr. for sub administration @ $80/hr.	Work with BEA to perform the design work via a formal agreement. Work with an external engineering firm to provide the pad design. Coordinate durations in both agreements.	SNFSF04100	N/A	N/A	N/A	None
SNF312	TO3.2	D.1.04.02.01	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Readiness Assessment Evaluation	If during preliminary MCP-2783 screening it is determined that a graded readiness assessment is acceptable it will result in positive cost and schedule variances.	MCP-2783 screening shows that an ORR or RA is not required.	SNFSF15593	Open	Opportunity	Accept	0.25	Unlikely	Moderate	2-Low	$ (720,000)	$ (450,000)	$ (270,000)	(48)	(32)	(16)	Approximately $1.8M is carried in the detailed cost estimate. The cost will be reduced by 15% for a worst case, 25% for most likely, and 40% for best case.	N/A	N/A	N/A	N/A	Perform a management review of MCP-2783 and MCP-2811 under SNFSF10000LOE to better understand the turnover plan and requirements.
SNF315	TO3.2	D.1.04.02.02, D.1.04.02.05	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Storm Water Retention Capacity	Adding 2.75 acres of impervious surface causes redesign and additional capacity for storm water retention.	During design it is identified that existing storm water canals do not have capacity for the additional required accumulation.	SNFSF03500	Open	Threat	Mitigate	0.2	Unlikely	Serious	2-Low	$ 50,000	$ 100,000	$ 250,000	28	56	112	Increase the depth of a water retention area or increase the area to accommodate additional water as needed.	Increase capacity of the storm water canals.	SNFSF03600	N/A	N/A	N/A
SNF316	TO3.2	D.1.04.05.03	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Earned Value Management System Certification	Earned Value Management System (EVMS) certification is not acquired by IEC prior to the CD-2/3 submittal being sent to DOE ICP for approval.	EVMS certification duration exceeds the SNF-SF CD-2/3 submittal date.	SNFSF10600	Open	Threat	Accept	0.3	Possible	Serious	3-Moderate	$ 200,000	$ 500,000	$ 750,000	32	64	100	IEC has been working EVMS. They have been built to EIA-748 and should be setup for certification. Additional team members are required to confirm that the procedures and progress of the Staging Facility are appropriate to get certified.	N/A	N/A	N/A	N/A	IEC pursues EVMS certification independent of the SNF-SF requirement prior to FY26. DOE approves/acknowledges the EVMS certification in FY26. Ryan Christensen and the IEC team are currently pursuing this certification. IEC pursues a permissible EVMS waiver considering EVMS compliance has been achieved.
SNF317	TO3.2	D.1.04.02.10	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Vendor Equipment DSA Incorporation	Existing, off-the-shelf, storage overpacks and systems will not be accepted into our safety basis (SAR-112 and SAR-114) without additional analysis.	IEC safety basis requires design changes to accommodate existing equipment (e.g. additional analysis, drop/lift analysis).	SNFSF05506, SNFSF05155VT	Open	Threat	Mitigate	0.2	Unlikely	Major	3-Moderate	$ 100,000	$ 250,000	$ 500,000	48	96	312	Additional analysis for vendor equipment is required for DSA incorporation. A fraction of the DSA development cost was used as a basis for the impacts.	Continual coordination between IEC nuclear safety and the vendor during CD-2/3 development.	SNFSF05520	N/A	N/A	See conceptual design report section 5.3.1. Continual coordination between IEC nuclear safety and the vendor during CD-2/3 development.
SNF318	TO3.2	D.1.04.02.10, D.1.04.02.05	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Radiological Dose Rate Mitigation	Radiological dose rates extend beyond the SNF-Staging Facility fenced area.	During design it is proven that radiological dose extends beyond the fenced facility area.	SNFSF05506	Open	Threat	Mitigate	0.15	Unlikely	Serious	2-Low	$ 250,000	$ 400,000	$ 750,000	32	48	96	Shielding is required around the perimeter of the facility.	Include shielding as to stop dose from extending beyond the fenced area, during design. Other facilities do not need shielding.	SNFSF03500	N/A	N/A	N/A
SNF319	TO3.2	D.1.04.02.10	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Submittal Safety Basis for CD-2/3 is Delayed	The submittal of SNF-Staging Facility safety basis to support CD-2/3 is delayed.	Design requirements/changes impact hazards analysis resulting in added safety controls which is driven by failed analysis. Nuclear safety documentation deficiencies (e.g., misalignment with DOE-HQ expectations). DOE review comments require change to nuclear safety design strategy.	SNFSF05520	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 60,000	$ 100,000	$ 225,000	40	60	100	Based on detailed cost estimate for comment resolution. Best Case: 1 additional iteration Most Likely: 2 additional iterations Worst Case: Reproduce PDSA	SDIT meetings between nuclear safety, engineering, design agent, and operations Perform design reviews and delta hazards analysis at 30/60/90% design to ensure alignment between design and hazards analysis to identify any impacts early SNF-SF design is based on current CPP-2707 design and ISFSI designs Maintain regular communication with DOE ICP through SDIT and CIPT meetings, request early feedback from DOE HQ on nuclear safety documentation Maintain regular communication with DOE ICP through SDIT and CIPT meetings, request early feedback from DOE HQ on nuclear safety documentation SNF-SF nuclear safety control strategy is based on current DSA(s) named SAR-112 and SAR-114 Continue to coordinate with DOE ICP to maintain 10CFR830 as the regulatory framework Maintain regular communication between the IPT and CIPT	SNFSF05520RM	N/A	N/A	N/A
SNF321	TO3.2	D.1.04.02.05	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Pad Elevation (Design)	During design, the elevation of the SNF-Staging Facility pad is optimized to reduce the amount of earthwork.	Preliminary design evaluation shows that existing facilities' elevations allow for the top of pad elevation to be high enough to reduce the majority of flatwork excavations while not exceeding sloping restrictions.	SNFSF03450	Open	Opportunity	Exploit	0.1	Rare	Serious	2-Low	$ (750,000)	$ (625,000)	$ (200,000)	(30)	(16)	(8)	The total excavation is approximately 8,500 CY. 2700 CY is required to the CTS and surrounding area. In theory 5,800 CY of excavation may be reduced. In lieu of excavating contaminated soil and hauling the soil to ICDF for proper remediation, an additional 11,000 CY of import would be needed. It is assumed that mass excavation is more expensive by $125 per CY. If 5,000 CY is removed from export and causes for 5,000 CY additional import Most Likely cost saving is 75625,000. There is likely schedule saving of 1 month.	N/A	N/A	N/A	N/A	N/A
SNF326	TO3.2	D.1.02.36.16	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Delay of Items Provided by Holtec	A delay in the delivery of Holtec long lead items (HI-STAR) will cause a significant delay to the Road Ready Demonstration Project.	Holtec unable to receive material or fabricate long lead items according to IEC Schedule.	RRDP-16050	Open	Threat	Mitigate	0.5	Possible	Major	4-High	$ 750,000	$ 1,500,000	$ 3,000,000	48	96	192	**Best Case**: Subcontractor has minimal delay causing a delay to overall project. **Most Likely**: Subcontractor has significant delay causing a delay to overall project. **Worst Case**: Subcontractor is unable to meet schedule requiring major replan of project. The costs listed from delays are based on a $13k/day cost to operate a SNF crew. IEC will address crew reassignment in order to minimize cost impact.	Long lead items will be identified once contract is in place. IEC to work with Holtec to identify possible delays due to supply chain issues. Also mitigating by purchasing long lead items at risk to minimize impacts to schedule The costs listed from delays are based on a $13k/day cost to operate a SNF crew. IEC will address crew reassignment in order to minimize cost impact	RRDP-16050RM	N/A	N/A	Updated Mitigation Actions 2/26/25
SNF327	TO3.2	D.1.02.36.24	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Delay of Delivery of DOESCs	A delay in the delivery of DOE Standard Canisters (DOESC) will cause a delay to the Road Ready Demonstration Project.	DOESC fabrication not completed according to IEC/BEA schedule.	RRDP24125	Open	Threat	Share	0.5	Possible	Major	4-High	$ 750,000	$ 1,500,000	$ 3,000,000	48	96	192	**Best case:** Delivery of DOESC is minimally delayed causing a delay in the overall project. **Most Likely:** Delivery of DOESC is significantly delayed causing a delay in the overall project. **Worst Case:** Delivery of DOESC is unable to meet project needs requiring a replan of overall project.	Propose share with DOE.	N/A	N/A	N/A	Work with BEA to identify possible delays due to supply chain issues. IEC and BEA looking to possibly procure DOESC's at risk if necessary. The costs listed from delays are based on a $13k/day cost to operate a SNF crew IEC will address crew reassignment in order to minimize cost impact. If DOESC's become critical path, IEC and BEA will pursue procurement at risk to minimize impact to schedule.
SNF331	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Failed Root Weld	If the BEA/Liburdi weld repair machine cannot successfully repair a failed root weld, then the project will have to find alternative methods to repair the weld or a complete repackaging of the fuel in a new canister will be required.	Root weld fails UT inspection.	RRDP24125	Open	Threat	Share	0.25	Unlikely	Serious	2-Low	$ 300,000	$ 600,000	$ 1,800,000	16	32	64	**Best case:** Cost of weld repair without requiring usage of additional equipment and resume operations with minimal waste. **Most Likely:** Cost of weld repair with minimal additional equipment and disposal of unusable items. **Worst Case:** Cost of complete repackaging of SNF in new canister with disposal of unusable items.	Propose share with DOE.	N/A	N/A	N/A	Cost includes operational costs, potentially a new DOESC system, and the cost of non usable DOESC system disposal. For the Road Ready Demonstration, 10 DOESC's will be procured. The Demonstration will be loading 7 DOESC's with 3 spares. In the event of a compromised DOESC, the fuel can be reloaded into a spare DOESC and welded. Additionally, the welding will be done in the PCS which will also allow for safety manually grinding of the weld. Weld will manually be ground off and rewelded if DOESC weld is damaged. If a second weld fails or DOESC is damaged unloading and loading of the DOESC is required. IEC will look at the qualifying individuals to hand weld the circumferential weld as necessary.
SNF332	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: BEA Leak Testing Fails	BEA Leak testing cannot successfully seal on DOESC causing a delay in the project.	Bell jar seals fail successful sealing	RRDP24125	Open	Threat	Share	0.25	Unlikely	Major	3-Moderate	$ 600,000	$ 1,200,000	$ 2,400,000	24	48	96	**Best case:** Leak testing device requires minimal redesign to achieve acceptable results. **Most Likely:** Leak testing device requires significant redesign to achieve acceptable results. **Worst Case:** Leak testing device requires complete redesign to achieve acceptable results.	Propose share with DOE.	N/A	N/A	N/A	BEA procurement of different seals to correct deficiencies to allow for successful leak testing. If alternative seals are not successful, BEA to correct design of Bell Jar. Additionally, BEA has identified a backup commercially provided option in the event the Leak Testing System is not acceptable.
SNF339	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Insufficient Maintenance Funding	Road Ready Project schedule may be delayed in the event that Insufficient maintenance funding is available to update facilities, systems, equipment, and infrastructure or recover from significant system failures.	Failure of components, system, equipment, or structures.	RRDP-19000	Open	Threat	Share	0.2	Unlikely	Major	3-Moderate	$ 1,000,000	$ 2,000,000	$ 4,000,000	48	96	192	**Best case:** Repairs of critical systems or components are minimal with minimal procurement of replacement components and minimal downtime **Most Likely:** Repairs of critical systems or components are significant with procurement of replacement components and downtime **Worst Case:** Repairs of critical systems or components are severe with major procurement of replacement components and extensive downtime.	Propose share with DOE.	N/A	N/A	N/A	Identified by Engineering as a necessary upgrade to CPP-603 to continue operations/support future projects such as the Packaging Demonstration. Replacement of the MSM and its approximate costs were determined from $13K/day crew costs applied to a 3, 6 and 12-month period. Maintain the Facility/Equipment. PM's will be scheduled and performed accordingly to identify any potential issues which can be corrected with minimal to no operational downtime. FIMS system will be updated accordingly to identify aging facilities and equipment needing attention or maintenance. IEC to work with DOE to identify systems and obtain appropriate funding for maintenance and repairs of critical systems and components.

SNF350	TO3.2	D.1.04.02.05	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Existing Facility Interfaces Upgrades	SSCs require upgrades to the ID SNF-SF processes (e.g. footings with induced loads, existing entrances and exits). Existing CPP-603 footings do not have capacity for induced loads outside of the building for the future operations (e.g. movements incorporating casks, low profile transporter, vertical cask transporter, etc).	Design analysis determines that footings cannot withstand additional loading.	SNFSF03450	Open	Threat	Mitigate	0.1	Rare	Minor	1-Low	$ -	$ 20,000	$ 750,000	0	8	104	The design analysis results in no changes. The design analysis needs to be performed to show the minimum distance between the VCT and building. The footings of CPP-603 have to be re-designed and reinforced for any loading and fencing requires changes.	Perform design analysis early to accommodate potential changes in design. Coordination with existing haul paths. Coordination with RRDP will allow the ID SNF-SF to perform a limited analysis. Footing evaluation. 1) RRDP is performing design analysis inside of the building and is assumed acceptable outside of CPP-603. 2) Perform design analysis for the LPT outside of CPP-603 3) Perform design analysis for the VCT approaching the exterior of CPP-603. 4) Require proximity restrictions for the VCT approaching CPP-603 as concluded from future design analysis.	SNFSF03500, SNFSF15593	N/A	N/A	N/A
SNF357	TO3.2	D.1.04.02.10	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Safety Significant Requirements Change	Natural phenomenon categorization increases for the ID SNF-SF. The ID SNF-SF facility is safety significant. (e.g. the SNF-SF pad, CTS weather enclosure, and CTS).	Code of Record development requires natural phenomenon categorization to increase. DSA development results in the facility becoming safety significant.	SNFSF02980	Open	Threat	Mitigate	0.2	Unlikely	Major	3-Moderate	$ 250,000	$ 500,000	$ 1,000,000	60	90	208	The basis of HAD-468 and the Safety Design Strategy change and work has to be reworked and approved. The SDS, HAD, and facility design are impacted. Potential existing infrastructure has to be reworked to accommodate new codes.	Coordinate with INTEC lessons learned (CPP-2707). Coordinate RRDP.	SNFSF05500	N/A	N/A	N/A
SNF358	TO3.2	D.1.04.02.10, D.1.04.02.05	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Criticality Alarm System	Material evaluations determine the criticality alarm system (CAS) is needed, resulting in increased costs and labor to design and install.	The stored material on the ID SNF-SF requires a criticality alarm system.	SNFSF05500	Open	Threat	Mitigate	0.1	Rare	Critical	3-Moderate	$ 1,000,000	$ 4,000,000	$ 6,000,000	96	208	252	The casks and movement plans have to be reevaluated due to the SNF. A CAS has to be incorporated into the design, procured, and included in construction. Including CAS infrastructure.	Upon safety design strategy approval, a criticality evaluation will be performed.	SNFSF03500	N/A	N/A	N/A
SNF360	TO3.2	D.1.04.02.10	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Safety Analysis Software Upgrades	As the project develops, and DSAs are upgraded, the safety analysis software currently used at IEC is required to be upgraded or changed to be in compliance. If the software is changed, the project will require additional support, training, and update information into the new software.	PDSA and DSA development and reviews indicate existing software at IEC is not compatible.	SNFSF05506	Open	Threat	Accept	0.15	Unlikely	Critical	3-Moderate	$ 200,000	$ 800,000	$ 2,000,000	96	192	256	Best case the same software provider is able to provide an update that brings the project within compliance. Most likely the project will have to change providers, get IT support, input all information, and perform verifications. Worst case infrastructure is required in addition to the most likely costs.	N/A	N/A	N/A	N/A	N/A
SNF367	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Fuel Elements Arrive at INTEC Damaged	Shipment causes unforeseen damage to fuel elements. In order to place fuel in safe configuration it must be repackaged in a sealed failed fuel can.	Fuel element arrives at INTEC damaged.	TRGA-SB0	Open	Threat	Accept	0.1	Rare	Minor	1-Low	$ 47,040	$ 188,160	$ 1,128,960	4	16	96	Based on SME costs/ schedule delays required to shipment into safe configuration. **Best Case**: No loss contamination control resulting in 1 week delay. 4 days x 12FTEs x $98 x 10 hr **Most Likely**: Damage requires sealed failed fuel can resulting in 4 week delay 16 days x 12 FTEs x 10hr x $98 **Worst Case**: Loss of contamination control resulting in 6 month delay 96 x 12 FTEs x 10hr x $98 Based on 12FTEs.	N/A	N/A	N/A	N/A	FY26/27 Scope only. Inspect fuel at shipping facility prior to loading. Provided on-site oversight during shipping.
SNF368	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Dropped Fuel Element or Basket	A dropped fuel element or basket during TRIGA operations could temporarily delay work which could lead to schedule and cost variances.	Dropping a fuel element or basket.	TRGA-SB0	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 9,600	$ 57,600	$ 230,400	2	12	48	**Best Case**: 2 days X 10 Hrs. X 6 FTEs x $80/hr. = $9600 **Most Likely:** 12 days X 10 Hrs. X 6 FTEs X $80/hr. = $57,600 **Worst Case**: 48 days X 10 Hrs. X 6 FTEs X $80/hr. = $230,400	N/A	N/A	N/A	N/A	FY26/27 Scope. Engineering evaluations and recovery actions.
SNF371	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Aging Conditions of Facilities & Legacy Equipment	There are aging conditions at CPP-603. Continued weathering and degradation is likely to require additional repairs and maintenance to infrastructure. If these repairs and/or upgrades do not occur they will prohibit project completion.	Continued degradation of facility without necessary repairs/ upgrades.	TRGA-SB0	Open	Threat	Accept	0.5	Possible	Major	4-High	$ 1,440,000	$ 1,800,000	$ 2,160,000	8	16	48	Based on SME input. Costs based on the cost of repairs of CPP-603 due to aging facilities in current 2 year contract.	N/A	N/A	N/A	N/A	FY26/27 Scope only. Perform necessary maintenance at CPP-603.
SNF378	TO3.2	D.1.02.32	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: CPP-603 Critical Equipment Failure	Advanced Test Reactor (ATR) Direct Transfers are delayed because of malfunctioning CPP-603 PaR manipulator (MAN-GSF-401) or other critical equipment failure.	While operating the CPP-603 PaR manipulator (MAN-GSF-401), certain PaR motions appear to be or are abnormal/malfunctioning. Critical equipment for ATR transfers fails prior to or during operations.	INATR-2000	Open	Threat	Accept	0.8	Likely	Minor	2-Low	$ 107,016	$ 214,032	$ 535,080	7	14	35	**Best Case**: 7 days X 12 hr. X 13 FTEs X $98/hr. **Most Likely**: 14 days X 12 hr. X 13 FTEs X $98/hr. **Worst Case**: 35 days X 12 hr. X 13 FTEs X $98/hr.	N/A	N/A	N/A	N/A	Original Risk ID: SNF00792. Conduct scheduled preventative maintenance on all equipment.
SNF379	TO3.2	D.1.02.32	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: Camera Failures Due to High Radiation Fields	High radiation fields in the fuel handling cave at CPP-603 Irradiated Fuel Storage Facility (IFSF) cause premature failure of the cameras in the CPP-603 IFSF causing delays for Advanced Test Reactor (ATR) receipts.	Failure of remote cameras hinder or prevent normal fuel handling operations in the CPP-603 IFSF cave and fuel storage area.	INATR-2000	Open	Threat	Accept	0.64	Possible	Serious	3-Moderate	$ 80,000	$ 100,000	$ 150,000	48	48	48	Estimating 3 camera replacements. Camera replacements will include material, cave dive, and operations costs. Cost estimate based on number of failures 2, 4, 6 cameras plus single cave dive.	N/A	N/A	N/A	N/A	Original Risk ID: SNF00BR2
SNF380	TO3.2	D.1.02.32	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: IEC Schedule Delay Caused by ATR	IEC experiences schedule delays due to equipment and/or operational delays at Advanced Test Reactor (ATR).	Equipment and/or operational delays at ATR cause delayed or moved shipment dates to INTEC.	INATR-2000	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ -	$ -	$ -	3	208	208	Schedule Impacts: Best Case: 3 days Most Likely: 14 days Worst Case: 64 days No Cost impacts.	N/A	N/A	N/A	N/A	ORIGINAL RISK: SNF015R2
SNF381	TO3.2	D.1.02.32	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: Destaco Clamps Malfunction	Advanced Test Reactor (ATR): Destaco clamps in CPP-603 are partially open or closed and prevent movement of fuel-loaded canisters.	Destaco clamps found to be damaged or damaged when remotely attempting to open/close a clamp.	INATR-2000	Open	Threat	Accept	0.5	Possible	Critical	4-High	$ 1,231,258	$ 2,308,608	$ 2,616,422	96	180	204	**Best Case:** 1 days X 10 hr. X 13.36 FTEs X $96/hr.= $1,2,825 **Most Likely**: 3 days X 10 hr. X 13.36 FTEs X $96/hr.= $38476 **Worst Case**: 204 days X 10 hr. X 13.36 FTEs X $96/hr.= $179,558	N/A	N/A	N/A	N/A	ORIGINAL RISK: SNF016R2
SNF382	TO3.2	D.1.02.40.06	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Damaged Tooling/Equipment	If fabricated or procured tooling or equipment (Canisters, tools, spacers, etc.) are damaged, we must fabricate additional tooling or equipment. This will cause negative schedule and cost impacts.	Damage to tooling or equipment during project work.	TRGA-800	Open	Threat	Mitigate	0.24	Unlikely	Minor	2-Low	$ 26,600	$ 107,400	$ 224,800	4	16	32	Based on Design/ Fabrication of new tooling/equipment. **Best Case:** 4 days X 10 Hrs. X 8 FTEs X $80/hr. = $25600 + materials $1000= $26600 **Most Likely**: 16 days X 10 Hrs. X 8 FTEs X $80/hr. = $102400 + materials $5000= $107400 **Worst Case**: 32 days X 10 Hrs. X 8 FTEs X $80/hr. = $204800 + materials $20000= $224800	IEC will fabricate spares of items.	TRGA-800RM	N/A	N/A	ORIGINAL RISK: SNF029
SNF383	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: CPP-603 Critical Equipment Failure	TRIGA transfers are delayed because of malfunctioning CPP-603 PaR manipulator (MAN-GSF-401) or due to other critical equipment failure in CPP-603.	While operating the CPP-603 PaR manipulator (MAN-GSF-401), certain PaR motions appear to be or are abnormal/malfunctioning. Failure of the manipulators results in schedule delays. Critical equipment for TRIGA transfers	TRGA-SB0	Open	Threat	Accept	0.8	Likely	Minor	2-Low	$ 107,016	$ 214,032	$ 535,080	7	14	35	**Best Case**: 7 days X 12 hr. X 13 FTEs X $98/hr. **Most Likely**: 14 days X 12 hr. X 13 FTEs X $98/hr. **Worst Case**: 35 days X 12 hr. X 13 FTEs X $98/hr.	N/A	N/A	N/A	N/A	Original Risk: SNF030. Conduct scheduled preventative maintenance on all equipment.
SNF384	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Camera Failure	Increased radiation levels inside the cave at CPP-603 will cause cameras to fail. Camera failure during TRIGA transfer will cause schedule delays and increased cost.	Failure of one or more cameras in CPP-603.	TRGA-SB0	Open	Threat	Mitigate	0.28	Possible	Moderate	2-Low	$ 19,000	$ 38,000	$ 57,000	20	21	48	Estimating 3 camera replacements. Camera replacements will include material, cave dive, and operations costs. Cost estimate based on number of failures 2, 4, 6 cameras plus single cave dive. Schedule impacts are based on lead time to procure camera as well as time to install 2 new cameras per cave dive. Camera cost estimated at $9,000/per. Approximate cost per cave dive: $10,000.	6 cameras within the cave at CPP-603 will be replaced with radiation hardened cameras in the Road Ready project. Minimize radiological exposure to cameras in the Fuel Handling Cave.	TRGA-SB0RM	N/A	N/A	ORIGINAL RISK: SNF031
SNF385	TO3.2	D.1.04.02.02	IEC	Cotterell, Jaksen Pickett	Wahnschaffe, Steven DaRell	Staging Facility: Engineering Contract Award Delay	If IEC procurement negotiations extend beyond original schedule durations the project will experience negative cost and schedule variances.	Negotiations take longer than anticipated.	SNFSF03225	Open	Threat	Mitigate	0.1	Rare	Serious	2-Low	$ 30,000	$ 60,000	$ 120,000	36	64	128	Based off detailed cost estimate of procurement activity. Doubled schedule duration and cost from DCES for best case.	Work standard MCP and procedures to avoid extended negotiation process.	SNFSF0322SRM	N/A	N/A	N/A
SNF388	TO3.2	D.1.02.40.05	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Existing Tooling Fails Inspection	All existing tooling must pass preventative maintenance inspections. If tooling doesn't pass inspections, additional equipment will need to be fabricated or procured in order for operations to continue.	Tooling fails preventative maintenance inspection.	TRGA-500	Open	Threat	Mitigate	0.5	Possible	Minor	2-Low	$ 64,750	$ 130,500	$ 261,000	8	16	32	**Best Case**: 8 days X 10 hrs. X 10 FTEs X $80/hr. = $64,000 + materials $750 = $64,750. **Most Likely**: 16 days X 10 hrs. X 10 FTEs X $80/hr. = $128,000 materials $2500 = $130,500. **Worst Case:** 32 days X 10 hrs. X 10 FTEs X $80/hr. = $256000 + materials $5000 = $261,000.	Develop and implement a preventative maintenance plan for existing tooling.	TRGA-500RM	N/A	N/A	ORIGINAL ID: SNF059
SNF389	TO3.2	D.1.02.40.04, D.1.02.40.05, D.1.02.40.06	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Lack of Dedicated Resources	Lack of qualified and trained resources to support TRIGA operations could result in cost and schedule delays.	Engineers are allocated to other higher priority projects Insufficient qualified engineers on staff	TRGA-600	Open	Threat	Accept	0.6	Possible	Serious	3-Moderate	$ 100,000	$ 200,000	$ 500,000	16	48	64	Based on SME input. Best case is that replacement personnel are immediately available with little downtime or vacancy in the position. Most likely case is that it may take 1-2 months to fill in and train replacement. Worst case is that it may take 6 months or more to recruit new personnel and train.	N/A	N/A	N/A	N/A	Original Risk ID: SNF369. Monitor qualifications/training.
SNF390	TO3.2	D.1.02.42	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Security Requirement Changes	Project activities are postponed due to evolving security requirements at CPP-749, CPP-2707 and CPP-603.	Requirements derived from planned security related vulnerability assessments impose more restrictive security controls.	INSNF-2020	Open	Threat	Share	0.3	Possible	Minor	2-Low	$ 45,864	$ 214,032	$ 428,064	3	14	28	Impacts based on 13 FTEs working 12 hr. shifts. **Best Case**: 3 days * 13 FTEs *12hr. * $98/hr. **Most Likely**: 14 days * 13 FTEs * 12hr. * $98/hr. **Worst Case**: 28 days * 13 FTEs * 12hr. * $98/hr.	Propose share with DOE.	N/A	N/A	N/A	
SNF391	TO3.2	D.1.02.42	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Mobile Crane Maintenance	Exceeding the Mobile Crane manufacturers recommended operating hours for performing routine maintenance. Exceeding these recommendations will restrict crane use and delay maintenance work at CPP-749/2707.	Mobile crane operator observes the machines monitoring system and concludes the manufactures recommended operating hours are exceeded.	INSNF-2100	Open	Threat	Accept	0.3	Possible	Minor	2-Low	$ 18,000	$ 46,000	$ 62,000	1	2	4	**Best Case**: 1 day plus equipment/materials **Most Likely Case**: 2 days plus equipment/materials **Worst Case**: 4 days plus equipment/materials	N/A	N/A	N/A	N/A	1.) Increase periodicity of planned maintenance. 2.) Perform additional routine observations to the machines monitoring system so maintenance can be planned and performed in accordance with the manufacturers recommendations. 3.) The crane will be removed and sent to CFA big shop for preventative maintenance.
SNF392	TO3.2	D.1.02.42	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Maintain Crews	Project has to maintain crews in the event that any SNF projects are delayed/ do not proceed as planned which will cause significant cost and schedule variances.	Any SNF project is delayed requiring crews to be redistributed.	INSNF-2020	Open	Threat	Accept	0.3	Possible	Serious	3-Moderate	$ 240,000	$ 720,000	$ 960,000	16	43	184	Impacts are estimated based on the amount of time crews have to be allocated to different scope.	N/A	N/A	N/A	N/A	N/A
SNF393	TO3.2	D.1.02.42.05, D.1.02.42.06	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Inclement Weather Delays at CPP-749/ 2707	Inclement weather delays work at CPP-749 and/or CPP-2707. CPP-749/2707 have strict guidelines for work in regard to windspeed, precipitation and temperature.	Inclement weather stops or delays work at CPP-749/2707.	INSNF-2080 INSNF-2100	Open	Threat	Accept	0.8	Likely	Minor	2-Low	$ -	$ -	$ -	4	8	16	**Best Case**: 1 week accumulative of inclement weather. **Most Likely**: 2 weeks accumulative of inclement weather. **Worst Case**: 4 weeks accumulative of inclement weather. Schedule Delays Only.	N/A	N/A	N/A	N/A	N/A
SNF394	TO3.2	D.1.02.42.05	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Mobile Crane Failure	Mobile crane required for scope needs repaired, resulting in delay to any operations/maintenance at CPP-749/2707 until repairs can be made.	Mobile crane failure/repair requirement.	INSNF-2080	Open	Threat	Accept	0.8	Likely	Minor	2-Low	$ 6,519	$ 13,038	$ 26,076	4	8	16	Cost based on BEA daily crane rental cost.	N/A	N/A	N/A	N/A	N/A

SNF395	TO3.2	D.1.02.42	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Industrial Incident Resulting in Shutdown	An industrial incident resulting in serious personnel injury may cause an extended shutdown to resolve conduct of operations issues.	An unanticipated accident resulting in injury or near miss.	INSNF-2020	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 20,000	$ 50,000	$ 300,000	4	8	16	Cost is based on ROM estimate to perform corrective actions, but dependent on extent of event. Best case = Incident is minor and investigated quickly with very few corrective actions requiring attention. Worst case = Prolonged shut-down with extensive recovery actions, training, etc.	N/A	N/A	N/A	N/A	N/A
SNF396	TO3.2	D.1.02.42, D.1.02.43	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance: Critical Legacy Equipment/Infrastructure	SNF has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Equipment or infrastructure failure at CPP-603, CPP-2707 or CPP-749.	INSNF-2020 (FY26) INSNF-2030 (FY27)	Open	Threat	Mitigate	0.95	Almost Certain	Critical	3-Very High	$ 500,000	$ 2,000,000	$ 5,000,000	96	144	192	Impacts based on repairs completed over last task order and known needs at CPP-603, CPP-2707 and CPP-749. Best Case: replace rail in 603 under shield doors. Worst Case: Impacts all other SNF projects in 603 and carry all FTE assigned to other projects.	Schedule additional periodic maintenance on all equipment and infrastructure.	INSNF-2020RM (FY26) INSNF-2030RM (FY27)	N/A	N/A	N/A
SNF397	TO3.2	D1.02.43	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	CPP-603 Shield Door Repair: Incompatible Equipment	Upon removal of the shield door in the Irradiated Fuel Storage Facility (IFSF) equipment is damaged or not as easy to remove as anticipated resulting in negative cost and schedule variances. Schedule variances may impact other SNF projects schedule variances as well.	Damaged bolts. Rail damaged during cutting. Any damaged equipment or infrastructure.	SNFDB5600	Open	Threat	Accept	0.75	Possible	Serious	3-Moderate	$ 150,000	$ 300,000	$ 5,000,000	32	64	192	Best Case: Impacts only rails/bolts and additional labor to replace rails/bolts. Worst Case: Other projects are impacted by investigation and carry all SNF crews until issue is resolved.	N/A	N/A	N/A	N/A	N/A
SNF400	TO3.2	D.1.02.43, D.1.02.42	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance/ CPP-603 Shield Door Repair: Lack of Dedicated Resources	Lack of qualified and trained resources to support SNF operations could result in cost and schedule delays	Engineers are allocated to other higher priority projects Insufficient qualified personnel on staff	SNFDB2100	Open	Threat	Accept	0.6	Possible	Serious	3-Moderate	$ 100,000	$ 200,000	$ 500,000	16	48	64	Based on SME input. Best case is that replacement personnel are immediately available with little downtime or vacancy in the position. Most likely case is that it may take 1-2 months to fill in and train replacement. Worst case is that it may take 6 months or more to recruit new personnel and train.	N/A	N/A	N/A	N/A	N/A
SNF401	TO3.2	D.1.02.43	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	SNF Facilities Surveillance and Maintenance/ CPP-603 Shield Door Repair: Unforeseen Radiological Incident and/or Loss of Contamination Control	An unexpected radiological incident and/or loss of contamination control outside the controlled area may result in personnel decontamination and extended shutdown/recovery actions.	Unexpected contamination levels or radioisotopes found. Unexpected dose rates found.	SNFDB5600	Open	Threat	Accept	0.8	Likely	Serious	4-High	$ 500,000	$ 1,000,000	$ 2,000,000	16	32	64	Cost and schedule impacts based on recovery actions/ shut down due to varying severity of a loss of contamination control/ radiation exposure.	N/A	N/A	N/A	N/A	N/A
SNF402	TO3.2	D.1.02.42, D.1.02.43	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	CPP-603 Shield Door Repair: IFSF Shield Door Failure	If the shield door in the Irradiated Fuel Storage Facility (IFSF) at CPP-603 malfunctions or fails operations requiring IFSF/ CPP-603 access will be stalled.	Failure or malfunction of shield door.	INSNF2040	Open	Threat	Accept	0.75	Possible	Critical	4-High	$ 500,000	$ 2,000,000	$ 5,000,000	96	144	192	Best Case: replace rail in 603 under shield doors. Worst Case: Impacts all other SNF projects in 603 and carry all FTE assigned to other projects.	N/A	N/A	N/A	N/A	N/A
SNF403	TO3.2	D.1.02.40.04, D.1.02.40.05, D.1.02.40.06	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Loss of Specialized Resources	Due to the extended period since the last TRIGA fuel receipt (over 10 years), there is a risk that subject matter expert (SME) with specialized knowledge of TRIGA fuel handling, procedures, and compliance requirement may retire, or be otherwise unavailable. This knowledge gap could delay fuel receipts handling and increased the risk of errors for TRIGA fuel receipts.	Loss of SME.	TRGA-510	Open	Threat	Accept	0.25	Unlikely	Moderate	2-Low	$ 34,880	$ 69,760	$ 139,520	16	32	64	Based hiring and/or qualifying SME. $218/HR FTE for SME.	N/A	N/A	N/A	N/A	N/A
SNF404	TO3.2	D.1.02.32.02, D.1.02.32.03	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: Equipment Failure during Fabrication	Critical fabrication equipment may fail or break down during use causing unplanned work delays, or the need for costly repairs or replacements.	Equipment failure.	INATR-2100	Open	Threat	Mitigate	0.3	Possible	Moderate	2-Low	$ 25,000	$ 300,000	$ 450,000	16	32	64	Based on replacement of essential fabrication equipment. Most Likely: Cost of Lathe $300,000.	Perform regular preventative maintenance on all fabrication equipment. Train staff to recognize early signs of equipment wear or malfunction. Keep critical spare parts on hand or identify rapid suppliers.	INATR-2100RM	N/A	N/A	N/A
SNF405	TO3.2	D.1.02.32.01	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	ATR Receipt: Corrosion or Degradation of Canister	Canisters used for ATR Fuel storage may degrade or corrode over time potentially rendering them unsafe or unusable. IEC plans for 10 additional canisters, if more canisters are needed it will lead to delays in project timelines due to additional canister fabrication.	Visual signs of rust or corrosion or a failure in material integrity.	INATR-2000	Open	Threat	Accept	0.35	Possible	Moderate	2-Low	$ 84,000	$ 420,000	$ 840,000	16	32	56	Cost to fabricate 1 bucket is approximately $84,000 and estimated time is 1 month.	N/A	N/A	N/A	N/A	Store canisters in a controlled environment with no moderators allowed. Fabricate/Maintain a spare stock of replacement canisters.
SNF406	TO3.2	D.1.02.40.04	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Contract Readiness Assessment	If the MCRP-2783 determination and DOE direction rules out a Contractor Readiness Assessment (CRA) the project will realize positive schedule and cost variances.	It is determined that CRA is not necessary.	TRGA-720	Open	Opportunity	Accept	0.9	Likely	Moderate	3-Moderate	$ (257,366)	$ (257,366)	$ (257,366)	(20)	(20)	(20)	Estimated cost of CRA is $257,366.	N/A	N/A	N/A	N/A	N/A
SNF407	TO3.2	D.1.02.40.06	IEC	Ellsworth, Carla Jean	Wahnschaffe, Steven DaRell	TRIGA Receipt: Equipment Failure during Fabrication	Critical fabrication equipment may fail or break down during use causing unplanned work delays, or the need for costly repairs or replacements.	Equipment failure.	TRGA-800	Open	Threat	Accept	0.3	Possible	Moderate	2-Low	$ 25,000	$ 300,000	$ 450,000	16	32	64	Based on replacement of essential fabrication equipment. Most Likely: Cost of Lathe $300,000.	N/A	N/A	N/A	N/A	Perform regular preventative maintenance on all fabrication equipment. Train staff to recognize early signs of equipment wear or malfunction. Keep critical spare parts on hand or identify rapid suppliers.
SNF408	TO3.2	D.1.02.36.18	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: CPP-603 Crane Envelope	During performance of the engineering analysis of the CPP-603 structural supports for the crane envelope and the CPP-603 floor, it is determined that significant structural modifications will be needed to expand the crane envelope for the Tandem crane move during movement of Casks for the Road Ready Demonstration Project, and the use of an LPT is not acceptable.	Crane envelope analysis determines significant structural modifications are needed to expand crane envelope.	RRDP-18025	Open	Threat	Accept	0.25	Unlikely	Critical	3-Moderate	$ 3,000,000	$ 4,500,000	$ 6,000,000	192	288	384	Engineering estimates of needed modifications of building for tandem crane movements.	N/A	N/A	N/A	N/A	An additional review of the CPP-603 crane envelope analysis will be performed to identify operational improvements as well as feasibility of using a tandem crane lift of large casks in the full operational area of CPP-603 as a secondary movement of large casks. The LPT floor analysis will be performed as a primary method of movement of casks.
SNF409	TO3.2	D.1.02.36.18	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Read Demonstration Project: Low Profile Transporter	During performance of the final engineering analysis of the CPP-603 floor for refurbishment for the Low-Profile Transporter (LPT), it is determined that significant modifications will be needed to allow for the LPT during movement of casks for the Road Ready Demonstration Project.	Engineering identifies deficiencies in flooring at CPP-603.	RRDP-18225	Open	Threat	Accept	0.5	Possible	Critical	4-High	$ 3,000,000	$ 4,500,000	$ 6,000,000	192	288	384	Based on cost of materials and engineering upgrades for flooring in CPP-603.	N/A	N/A	N/A	N/A	A preliminary analysis will be performed to identify possible issues with refurbishment of the CPP-603 LPT floor transfer route. A final analysis will be performed upon receipt of the LPT design from the Commercial Vendor. This will address any necessary modifications that need to be made to the transfer route.
SNF410	TO3.2	D.1.02.36.18	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: CPP-603 Floor Refurbishment	During the performance of refurbishment of the CPP-603 floor, unknown radiological or other anomalous conditions are encountered requiring extra resources to recover and adding additional cost and delay to the project.	Unexpected conditions found during floor refurbishment.	RRDP-18375	Open	Threat	Mitigate	0.76	Likely	Serious	4-High	$ 250,000	$ 350,000	$ 500,000	32	64	96	Cost/ schedule based on recovery actions to restore work to safe configuration.	Anomalous conditions will not be known until time of refurbishment; however, engineering will do a final analysis to identify to the maximum extent possible any possible conditions that could cause a delay. Prior to work, team members will be briefed on possible anomalous conditions and take action as appropriate if encountered.	RRDP-1837SRM RRDP-1840ORM	N/A	N/A	N/A
SNF412	TO3.2	D.1.02.36.19	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: DOESC Handling Tool Fabrication	During fabrication for handling tools, materials are damaged, or the project experiences a shortage of materials. This will require procurement of additional materials and re-work increasing the cost of the project and a delay to the schedule.	Damaged or shortage of materials to fabricate handling tools.	RRDP-19350	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 80,000	$ 100,000	$ 130,000	32	64	96	Based on cost to procure new materials and re-work for fabrication of new handling tools.	Material will be procured under the appropriate quality level. Fabrication will follow standard work practices and procedures to minimize the amount of potential material that is damaged or rework that is needs to be performed.	RRDP-1935ORM RRDP-1912SRM	N/A	N/A	N/A
SNF413	TO3.2	D.1.02.36.17	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Support Equipment Material Failure	During the performance of fabrication for Road Ready Support Equipment, material failure is experienced due to the fabrication process requiring procurement of additional materials increasing the cost of the project and a delay to the schedule.	Damaged material during fabrication.	RRDP-17125	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 80,000	$ 100,000	$ 130,000	32	64	96	Based on procuring additional materials and re-work too fabricate support equipment.	Material will be procured under the appropriate quality level. Fabrication will follow standard work practices and procedures to minimize the amount of potential material that is damaged or rework that is needed to be performed.	RRDP-1712SRM RRDP-1792SRM RRDP-1772SRM RRDP-2115ORM RRDP-2132SRM RRDP-2155ORM RRDP-2172SRM	N/A	N/A	N/A
SNF414	TO3.2	D.1.02.36.17	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Demo Fabrication Equipment Failure	During the mockup of handling tools or other equipment for the Road Ready Demonstration Project, machining/equipment failure is experienced resulting in a delay to the fabrication process and increased cost to repair machines.	Failure of equipment/machining.	RRDP-17550	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 80,000	$ 100,000	$ 130,000	32	64	96	Based on cost to repair machine and delays to schedule.	Additional machine periodic maintenance and other maintenance will be scheduled and performed to maintain machines in proper operating condition.	RRDP-1755ORM RRDP-2092SRM RRDP-2032SRM RRDP-2035ORM	N/A	N/A	N/A
SNF415	TO3.2	D.1.02.36.19	IEC	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: Loss of Specialty Resources	During the fabrication of handling tools or other equipment for the road ready demonstration, it is determined that other IEC projects are a higher priority to complete resulting in a delay in output.	Other projects take priority.	RRDP-19350	Open	Threat	Accept	0.8	Likely	Serious	4-High	$ 80,000	$ 100,000	$ 130,000	32	64	96	Based upon delays to project deliverables.	N/A	N/A	N/A	N/A	Project will work with Management to identify resources and possible options of subcontracts or overtime to address the need for company priority realignment.
SNF420	TO3.2	D.1.02.41.02	IEC	Johnson, Walter Jacob	Sanders, Tyrone Lorenzo	HBURC: Lack of Dedicated Resources	The High Burn Up Cask (HBURC) project has a critical deadline to ensure the cask arrives at INTEC in 2027. The nature and current unknowns of the HBURC project could impact the dedicated resources assigned to meet the requirements of Waiver K.1 of the 1995 Idaho Settlement Agreement.	Loss of Key Personnel. Significant amount of overtime required to meet schedule deadlines. Changing requirements and/or schedule.	INHBU-2000	Open	Threat	Mitigate	0.5	Possible	Moderate	2-Low	$ 100,000	$ 150,000	$ 300,000	16	32	48	Cost and schedule worst case based on SAR revision.	Authorize overtime. Onboard Additional Personnel. Engage Subcontractor Support.	INHBU-2000RM	N/A	N/A	
SNF424	TO3.2	D.1.02.36	IEC/DOE	Johnson, Walter Jacob	Wahnschaffe, Steven DaRell	Road Ready Demonstration Project: DOE-NE Supplied Equipment	The Department of Energy - Nuclear Energy (DOE-NE) provides critical equipment for the Road Ready Demonstration Project. If DOE-NE ceases to provide necessary equipment for the RRDP will be required to procure a subcontractor to fabricate and/or provide necessary equipment resulting in negative cost/schedule variances.	DOE-NE fails to provide critical equipment for RRDP. DOE-NE decides to stop funding the fabrication of DOESCs.		Open	Threat	Share	0.8	Likely	Critical	3-Very High	$ 356,000	$ 1,200,000	$ 3,000,000	96	288	480	Best Case: Bell Jar 356K (6-month fabrication/test) Most Likely: DOESCs $120k/10 total (1.5-2 years to fabricate) Worst Case: All DOE-NE supplied equipment. Welder: 1.5 million Bell Jar: 356K DOESCs: $120K/10 total (2.5 years)	Propose share with DOE.	N/A	N/A	N/A	
TRU306	TO3.2	D.2.03.36.04	IEC	Vargesko, Matthew James	Jenkins, Talley Wallace	AMWTP LLW/MLLW Treatment and Disposal: Unanticipated Treatment Costs Determined by Perma-Fix/ Energy Solutions/ Waste Control Specialists Sampling	Depending on sampling results performed by Perma-Fix Florida (PFF), Energy Solutions (ES), and Waste Control Specialists (WCS) there may be additional treatment costs for unexpected chemical constituents.	Unanticipated chemical constituents are found that are outside of what has been determined through characterization data.	LLW-PERMA-2601, LLW-PERMA-2602, LLW-PERMA-2603, LLW-PERMA-2701, LLW-PERMA-2702, LLW-PERMA-2703, LLW-PERMA-2704	Open	Threat	Accept	~~0.26~~	Possible	Minor	2-Low	$ 11,000	$ 11,000	$ 44,000	4	4	8	**Best Case**: $11,000 would be the cost of doing VTD treatment for a drum where unanticipated organics were found, such as sludge found in a debris container. This is a good conservative estimate for additional treatment needed, as this would be one of the most expensive routes of treatment. **Most Likely**: $11,000 would be the cost of doing VTD treatment for a drum where unanticipated organics were found, such as sludge found in a debris container. This is a good conservative estimate for additional treatment needed, as this would be one of the most expensive routes of treatment. **Worst Case:** More than one container is found to need additional treatment. Very unlikely would be 4 containers needing additional treatment. $11,000 x 4 = $44,000.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU020R2.
TRU307	TO3.2	D.2.03.36.04	IEC	Vargesko, Matthew James	Jenkins, Talley Wallace	AMWTP LLW/MLLW Treatment and Disposal: Non-Compliant Container Shipped Back to AMWTP Due to Prohibited Items	Prior to offsite shipment to any commercial Treatment, Storage, and Disposal Facility (TSDF), AMWTP LLW/MLLW makes every effort to characterize waste in a safe and compliant manner, utilizing many resources to document and review container content information. However, a low chance does exist that a container will be shipped with a prohibited item, or some other chemical/radiological characteristic that was not anticipated. If the content cannot be treated by the TSDF or shipped by the TSDF to another treatment facility, the container will be sent back to AMWTP for further evaluation.	The TSDF opens a container and finds a physical prohibited item and/or the TSDF samples the container contents and finds unacceptable amounts of hazardous or radiological material outside of what the TSDF Waste Acceptance Criteria (WAC) allows.	LLW-PERMA-2601, LLW-PERMA-2602, LLW-PERMA-2603, LLW-PERMA-2701, LLW-PERMA-2702, LLW-PERMA-2703, LLW-PERMA-2704, LLW-S-ES-2601, LLW-WCS-2601, LLW-WCS-2701, LLW-D-ES-2601, LLW-D-ES-2701	Open	Threat	Accept	0.18	Unlikely	Major	3-Moderate	$ 20,000	$ 20,000	$ 40,000	80	96	208	**Best Case**: Return shipping costs are $20,000 to send a container back to us. **Most Likely**: Return shipping costs are $20,000 to send a container back to us. **Worst Case**: Return shipping costs are $20,000 to send a container back to us. However, if there is no room to ship the container on an already existing shipment when it leaves a second time (after addressing the problem) it will add an extra shipment, requiring another $20,000.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU021R2.

TRU308	TO3.2	D.2.03.36.05	IEC	Vargesko, Matthew James	Jenkins, Talley Wallace	AMWTP LLW/MLLW Material & Equipment: Pallet and/or Macrobag Procurement Vendor Output Issues Impact Shipping Schedule and Shipment Destination	Issues at the pallet and/or macrobag vendor site may disrupt our ability to acquire these materials in a timely manner. Not being able to procure the needed materials may delay onsite macroencapsulation (MACRO) and/or packaging operations. This may cause enough delay to cancel scheduled shipments of treated waste to offsite Treatment, Storage, and Disposal Facilities (TSDFs). If we must go to another vendor for materials, it can increase material cost. If we must ship to a commercial facility instead of the Nevada National Security Site (NNSS), it will greatly increase cost.	MACRO bags and pallets cannot be funded, or the vendor is not able to provide their product.	LLW-MACRO-2601, LLW-PALLET-2601	Open	Threat	Mitigate	0.4	Possible	Minor	2-Low	$ 15,000	$ 15,000	$ 114,000	8	8	32	**Best Case**: We continue to order MACRO bags and pallets for MLLW shipments, which costs approx. $15,000 per shipment. **Most Likely**: We continue to order MACRO bags and pallets for MLLW shipments, which costs approx. $15,000 per shipment. **Worst Case**: We cannot acquire MACRO bags and must ship a 6 BR-90 shipment to WCS instead of NNSS. 6 BR-90s = 2.55 * 6 = 15.3m3. 15.3m3 macroencapsulation at WCS costs $7449.11 per m3. 15.3 * $7449.11 = $113,971 = $114,000.	Continue to provide funding to procure MACRO bags and pallets, and procure additional back-up pallets to ensure packaging operations remain uninterrupted.	LLW-MACRO-2601-RM	N/A	N/A	This risk was previously identified under TRU033.
TRU309	TO3.2	D.2.03.36.04	IEC	Vargesko, Matthew James	Jenkins, Talley Wallace	AMWTP LLW/MLLW Treatment and Disposal: Generated RCRA Waste	Resource Conservation and Recovery Act (RCRA) waste that is generated as part IEC operations must be shipped offsite within 1 year of generation or IEC must provide documentation for wastes with no path to disposition. There is risk for funding to not be adequate for this scope due to it taking lower priority. If this risk were to materialize, it would affect shipments to commercial facilities (i.e. Energy Solutions (ES), Waste Control Specialists (WCS), Perma-Fix Florida (PFF)). If we fail to meet the one year to get rid of our New Gen RCRA waste, the DEQ (or EPA if superseded) will likely issue a compliance order, unless we can prove why we need to exceed the one year. It is not likely they will extend the one year for routine Newly Generated RCRA waste (i.e. there is no special waste content reason, only funding being the issue). If they issue a compliance order, and we don't meet the terms per their timeline, they can charge us $37,500 per day until resolved. Not only will there be financial risk, but we also risk suspension/losing our RCRA Permit(s) based on the following rule: 300B(c): Violation of Compliance Orders If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than $37,500 for each day of continued noncompliance with the order. In addition, the EPA Administrator may suspend or revoke any permit issued to the violator (whether issued by the Administrator or the State). If our RCRA permit is suspended or revoked, it takes quite some time to get it back, more than likely 1-2 years. This would greatly impact current operations, as well as STP milestones.	Higher priority scope causes this work package to not get funded. IEC generated RCRA waste is not shipped in acceptable timeframe.	LLW-O-ES-2601, LLW-O-ES-2701, LLW-WCS-2601, LLW-WCS-2701	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 37,000	$ 150,000	$ 600,000	1	4	16	300B(c): Violation of Compliance Orders If a violator fails to take corrective action within the time specified in a compliance order, the Administrator may assess a civil penalty of not more than $37,500 for each day of continued noncompliance with the order. In addition, the EPA Administrator may suspend or revoke any permit issued to the violator (whether issued by the Administrator or the State). If our RCRA permit is suspended or revoked, it takes quite some time to get it back, more than likely 1-2 years. The costs associated with permit suspension/revocation are unknown above and beyond the daily costs of the penalty fees due to the large programmatic impact of such an event.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU049.
TRU310	TO3.2	D.2.03.35.04	IEC	Hubler, Rachelle Bernice	Jenkins, Talley Wallace	CH-TRU Load Management: Commodity Availability/Cost Increases/Alternate Vendor Needs	Delays associated with receipt of various commodities due to vendor delays with raw material delivery/manufacturing. Commodities include tent materials, helium leak detectors and/or shipping materials.	Unavailability of raw material to vendor.	P&T-WIPP-2601, P&T-WIPP-2602, P&T-WIPP-2603, P&T-WIPP-2604, P&T-WIPP-2605, P&T-WIPP-2606, P&T-WIPP-2701, P&T-WIPP-2702	Open	Threat	Mitigate	0.83	Likely	Minor	2-Low	$ 14,400	$ 28,800	$ 43,200	8	16	24	**Best Case:** 8 days x 10hr /day x 4 people x 45/hr. = $14,400 **Most Likely:** 16 days x 10hr /day x 4 people x 45/hr. = $28,800 **Worst Case:** 24 days x 10hr /day x 4 people x 45/hr. = $43,200	Procure additional inventory of commodities and forecast for future purchases.	P&T-WIPP-2607-RM	N/A	N/A	This risk was previously identified under TRU031.
TRU311	TO3.2	D.2.03.35.04	IEC	Hubler, Rachelle Bernice	Jenkins, Talley Wallace	CH-TRU Load Management: CH-TRU/LLW/MLLW Waste Returned for Out-of-Compliance Determination	Waste Returned for Out-of-Compliance Determination by Treatment, Storage, and Disposal Facility (TSDF).Out-of-Compliance defined as damaged or leaking drums unable to pass TSDF inspection prior to acceptance of shipment and placed in storage.	Containers fail inspection or are out-of-compliance.	P&T-WIPP-2601, P&T-WIPP-2602, P&T-WIPP-2603, P&T-WIPP-2604, P&T-WIPP-2605, P&T-WIPP-2606, P&T-WIPP-2701, P&T-WIPP-2702	Open	Threat	Mitigate	0.83	Likely	Major	4-High	$ 80,000	$ 100,000	$ 250,000	50	75	90	Transportation and loading/unloading costs $150K-$200K Inspection costs $80k-$250K	Increase monitoring and testing the integrity of LLW/MLLW drums before shipping to storage facility.	P&T-WIPP-2707-RM	N/A	N/A	This risk was previously identified under TRU032. WIPP may change their requirements or may introduce new interpretations of existing requirements, resulting in delays associated with profiling and certification or may necessitate reprocessing of waste.
TRU313	TO3.2	D.2.05.30.17, D.2.05.30.18, D.2.05.30.19	IEC	Orme, Jason Conrad	Jenkins, Talley Wallace	Waste Generator Services: Treatment, Storage, and Disposal Facility (TSDF) Closure	When TSDF is unable to receive waste, transportation of that waste will be delayed. It may then become necessary to work overtime to recover schedule.	TSDF discontinues receiving of waste.	CLASS-A-DISP-FY26, CLASS-A-DISP-FY27, WGS-MLLW-FY26-1, WGS-MLLW-FY26-2, WGS-MLLW-FY26-3, WGS-MLLW-FY27-1, WGS-MLLW-FY27-2,	Open	Threat	Accept	0.5	Possible	Minor	2-Low	$ 79,200	$ 118,000	$ 158,400	8	12	16	**Best Case:** 8 days x 10 hr ./day x 6 FTEs X ($110/hr. + OT = $165/hr.) **Most Likely Case**: 12 days x 10 hr /day x 6 FTEs X ($110/hr. + OT = $165/hr.) **Worst Case:** 16 days x 10 hr /day x 6 FTEs X ($110/hr. + OT = $165/hr.)	N/A	N/A	N/A	N/A	This risk was previously identified under TRU042.
TRU314	TO3.2	D.2.05.30.17, D.2.05.30.18, D.2.05.30.19	IEC	Orme, Jason Conrad	Jenkins, Talley Wallace	Waste Generator Services: Waste Container Treatment, Storage, and Disposal Facility (TSDF) Certification Failure	During the verification process, if a waste container(s) is found to not be in accordance with the TSDF Waste Acceptance Criteria (WAC), the waste will need to be reworked.	A container(s) is identified as damaged, packaged incorrectly, containing uncertified waste, containing prohibited items, etc.	CLASS-A-DISP-FY26, CLASS-A-DISP-FY27, WGS-MLLW-FY26-1, WGS-MLLW-FY26-2, WGS-MLLW-FY26-3, WGS-MLLW-FY27-1, WGS-MLLW-FY27-2,	Open	Threat	Accept	0.05	Rare	Minor	1-Low	$ 54,000	$ 81,000	$ 108,000	4	6	8	Certification rework and repackaging to meet Waste Acceptance Criteria	N/A	N/A	N/A	N/A	This risk was previously identified under TRU043
TRU315	TO3.2	D.2.05.31 D.2.05.31.14	IEC	Orme, Jason Conrad	Jenkins, Talley Wallace	Waste Generator Services Support: Emergency Equipment Failure	In the event that critical equipment which supports daily operations fails, we will need to procure a replacement.	Critical equipment failure at CPP-1617 and if any of the following equipment fails: Bobcat 650, Telehandler TL923, Iron Bull Deck Over 5th Wheel.	RH-LLW-LOE-FY26, RH-LLW-LOE-FY27	Open	Threat	Accept	0.83	Likely	Serious	4-High	$ 118,000	$ 236,000	$ 354,000	30	60	90	Equipment Costs per DCES sheet / Lease Rates for Equipment Total $56,700 - 20% Equipment Potential Failures - Daily Rates 20% Higher than Monthly Rates	N/A	N/A	N/A	N/A	This risk was previously identified under TRU044.
TRU316	TO3.2	D.2.05.31.15	IEC	Orme, Jason Conrad	Jenkins, Talley Wallace	Waste Tracking: WTS Support: Failure to Upgrade Waste Tracking System	The current Waste Tracking System (WTS) is outdated and in need of a significant upgrade. If an upgrade is not performed, the project is at risk of consistent stop work delays to perform repairs.	Dated WTS fails during project operations.	WTS-LOE-1700	Open	Threat	Mitigate	0.83	Likely	Minor	2-Low	$ 1,500	$ 24,000	$ 72,000	1	16	48	**Best Case:** 1 days x 10 hrs/day x 2 people x $75/hr **Most Likely:** 16 days x 10 hrs/day x 2 people x $75/hr **Worst Case:** 48 days x 10 hrs/day x 2 people x $75/hr	Procure required backup equipment to resume operations	WGS-LOE-FY26-RM, WGS-LOE-FY27-RM	N/A	N/A	This risk was previously identified under TRU045.
TRU317	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Failure of Characterization Equipment Will Impact CH TRU Waste Certification	If WIPP certified characterization equipment fails and can no longer be used, then CH TRU waste certification and shipment could be impacted. The equipment is older technology that is still in use.	Failure of nondestructive assay or real-time-radiography equipment.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.18	Unlikely	Major	3-Moderate	$ 24,000	$ 102,000	$ 153,000	16	68	102	Equipment is unavailable to preform Characterization which delays certification and shipments to WIPP. $136K	Ensure/procure critical spare parts are on hand as availability allows.	CHTRU-CERT-2601-RM, CHTRU-CERT-2701-RM	N/A	N/A	This Risk was previously identified under TRU007R2.
TRU318	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Non-Destructive Assay (NDA) Results, Using ISOCs and All Other Available NDA Equipment, Will Not Provide a Valid Assay Result for The Entire Inventory of Waste Containers at the RWMC	If NDA results, using ISOCs and all other available NDA equipment, will not provide valid assay results for the entire inventory of waste containers at the RWMC, then both TRU and MLLW certification cannot be completed. This may result in the need for repackaging of waste containers by splitting the waste into multiple daughter containers, combining two or more containers, and/or a other means. After re-assay, one or more of the resulting containers may still be indeterminate for assay and have no approved disposition path from RWMC.	Containers fail assay due to high gamma.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.05	Rare	Moderate	1-Low	$ 48,000	$ 96,000	$ 144,000	16	32	48	This may result in the need for repackaging of waste containers by splitting the waste into multiple daughter containers, combining two or more containers, and/or a other means. $136K	Provide additional monitoring for NDA results, identify problematic waste, and make notification. Use dose to Curie results for any RH generated waste.	CHTRU-CERT-2602-RM, CHTRU-CERT-2702-RM	N/A	N/A	This risk was previously identified under TRU012R2. Provide additional monitoring for NDA results, identify problematic waste, and make notification. Use dose to Curie results for any RH generated waste.
TRU320	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: The Annual Site Treatment Plan Milestone is Missed	If the annual Site Treatment Plan milestone is missed, then potential significant cost impact due to lost fee and holdback resulting from IDEQ penalty.	A)The risk that IEC will lose critical personnel and will be unable to fill available positions with experienced staff to complete critical Acceptable Knowledge, Site Project Manager, Certification, Real Time Radiography, Non-Destructive Assay, etc., activities in support of profiling and certification of waste streams B)Delays in external, DOE-ID and the CBFO, approvals of critical documents in support of TRU waste characterization, profiling and certification. C)CBFO requires an action and DOE-ID requires something different. This could potentially generate orphan waste; or)could delay waste processing, require reprocessing, or)Sdelay profiling and)certification. D) WIPP may change their requirements or may introduce new interpretations of existing requirements, resulting in delays associated with profiling and certification or may necessitate reprocessing of waste.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 51,200	$ 99,200	$ 201,600	32	62	84	Significant cost impact due to lost fee and holdback resulting from IDEQ penalty. $48K	Provide cross training between disciplines and Increase communication with the DOE-ID and CBFO to minimize, and challenges with them as they arise.	CHTRU-CERT-2603-RM, CHTRU-CERT-2703RM	N/A	N/A	This risk was previously identified under TRU019R2.
TRU321	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Waste Not Compliant for Waste Isolation Pilot Plant (WIPP) Disposition	If TRU waste is identified that cannot be disposed of in its current configuration, then additional processing, Acceptable Knowledge (AK) development, WIPP authorization, etc., may be required.	Identification of containers that do not allow for certification.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 96,000	$ 192,000	$ 384,000	32	64	128	Additional processing, AK development, WIPP authorization, etc., would be required.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU022. Establish new capabilities by review and reconciliation of container data for waste destined for WIPP.
TRU322	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: CERCLA Facility Unavailability for Sampling/Remediation	If sampling and/or remediation (ammonium nitrate filters, high uranium, etc.) of CERCLA waste is necessary and an ARP facility is not available, then a non-RCRA facility will be required with potential update of ARP waste CERCLA requirements.	ARP waste requires reprocessing or testing.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 96,000	$ 192,000	$ 384,000	32	64	128	A non-RCRA facility will be required with potential update of ARP waste CERCLA requirements. $228K	Completed CBFO authorized testing, and ammonium nitrate in ARP waste is not acceptable for the WIPP. Remediation options are being developed, and recommendations will be provided to DOE-ID and the CBFO.	CHTRU-CERT-2604-RM, CHTRU-CERT-2704-RM	N/A	N/A	This risk was previously identified under TRU023.
TRU323	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Waste Does Not Meet Basis of Knowledge (BoK) Criteria	If containers do not meet BoK requirements, then additional processing will be required.	Containers fail BoK criteria.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Accept	0.5	Possible	Moderate	2-Low	$ 24,000	$ 48,000	$ 96,000	16	32	64	Additional processing will be required.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU024. Maintain capabilities for reprocessing waste if necessary.
TRU324	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Product Drums Cannot be Certified	If TRU product drums that fail container integrity (CI) inspections exceed allowable fissile gram equivalence (FGE) limits for a standard waste box (SWB) and the Advanced Mixed Waste Facility (AMWTF) is not available for reprocessing, then the drums cannot be overpacked or reprocessed and the waste cannot be certified.	Product drums cannot be certified due to CI failure and cannot be overpacked into an SWB.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 96,000	$ 192,000	$ 384,000	32	64	128	Drums cannot be overpacked or reprocessed and the waste cannot be certified. $211K	CBFO increase of the FGE limit for SWBs containing compacted waste. Perform UT testing to minimize the need for overpack bags and SWBs. Reprocess drums through the AMWTF while it is available.	CHTRU-CERT-2605-RM CHTRU-CERT-2705-RM	N/A	N/A	This risk was previously identified under TRU025.
TRU325	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Product Drums Require Reprocessing and Facility is Not Available	If TRU product drums must be reprocessed (liquid, high Fissile Gram Equivalence (FGE), crit cleanout puck, etc.) and Advanced Mixed Waste Treatment Facility (AMWTF) is not available, then containers cannot be reprocessed and cannot be certified.	Product drums cannot be certified due to prohibited condition and the AMWTF is not available for reprocessing.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.5	Possible	Serious	3-Moderate	$ 96,000	$ 192,000	$ 384,000	32	64	128	Containers cannot be reprocessed and cannot be certified. $288K	Identify and reprocess problematic product drums prior to AMWTF closure.	CHTRU-CERT-2606-RM CHTRU-CERT-2706-RM	N/A	N/A	This risk was previously identified under TRU026. Identify and reprocess problematic product drums prior to AMWTF closure.
TRU326	TO3.2	D.2.03.31.06	IEC	Byram, George Trevor	Jenkins, Talley Wallace	Waste Certification: Small Waste Stream Resource Availability Issues	Limited specialty resources will prevent development and approval of required TRU waste documentation resulting in a delay of waste certification.	Cannot certify populations of containers due to limited personnel and priorities associated with larger waste streams.	CHTRU-CERT-2601, CHTRU-CERT-2701	Open	Threat	Mitigate	0.5	Possible	Critical	4-High	$ 96,000	$ 192,000	$ 384,000	64	128	256	Waste will not be able to be certified. $129K	Utilize CCP AK Support to develop a system for AMWTP certification of ARP waste. Prioritize large SRP waste streams. Include debris waste from small generators in the BNS10 waste stream. Work off remaining legacy waste containers.	CHTRU-CERT-2607-RM CHTRU-CERT-2707-RM	N/A	N/A	This risk was previously identified under TRU027.
TRU328	TO3.2	D.2.03.31.08	IEC/DOE	Byram, George Trevor	Jenkins, Talley Wallace	Classification Analyst: BEA Cannot Complete Potential Classified Document Reviews	If BEA is not available to complete potential classified document reviews, then reviews of required Waste Isolation Pilot Plant (WIPP) documents cannot be completed.	Funding or personnel are not available for BEA classified document reviews.	CLASS-LOE-2601, CLASS-LOE-2602, CLASS-LOE-2603, CLASS-LOE-2701, CLASS-LOE-2702, CLASS-LOE-2703	Open	Threat	Share	0.83	Likely	Critical	5-Very High	$ 156,000	$ 312,000	$ 468,000	104	208	312	Without reviews being performed, required documents cannot be provided for review and approvals. Could impact waste stream document approvals, necessary procedure revisions, etc., which could impact shipments and STP milestones.	Propose share with DOE.	N/A	N/A	N/A	This risk was previously identified under TRU040.
TRU329	TO3.2	D.2.04.30	IEC	O'Connell, Thomas Abiah	Larsen, Rotjanee	RH-TRU Waste Disposition: Inadequate Waste Storage Space	The current storage space for generated waste is limited and with the lack of offsite disposal options combines with the increased generated RCRA waste need to be stored, the projects will run out of storage options for the waste.	Storage for RH TRU and IWTU RCRA generated waste reaches capacity.	RHTRU-OPS-5000, RHTRU-OPS-5010, RHTRU-OPS-5020, RHTRU-OPS-5030, RHTRU-OPS-5040, RHTRU-OPS-5050, RHTRU-OPS-5060,	Open	Threat	Accept	0.96	Almost Certain	Major	5-Very High	$ 500,000	$ 750,000	$ 1,000,000	48	96	144	**Best Case**: A 3-month delay and need to construct a vault storage pad=$27/sq Foot **Most Likely**: A 6-month delay and potentially multiple/larger storage pads **Worse Case**: A 9-month delay due to lack of construction resources and or additional material.	N/A	N/A	N/A	N/A	This was previously identified under TRU305.

TRU331	TO3.2	D.2.03.37.03	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU AMWTP Maintenance Activities: Crane Failure in WMF-618	WMF-618 crane is old and unreliable. Failure of the facility crane would directly impact TRUPACT loading and ultimately shipments to WIPP. It is a single-point failure and would drop shipping capabilities down to 25% capacity. Instead of being able to prepare TRUPACT shipments at a rate of 2 per day, it would effectually allow for one TRUPACT to be ready for shipment every two days, barring any interruption.	WMF-618 Overhead Crane Failure that cannot be easily repaired because of replacement part availability.	BP-CM-FY26-1, BP-PM-FY26-1, BP-CM-FY26-2, BP-PM-FY26-2, BP-CM-FY26-3, BP-PM-FY26-3, BP-CM-FY26-4, BP-PM-FY26-4, BP-CM-FY27-1, BP-PM-FY27-1, BP-CM-FY27-2, BP-PM-FY27-2, BP-CM-FY27-3, BP-PM-FY27-3, BP-CM-FY27-4, BP-PM-FY27-4	Open	Threat	Mitigate	0.25	Unlikely	Moderate	2-Low	$ 150,000	$ 380,000	$ 1,000,000	14	21	60	**Best Case**: 14 days x 10 hr./day x 16 people x $75/hr. **Most Likely**: 21 days x 10 hr./day x 16 people x $75/hr. **Worst Case:** 60 days x 10 hr./day x 16 people x $75/hr. Purchased parts for parts replacement (gearbox $65k + electrical upgrade total: $100K+) if needed. Crane replacement: $500-600K to replace (cut in, lift, and test). Have crane on site. Take 3 months to replace. Rebuilding whole crane with parts. Electrical upgrades. Shutdown for 2 wks. Likely run this crane to failure. May last 10 to 15 more years.	Evaluate other options to continue shipping waste offsite until repairs can be completed	TRU331-RM	N/A	N/A	This risk was previously identified under TRU018R2.
TRU332	TO3.2	D.2.03.34.04	IEC	Martin, David Wayne	Jenkins, Talley Wallace	Storage & Movement Activities: Loss of Contamination Control	Loss of contamination control during either storage or movement of containers.	Containers lose container integrity during storage and/or movement and contents are spilled.	SM-CM-FY26-1, SM-CM-FY26-2, SM-CM-FY26-3, SM-CM-FY26-4, SM-CM-FY27-1, SM-CM-FY27-2, SM-CM-FY27-3, SM-CM-FY27-4	Open	Threat	Accept	0.83	Likely	Moderate	3-Moderate	$ 18,000	$ 36,000	$ 54,000	10	20	30	**Best Case**: 10 days x 10hr./day x 4 people x $45/hr. = $18,000 **Most Likely**: 20 days x 10hr./day x 4 people x $45/hr. = $36,000 Worst Case: 30 days x 10hr./day x 4 people x $45/hr. = $54,000	N/A	N/A	N/A	N/A	This risk was previously identified under TRU029.
TRU333	TO3.2	D.2.03.34.05	IEC	Martin, David Wayne	Jenkins, Talley Wallace	SaM Material & Equipment Procurement: Unforeseen Equipment Replacement Need	Need for equipment replacement due to accident, breakdown, end of useful life, fabrication of new drum movement components/attachments, etc.	Replacement parts or replacement vehicles are unable for purchasing or long lead times.	SM-BUY-FY26-1, SM-BUY-FY26-2, SM-BUY-FY26-3, SM-BUY-FY26-4, SM-BUY-FY27-1, SM-BUY-FY27-2, SM-BUY-FY27-3, SM-BUY-FY27-4	Open	Threat	Mitigate	0.83	Likely	Moderate	3-Moderate	$ 100,000	$ 200,000	$ 300,000	16	32	64	**Best Case**: 1 Month delay + labor and Equipment. = $100,000 **Most Likely**: 2 Month delay + labor and equipment = $200,000 **Worst Case**: 4 Month delay + labor and Equipment = $300,000	Maintain and log aging parts/vehicles that may be needing replacement in the future.	TRU333-RM	N/A	N/A	This risk was previously identified under TRU030.
TRU334	TO3.2	D.2.03.32.05	IEC	Martin, David Wayne	Jenkins, Talley Wallace	Treatment of Additional Waste Streams: Equipment Breakdown	Box lines, the Super-compactor, or both are offline for a period of time as they are aging equipment in an aging facility causing processing to come to a halt.	Breakdown during processing.	TF-RW-FY26-1, TF-RW-FY26-2, TF-RW-FY26-3, TF-RW-FY26-4, TF-RW-FY27-1, TF-RW-FY27-2, TF-RW-FY27-3,	Open	Threat	Accept	0.75	Possible	Serious	3-Moderate	$ 350,000	$ 500,000	$ 1,000,000	32	64	128	Best Case is 32 days of labor plus cost of equipment and materials to repair the equipment. Worst case is 128 days of labor plus cost of materials and equipment to repair.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU035.
TRU335	TO3.2	D.2.03.32.05	IEC	Martin, David Wayne	Jenkins, Talley Wallace	Treatment of Additional Waste Streams: Ammonium Nitrate Changeover	Difficulty/delays caused by not being able to determine the best path forward to be able to treat and package Ammonium Nitrate bearing waste in a safe and compliant manner.	Ammonium Nitrate waste requires reprocessing or testing.	TF-RW-FY27-4	Open	Threat	Accept	0.83	Likely	Serious	4-High	$ 96,000	$ 192,000	$ 384,000	32	64	128	**Best Case**: 32 days x 10 hr./day x 4 people x $75/hr. = $96,000 **Most Likely**: 64 days x 10 hr./day x 4 people x $75/hr. = $192,000 Worst Case: 128 days x 10 hr./day x 4 people x $75/hr. = $384,000	N/A	N/A	N/A	N/A	This risk was previously identified under TRU036.
TRU336	TO3.2	D.2.03.37.04	IEC	Martin, David Wayne	Jenkins, Talley Wallace	BOP Material & Equipment Procurement: Replacement Parts Are Out of Compliance or Unavailable	Advanced Mixed Waste Treatment Project (AMWTP) is an aging facility, and the project is in need of constant repairs for continued operations. If parts are unavailable or equipment breaks down operations may stop progressing causing schedule delays.	Parts and equipment are unavailable or obsolete to keep equipment operating.	BP-ME-FY26-1, BP-ME-FY26-2, BP-ME-FY26-3, BP-ME-FY26-4, BP-ME-FY27-1, BP-ME-FY27-2, BP-ME-FY27-3, BP-ME-FY27-4	Open	Threat	Accept	0.93	Almost Certain	Serious	5-Very High	$ 350,000	$ 500,000	$ 1,000,000	16	64	128	32 days of labor for Purchasing Activities (~$30K) plus regular non-labor needs for that time frame (~$86K). 64 days of labor for Purchasing Activities (~$58K) plus regular non-labor needs for that time frame (~$172K). 128 days of labor for Purchasing Activities (~$116K) plus regular non-labor needs for that time frame (~$350K). These costs are before any needs for large rental/lease equipment, or new purchases or procurement of replacement items.	N/A	N/A	N/A	N/A	This risk was previously identified under TRU039.
TRU338	TO3.2	D.2.03.34.08	IEC	Martin, David Wayne	Jenkins, Talley Wallace	WMF-635 Tent Operations: Support Equipment Failure	While working on projects there is a loss of ventilation, or loss of crane and other pieces of equipment.	Equipment Failure	SM-TENT-1, SM-TENT-2, SM-TENT-3, SM-TENT-4, SM-TENT-5, SM-TENT-6, SM-TENT-7,	Open	Threat	Accept	0.26	Possible	Minor	2-Low	$ 30,000	$ 60,000	$ 100,000	4	16	32	Current numbers based on CAM judgement, and cost of replacement material.	N/A	N/A	N/A	N/A	New Risk
WM001	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Waste Disposition: External Requirements Change	External Requirements for corrective maintenance are subject to change. Examples of external requirements are: DOE O151.1C, OSHA, EPA, FEMA, and state and local laws. When external requirements are modified, the project may be required to make significant equipment upgrades, supply employees with additional training, update work control, etc., which could result in unforeseen costs and schedule slippage.	IEC is notified of changes made to external requirements.	TBD	Open	Threat	Accept	0.5	Possible	Serious	3-Moderate	$ 400,000	$ 800,000	$ 1,600,000	0	0	0	Impacts represent the time and costs it would take to plan rework, new paths forward, additional training and equipment upgrades.	N/A	N/A	N/A	N/A	N/A
WM002	TO3.2	D.2.03.34	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Storage and Movement: WMF-634 Critical Legacy Equipment or Infrastructure Failure (Nuclear)	WMF-634 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure equipment has the potential of failing or becoming obsolete due to the nature of its age. Unforeseen infrastructure and/or equipment failure as well as obsolete equipment no longer serving a purpose can cause unscheduled outages to repair or procure new equipment and turn the facility/equipment back over to operations.	Failure of the following items but not limited to: • Drum and box assay systems • Support infrastructure • Old PC replacement • Real time radiography (RTR) systems failure • Heating and HVAC systems failure	TBD	Open	Threat	Accept	0.95	Almost Certain	Serious	5-Very High	$ 500,000	$ 1,000,000	$ 1,500,000	8	30	48	Impacts are driven by efforts to replace and/or repair certain parts of aging equipment.	N/A	N/A	N/A	N/A	N/A
WM003	TO3.2	D.2.03.32	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU treatment Facility Support: WMF-676 Drum Assay System, Fire Systems - Critical Legacy Equipment or Infrastructure Failure (Nuclear)	WMF-676 has a significant amount of legacy infrastructure and equipment specifically the Drum Assay System, Fire Systems, and Special Waste Case Packet Assay monitor. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failing equipment and/or infrastructure. Drum Assay System, Upgrade/replacement of Box Line CO2 Fire Suppression System, Fire Protection Upgrades (New 1" ENS, 2"Alarm panels, 3" Type 2/Linear Beams, Risers and valving components) Refurbishment of Special Case Waste Packet Assay Monitor.	TBD	Open	Threat	Accept	0.95	Almost Certain	Serious	5-Very High	$ 400,000	$ 1,000,000	$ 2,000,000	8	16	60	Impacts are based on actuals for replacing related legacy equipment.	N/A	N/A	N/A	N/A	N/A
WM004	TO3.2	D.2.03.32	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU treatment Facility Support: WMF-676 Drum Venting Barrier/Process Cell Elevators - Critical Legacy Equipment or Infrastructure Failure (Nuclear)	WMF-676 has a significant amount of legacy infrastructure and equipment, specifically in the Drum Venting Barrier and the Process Cell Elevators. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Drum Venting Barrier: New make-up Air Unit and compressors Process Cell Elevators: Replacements of damaged or aged parts, CCTV/imaging update from analog to digital that is compliant with IT Cyber Security Requirements.	TBD	Open	Threat	Accept	0.95	Almost Certain	Major	5-Very High	$ 500,000	$ 1,250,000	$ 2,000,000	8	32	60	**Best Case** is 8 days of labor plus cost of materials to repair the equipment. **Most Likely Case** is 32 days of labor plus cost of materials to repair the equipment. **Worst Case** is 60 days of labor plus cost of materials to repair the equipment.	N/A	N/A	N/A	N/A	N/A
WM005	TO3.2	D.2.03.32	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU treatment Facility Support: WMF-676 Roof, Treatment/Process Ventilation System, FTS - Critical Legacy Equipment or Infrastructure Failure (Nuclear)	WMF-676 has a significant amount of legacy infrastructure and equipment specifically the Treatment/Process Ventilation System, Fissile Tracking system, and the Roof. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Treatment/Process Ventilation System Upgrades (electrical and control systems). Fissile Tracking System (FTS) failure Roof failed to seal and begins leaking, needing immediate repairs.	TBD	Open	Threat	Accept	0.5	Possible	Major	4-High	$ 1,000,000	$ 2,000,000	$ 3,000,000	30	60	68	Impacts reflect a range from time required for trouble shooting and minor part replacements and repairs to potential major component or full system procurements necessary to restore operations to required standards.	N/A	N/A	N/A	N/A	N/A
WM006	TO3.2	D.2.03.32	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU treatment Facility Support: WMF-676 Critical Legacy Equipment or Infrastructure Failure (Nuclear)	WMF-676 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Super compactor electrical and motor control center, Ventilation System Upgrades.	TBD	Open	Threat	Accept	0.5	Possible	Major	4-High	$ 1,000,000	$ 2,500,000	$ 4,000,000	30	60	72	Impacts are driven by efforts to repair and/or replace aging equipment.	N/A	N/A	N/A	N/A	N/A
WM007	TO3.2	D.2.03.32	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU treatment Facility Support: WMF-676 HVAC - Critical Legacy Equipment or Infrastructure Failure (Non-Nuclear)	WMF-676 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Non-nuclear Ventilation HVAC back up compressor: motors continuously fails.	TBD	Open	Threat	Accept	0.95	Almost Certain	Moderate	4-High	$ 200,000	$ 300,000	$ 400,000	4	8	16	Impacts are based on actual HVAC repair and/or replacement activities.	N/A	N/A	N/A	N/A	N/A
WM008	TO3.2	D.2.03.34	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Storage and Movement: Area Wide Critical Legacy Equipment or Infrastructure Failure (Roofs and Exhaust Fans)	WMF-628,629,630,631,632,633,634 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations. Infrastructure elements such as roofs, exhaust fans, and other legacy systems are approaching or have exceeded their expected service life. The aging condition of these components has led to performance issues and a higher frequency of equipment failures, indicating a need for assessment, repair, or replacement planning.	Aging building infrastructure causes roofs or ventilation system (fans) failure, resulting in potential safety hazards, project delays, or additional repair costs.	TBD	Open	Threat	Accept	0.95	Almost Certain	Major	5-Very High	$ 500,000	$ 1,500,000	$ 2,250,000	8	48	56	**Best Case**: Impacts are based on schedule delays and minor material costs associated with repairing discovered damage. **Most Likely Case:** Impacts are based on minor components needing to be replaced. **Worst Case**: Impacts are based on major components needing to be replaced.	N/A	N/A	N/A	N/A	N/A
WM009	TO3.2	D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	RWMC BOP: WMF-709 - Critical Legacy Equipment or Infrastructure Failure	WMF-709 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age including issues with the interior and exterior coating of the building. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Potable water storage tank #1 exterior coating needs replaced. During routine inspections, issues were identified with both the interior and exterior coatings of the building.	TBD	Open	Threat	Accept	0.9	Likely	Moderate	3-Moderate	$ 250,000	$ 500,000	$ 750,000	4	8	16	Impacts are based on minor repairs to purchasing additional materials for repairs.	N/A	N/A	N/A	N/A	N/A
WM010	TO3.2	D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	RWMC BOP: WMF-613,637,655,656 - Critical Legacy Equipment or Infrastructure Failure	WMF-613, 637, 655, 656 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Complete Fire Water Upgrades, replacement of sprinkler heads as well as replacing supply lines if needed, new valves. It also covers new detection systems, i.e.. New Fire Alarm Control Panels, new field devices, new conduit if needed and conductors if needed.	TBD	Open	Threat	Accept	0.95	Almost Certain	Major	5-Very High	$ 250,000	$ 1,500,000	$ 2,000,000	4	30	48	Based on actuals from INTEC firewater replacement in FY24/25.	N/A	N/A	N/A	N/A	N/A
WM011	TO3.2	D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	RWMC BOP: WMF-639 - Critical Legacy Equipment or Infrastructure Failure	WMF-639 has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age including issues with the interior and exterior coating of building. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Firewater Pumphouse #2: New Diesel Fire pump as well as a upgraded fire water riser and piping. replacement piping will have to be replaced when the diesel pump is replaced, and the supply and discharge piping are 10" lines. During routine inspections, issues were identified with both the interior and exterior coatings of the building.	TBD	Realized	Threat	Accept	0.95	Almost Certain	Moderate	4-High	$ 200,000	$ 450,000	$ 850,000	4	8	16	Impacts are based on minor repairs to purchasing additional materials for repairs.	N/A	N/A	N/A	N/A	N/A
WM012	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Waste Disposition: Area Wide Roads and Grounds Early Degradation Infrastructure Failure	Unforeseen early degradation of roads and grounds including manholes at RWMC may require unplanned repairs and/or replacement which may cause unplanned schedule and cost variances to return grounds and roads to a safe configuration.	Significant degradation of roadways, drainage system and concrete/asphalt and manholes.	TBD	Open	Threat	Accept	0.9	Likely	Major	4-High	$ 750,000	$ 1,500,000	$ 3,000,000	8	24	48	Actuals from FY/24 and FY/25 re-paving activities that took place at INTEC.	N/A	N/A	N/A	N/A	N/A
WM013	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Waste Disposition: Area Wide Critical Legacy Equipment or Infrastructure Failure	Legacy infrastructure and equipment has the potential of failing due to the nature of its age including issues with the interior and exterior coating of building. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	HVAC control system replacement (new wiring controls, computer, programing etc.), roof repair, Rolling Stock Upgrades/Replacements (e.g., trucks and forklifts), carpet, paint, awning repairs, sewage loft stations/grinder pumps, sewer lagoons, and piping are in need of an assessment, repair, or replacement planning.	TBD	Open	Threat	Accept	0.9	Likely	Moderate	3-Moderate	$ 100,000	$ 500,000	$ 1,000,000	4	8	16	Impacts are based on a range of potential outcomes, from minor repairs to failed HVAC components to major system repairs or full equipment replacement planning.	N/A	N/A	N/A	N/A	N/A

WM014	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Waste Disposition: RWMC Critical Legacy Equipment or Infrastructure Failure	RWMC has a significant amount of legacy infrastructure and equipment. Legacy infrastructure and equipment has the potential of failing due to the nature of its age. Unforeseen infrastructure and/or equipment failure can cause unscheduled outages to repair and turn the facility/equipment back over to operations.	Failure of equipment and/or infrastructure.	TBD	Open	Threat	Accept	0.95	Almost Certain	Critical	5-Very High	$ 6,000,000	$ 8,000,000	$ 12,000,000	32	48	96	Impacts are based on actuals for replacing similar legay equipment at INTEC or other INL locations.	N/A	N/A	N/A	N/A	N/A
WM015	TO3.2	D.2.03.32 D.2.03.34 D.2.03.37 D.2.07.30	IEC	Martin, David Wayne	Jenkins, Talley Wallace	CH-TRU Waste Disposition: Failure of Transformers, Underground Electrical and/or Process Piping	Failure of transformers, PCC's MCC's and underground electrical and process piping at RWMC will result in significant cost and schedule delays.	Failure of piping or underground wiring. Failure of transformers, PCC's and MCC's.	TBD	Open	Threat	Accept	0.9	Likely	Critical	5-Very High	$ 3,000,000	$ 6,000,000	$ 9,000,000	32	48	96	Impacts are based on repairing piping, wiring, transformers, etc. up to point of full replacement.	N/A	N/A	N/A	N/A	N/A

TO5.1 Risk Register: DOE Transfer Risks

Idaho Cleanup Project Programmatic Risk Register

Updated : 12.11.25

																Cost Impacts			Schedule Impacts (in days)					
Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	Status	Risk Type	Handling Strategy	Probability	Risk Event Likelihood	Risk Impact	Risk Rating	Best Case	Most Likely	Worst Case	Best Case	Most Likely	Worst Case	Basis of Impacts	Mitigation/Enhancement Activities	Notes
A1W305	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Removal of Large Components by Subcontractor	Removal of large components from areas 1-6 by subcontractor delayed due to building access conflicts, resulting in delays to the demolition for areas 1, 2 and 6 which restricts access to the remainder of the building.	NR/FMP Utility reroutes, or personnel relocations delay turnover and access to A1W.	Open	Threat	Share	50%	Possible	Moderate	2-Low	$ 142,880	$ 285,760	$ 571,520	8	16	24	Access is not available for subcontractor setup for removal of large components can cause delays, which result in the estimated costs.	Propose share with DOE.	This risk was previously identified under IT320.
A1W306	TO5.1	D.5.01	DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: A1W Large Components to Onsite Waste Disposal	Idaho CERCLA Disposal Facility (ICDF) existing cells (1 and 2) space is unable to accept A1W Reactor Vessels for disposal and cell 3 will not be operational to support the schedule.	ICDF does not have the capacity to accept the A1W reactor Vessels, Waste may need to be staged and disposed of at a later date.	Open	Threat	Transfer	40%	Possible	Serious	3-Moderate	$ 569,808	$ 900,000	$ 2,279,232	8	16	24	ICDF cannot accept additional packaging may be required to stage waste and dispose of at a later date. This may take extra resources and 16-day delay.	Propose transfer to DOE.	This was previously identified under RHTRU301.
NRFDD014 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Cranes Turnover Weight Restriction	The overhead cranes in SSG are crucial in removing all large items from the basin in SSG. Loss of overhead cranes or inability to increase the load capacity will limit large item removal and negatively impact project schedule and cost.	Upon cranes turnover from Fluor Marine Propulsion (FMP), weight capacity increase is not allowed.	Open	Threat	Share	5%	Rare	Moderate	1-Low	$ -	$ -	$ -	16	20	32	January - September 30th, large item removal will be slower than anticipated. No cost impacts, schedule impacts only.	Propose share with DOE.	Work with BEA to identify possible delays due to supply chain issues. IEC and BEA looking to possibly procure DOESC's at risk if necessary. The costs listed from delays are based on a $13k/day cost to operate a SNF crew IEC will address crew reassignment in order to minimize cost impact. If DOESC's become critical path, IEC and BEA will pursue procurement at risk to minimize impact to schedule.
NRFDD301 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operational Control of NRF-626	It is assumed that Fluor Marine Propulsion (FMP) will transfer operation control of NRF-626 to IEC. If NRF-626 is not transferred when anticipated the project's schedule will be negatively impacted.	A1W transfer of NRF-626 not turned over as scheduled.	Open	Threat	Share	27%	Possible	Minor	2-Low	$ 125,000	$ 175,000	$ 250,000	8	12	16	Cost and Schedule impacts have been estimated based on SME expertise. Most Likely assumes 626 turnover delays crews 2 weeks on the 626 start. Worst case assumes 626 turnover delays crews 3 weeks on the 626 start.	Propose share with DOE.	Cost includes operational costs, potentially a new DOESC system, and the cost of non usable DOESC system disposal. For the Road Ready Demonstration, 10 DOESC's will be procured. The Demonstration will be loading 7 DOESC's with 3 spares. In the event of a compromised DOESC, the fuel can be reloaded into a spare DOESC and welded. Additionally, the welding will be done in the PCS which will also allow for safely manually grinding of the weld. Weld will manually be ground off and rewelded if DOESC weld is damaged. If a second weld fails or DOESC is damaged unloading and loading of the DOESC is required. IEC will look at the qualifying individuals to hand weld the circumferential weld as necessary.
NRFDD302	TO5.1	D.5.01	DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Large Components to Onsite Waste Disposal	Idaho CERCLA Disposal Facility (ICDF) existing cells (1 and 2) space is unable to accept the SSG Reactor Vessel for disposal and cell 3 will not be operational to support the schedule	ICDF does not have the capacity to accept the SSG reactor Vessel, Waste may need to be staged and disposed of at a later date.	Open	Threat	Transfer	50%	Possible	Serious	3-Moderate	$ 569,808	$ 900,000	$ 2,279,232	8	16	24	ICDF cannot accept additional packaging may be required to stage waste and dispose of at a later date. This may take extra resources and 16-day delay.	Propose transfer to DOE.	BEA procurement of different seals to correct deficiencies to allow for successful leak testing. If alternative seals are not successful, BEA to correct design of Bell Jar. Additionally, BEA has identified a backup commercially provided option in the event the Leak Testing System is not acceptable.
NRFDD303 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operation Control of SSG High Bay	It is assumed that Fluor Marine Propulsion (FMP) will turn over operational control of SSG to IEC. IF FMP and IEC have to share workspace in SSG it may lead to delays due to coordination issues, misaligned workflow, access limitations or conflicting operational guidelines and/or priorities.	Conflicting work guidelines/procedures. Shared airspace. Personnel Nuisances.	Open	Threat	Share	50%	Possible	Moderate	2-Low	$ 240,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 2 crews for 1 day /month and worst case is based on delay for 2 crews 2 days/month due to shut down due to sharing the same workspace.	Propose share with DOE.	Identified by Engineering as a necessary upgrade to CPP-603 to continue operations/support future projects such as the Packaging Demonstration. Replacement of the MSM and its approximate costs were determined from $13K/day crew costs applied to a 3, 6 and 12-month period. Maintain the Facility/Equipment. PM's will be scheduled and performed
NRFDD304	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Delays due to FMP Facility Maintenance, Utility Isolations and Road Closures	Any unforeseen Fluor Marine Propulsion (FMP) facility maintenance, road closures or utility isolations at Naval Reactor Facility (NRF) may delay the projects schedule.	Any maintenance, road closures or utility isolations that interfere with project.	Open	Threat	Share	50%	Possible	Moderate	2-Low	$ 240,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 2 crews for 1 day /month and worst case is based on delay for 2 crews 2 days/month due to road closures, excavations, PM's or corrective maintenance by FMP that impacts IEC work area.	Propose share with DOE.	N/A
NRFDD305 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Exclusive Rail Use Delays	Idaho Environmental Coalition (IEC) assumes exclusive use of the rail at the west end of SSG. If the rail is needed by Fluor Marine Propulsion (FMP) for other work, it will impact the work scope and lead to schedule delays.	FMP needs rail system for other work scope.	Open	Threat	Share	10%	Rare	Moderate	1-Low	$ 120,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 1 crew for 1 day /month and worst case is based on delay for 2 crews 2 days/month due a delay in moving rail car system in/out of SSG through gate 6 for waste removal and sizing.	Propose share with DOE.	This risk was previously identified under TRU040.
NRFDD307 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Floor Design Delay	If the floor design for SSG or approval of the floor design by Fluor Marine Propulsion (FMP) takes longer than anticipated the schedule will be negatively impacted.	Floor design takes longer than anticipated. FMP takes longer than anticipated to approve floor design.	Open	Threat	Share	50%	Possible	Moderate	2-Low	$ 160,000	$ 480,000	$ 960,000	16	32	64	Best Case is based on delay for 1 month delaying the subcontract award process and may cause subcontractor cost increase. Worst case is 6-month delay with a lag between our work completion and installation of floor increasing the overhead and cost for Level of Effort (LOE) management and engineering support	Propose share with DOE.	
NRFDD308 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG End State Floor Design and Installation	There is a potential that the end state floor design provided by Fluor Marine Propulsion (FMP) will be too complex to align with the allotted schedule duration.	The floor design comes back more complex than anticipated.	Open	Threat	Share	50%	Possible	Moderate	2-Low	$ 160,000	$ 480,000	$ 960,000	16	32	64	Best Case is based on delay for 1 month delaying the subcontract award process and may cause subcontractor cost increase. Worst case is 6-month delay with a lag between our work completion and installation of floor increasing the overhead and cost for Level of Effort (LOE) management and engineering support or fall out our contact completion.	Propose share with DOE.	
NRFDD310 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Containment Modifications	It is assumed that the current containment design for the SSG tent is adequate. However, if any external entity requires modifications or redesign of the SSG containment tent, the project schedule may be delayed and project costs may drastically increase, and a new or revised proposal for scope may be required.	Any externally driven modifications or redesign requirements to current containment design for SSG.	Open	Threat	Share	80%	Likely	Minor	2-Low	$ 50,000	$ 100,000	$ 250,000	8	16	32	Best Case: 1 crew for 2 weeks from cutting activities and material costs and delays in material acquisition and delivery. Most likely: 1 crew for 1 month from cutting activities and material costs delays in material acquisition and delivery. Worst case: 1 crew for 2 months from cutting activities and material costs delays in material acquisition and delivery.	N/A	N/A
NRFDD311	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Externally Driven Scope Changes	If any external entity requires changes to current project scope, the project may be delayed and achievement of critical DOE milestones may be impacted due to additional review, approval, redesign, or any rework requirements.	External direction requiring scope changes. Regulatory modifications.	Open	Threat	Share	50%	Possible	Major	4-High	$ 1,500,000	$ 2,500,000	$ 5,000,000	48	96	192	Delayed receipt of projected performance fees resulting in a higher overhead and extended schedule increasing the overall costs and missing the end state milestone and associated fee. 2 crews for 3 months. 2 crews for 6 months. 2 crews for 12 months.	N/A	N/A
S1W002R2	TO5.1	D.5.01	DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Supply Chain Delays and Cost Increases	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain.	Realized	Threat	Transfer	18%	Unlikely	Moderate	2-Low	$ 150,000	$ 300,000	$ 960,000	5	10	32	Based on SME experience. Best case assumes 1 week delay and a small cost increase. Most Likely assumes 2 1/2 weeks delay with moderate expense for supplies due to availability. Worst Case assumes 2 months delay the impacts other activities with substantial cost increase.	Propose transfer to DOE.	9/23/25 The initial wire used for metals was not efficient and was slow or failing. A limited supply of another option was found and expedited, this wire is working better however, it is discontinued by Hilti. The replacement for the discontinued wire is not available until October. Two other possible options have been found from a different supplier and a quote and availability has been requested.
SSG300 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operational Control of SSG West End for Waste Removal	It is assumed that operational control of SSG west end roll-up door and crane will allow for waste and equipment removal. If the transfer of operational control is not turned over when expected, it will result in the inability to remove waste from SSG. If waste from SSG cannot be removed the project schedule will be negatively impacted.	West end of SSG not available to support removal of waste and/ or equipment.	Open	Threat	Share	27%	Possible	Minor	2-Low	$ 125,000	$ 175,000	$ 250,000	8	12	16	Cost and Schedule impacts have been estimated based on SME expertise. Best case assumes it takes 2 weeks to schedule crane use at West end for waste loadout. Most likely assumes it takes 3 weeks to schedule crane use at West end for waste loadout. Worst case assumes it takes 1 month to schedule crane use at West	Propose share with DOE.	
SSG302 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Unexpected Waste Properties	Waste removed from the basin in NRF-633 has unexpected properties. These properties result in not meeting the waste acceptance criteria (WAC) for the planned disposal path. This could require additional packaging, and alternative disposal path.	Unexpected waste profile not identified by Fluor Marine Propulsion (FMP) discovered while removing waste from the basin.	Open	Threat	Share	8%	Rare	Minor	1-Low	$ 125,000	$ 250,000	$ 500,000	8	16	32	Cost and Schedule impacts have been estimated based on SME expertise.	Propose share with DOE.	

TO5.1 Project Risk Register

Idaho Cleanup Project Programmatic Risk Register

Updated : 12.11.25

Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	Status	Risk Type	Handling Strategy	Risk Event Likelihood	Risk Impact	Risk Rating	Cost Impacts			Schedule Impacts (in days)			Basis of Impacts	Mitigation Actions	Mitigation Activities (P6 activity that points to your mitigation action)	Response/Recovery Actions	Reason for Closure	Notes
															Best Case	Most Likely	Worst Case	Best Case Days	Most Likely Days	Worst Case Days						
A1W305	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Removal of Large Components by Subcontractor	Removal of large components from areas 1-6 by subcontractor delayed due to building access conflicts, resulting in delays to the demolition for areas 1, 2 and 6 which restricts access to the remainder of the building.	NR/FMP Utility reroutes, or personnel relocations delay turnover and access to A1W.	Open	Threat	Share	Possible	Moderate	2-Low	$ 142,880	$ 285,760	$ 571,520	8	16	24	Access is not available for subcontractor setup for removal of large components can cause delays, which result in the estimated costs.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0012	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Industrial Incidents Resulting in Shutdowns	An industrial incident resulting in serious personnel injury may cause an extended shutdown due to corrective actions or equipment failures.	An unanticipated accident resulting in injury.	Open	Threat	Accept	Rare	Critical	3-Moderate	$ 750,000	$ 1,500,000	$ 3,000,000	100	180	204	Cost is based on the SME estimate to perform corrective actions, but dependent on extent of the event. Best Case-incident is minor, with a quick investigation and very few corrective actions. Worse case-prolonged shut-down with extensive recovery actions, corrective actions, training, etc.	N/A	N/A	N/A	N/A	N/A	None
NRFD0013	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Subcontract Management	Not securing a subcontractor that can perform large item removal in accordance with the schedule can cause schedule delays.	Subcontractor is not readily available to perform work.	Open	Threat	Mitigate	Rare	Major	2-Low	$ 1,000,000	$ 2,000,000	$ 3,000,000	5	30	30	It was determined by the project manager (PM) subject matter expert (SME) that best case may delay a week with minimal cost impacts. Most likely may delay work 1 month to rebid contract but minimal cost impacts. Worst case may delay 1 month with a higher bid price from a backup subcontractor.	Secure Backup Crane Subcontractor for large component removal.	NRFSSG-7132RM	N/A	N/A	None
NRFD0014 **Scope not definitized.	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Cranes Turnover Weight Restriction	The overhead cranes in SSG are crucial in removing all large items from the basin in SSG. Loss of overhead cranes or inability to increase the load capacity will limit large item removal and negatively impact project schedule and cost.	Upon cranes turnover from Fluor Marine Propulsion (FMP), weight capacity increase is not allowed.	Open	Threat	Share	Rare	Moderate	1-Low	$ -	$ -	$ -	16	20	32	January - September 30th, large item removal will be slower than anticipated. No cost impacts, schedule impacts only.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0301 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operational Control of NRF-626	It is assumed that Fluor Marine Propulsion (FMP) will transfer operation control of NRF-626 to IEC. If NRF-626 is not transferred when anticipated the project's schedule will be negatively impacted.	A1W transfer of NRF-626 not turned over as scheduled.	Open	Threat	Share	Possible	Minor	2-Low	$ 125,000	$ 175,000	$ 250,000	8	12	16	Cost and Schedule impacts have been estimated based on SME expertise. Most Likely assumes 626 turnover delays crews 2 weeks on the 626 start. Worst case assumes 626 turnover delays crews 3 weeks on the 626 start.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0303 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operation Control of SSG High Bay	It is assumed that Fluor Marine Propulsion (FMP) will turn over operational control of SSG to IEC. IF FMP and IEC have to share workspace in SSG it may lead to delays due to coordination issues, misaligned workflow, access limitations or conflicting operational guidelines and/or priorities.	Conflicting work guidelines/procedures. Shared airspace. Personnel Nuisances.	Open	Threat	Share	Possible	Moderate	2-Low	$ 240,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 2 crews for 1 day /month and worst case is based on delay for 2 crews 2 days/month due to shut down due to sharing the same workspace.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0304	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Delays due to FMP Facility Maintenance, Utility Isolations and Road Closures	Any unforeseen Fluor Marine Propulsion (FMP) facility maintenance, road closures or utility isolations at Naval Reactor Facility (NRF) may delay the projects schedule.	Any maintenance, road closures or utility isolations that interfere with project.	Open	Threat	Share	Possible	Moderate	2-Low	$ 240,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 2 crews for 1 day /month and worst case is based on delay for 2 crews 2 days/month due to road closures, excavations, PM's or corrective maintenance by FMP that impacts IEC work area.	Propose share with DOE.	NRFSSG7185	N/A	N/A	
NRFD0305 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Exclusive Rail Use Delays	Idaho Environmental Coalition (IEC) assumes exclusive use of the rail at the west end of SSG. If the rail is needed by Fluor Marine Propulsion (FMP) for other work, it will impact the work scope and lead to schedule delays.	FMP needs rail system for other work scope.	Open	Threat	Share	Rare	Moderate	1-Low	$ 120,000	$ 320,000	$ 480,000	12	16	24	Best case is based on delay of work for 1 crew for 1 day /month and worst case is based on delay for 2 crews 2 days/month due a delay in moving rail car system in/out of SSG through gate 6 for waste removal and sizing.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0306 **Scope not definitized	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Reactor Vessel WAC Requirements	The reactor vessel in SSG has unexpected properties. These properties result in not meeting the waste acceptance criteria (WAC) for the planned disposal path. This could require additional packaging, and alternative disposal path.	Unexpected waste profile not identified by Fluor Marine Propulsion (FMP) discovered while removing reactor vessel from the basin.	Open	Threat	Accept	Rare	Minor	1-Low	$ 120,000	$ 180,000	$ 240,000	8	12	16	Best Case is based on delay for additional approvals 1 month delay. Worst case is waste need to be sent to off-site disposal with additional shipping and disposal costs.	N/A	N/A	N/A	N/A	
NRFD0307 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Floor Design Delay	If the floor design for SSG or approval of the floor design by Fluor Marine Propulsion (FMP) takes longer than anticipated the schedule will be negatively impacted.	Floor design takes longer than anticipated. FMP takes longer than anticipated to approve floor design.	Open	Threat	Share	Possible	Moderate	2-Low	$ 160,000	$ 480,000	$ 960,000	16	32	64	Best Case is based on delay for 1 month delaying the subcontract award process and may cause subcontractor cost increase. Worst case is 6-month delay with a lag between our work completion and installation of floor increasing the overhead and cost for Level of Effort (LOE) management and engineering support	Propose share with DOE.	N/A	N/A	N/A	
NRFD0308 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG End State Floor Design and Installation	There is a potential that the end state floor design provided by Fluor Marine Propulsion (FMP) will be too complex to align with the allotted schedule duration.	The floor design comes back more complex than anticipated.	Open	Threat	Share	Possible	Moderate	2-Low	$ 160,000	$ 480,000	$ 960,000	16	32	64	Best Case is based on delay for 1 month delaying the subcontract award process and may cause subcontractor cost increase. Worst case is 6-month delay with a lag between our work completion and installation of floor increasing the overhead and cost for Level of Effort (LOE) management and engineering support or fall out our contact completion.	Propose share with DOE.	N/A	N/A	N/A	
NRFD0310 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: SSG Containment Modifications	It is assumed that the current containment design for the SSG tent is adequate. However, if any external entity requires modifications or redesign of the SSG containment tent, the project schedule may be delayed and project costs may drastically increase, and a new or revised proposal for scope may be required.	Any externally driven modifications or redesign requirements to current containment design for SSG.	Open	Threat	Share	Likely	Minor	2-Low	$ 50,000	$ 100,000	$ 250,000	8	16	32	Best Case: 1 crew for 2 weeks from cutting activities and material costs and delays in material acquisition and delivery. Most likely: 1 crew for 1 month from cutting activities and material costs delays in material acquisition and delivery. Worst case: 1 crew for 2 months from cutting activities and material costs delays in material acquisition and delivery.	N/A	N/A	N/A	N/A	
NRFD0311	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Externally Driven Scope Changes	If any external entity requires changes to current project scope, the project may be delayed and achievement of critical DOE milestones may be impacted due to additional review, approval, redesign, or any rework requirements.	External direction requiring scope changes. Regulatory modifications.	Open	Threat	Share	Possible	Major	4-High	$ 1,500,000	$ 2,500,000	$ 5,000,000	48	96	192	Delayed receipt of projected performance fees resulting in a higher overhead and extended schedule increasing the overall costs and missing the end state milestone and associated fee. 2 crews for 3 months. 2 crews for 6 months. 2 crews for 12 months.	N/A	N/A	N/A	N/A	
SSG300 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Transfer of Operational Control of SSG West End for Waste Removal	It is assumed that operational control of SSG west end roll-up door and crane will allow for waste and equipment removal. If the transfer of operational control is not turned over when expected, it will result in the inability to remove waste from SSG. If waste from SSG cannot be removed the project schedule will be negatively impacted.	West end of SSG not available to support removal of waste and/ or equipment.	Open	Threat	Share	Possible	Minor	2-Low	$ 125,000	$ 175,000	$ 250,000	8	12	16	Cost and Schedule impacts have been estimated based on SME expertise. Best case assumes it takes 2 weeks to schedule crane use at West end for waste loadout. Most likely assumes it takes 3 weeks to schedule crane use at West end for waste loadout. Worst case assumes it takes 1 month to schedule crane use at West end for waste loadout.	Propose share with DOE.	N/A	N/A	N/A	
SSG302 **Scope not definitized	TO5.1	D.5.01	IEC/DOE	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Unexpected Waste Properties	Waste removed from the basin in NRF-633 has unexpected properties. These properties result in not meeting the waste acceptance criteria (WAC) for the planned disposal path. This could require additional packaging, and alternative disposal path.	Unexpected waste profile not identified by Fluor Marine Propulsion (FMP) discovered while removing waste from the basin.	Open	Threat	Share	Rare	Minor	1-Low	$ 125,000	$ 250,000	$ 500,000	8	16	32	Cost and Schedule impacts have been estimated based on SME expertise.	Propose share with DOE.	N/A	N/A	N/A	
TOSA001	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Personnel Attrition	Ability to acquire new trained individuals becomes harder, requiring subcontractor support to complete the work. This may incur additional costs & schedule delays.	Attrition realized.	Open	Threat	Accept	Rare	Moderate	1-Low	$ 37,500	$ 225,000	$ 337,500	5	30	30	Based on SME input. Best Case is that replacement personnel are immediately available with little downtime or vacancy in the position. Most likely case is that it may take 1-2 months to fill in and train replacement personnel. Worst case is that it may take 6 months to recruit and train new personnel.	N/A	N/A	N/A	N/A	
TOSA004	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Loss of Contamination Control	Loss of contamination control (outside D&D boundaries) during demolition may result in personnel contamination and/or extended shutdown for recovery.	An unanticipated event driven by discovery of potential radiological contamination outside of the demolition boundary.	Open	Threat	Accept	Rare	Major	2-Low	$ 562,500	$ 1,687,500	$ 2,000,000	10	30	30	Cost and schedule impacts based on recovery actions/ shut down due to varying severity of a loss of contamination control/ radiation exposure.	N/A	N/A	N/A	N/A	None
TOSA007	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Offsite Shipment of Haz Waste for Disposal	No Treatment, Storage, and Disposal Facility (TSDF) available for offsite treatment of "hazardous" waste generated during deactivation or characterization.	Unexpected hazardous waste is found during deactivation or characterization.	Open	Threat	Accept	Rare	Moderate	1-Low	$ 142,452	$ 284,904	$ 569,808	16	32	64	Cost and schedule based on finding an alternative disposal path and storage facility for hazardous waste.	N/A	TOSA-050151-2007 NRFA1W-1019; NRFSSG-4010	N/A	N/A	
TOSA010	TO5.1	D.5.01	IEC	Burtenshaw, Shawna Irene	Larsen, Eric Charles	NRF D&D: Rad Characterization of RVs Determines Class C Disposal Required	If Reactor Pressure Vessels (RVs) is determined as Class C then that would require offsite disposal.	Reactor Pressure Vessels is determined to be Class C	Open	Threat	Accept	Rare	Serious	2-Low	$ 428,640	$ 857,280	$ 1,714,560	12	24	48	S1W Reactor Vessel is no risk as it has been characterized and approve to go to ICDF. Most Likely assumes the SSG reactor vessel requires offsite disposal and would increase the disposal costs. Worst Case is A1W Reactor Vessels (2) which have not been characterized. Assumes they required offsite disposal significantly increasing the disposal cost and duration due to planning and approvals.	N/A	N/A	N/A	N/A	N/A	None

TO6.1 Risk Register: DOE Transfer Risks

Idaho Cleanup Project Programmatic Risk Register

Updated : 12.11.25

																Cost Impacts			Schedule Impacts (in days)					
Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	Status	Risk Type	Handling Strategy	Probability	Risk Event Likelihood	Risk Impact	Risk Rating	Best Case	Most Likely	Worst Case	Best Case	Most Likely	Worst Case	Basis of Impacts	Mitigation/Enhancement Activities	Notes
NRC001R2	TO6.1	D.1.03.60, D.1.03.61	DOE	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: NRC regulations or directions are revised or updated.	There is a potential for NRC regulations or directions to be revised or updated such that it might require us to revise programs, procedures, or implement various other measures.	Receipt of NRC direction, request for information, notice of violation or other confirmatory order	Open	Threat	Transfer	0.5	Possible	Minor	2-Low	$ 20,000	$ 100,000	$ 1,000,000	8	16	32	Best case based on SME experienceMost likely case based on actuals for response to RFI,Worst case based on actuals for resonse to Confirmatory Order	Propose transfer to DOE.	
NRC012	TO6.1	D.1.03.60 D.1.03.61	DOE	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: Supply Chain Delays and Cost Increases.	Due to emerging local, regional, and/or international events the supply chain is impacted limiting the ability to procure or accurately estimate the cost and time necessary to acquire necessary materials, services, and personnel.	Emerging national and international events impact supply chain.	Open	Threat	Transfer	0.5	Possible	Minor	2-Low	$ 10,000	$ 50,000	$ 100,000	4	16	48	Based on SME experience. Best case assumes 1 week delay with little expense. Most likely assumes 1 month delay with moderate expense for equipment. Worst case assumes 90 day delay.	Propose transfer to DOE.	

TO6.1 Project Risk Register

Idaho Cleanup Project Programmatic Risk Register

Updated : 12.11.25

															Cost Impacts			Schedule Impacts (in days)						
Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	Status	Risk Type	Handling Strategy	Risk Event Likelihood	Risk Impact	Risk Rating	Best Case	Most Likely	Worst Case	Best Case Days	Most Likely Days	Worst Case Days	Basis of Impacts	Mitigation Actions	Mitigation Activities (P6 activity that points to your mitigation action)	Response/Recovery Actions	Notes
NRC003R2	TO6.1	D.1.03.60 D.1.03.61	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: Aging conditions of facilities	There are aging conditions at both TMI-2 and FSV. Continued weathering and degradation is likely to require additional repairs and maintenance to concrete, paint, other coatings, associated infrastructure components, etc. If these repairs and/or upgrades do not occur they will prohibit critical project completion and could be identified as noncompliance with NRC requirements.	Continued degredation of facilites with out necessary repairs and/or upgrade	Open	Threat	Mitigate	Possible	Major	4-High	$ 1,800,000	$ 2,000,000	$ 2,200,000	48	80	96	Based on SME input. Costs based on the cost of repairs due to aging facilities in current 2 year contract for TO6. Cost tripled to account for longer contract length of 6 years vs 2 years to determine Most Likely. Best and worst case were established +/- 10% of Most Likely. **Best case** is that lack of funding will occur between activities resulting in schedule delays but no rework or additional mobilization/demobilization/stand-by impacts. **Most likely case** is that in addition to schedule delays, some re-work will be required, mobilization/demobilization of crews will be required, vendor costs will be higher due to inflation and securing specialized resources, and additional procurement of equipment. **Worst case** is that funding is cut in the middle of the job resulting in complete re-work, additional demobilization/mobilization costs, work site being left in condition to accentuate or accelerate deterioration conditions, etc.	Stock spare parts/material to minimize delay of needed repairs.	TMI2-OPS-103ORM	N/A	None
NRC007R2	TO6.1	D.1.03.60, D.1.03.61	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: Loss of Specialty Resources	Loss of qualified and trained resources could result in cost and schedule delays.	Retirement or notification of intent to leave.	Open	Threat	Accept	Likely	Serious	4-High	$ 100,000	$ 200,000	$ 500,000	16	48	64	Based on SME input.Best case is that replacement personnel are immediately available with little downtime or vacancy in the position.Most likely case is that it may take 1-2 months to fill in and train replacement.Worst case is that it may take 6 months or more to recruit new personnel and train.	N/A	N/A	N/A	None
NRC011	TO6.1	D.1.03.60, D.1.03.61	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: Industrial Incidents Resulting in Shutdowns	An industrial incident resulting in serious personnel injury may cause an extended shutdown to resolve conduct of operations issues.	An unanticipated accident resulting in injury or near miss	Open	Threat	Accept	Rare	Minor	1-Low	$ 20,000	$ 50,000	$ 300,000	4	8	16	Cost is based on ROM estimate to perform corrective actions, but dependant on extent of event.Best case = incident is minor, and investigated quickly with very few corrective actions requiring attention.Worst case = prolonged shut-down with extensive recovery actions, training, etc.	N/A	N/A	N/A	None
NRC300	TO6.1	D.1.06.61.11	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	Fort S. Vrain ISFSI: Crane Hydraulic Motor Repair	While performing hydraulic motor repairs on the crane, more issues are identified that will need to be resolved before continuing. The project will experience schedule delays and cost increases to resolve the additional problems.	More issues with the crane are identified.	Realized	Threat	Accept	Almost Certain	Minor	3-Moderate	$ 2,000	$ 10,000	$ 50,000	4	8	16	Cost and schedule delays based on vendor quotes to replace entire hydraulic motor. This is most likely case. Best case is based on SME input to obtain additional minor parts. Worst case based on SME input assuming additional issues are found with other parts and equipment.	N/A	N/A	Repair crane motor. Once crane is needed any necessary repairs will need to be completed in order to complete work scope.	N/A
NRC301	TO6.1	D.1.03.61	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	Fort S. Vrain ISFSI: Incompatible Equipment	New equipment purchased is not compatible and different replacements have to be purchased. The project will incur unforeseen costs from purchasing equipment not anticipated. The project will also experience schedule delays to perform the procurement and receiving items.	During install, equipment is discovered to be incompatible with the existing system.	Open	Threat	Accept	Rare	Minor	1-Low	$ 5,000	$ 50,000	$ 200,000	8	16	32	Best case assumes that equipment can be returned to the vendor without any peN/Alties and minimum restocking fee. Most likely case assumes that only some equipment cannot be returned to vendor and delays to schedule and costs for additional trips by vendor to the facility. Worst case is based on needing to re-purchase all new equipment.	N/A	N/A	N/A	N/A
NRC302	TO6.1	D.1.03.60, D.1.03.61	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	NRC Licensed SNF Storage Facilities: Inclement Weather	Inclement weather delays surveys or work being completed. TMI-2 has strict requirements for windspeed, precipitation and temperature while performing surveys.	Inclement weather stops or delays work at TMI-2.	Open	Threat	Accept	Likely	Minor	2-Low	$ 10,000	$ 50,000	$ 100,000	1	4	8	**Best Case:** 1 day accumulative of inclement weather **Most Likely:** 1 week accumulative of inclement weather Worst Case: 2 weeks accumulative of inclement weather ** base schedule or cost delays on this	N/A	N/A	N/A	Field activities are generally scheduled during the summer months at TMI-2 (May-October) to try to eliminate potential weather issues associated with winter cold. High winds and stormy conditions are typical in the summer months and expected. Typically, these conditions only impact partial work day delays of a few hours. This risk assumes that inclement weather impacts operations for a full day or more.
NRC303	TO6.1	D.1.03.61.15	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	Fort S. Vrain ISFSI: Wildlife Inteference with Facility Improvements at FSV	Wildlife impacting FSV Access road, asphalt storage pads, and security measures at FSV facility may cause a need to implement alternative methods and delay completion of this work.	Initial wildlife mitigation activities are unsuccessful.	Open	Threat	Accept	Possible	Minor	2-Low	$ 5,000	$ 10,000	$ 100,000	1	1	8	**Best Case:** Work delay of <1 day as a result of identified interference from swallows nesting or other wildlife activities. **Most Likely Case**: Work delay of 1 day as a result of identified wildlife inference with scheduled operations or maintenance. **Worst Case:** Work delay of 8 days as a result of identified species stopping work due to protected status and need for extensive mitigation measures to relocate species.	N/A	N/A	N/A	N/A
NRC305	TO6.1	D.1.03.61.14	IEC	Long, Jeffery Dean	Wahnschaffe, Steven DaRell	Fort S. Vrain ISFSI: NRC License Renewal Requires Additional Procedural Requirements	NRC license renewal or extension processes are scheduled to be completed prior to the end of the contract date, and additional surveillance and maintenance aging management requirements may be required to implement in order to maintain license in accordance with new amendment. These additional requirements may increase costs of maintaining NRC facilities.	Renewed license is issued.	Open	Threat	Accept	Rare	Minor	1-Low	$ 10,000	$ 75,000	$ 1,500,000	0	16	180	Completion of an NRC License Amendment, unless strictly administrative, will typically add new surveillance or inspection requirements. Best case scenario is that the license amendment only requires administrative updates to SAR or other procedures without any impacts to schedule to perform planned surveillances or inspections. Most likely that the license amendment will require at least 1 new annual inspection activity impacting schedule by 1 month to develop new procedure,	N/A	N/A	N/A	Development of new inspection capabilities at TMI-2 as a result of multiple new inspection requirements associated with the renewed TMI-2 license in 2019 cost approximately $1.5 million in additional development costs, not including ongoing surveillance, maintenance, and equipment costs.

TO7.2 Project Risk Register

Idaho Cleanup Project Programmatic Risk Register

Updated : 12.11.25

																Cost Impacts			Schedule Impacts (in days)							
Risk ID	Task Order	WBS	Responsible Organization	IEC POC	DOE FPD	Risk Title	Risk Description	Trigger Event	P6 Activity (where is this risk likely to occur)	Status	Risk Type	Handling Strategy	Risk Event Likelihood Percent	Risk Event Likelihood	Risk Impact	Risk Rating	Best Case	Most Likely	Worst Case	Best Case Days	Most Likely Days	Worst Case Days	Basis of Impacts	Mitigation Actions	Mitigation Activities (P6 activity that points to your mitigation action)	Response/Recovery Actions	Notes
IWTU311	TO7.2	D.3.06.7A	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Lack of resources	Completing IWTU scope will be impacted due to a lack of resources.	The project cannot staff up as planned to support scheduled work.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	18%	Unlikely	Moderate	2-Low	$ 133,920	$ 267,840	$ 401,760	12	24	36	**Best Case:** 12 days x 10 hrs/day x 12 FTEs x $93/hr = $133,920 **Most Likely:** 24 days x 10 hrs/day x 12 FTEs x $93/hr = $267,840 **Worst Case:** 36 days x 10 hrs/day x 12 FTEs x $93/hr = $401,760	N/A	N/A	N/A	This risk was previously identified under IWTU009AR2.
IWTU312	TO7.2	D.3.06.7A.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: GAC Replacement Takes Longer than Estimated and Extends the GAC Outage	The Granulated Activated Carbon (GAC) replacement will extend the current GAC outage schedule due to equipment design, procurement, and installation requirements during the outage.	Delays in GAC replacement delays completion of GAC Outage.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Serious	3-Moderate	$ 324,360	$ 648,720	$ 2,594,880	6	12	24	**Best Case:** 6 days x 12 hrs/day x 17 FTEs x $265/hr = $324,360 **Most Likely:** 12 days x 12 hrs/day x 17 FTEs x $265/hr = $648,720 **Worst Case:** 24 days x 24 hrs/day x 17 FTEs x $265/hr = $2,594,880	N/A	N/A	N/A	This risk was previously identified under IWTU016R2.
IWTU313	TO7.2	D.3.06.7C.02	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: Vaults are Constructed in Winter Weather	Schedule delays require constructing vaults in winter weather, thereby increasing vault construction costs. Concrete heating and weather conditions impact the safety of the craft work force.	Increased cost for construction of vaults.	WTUVLT7F52	Open	Threat	Accept	50%	Possible	Major	4-High	$ 400,000	$ 1,600,000	$ 1,750,000	8	17	34	Impacts to concrete curing time and compaction testing due to adverse weather conditions, additional engineering analysis needed for acceptance	N/A	N/A	N/A	This risk was previously identified under IWTU023R2.
IWTU314	TO7.2	D.3.06.7C.02	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: New Vault Concrete does not Meet Shielding Density Requirements	Concrete test cylinder that fails to meet density requirements and requires rework adding cost and schedule impacts.	Gamma inspection and/or concrete test identifies vault failure.	WTUVLT7R61	Open	Threat	Accept	18%	Unlikely	Serious	2-Low	$ 500,000	$ 1,000,000	$ 1,500,000	17	34	51	Perform additional shielding or analysis needed for acceptance	N/A	N/A	N/A	This risk was previously identified under IWTU024R2.
IWTU315	TO7.2	D.3.06.7A.01	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: The Wet Decon System Rebuild does not Function as Designed	The wet decon rebuild has issues that do not allow the wet decon system to fully function as designed.	Unsuccessful operation of wet decon system.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Moderate	2-Low	$ 50,000	$ 90,000	$ 270,000	16	30	90	**Best Case:** 16 days X 10 hr/day X 2 FTE X $100/hr= $32,000 **Most Likely Case:** 30 days X 10 hr/day X 3 FTE X $100/hr= $90,000 **Worst Case:** 90 days X 10 hr/day X 3 FTE X $100/hr= $270,000	N/A	N/A	N/A	This risk was previously identified under IWTU030R2.
IWTU316	TO7.2	D.3.06.7A.05	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Unable to Release Vendor Supplied Equipment	Vendor supplied equipment cannot be released due to unexpected contamination levels. The inability to release the equipment results in the added cost of purchasing the vendor supplied equipment.	Detectable contamination found on vendor supplied equipment.	WTUGAC7120 WTUGAC7220	Realized	Threat	Accept	50%	Possible	Moderate	2-Low	$ 247,200	$ 350,000	$ 853,200	1	2	3	**Best Case**: $247,200 for equipment **Most Likely:** $350,000 for equipment **Worst Case:** $853,200 for equipment	N/A	N/A	A purchase request (PR 40846) has been submitted to purchase equipment that Rad is not releasing. An individual charge code is being set-up in order to track the additional costs.	This risk was previously identified under IWTU049.
IWTU317	TO7.2	D.3.06.78.01	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: New Canisters do not Pass QA Receipt	New canisters do not pass QA inspections and must be reworked/replaced.	One new canister fails inspection.	WTUCAN71013	Open	Threat	Accept	50%	Possible	Minor	2-Low	$ 4,000	$ 6,000	$ 44,000	6	12	24	**Best Case**: Additional rework on 1 new canister **Most Likely:** Additional rework on 2 new canisters **Worst Case:** New canister $44,000	N/A	N/A	N/A	This risk was previously identified under IWTU050.
IWTU318	TO7.2	D.3.06	IEC/DOE	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: BEA Support Services	IEC relies on BEA for support services on Milestones, regulatory commitments, and scope completion. If the work from BEA is delayed, or does not meet the requirements, it can cause a project schedule impact.	Insufficient quality of work product or timeliness of completion of BEA deliverables impacts project schedule.	N/A	Open	Threat	Share	18%	Unlikely	Moderate	2-Low	$ 93,000	$ 390,600	$ 1,116,000	5	21	60	**Best Case:** 5 days X 10 hrs/day X 20 FTEs X $93/hr **Most Likely Case:** 21 days X 10 hrs/day X 20 FTEs X $93/hr **Worst Case:** 60 days X 10 hrs/day X 20 FTEs X $93/hr	Propose share with DOE.	N/A	N/A	This risk was previously identified under IWTU054a and IWTU054b.
IWTU319	TO7.2	D.3.06.7A.07	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Pilot Plant Driven Plant Modifications	Hazen drives facility modifications that require a facility shutdown which delays completion of sodium bearing waste (SBW) processing campaign.	Hazen Run discovers the need for further plant modifications.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Serious	3-Moderate	$ 200,880	$ 401,760	$ 803,520	30	60	120	**Best Case:** 30 days x 12hrs/day x 6 FTEs x $93/hr = $200,880 **Most Likely:** 60 days x 12hrs/day x 6 FTEs x $93/hr = $401,760 **Worst Case:** 120 days x 12hrs/day x 6 FTEs x $93/hr = $803,520	N/A	N/A	N/A	This risk was previously identified under IWTU301.
IWTU320	TO7.2	D.3.06.7A.01	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Additional Calcined Coal is Needed	Calcined coal reserves are depleted before sodium bearing waste (SBW) tanks are emptied and rinsed.	Inventory is reduced at a faster pace than previously anticipated or IWTU is forecasted to operate for a longer period of time due to various issues.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 1,563,100	$ 3,126,200	$ 4,689,300	120	180	365	**Best Case:** 500000 pounds at $2.03 / lb **Most Likely Case**: 1000000 pounds at $2.03 / lb **Worst Case:** 1500000 pounds at $2.03 / lb Applied a 54% increase to cost to account for the current proposed tariff rate on goods imported from China.	N/A	N/A	N/A	This risk was previously identified under IWTU302.
IWTU321	TO7.2	D.3.06.7A.01	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Previous Calcined Coal Source is Unavailable	Vendor is unable to utilize original mine used for calcine coal procurements.	The current source of calcined coal is no longer available.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 75,000	$ 125,000	$ 1,275,000	60	120	365	Rough subcontracted costs for the process of sourcing, testing and validating an adequate source of calcined coal. Worst case contains the costs of a Hazen Pilot Plant Run to verify.	N/A	N/A	N/A	This risk was previously identified under IWTU303.
IWTU322	TO7.2	D.3.06	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Overtime Required to Complete Performance Milestones	Additional overtime is needed to maintain plant operability in an effort to reach the Site Treatment Plan milestone.	IWTU issues that reduces the plant's output and/or operability require additional personnel to keep plant operating.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	82%	Likely	Moderate	3-Moderate	$ 160,704	$ 321,408	$ 482,112	12	24	36	Best Case: 12 days x 12hrs/day x 12 FTEs x $93/hr = $160,704 Most Likely: 24 days x 12hrs/day x 12 FTEs x $93/hr = $321,408 Worst Case: 36 days x 12hrs/day x 12 FTEs x $93/hr = $482,112	N/A	N/A	N/A	This risk was previously identified under IWTU304.
IWTU323	TO7.2	D.3.06.7B	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: Additional Waste Canisters	Additional canisters are needed to complete sodium bearing waste (SBW) and rinsate treatment.	More than 1,344 canisters are needed.	WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 6,072,000	$ 11,308,000	$ 25,828,000	150	500	690	**Best Case**: 224 canisters x $44,000/canister = $6,072,000 **Most Likely:** 726 canisters x $44,000/canister = $11,308,000 **Worst Case:** 992 canisters x $44,000/canister = $25,828,000	N/A	N/A	N/A	This risk was previously identified under IWTU305.
IWTU324	TO7.2	D.3.06.7C	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: Additional Canister Storage Vaults	Additional cannister storage vaults are needed to complete Sodium Bearing Waste (SBW) and Rinsate treatment.	More than 84 vaults are needed.	WTUOPS7L28	Open	Threat	Mitigate	50%	Possible	Critical	4-High	$ 7,200,000	$ 10,200,000	$ 22,200,000	150	480	620	**Best Case**: 12 vaults x $600,000/vault = $ 7,200,000 **Most Likely**: 17 vaults x $600,000/vault = $ 10,200,000 **Worst Case**: 37 vaults x $600,000/vault = $ 22,200,000	Procure additional canister storage vaults.	WTUVLT7P93RM WTUVLT7P94RM WTUVLT7P95RM WTUVLT7P96RM WTUVLT7F93RM WTUVLT7F94RM WTUVLT7F95RM	N/A	This risk was previously identified under IWTU306.
IWTU325	TO7.2	D.3.06	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Additional Product Storage Building	Product Storage Building (PSB-II) is filled to capacity before Sodium Bearing Waste (SBW) tanks are emptied and rinsed.	PSB-II is estimated to be filled within 2 years.	WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 8,000,000	$ 20,000,000	$ 28,000,000	540	730	900	**Best Case:** Smaller PSB-III **Most Likely:** PSB-III identical to PSB-II **Worst Case:** PSB-III larger than PSB-II	N/A	N/A	N/A	This risk was previously identified under IWTU307.
IWTU326	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: INTEC Issues Affect IWTU	INTEC infrastructure or operational issues cause an impact on IWTU operations, resulting in idle time for IWTU.	Issues at INTEC causes inability to send waste to IWTU.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 6,300,000	$ 12,600,000	$ 25,200,000	12	24	48	**Best Case**: 3 weeks * $2,100,000/week = $6,300,000 **Most Likely**: 6 weeks * $2,100,000/week = $12,600,000 **Worst Case:** 12 weeks * $2,100,000/week = $25,200,000	N/A	N/A	N/A	This risk was previously identified under IWTU308.
IWTU327	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Major Equipment Failure	Any unforeseen major equipment failure at IWTU that cannot be repaired and requires replacement will result in a forced shutdown.	Significant equipment or component failure that requires replacement.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	5%	Rare	Critical	3-Moderate	$ 800,000	$ 1,800,000	$ 5,000,000	120	240	365	**Best Case:** Replacement Duration 120 days for 7 FTE's at $93/hr **Most Likely:** Replacement Duration of 240 days for 8 FTE's at $93/hr **Worst Case:** Replacement Duration of 365 days for 14 FTE's at $93/ hr.	N/A	N/A	N/A	This risk was previously identified under IWTU309.
IWTU328	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Early Environmental Limits Reached Cause Shut Down	IWTU operates within specific environmental limits. If the limits of the early environmental permits are close to being reached a shutdown will be required.	Early environmental levels approaching or exceeding permit limit.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	5%	Rare	Major	2-Low	$ 1,000,000	$ 1,500,000	$ 2,000,000	90	90	90	Several of the IWTU operating parameters have permitted limits that they must remain within. If IWTU operates long enough or experiences off normal scenarios then some of these limits may invoke shutting down the process. This impact would constrict the window of operating for the IWTU requiring a higher maintained feed rate to achieve STP processing goals. For having to reach the milestone in 90 days we would only have to maintain a feed rate of 1.0 gpm, this would be the best case. For most likely we would have 75 days to reach the milestone which correlates to maintaining a feed rate of 1.2 gpm. For worst case we would have to process continuously at the highest processing rate we can maintain for 60 days to reach the milestone.	N/A	N/A	N/A	This risk was previously identified under IWTU310.
IWTU331	TO7.2	D.3.06.7A.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Additional GAC Bed Replacements	Granulated Activated Carbon (GAC) beds need to be replaced.	GAC beds become depleted and no longer absorb mercury.	WTUOPS7L27	Open	Threat	Mitigate	50%	Possible	Critical	4-High	$ -	$ 4,200,000	$ 8,400,000	0	90	180	**Best Case:** No Additional GAC Changeout **Most Likely Case:** 1 Additional GAC Changeout ($4.2M) **Worst Case:** 2 Additional GAC Changeouts ($8.4M) Based on previous DCES budgeted costs for GAC Replacements.	Perform additional Granulated Activated Carbon (GAC) bed replacements	WTUGAC7300RM WTUGAC7310RM WTUGAC7320RM WTUGAC7330RM WTUGAC7350RM WTUGAC7360RM WTUGAC7340RM	N/A	N/A
IWTU332	TO7.2	D.3.06	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Readiness Assessment Required to Resume Operations	If IWTU operations are shutdown longer than 1 year, a readiness assessment will be required before operations can resume. This will result in the need for additional resources, changes to work control and additional training.	IWTU shutdown last longer than 1 year.	WTUOPS7L25 WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	20%	Unlikely	Serious	2-Low	$ 14,400	$ 86,400	$ 172,800	21	42	42	**Best Case:** 1 FTE Subcontractor consult for 120 hrs x $120/hr for a cost of $14,400. **Most Likely Case:** 3 FTE Subcontractor consult for 240 hrs x $120/hr for a cost of $86,400. **Worst Case:** 6 FTE Subcontractor consult for 240 hrs x $120/hr for a cost of $172,800.	N/A	N/A	N/A	N/A

IWTU333	TO7.2	D.3.06	IEC	Nowak, Joel Thomas	Neville, Trent Scott	IWTU: Unforeseen Radiological Incident and/or Loss of Contamination Control	An unexpected radiological incident and/or loss of contamination control outside the controlled area during processing of Sodium Bearing Waste (SBW) may result in personnel decontamination and extended shutdown/recovery actions.	Unexpected dose rates during processing of SBW.	WTUOPS7L2S WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	20%	Unlikely	Moderate	2-Low	$ 160,704	$ 321,408	$ 482,112	12	24	48	**Best Case:** 12 days x 12hrs/day x 12 FTEs x $93/hr = $160,704 **Most Likely:** 24 days x 12hrs/day x 12 FTEs x $93/hr = $321,408 **Worst Case:** 36 days x 12hrs/day x 12 FTEs x $93/hr = $482,112 Additional resources needed to perform decontamination efforts.	N/A	N/A	N/A	N/A
IWTU335	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Processing Solids Collected from SBW Tanks	IWTU receives too much solid build up from Tank Farm Sodium Bearing Waste (SBW) tanks and are unable to process.	Solids plug off nozzle and can't continue to process SBW. Significant issues processing solids.	WTUOPS7L2S WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 204,441	$ 408,882	$ 817,764	180	180	360	Additional Set of Feed Nozzles have to be purchased. FY25 costs for set of Waste Feed Nozzles was $204,441.00. **Best Case:** 1 more set of Feed Nozzles are purchased for a cost of $204,441.00. **Most Likely Case**: 2 more sets of Feed Nozzles are purchased for a cost of $408,882.00. **Worst Case:** 4 more sets of Feed Nozzles are purchased for a cost of $817,764.00.	N/A	N/A	N/A	N/A
IWTU336	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Process Gas Filter Require Replacement	The selected replacement Process Gas Filter (PGF) elements and associated PGF modifications do not function as anticipated, requiring plant modifications and/or alternative filter media.	Filters degrade or do not perform as designed.	WTUOPS7L2S WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 1,500,000	$ 3,000,000	$ 4,500,000	90	180	270	**Best Case:** 1 Additional PGF Filter Changeout, $1,500,000. **Most Likely Case:** 2 Additional PGF Filter Changeouts, $3,000,000. **Worst Case:** 3 Additional PGF Filter Changeouts, $4,500,000.	N/A	N/A	N/A	N/A
IWTU337	TO7.2	D.3.06.7A.07	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Significant Repairs To Hazen Pilot Plant	Aged equipment needs replaced in order to run or significant modifications needed to support pilot plant test.	Failure of Equipment	WTUOPS7L2S WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Open	Threat	Accept	20%	Unlikely	Moderate	2-Low	$ 25,000	$ 125,000	$ 250,000	15	30	60	**Best Case:** Small component such as transmitters, thermocouples, etc. need replacing. **Most Likely Case:** Medium components such as valves, pumps, etc. need replacing. **Worst Case**: Major components such as control system, vessels, need replacing.	N/A	N/A	N/A	N/A
IWTU338	TO7.2	D.3.06.7A.07	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Additional Hazen Runs are Needed	IWTU plans and performs additional Hazen Runs. If additional Hazen runs are needed it will have cost and schedule impacts.	Unplanned Hazen run is needed.	WTUOPS7L2S WTUOPS7L26 WTUOPS7L27 WTUOPS7L28	Realized	Threat	Mitigate	50%	Possible	Major	4-High	$ -	$ 2,313,649	$ 6,940,948	0	60	180	**Best Case:** No Additional Hazen Runs are needed. **Most Likely Case**: 1 Additional Hazen Run is needed. **Worst Case:** 3 Additional Hazen Runs are needed. Previous FY24 actual costs for Hazen Pilot Plant run were $2,313,649.	Perform additional Hazen Runs.	WTUH2N7150RM WTUH2N7250RM WTUH2N7350RM	An additional Hazen run was started in FY25 but is continuing under FY26 (TO7.2).	N/A
IWTU339	TO7.2	D.3.06.7A.07	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: Additional Offsite Support	Offsite support is needed from Dominion and or Particulate Solids Research Institute (PSRI) or other.	Offsite analytical support or research is required.	WTUH2N7150	Open	Threat	Accept	50%	Possible	Serious	3-Moderate	$ -	$ 49,898	$ 249,490	0	60	180	**Best Case**: No Additional Analytcal Support is Needed **Most Likely Case:** Testing support similar to the ceramic fuse testing is required. **Worst Case Scenario:** Significant Analytical Support is needed to evaluate plant issue. (5x) FY25 actuals for ceramic fuse testing prior to pilot plant run were $49,898.	N/A	N/A	N/A	N/A
IWTU340	TO7.2	D.3.06	IEC	Arrowood, John Ross IV	Neville, Trent Scott	IWTU: The Simulant is not Fully Representative of Actual Waste	Simulant is not fully representative of actual waste. For example, mercury and heavy metals have not been included in the simulant. This may result in system performance problems causing delays.	Introduction of actual waste causes plant performance problems.	TBD	Open	Threat	Mitigate	50%	Possible	Serious	3-Moderate	$ 32,000	$ 460,000	$ 1,740,000	16	60	180	**Best Case:** 16 days X 10 hr/day X 2 FTE X $100/hr= $32,000 **Most Likely Case:** 60 days X 10 hr/day X 6 FTE X $100/hr= $360,000, Material Cost = $100,000 **Worst Case:** 180 days X 10 hr/day X 8 FTE X $100/hr= $1.44M Material Cost= $300,000	Ramp up waste feed percentage (vs. simulant) during System Performance Test. Review original test results for accuracy and completeness.	TBD	N/A	This risk was previously identified under IWTU010R2.
IWTU341	TO7.2	D.3.06.7C	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: PSB II Construction is Delayed	Delays in PSB II construction results in inadequate storage capacity and operational delays.	PSB I is full and construction of PSB II is delayed.	TBD	Open	Threat	Mitigate	50%	Possible	Moderate	2-Low	$ 150,000	$ 300,000	$ 600,000	10	10	20	**Best Case:** 10 days X 10 hr/day X 10 FTE X $150/hr= $150,000 **Most Likely Case:** 10 days X 10 hr/day X 20 FTE X $150/hr= $300,000 **Worst Case:** 20 days X 10 hr/day X 20 FTE X $150/hr= $600,000	Use additional overtime resources to complete PSB-II as soon as possible.	TBD	N/A	This risk was previously identified under IWTU053.
IWTU342	TO7.2	D.3.06.7C.02	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: No Vaults for Waste Canister Storage	If subcontractor is unable to produce additional Vault construction by the time they are needed the project will run out of Vaults for waste canister storage.	No useable vaults for processing are available	TBD	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 14,571,420	$ 29,142,840	$ 43,714,260	60	120	180	**Best Case:** 60 days X $242,857/day **Most Likely Case:** 120 days X $242,857/day **Worst Case:** 180 days X $242,857/day	N/A	N/A	N/A	This risk was previously identified under IWTU055.
IWTU343	TO7.2	D.3.06.7B.01	IEC	Frye, Meesha Eileen	Neville, Trent Scott	IWTU: No Waste Canisters Available For Storage	If subcontractor is unable to produce additional waste canisters by the time they are needed the project will run out of waste canisters.	Plant continues to operate, and we have less than 32 canisters available on site.	TBD	Open	Threat	Accept	50%	Possible	Critical	4-High	$ 7,285,710	$ 10,928,565	$ 14,571,420	30	45	60	**Best Case:** 30 days X $242,857/day **Most Likely Case:** 45 days X $242,857/day **Worst Case:** 60 days X $242,857/day	N/A	N/A	N/A	This risk was previously identified under IWTU056.