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|---|------------------------------------|--|---|
| AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT | | 1. CONTRACT ID CODE | PAGE OF PAGES 1 2 |
| 2. AMENDMENT/MODIFICATION NO. P00026 | 3. EFFECTIVE DATE See Block 16C | 4. REQUISITION/PURCHASE REQ. NO. | 5. PROJECT NO. (If applicable) |
| 6. ISSUED BY EM-Idaho Department of Energy Office of Environmental Management Idaho Cleanup Project 1955 Fremont Avenue Idaho Falls ID 83415 | CODE 893042 | 7. ADMINISTERED BY (If other than Item 6) U.S. Department of Energy Idaho Operations Office 1955 Fremont Avenue Idaho Falls ID 83415 | CODE 00701 |
| 8. NAME AND ADDRESS OF CONTRACTOR (No., street, county, State and ZIP Code) IDAHO ENVIRONMENTAL COALITION LLC Attn: John H. MacRae, Jr. 1580 Sawtelle Street Idaho Falls ID 83402 | | (x) | 9A. AMENDMENT OF SOLICITATION NO. |
| CODE LQ5ZLNE3EM27 | | FACILITY CODE | 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: 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 Orders (TO) 3.2, Integration and Mission Continuity, and TO-7.1, Integrated Waste Treatment Unit (see below for details).

Payment:

OR for Idaho
U.S. Department of Energy
Oak Ridge Financial Service Center
P.O. Box 6017
Oak Ridge TN 37831

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.

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| 15A. NAME AND TITLE OF SIGNER (Type or print) J.H. MacRae, Jr. (Jack), Business Services & PCO | | 16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) Grace H. Ruiz | |
| 15B. CONTRACTOR/OFFEROR JOHN MACRAE (Affiliate) <small>Digitally signed by JOHN MACRAE (Affiliate) Date: 2024.05.16 14:21:59 -0600</small> (Signature of person authorized to sign) | 15C. DATE SIGNED | 16B. UNITED STATES OF AMERICA GRACE RUIZ <small>Digitally signed by GRACE RUIZ Date: 2024.05.16 14:33:43 -0600</small> (Signature of Contracting Officer) | 16C. DATE SIGNED 05/16/2024 |

Previous edition unusable

NAME OF OFFEROR OR CONTRACTOR
 IDAHO ENVIRONMENTAL COALITION LLC

| ITEM NO. (A) | SUPPLIES/SERVICES (B) | QUANTITY (C) | UNIT (D) | UNIT PRICE (E) | AMOUNT (F) |
|-----------------|--|-----------------|-------------|-------------------|----------------|
| | <p>Period of Performance: 10/01/2023 to 09/30/2031</p> <p>Change Item 00302 to read as follows (amount shown is the total amount):</p> | | | | |
| 00302 | <p>CLIN 03 SUBTASK 0302 INTEGRATION AND MISSION CONTINUITY (TASK ORDER 3.2)</p> <p>Line item value is: \$682,509,604.00</p> <p>Incrementally Funded Amount: \$273,219,506.14</p> <p>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 (see attachments TO-3.2 DOE Transfer Risk Register Updates FY24 Q1 - Redlined and TO-3.2 Risk Register Updates FY24 Q1 - Redlined).</p> <p>All other terms and conditions remain unchanged.</p> <p>Change Item 00701 to read as follows (amount shown is the total amount):</p> | | | | 682,509,604.00 |
| 00701 | <p>CLIN 07 SUBTASK 0701 IWTU OPERATIONS (TASK ORDER 7.1)</p> <p>Line item value is: \$233,119,349.00</p> <p>Incrementally Funded Amount: \$87,910,681.42</p> <p>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-7.1, Integrated Waste Treatment Unit (see attachment TO-7.1 Risk Register Updates FY24 Q1 - Redlined).</p> <p>All other terms and conditions remain unchanged.</p> | | | | 233,119,349.00 |



TO3 Phase 2 Risk Register

Idaho Cleanup Project Programmatic Risk Register
Updated: 3.10.24

Table with columns: Risk ID, WBS, Responsible Organization, Risk Owner, IEC Risk Back-up, Risk Title, Risk Description, Trigger Event, Status, Risk Type, Handling Strategy, Risk Event Likelihood, Risk Impact, Risk Rating, Cost Impacts (Best Case, Most Likely, Worst Case), Schedule Impacts (Best Case, Most Likely, Worst Case), Basis of Impacts, Mitigation Actions, Risk Corrective Actions, Date Identified, Last update, Notes.

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|------------|--------------|-----|---------------------|---------------------|---|---|--|--------------|--------|----------|----------------|----------|------------|-----|-----------|-----|-----------|-----|-----------|----|-----|--|--|--|-----|------------|-----------|--|---------|
| CERCLA001 | D.4.05.30.09 | IEC | Whitmore, Erik | N/A | CERCLA: Evaporation Pond Liner Damage | Existing CERCLA Evaporation liner tears which would require subcontractor support to complete repairs. | Existing liner is damaged. | Open | Threat | Mitigate | 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. | Allocation for repairs for material failure of the pond liner, similar to currently existing situation | N/A | N/A | 7/10/2023 | In DCES but it has 4 more activities associated. See Column W ER6530 not found in schedule. ER9150 is an LOE Activity? | |
| ICDF001 | D.4.05.31.03 | IEC | Orme, Jason | Zovi, Bruno | ICDF Ops and Maintenance: 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. | Open | Threat | Accept | Likely | Serious | 4-High | \$ | 67,240 | \$ | 341,000 | \$ | 511,000 | 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 | N/A | N/A | 4/23/2023 | 7/10/2023 | Used ICDF-1025 Risk mitigation is not in DCES ICDF1055 is not in the schedule WP was not listed in the WBS in the Register D.4.05.32 was not found in the schedule | |
| ICDF002 | D.4.05.31.03 | IEC | Orme, Jason | Zovi, Bruno | ICDF Ops and Maintenance: Treatment, Storage, and Disposal Facility (TSDF) Closure | Treatment, Storage, and Disposal Facility (TSDF) 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. | TSDF discontinues receiving of waste. | Open | Threat | Mitigate | 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.) | Implement the following possible mitigations: - Upon TSDF resuming operations, shipment(s) will commence and schedule will be recovered by working overtime. | N/A | N/A | 4/23/2023 | 7/10/2023 | In DCES |
| ICDF003 | D.4.05.31.04 | IEC | Orme, Jason | Zovi, Bruno | ICDF Ops and Maintenance: 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 NNSWAC, the waste will need to be reworked. | A container(s) is identified as damaged, packaged incorrectly, containing uncertified waste, containing prohibited items, etc. | Open | Threat | Mitigate | Likely | Minor | 2-Low | \$ | 54,000 | \$ | 81,000 | \$ | 108,000 | 4 | 6 | 8 | Best Case: 8 days x 10 hr./day x 6 FTEs X (\$75/hr. + OT = \$112.50/hr.) Most Likely Case: 612 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.) | Implement the following possible mitigations: - After issues are corrected we will reevaluate and certify waste. Overtime will be worked to recover schedule. | N/A | N/A | 4/23/2023 | 7/10/2023 | In DCES |
| INDR001 | K.1.03.03.08 | IEC | Henry, Jennifer | Henry, Jennifer | Radiation Protection: Spare Rad Instrument Disposal | IEC has several cargo containers at the projects that are filled with old radiological instruments. 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. | Open | Threat | Accept | Almost Certain | Critical | 4-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 such as ARP Worst Case: require disposal of current spares and spares that come from current projects such as ARP. Additionally there would be demo on some buildings as there would be removal in some locations. | N/A | N/A | 9/11/2023 | 9/18/2023 | | |
| INTEC01R2 | D.3.03.32.02 | IEC | Baisch, Kasey | Baisch, Kasey | INTEC BOP: Transformer Failure Causes Unscheduled Electrical Outage | A transformer failure can cause an unscheduled power outage with long repair times. Transformers can require long procurement times depending on the size needed. All production could halt within the affected facility due to a lack of electrical power. | Electrical equipment (transformer) failure due to prolonged exposure to harsh outdoor weather conditions without testing or maintenance. | Open | Threat | Accept | Possible | Minor | 3-Low | \$ | 250,000 | \$ | 545,600 | \$ | 2,578,000 | 48 | 96 | 160 | Best Case- transformer fails on double end fed piece of equipment so cost to replace is the materials only of 250k. Most Likely - transformer failure which causes partial building outage (CPP-659) for duration of the time it takes to get a new transformer. MATL COST: 200k LABOR COST: 96 days X 12 hr./day X 3FTE X \$100/hr. Worst Case: Transformer failure includes need to replace feeder breakers also and results in loss of 1/2 of CPP-666 for duration of the time it takes to get transformer, breakers, and time to install. MATL COST: 750k, LABOR COST: 160 days X 12 hr./day X 9 FTE X \$100/hr. SPRACED WORKER COST: 100k | N/A | N/A | 3/20/2022 | 7/10/2023 | | |
| INTEC037R2 | D.3.03.38.06 | IEC | Wilcox, Christopher | Wilcox, Christopher | INTEC Miscellaneous Paving: Excavation Uncovers Unanticipated Objects | Excavation reveals unidentified objects and/or utilities resulting in a stop work to determine a any additional remediation prior to proceeding with excavation. | An unknown utility or object is discovered during excavation. | Open | Threat | Mitigate | Unlikely | Minor | 3-Low | \$ | 8,000 | \$ | 8,000 | \$ | 96,000 | 1 | 1 | 12 | Based on work history of similar projects for number of FTEEstimated values are: # Days x 10 hrs/day x 8 FTE x \$100/hr | Check weather before hand and have possible weather shelters nearby or on site for emergencies | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC038R2 | D.3.03.38.06 | IEC | Wilcox, Christopher | Wilcox, Christopher | INTEC Miscellaneous Paving: Clay Layer Discovered During Excavation | Additional excavation may be required to remove an unanticipated clay layer under the designated pave/repair area and then place on a compactable base. | Discovering a clay layer during excavation. | Open | Threat | Accept | Possible | Minor | 3-Low | \$ | 8,000 | \$ | 8,000 | \$ | 32,000 | 1 | 2 | 16 | Based on work history of similar projects for number of FTEEstimated values are: # Days x 10 hrs/day x 8 FTE x \$100/hr | Ensure operators assigned to the job are familiar and trained to use the equipment provided. | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC041R2 | D.3.03.38.09 | IEC | Klukis, Venita | Klukis, Venita | INTEC Distributed Control System Upgrades: DCS electronics failure. | The DCS electronic systems need to be updated to more readily available products in the event of a system failure. Parts for the currently operated system are not readily available as it is an outdated system. | Outdated DCS equipment fails upon use. | Open | Threat | Mitigate | Possible | Critical | 4-High | \$ | 232,000 | \$ | 264,000 | \$ | 296,000 | 90 | 150 | 270 | In house design delay can be an issue, it will take six weeks to source the job. to outside engineering company just to be awarded, plus designing period, that would cost three months delay on the job plus extra cost to the out outside company to complete the design. For activity's 1030 and 1050 the SOs are in approval status and it has been quoted that the costs of both risks combined will be \$200,000K. The supply chain issue to get the material is 82 days. So best case is \$200K at 90 days. The other 2 risks 1010 and 1040 are based on labor from our software engineers. Those risks combine for a total of 16 Days X 10 hour X 2 FTEs X \$100=\$32,000X 2 X 2 X \$100=\$64,000X 4 X 10 X 2 \$100=\$96,000 | Work with engineering to prioritize high risk equipment and replace them first. | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC045R2 | D.3.03.38.07 | IEC | Miller, Zeena | Miller, Zeena | INTEC CPP-666 Annex HVAC Upgrades: Discovery of Asbestos | The risk of asbestos being discovered during demo and installation requires additional controls. | Asbestos was discovered during demolition and installation. | Open | Threat | Mitigate | Possible | Moderate | 3-Low | \$ | 112,000 | \$ | 224,000 | \$ | 336,000 | 14 | 28 | 42 | Since demo is proposed to be completed by force account, this will reduce our cost of treating asbestos (trained staff). At this point it is proposed to be probably two weeks of working days delay. Plus expenses, - 14 days X 10 hr/day X 8 FTE X \$100/hr=28 daysX42 Days | Issue a work order early on the process to test suspect materials for asbestos. | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC059R2 | D.3.03.39.02 | IEC | Lords, Darin | Lords, Darin | Emergency Communication System Air #1: ECS wireless system failure. | Existing ECS wireless system failure causes the work to be stopped and impacts the accomplishment of the fire panel conversion process. | Failure of the INTEC ECS which stops the fire panel conversion work progress and testing. | Open | Threat | Accept | Unlikely | Serious | 3-Low | \$ | 30,000 | \$ | 180,000 | \$ | 270,000 | 30 | 60 | 90 | Best - 30d x 10 h/d x 1fte x 100/hr = 30,000 Lik - 60d x10h/d x3fte x 100/hr = 180,000 Wo - 90d x 10h/d x 3fte x 100/hr =270,000 | Have an ECS recovery plan in place to repair the system. | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC060R2 | D.3.03.39.02 | IEC | Lords, Darin | Lords, Darin | Emergency Communication System Air #1: BEA reprogramming was not completed in a timely manner. | Required BEA reprogramming at the Central Fire Station for each ECS panel conversion is not completed in a timely manner. | BEA does not reprogram and work to test system is suspended. | Open | Threat | Accept | Unlikely | Moderate | 3-Low | \$ | 14,000 | \$ | 90,000 | \$ | 120,000 | 14 | 30 | 60 | Best - 14d x 10 h/d x 1fte x 100/hr = 14,000 Lik - 30d x10h/d x3fte x 100/hr = 90,000 Wo - 60d x 10h/d x 2fte x 100/hr =120,000 | Have early communications with BEA and have needed necessary documentation in place to allow coordination between IEC and BEA for needed reprogramming. | N/A | N/A | 3/20/2022 | 10/9/2023 | |
| INTEC067R2 | D.3.03.3C.02 | IEC | Howell, Jonathan | Howell, Jonathan | INTEC Crane Upgrade: Materials costs exceed estimates. | Material price points in DCES are considered a ROM estimate and have no basis of estimate. Controller, hook, and linear actuator lead times are unknown. | Supplier response to RFQ. | Open | Threat | Accept | Likely | Moderate | 3-Moderate | \$ | 375,000 | \$ | 500,000 | \$ | 625,000 | 0 | 0 | 0 | Received budgetary quote from PaR for controller system that is \$400k per crane and DCES currently has \$150k per crane. Used difference between values for the Most Likely case and then adjusted 25% both ways to arrive at the Worst Case and Best Case values. | NA | N/A | 7/25/2022 | 10/9/2023 | | |
| INTEC068R2 | D.3.03.3C.02 | IEC | Howell, Jonathan | Howell, Jonathan | INTEC Crane Upgrade: PaR Re-certification Scope Definition | Full work scope to re-certify existing PaR arm is unknown and could exceed estimated cost and schedule once vendor evaluation is complete. | Vendor inspection and testing upon receipt of PaR arm. | Open | Threat | Mitigate | Likely | Minor | 3-Low | \$ | 16,500 | \$ | 41,250 | \$ | 82,500 | 0 | 0 | 0 | Previous quote from 2008 for similar work was \$120K which escalates to \$165K in today's dollars. Worst Case assumes we increase cost by 50%, Most Likely assumes we increase cost by 25%, and Best Case assumes we increase cost by 10%. This activity is not on the project critical path and is not expected to adversely impact project schedule so no durations were inputted. | Inspect PaR arm prior to shipment to better determine risk level | N/A | N/A | 7/25/2022 | 10/9/2023 | |
| INTEC069R2 | D.3.03.3C.02 | IEC | Howell, Jonathan | Howell, Jonathan | INTEC Crane Upgrade: CPP-603 Operations Impacts | INTEC Crane Upgrade must be started and completed between higher priority operational evolutions to ensure that the necessary personnel and equipment are available. | The project is not complete prior to the beginning of higher priority operational work. | Price Option | Threat | Mitigate | Almost Certain | Minor | 4-High | \$- | \$- | \$- | \$- | \$- | 8 | 16 | 32 | Worst case assumes we are ready to begin work when ATR wet-to-dry shipments are starting. The other cases assume we do not have as much schedule overlap. No cost impact is associated with this risk. | Project will work to prioritize activities to avoid running into conflicts with ATR Direct shipments. | N/A | N/A | 4/11/2023 | 7/10/2023 | | |
| INTEC070R2 | D.3.03.3C.02 | IEC | Howell, Jonathan | Howell, Jonathan | INTEC Crane Upgrade: Infrastructure doesn't support integration of new design | Engineering design identifies areas where additional conduit or cell wall penetrations will be required. | Engineering design contractor identifies issues with integration into existing facility. | Open | Threat | Mitigate | Unlikely | Moderate | 3-Low | \$ | 30,000 | \$ | 60,000 | \$ | 101,250 | 16 | 32 | 54 | Best Case-accounts for a minor adjustment to existing drawing and work package only. Likely Case assumes that and a new, minor infrastructure installation which would drive material procurement. Worst Case assumes that, and rework to existing infrastructure. Durations are based off project historicals and then costs were calculated using typical crew size for this type of work. | Specification is being written such that the supplier will be required to design within the existing infrastructure. | N/A | N/A | 7/25/2022 | 10/9/2023 | |
| INTEC071R2 | D.3.03.35 | IEC | Inns, Ryan | Inns, Ryan | INTEC Utility Tunnel: Specialty Subcontractor Availability | Specialty contractor, who would be required to support training, oversight, inspection, or testing for Utility Tunnel Upgrades is not available. | Identified contractor identifies availability issues that impact the project schedule. | Price Option | Threat | Mitigate | Possible | Minor | 3-Low | \$ | 12,000 | \$ | 48,000 | \$ | 144,000 | 4 | 16 | 48 | Best Case: 4 days x 10 hrs./day x 4 people x \$75/hr. = \$12,000 Most Likely: 16 days x 10 hrs./day x 4 people x \$75/hr. = \$48,000 Worst Case: 48 days x 10 hrs./day x 4 people x \$75/hr. = \$144,000 | Schedule contractor early. | N/A | N/A | 4/11/2023 | 7/10/2023 | |
| INTEC072R2 | D.3.03.35 | IEC | Inns, Ryan | Inns, Ryan | INTEC Utility Tunnel: Craft Support Availability | Force Account craft, who are needed to support the Utility Tunnel Upgrades, are not available when needed. | Craft management identifies availability issues that impact the project schedule. | Price Option | Threat | Mitigate | Possible | Minor | 3-Low | \$ | 12,000 | \$ | 48,000 | \$ | 144,000 | 4 | 16 | 48 | Best Case: 4 days x 10 hr./day x 4 people x \$75/hr. = \$12,000 Most Likely: 16 days x 10 hr./day x 4 people x \$75/hr. = \$48,000 Worst Case: 48 days x 10 hr./day x 4 people x \$75/hr. = \$144,000 | Schedule contractor early. | N/A | N/A | 4/11/2023 | 7/10/2023 | |
| INTEC076R2 | D.3.03.3D.02 | IEC | Kelly, Patrick | Kelly, Patrick | INTEC Energy Audits: Facility Availability to Support Walkthrough/Work Release | Unforeseen operational activities may prevent facility access to perform walkthroughs/energy audits. | Emergent Operational activities prevent scheduled access to facility. | Price Option | Threat | Accept | Rare | Minor | 3-Low | \$ | 276 | \$ | 2,210 | \$ | 4,419 | 1 | 2 | 3 | Best Case \$276.19 subcontractor cost for each facility. Most Likely: 4 facility audits per day = \$1104.76 3 day delay = \$3209.52 Worst Case: 4 day delay = \$4419.04 | N/A | N/A | 4/11/2023 | 7/10/2023 | | |
| INTEC077R2 | D.3.03.38.10 | IEC | Wilcox, Christopher | Wilcox, Christopher | LED Lights Longevity | LED lights don't last in the cell environment. | Initial LED lights installed do not last and future light installations are put on hold. | Open | Threat | Accept | Possible | Major | 4-High | \$ | 43,525 | \$ | 87,051 | \$ | 174,102 | 54 | 66 | 91 | Worst case assumes all lights were installed and would require replacement. Cost per light is \$220, cost per shoebox is \$290, and cost to support removal and installation is estimated to be \$160K. Schedule impact worst case was found by reusing initial project durations for work order development, part procurement, and light installations. Most Likely values were found by assuming 50% of lights would need to be removed/replaced while Best Case assumed 25%. | N/A | N/A | 11/17/2022 | 10/9/2023 | | |

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|------------|--|-----|---------------------|---------------------|--|---|---|------|--------|----------|----------------|----------|------------|----|---------|----|-----------|----|-----------|----|-----|-----|--|--|--|------------|-----------|--|
| INTEC07BR2 | D.3.03.38.10 | IEC | Wilcox, Christopher | Wilcox, Christopher | Waste in Cell 216 Prevents Lower Light Replacements | The waste currently in Cell 216 will hinder the lower half of the LED light replacements. | The upper lights are completed and waste is still in the cell. Access to the lower lights is determined to be not possible. | Open | Threat | Mitigate | Likely | Critical | 1-Low | \$ | - | \$ | - | \$ | - | 0 | 136 | 198 | There is no cost impact if risk is realized, however, schedule could be impacted. Best case the waste is removed prior to light installation, most likely is based off of completing the waste load out by end of FY23, and worst case estimates the waste loadout is completed by 1/2023 | Setup schedule to perform these lights last to allow as much time as possible for the Waste Loadout to complete. | | 11/17/2022 | 10/9/2023 | |
| INTEC08OR2 | D.3.03.38.04 | IEC | Lords, Darin | Lords, Darin | Material Delays | Cell signal boosters are delayed. | Materials are not received on scheduled date. | Open | Threat | Accept | Possible | Moderate | 1-Low | \$ | - | \$ | - | \$ | - | 10 | 20 | 40 | Work is being performed by subcontractor so, minimal cost will be realized if materials are delayed but the schedule will be negatively impacted. Most likely scenario is a delay in the vendors supply chain | Coordinate with the vendor to schedule the installation when the materials are available. | | 11/17/2022 | 10/9/2023 | |
| INTEC082 | D.3.03.32.03 | IEC | Hamilton, Rob | N/A | INTEC 902 Crane Repair: Crane 902 Rail Repairs Delays New Crane Install | Crane rail repairs take longer than anticipated and are not completed by the time new crane shows and paperwork to install is approved. | Crane rail repairs continue to slip past 10/02/2023. | Open | Threat | Accept | Possible | Moderate | 2-Low | \$ | 140,000 | \$ | 280,000 | \$ | 500,000 | 0 | 0 | 16 | Best Case: PPE costs-\$18000 (\$500/entry/person) per week. Straight time for union workers - 8 days X 10 hr./day X 9 FTEs X \$60/hr. overtime for union workers - 4 days X 10 hr./day X 9 FTEs X \$90/hr. Exempt personnel - 12 days X10 hr./day X 3 FTEs X \$75/hr. = \$140,000. No schedule impact since taking action prior to installation of crane. Most Likely Case: PPE costs-\$18000 per week. Straight time for union workers - 16 days X 10 hr./day X 9 FTEs X \$60/hr. overtime for union workers - 8 days X 10 hr./day X 9 FTEs X \$90/hr. Exempt personnel - 24 days X 10 hr./day X 3 FTEs X \$75/hr. = \$280,000. Worst Case: No overtime allowed causes schedule impact of 16 work days since it would delay the crane install. PPE costs-\$18000 per week. Straight time for union workers - 32 days X 10 hr./day X 9 FTEs X \$60/hr. Exempt personnel - 32 days X 10 hr./day X 3 FTEs X \$75/hr. = \$500,000 | N/A | Work OT to recover schedule slip later when the paperwork is approved to install the crane | 4/23/2023 | 7/18/2023 | Risk listed a mitigation action in the register but no RM Activity ID Removed mitigation action from register. Reworded Corrective Action to reflect a post realized-risk action item. |
| INTEC083 | D.3.03.32.03 | IEC | Baisch, Kasey | Baisch, Kasey | INTEC 902 Crane Repair: Cable Reel and Bridge Motor Impact Clearance Tolerances | During the remote design of the crane, the cable reel and bridge motor were changed to meet the required clearance tolerances. It may be discovered that the cable reel and/or bridge motor tolerances do not allow for proper operation of the crane due to interference with the west wall in the PaR parking area of the cell. | Installation of the crane. | Open | Threat | Accept | Rare | Moderate | 1-Low | \$ | 56,500 | \$ | 88,450 | \$ | 161,100 | 20 | 22 | 44 | Best Case: Assuming maintenance can access cable reel and bridge motor, it will take 1 month for ACECO engineers design changes which we will not pay for due to warranty. 1 week for maintenance to fix equipment per engineering design. Craft 4 days X 10 hr./day X 9 FTEs X \$60/hr. Exempt personnel 4 days X 10 hr./day X 3 FTEs X \$75/hr. PPE cost \$21,500 = \$56,500. OT 2 days X 10 hr./day X 1.5 OT rate X 9 FTEs X \$60/hr. Exempt personnel 2 days OT X 10 hr./day X 1.5 OT rate X 3 FTEs X \$75/hr. = \$22950.00 + 9000.00. PPE +\$5500.00 = \$88450. Worst Case: 6 weeks for engineering design. 2 weeks with overtime = Straight time - Craft 8 days X 10 hr./day X 9 FTEs X \$60/hr. + 4 OT days X 10 hr./day X 1.5 OT rate X 9 FTEs X \$60/hr. = \$75600.00. Exempt - 8 days X 10 hr./day X 3 FTEs X \$75/hr. = 4 days X 10 hr./day X 1.5 OT rate X 3 FTEs X \$75/hr. = \$31500.00 + 75600.00 = \$107100.00 + PPE \$54000 = \$161,100.00 | N/A | | 4/23/2023 | 7/18/2023 | |
| INTEC137 | 03.3A.05D.3.03.3A | IEC | Wilcox, Christopher | Wilcox, Christopher | INTEC Firewater System: Materials Procurement Delays | Materials are delayed or not available as scheduled. | Materials are backordered or have excessive lead times. | Open | Threat | Accept | Possible | Minor | 1-Low | \$ | 45,000 | \$ | 60,000 | \$ | 120,000 | 12 | 16 | 32 | Best Case: 12 days X 10 Hrs. X 5 FTEs X \$75/hr. Most Likely: 16 days X 10 Hrs. X 5 FTEs X \$75/hr. Worst Case: 32 days X 10 Hrs. X 5 FTEs X \$75/hr. | N/A | | 4/11/2023 | 7/10/2023 | |
| INTEC138 | 03.3A.05D.3.03.3A | IEC | Wilcox, Christopher | Wilcox, Christopher | INTEC Firewater System: Equipment Lease/Procurement Delays | Equipment delayed or not available as scheduled. | Equipment is backordered or has excessive lead times. | Open | Threat | Accept | Possible | Minor | 1-Low | \$ | 45,000 | \$ | 60,000 | \$ | 120,000 | 12 | 16 | 32 | Best Case: 12 days X 10 Hrs. X 5 FTEs X \$75/hr. Most Likely: 16 days X 10 Hrs. X 5 FTEs X \$75/hr. Worst Case: 32 days X 10 Hrs. X 5 FTEs X \$75/hr. | N/A | | 4/11/2023 | 7/10/2023 | |
| INTEC211 | D.3.03.32.01 D.3.03.32.02 | IEC | Hamilton, Rob | N/A | 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, it could result in additional resources required, changes to work control, additional training required, etc. | A Major Noncompliance event occurs. | Open | Threat | Accept | Likely | Major | 4-High | \$ | 250,000 | \$ | 500,000 | \$ | 1,000,000 | 48 | 96 | 192 | Cost of subcontract repairs, cost to refurbish program, cost for retraining. | N/A | Apply additional outside oversight to ensure we are following process steps and expectations | 5/18/2023 | 7/10/2023 | Used INBOP-PM-1020 |
| INTEC212 | D.3.03.30.04 | IEC | Baisch, Kasey | Baisch, Kasey | BOP CM: Critical Legacy Equipment Failure | INTEC utilizes many pieces of legacy equipment, such as: cranes, overhead doors, transformers, etc. Legacy equipment has the potential of failing due to the nature of its age. Unforeseen equipment failure can cause unscheduled outages to repair and turn the equipment back over to operations. | Equipment fails. | Open | Threat | Accept | Almost Certain | Critical | 1-Low | \$ | 500,000 | \$ | 1,000,000 | \$ | 2,000,000 | 96 | 192 | 288 | G16 compressor replacement actuals, potable water wiring actuals, 1647 piping actuals, cathodic protection replacement actuals. | N/A | | 5/18/2023 | 7/10/2023 | |
| INTEC221 | D.3.03.3F.06 | IEC | Lords, Darin | N/A | CPP-606 Vulnerabilities Upgrades: Weather Delays Power Conductor Testing and Installation | During the performance of the conductor testing for the deep well installation, severe weather could cause a delay, increasing the time needed to complete the testing. | Severe Weather. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 30,000 | \$ | 45,000 | \$ | 60,000 | 8 | 12 | 16 | Best Case: 8 days X 10 hr. X 5 FTEs X \$75/hr. Most Likely: 12 days X 10 hr. X 5 FTEs X \$75/hr. Worst Case: 16 days X 10 hr. X 5 FTEs X \$75/hr. | N/A | N/A | 7/28/2022 | 7/10/2023 | Not in DCES |
| INTEC222 | D.3.03.3F.06 | IEC | Lords, Darin | N/A | CPP-606 Vulnerabilities Upgrades: Conductors Cable Fails | While testing of deep well power conductors, the cable fails the testing criteria, thus, having to be replaced. | Failed test. | Open | Threat | Accept | Rare | Major | 2-Low | \$ | 94,500 | \$ | 171,000 | \$ | 274,500 | 42 | 76 | 122 | Best Case: 42 days X 10 hr. X 3 FTEs X \$75/hr. Most Likely: 76 days X 10 hr. X 3 FTEs X \$75/hr. Worst Case: 122 days X 10 hr. X 3 FTEs X \$75/hr. | N/A | N/A | 7/28/2022 | 7/10/2023 | Not in DCES |
| INTEC223 | D.3.03.3F.06 | IEC | Lords, Darin | N/A | CPP-606 Vulnerabilities Upgrades: Cable Connectors Damaged | During connector tie-in evolution of the Deep Well power conductors there is potential a connector kit could become damaged and new kits have to be installed or be replaced. | Damaged Equipment/parts. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 60,000 | \$ | 75,000 | \$ | 135,000 | 12 | 16 | 32 | Best Case: 12 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$15K in materials Most Likely: 16 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$15K in materials Worst Case: 32 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$15K in materials | N/A | N/A | 7/28/2022 | 7/10/2023 | Not in DCES |
| INTEC224 | D.3.03.3F.06 | IEC | Lords, Darin | N/A | CPP-606 Vulnerabilities Upgrades: During Conductor Installation, A Conductor Gets Stuck in Conduit | During the tugger/pulling evolution of the conductors, the conductor becomes wedged and will not continue into conduit. | Cable will not pull into new conduit. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 95,000 | \$ | 110,000 | \$ | 170,000 | 12 | 16 | 32 | Best Case: 12 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$50K in materials Most Likely: 16 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$50K in materials Worst Case: 32 days X 10 hr. X 5 FTEs X \$75/hr. Plus \$50K in materials | N/A | N/A | 7/28/2022 | 7/10/2023 | Not in DCES |
| IT004 | D.6.02.38.01 | IEC | Anderson, Jade | N/A | Information Technology: Subcontractor Availability | Subcontractor availability (wheeler electric, Leverage) preference and availability. | Preferred subcontractor is unavailable. | Open | Threat | Mitigate | Rare | Serious | 2-Low | \$ | 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 | Develop a request for back-up subcontractor. | N/A | 4/23/2023 | 7/10/2023 | No mitigation in DCES |
| IT010 | D.6.02.36.01_04-07 | IEC | Anderson, Jade | N/A | Information Technology: Software Upgrades | Scheduling testing for software upgrades (ARB risk assessments for Cyber and IT) - Derogatory information discovered during risk assessment, or software vulnerabilities discovered render software or hardware item unfit for use at ICP. | Discovery of derogatory information. | Open | Threat | Mitigate | Unlikely | Minor | 2-Low | \$ | 18,000 | \$ | 72,000 | \$ | 288,000 | 4 | 16 | 64 | Best Case: 4 days x 10 hr./day x 2 FTEs x \$225/hr. = \$18,000 Most Likely: 16 days x 10 hr./day x 2 FTEs x \$225/hr. = \$72,000 Worst Case: 64 days x 10 hr./day x 2 FTEs x \$225/hr. = \$288,000 | Perform preliminary assessment to locate any vulnerabilities and adjust coding as necessary. | N/A | 4/23/2023 | 7/10/2023 | No mitigation in DCES |
| IT012 | D.6.03.32.01 | IEC | Anderson, Jade | N/A | Information Technology: 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. | Cannot source Hardware. | Open | Threat | Accept | 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 | 4/23/2023 | 7/10/2023 | No mitigation in DCES |
| IT013 | D.6.02.38.39.41 D.6.03.32 D.6.03.33 D.6.02.34 D.6.02.35.01 | IEC | Anderson, Jade | N/A | 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. | Open | Threat | Accept | Possible | Critical | 4-High | \$ | 320,000 | \$ | 960,000 | \$ | 1,920,000 | 40 | 120 | 240 | Best Case: 40 days x 10 hr./day x 4 FTEs x \$200/hr. = \$320,000 Most Likely: 120 days x 10 hr./day x 4 FTEs x \$200/hr. = \$960,000 Worst Case: 240 days x 10 hr./day x 4 FTEs x \$200/hr. = \$1,920,000 | N/A | N/A | 4/23/2023 | 7/10/2023 | No mitigation in DCES FP-1010 not found in schedule IP-P3-1010 not found in schedule IP-P2-1010 not found in schedule D5HP-1010 not found in schedule |
| NICDF006 | D.4.06.3A.01 | IEC | Reese, Craig | N/A | New ICDP Cell Definition: Potential Contamination of Groundwater Monitoring Well Drilling Equipment and Site | During installation of groundwater monitoring wells, there is a potential for contamination to be discovered that could impact the equipment, ground water, and/or surrounding area. This would require time and cost to move to another drilling site and to decontamination equipment. | Unexpected contamination discovered on well drilling equipment. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 30,000 | \$ | 75,000 | \$ | 120,000 | 2 | 5 | 8 | Best Case: 2 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 8 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES |

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|------------|-----------------------------------|-----|--------------------|-------------------|--|---|---|----------------|--------|----------|----------------|----------|------------|----|-----------|----|-----------|----|------------|-----|-----|-----|--|--|-----------|-----------|-----------|---|--|
| NICDF007 | D.4.06.32.01 | IEC | Reese, Craig | N/A | New ICDF Cell: Lowering the Cell Results in Finding Basalt | If DOE/Tribes require lowering the ICDF cell berm by 7 feet (reducing visual footprint) then a modification in design and excavation would be required. The project would have to re-design the cell, requiring rotating the cell 90°, and excavating 7 feet deeper than currently estimated. | During deeper excavation of cell, basalt is encountered. Takes longer to excavate. | Open | Threat | Accept | Almost Certain | Minor | 3-Moderate | \$ | 150,000 | \$ | 240,000 | \$ | 720,000 | 10 | 16 | 48 | Best Case: 10 days X 10 hrs./day X 20 FTEs X \$75/hr. Most Likely Case: 16 days X 10 hrs./day X 20 FTEs X \$75/hr. Worst Case: 48 days X 10 hrs./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/18/2023 | 9/18/2023 | As of 9/18/2023 Note From DOE: This is a risk within the project baseline and not an external risk. Further, the cell has already been lowered and rotated 90-degrees in the design documents. Also, if basalt is found during excavation, it is a risk that should have been covered in the site preparation (excavation) activities. As such, this is an IEC risk that should be covered by the Management Reserve account. | |
| NICDF009 | D.4.06.39.01 | IEC | Reese, Craig | N/A | ICDF Cell 3: Lack of Construction or Excavation Resources Due to Competing Projects or Priorities | As the construction begins, the resources may be unavailable due to other construction activities taking place. Therefore, earthmoving equipment and labor resource may not be available. | Cell 3 construction contractors are unable to provide equipment and/or qualified labor to complete the scope and maintain schedule. | Open | Threat | Accept | Likely | Moderate | 3-Moderate | \$ | 100,000 | \$ | 500,000 | \$ | 1,250,000 | 10 | 10 | 10 | Best Case: 10 days (2% increase in subcontract cost) = .02 X \$5M Most Likely Case: 10 days (10% increase in subcontract cost) = 1 X \$5M Worst Case: 10 days (25% increase in subcontract cost) = 25 X \$5M | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF010 | D.4.06.38.02 | IEC | Reese, Craig | N/A | ICDF Cell 3: Funding Constraints May Impact the Acquisition Strategy | Due to the Project Data Sheet having funding over several fiscal years, a contract for the entire construction FFP cannot be awarded. The strategy is to award a partial contract for each FY and have the contractor provide a FFP each year. If price of the FFP cannot be | Contractors annual FFP proposal is greater than funding availability and cannot be negotiated. | Open | Threat | Accept | Rare | Critical | 3-Moderate | \$ | 1,000,000 | \$ | 5,000,000 | \$ | 20,000,000 | 10 | 20 | 40 | Best Case: 10 days (2% increase in subcontractor cost) = 2 X \$5M Most Likely Case: 20 days (5% increase in subcontractor cost) = 1 X \$5M | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF014 | D.4.06.37.05 | IEC | Reese, Craig | N/A | New ICDF Cell Definition: Excavation Activities Halted | Excavation during the winter months may require the contractor to double handle material. | Excavation becomes difficult due to freezing temperatures and subsequent frost line. | Open | Threat | Accept | Likely | Minor | 2-Low | \$ | 60,000 | \$ | 240,000 | \$ | 720,000 | 4 | 16 | 48 | Best Case: 4 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 16 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 48 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF018 | D.4.06.38.02 | IEC | Reese, Craig | N/A | New ICDF Cell Definition: Silica in Bentonite Requires Respirators | HSQA is discussing the possibility of requiring the use of respirators when working with Bentonite which could impact the approach to the work being performed. | HSQA requiring respirators. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 60,000 | \$ | 240,000 | \$ | 1,440,000 | 4 | 16 | 96 | Best Case: 4 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 16 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 96 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF020 | D.4.06.37.05 | IEC | Reese, Craig | N/A | New ICDF Cell Definition: Excavation Uncovers Unanticipated Materials | While doing excavation there is a chance of unforeseen circumstances (i.e., rad contamination) to occur that can cause a delay in the schedule or a need to assess a new path forward. | Discovering: (Examples) Basalt pockets, Un-identified utilities, Rad contamination Archaeology artifacts | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 30,000 | \$ | 75,000 | \$ | 1,200,000 | 2 | 5 | 80 | Best Case: 2 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 80 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF021 | D.4.06.34.05 | IEC | Reese, Craig | N/A | New ICDF Cell Definition: Inflation Driving Costs above \$100M | In the event that the project ACWP starts to climb above \$100M the potential for a stop work or a new CD evaluation could evolve. | "Estimate to Complete" drives the project above \$100M. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 30,000 | \$ | 75,000 | \$ | 300,000 | 2 | 5 | 20 | Best Case: 2 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 20 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF027 | D.4.06.39.01 | IEC | Reese, Craig | N/A | PM Support - ICDF: 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. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 30,000 | \$ | 75,000 | \$ | 1,440,000 | 2 | 5 | 96 | Best Case: 2 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 96 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 9/21/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF030R2 | D.4.06.37.05 | IEC | Reese, Craig | N/A | New ICDF Cell: Overtime Required | To maintain project schedule, overtime is required to maintain or recover project schedule. | Technical or installation issues cause schedule delays require overtime recover or maintain project schedule. | Open | Threat | Accept | Possible | Moderate | 2-Low | \$ | 144,000 | \$ | 288,000 | \$ | 432,000 | 16 | 32 | 48 | Best Case: 16 days X 1 hr./day X 120 FTEs X \$75/hr. Most Likely Case: 32 days X 1 hr./day X 120 FTEs X \$75/hr. Worst Case: 48 days X 1 hr./day X 120 FTEs X \$75/hr. | N/A | N/A | 12/8/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF033 | D.4.06.37.05 | IEC | Reese, Craig | N/A | PM Support - ICDF: Weather Delays | Cold/wet weather in the spring and fall prevent construction of the cell and evaporation ponds. | Spring and fall weather prevent construction work at the site. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 75,000 | \$ | 225,000 | \$ | 675,000 | 5 | 15 | 45 | Best Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 15 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 45 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 12/8/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF034 | D.4.06.37.05 | IEC | Reese, Craig | N/A | PM Support - ICDF: Identification of Contamination | Unforeseen radiological and/or hazardous contamination is discovered outside the boundaries of known sources. | Contamination is identified. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 30,000 | \$ | 75,000 | \$ | 300,000 | 2 | 5 | 20 | Best Case: 2 days X 10 hr./day X 20 FTEs X \$75/hr. Most Likely Case: 5 days X 10 hr./day X 20 FTEs X \$75/hr. Worst Case: 20 days X 10 hr./day X 20 FTEs X \$75/hr. | N/A | N/A | 12/8/2022 | 7/10/2023 | No mitigation in DCES | |
| NICDF037a | D.4.06.30 | IEC | Reese, Craig | Reese, Craig | New ICDF Cell: BEA Support Services Do Not Meet ICDF Scheduled Need Dates | 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. | Open | Threat | Shared | Unlikely | Minor | 2-Low | \$ | 60,000 | \$ | 240,000 | \$ | 2,640,000 | 4 | 16 | 176 | Best Case: 4 days X 10 hrs./day X 20 FTEs X \$75/hr. Most Likely Case: 16 days X 10 hrs./day X 20 FTEs X \$75/hr. Worst Case: 176 days X 10 hrs./day X 20 FTEs X \$75/hr. | Propose Shared to DOE | N/A | N/A | 2/2/2023 | 9/18/2023 | |
| NICDF038 | D.4.06.34.05 | IEC | Reese, Craig | N/A | New ICDF Cell: EVMS Certification Disapproval/Delay | IEC Contract H.1.7 requires "For contracts supporting projects valued at \$100M or more, the contractor's EVMS must be formally certified. * Excessive Corrective Action Reports (CARs) or EVMS disapproval could result in project execution impacts including delays and increased costs. This would impact IEC's ability to execute work on Capital Asset projects after Critical Decision (CD) 2. | Disapproval or delay of EVMS certification. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | - | \$ | 1,000 | \$ | 6,000 | 0 | 16 | 96 | Best Case: No impacts are applied. Most Likely Case: 1 month delay to rework CD Approval documents * 1k/month = \$1k Worst Case: EVMS certification disapproval results in 6 months to restructure * 1k/month = \$6k | N/A | N/A | 6/26/2023 | 7/10/2023 | No mitigation in DCES | |
| NICDF039a | D.4.06.34.05 | IEC | DOE FPD | Reese, Craig | New ICDF Cell: CD2/3 PMB Higher than Phase 2 Plan | ICDF New Cell is anticipated to be submitting a PMB in the spring of 2024 for the lifecycle of the project. Under DOE direction they are also planning two years of scope under Task Order 3 Phase 2 (FY24-FY25). There is a potential differentiation in the planning of those time periods making the PMB in the spring come in at a different cost or schedule than planned. | The PMB submitted in the spring comes out with different costs and/or schedule estimates than planned under TO3 Phase 2. | Open | Threat | Shared | Possible | Serious | 3-Moderate | \$ | 250,000 | \$ | 500,000 | \$ | 750,000 | 32 | 64 | 96 | Best Case: Additional 2 months needed for scope identified under FY24/25 time frame with additional \$500k. Most Likely: Additional 4 months needed for scope identified under FY24/25 time frame with additional \$500k. Worst Case: Additional 6 months needed for scope identified under FY24/25 time frame with additional \$500k. | Propose Shared to DOE | N/A | N/A | 7/10/2023 | 9/18/2023 | |
| NRF00008R2 | D.5.01.32D.5.01.30.20D.5.01.30.21 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: Loss of Contamination Control | Loss of contamination control (outside D&B boundaries) during contamination in personnel contamination and/or extended shutdown for recovery. | An unanticipated event driven by discovery of contamination outside of the boundary, possibly portable air monitor. | Open | Threat | Accept | Rare | Critical | 3-Moderate | \$ | 750,000 | \$ | 1,500,000 | \$ | 1,000,000 | 100 | 180 | 204 | Best Case: 100 days x 10 hrs./day x 8 people x \$93/hr. = \$750,000 Most Likely: 180 days x 10 hrs./day x 8 people x \$93/hr. = \$1,500,000 Worst Case: 204 days x 10 hrs./day x 8 people x \$93/hr. = \$3,000,000 | N/A | N/A | 3/20/2022 | 10/9/2023 | | |
| NRF00009 | D.5.01.32 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: NRF West Gate Access | The West entrance for NRF using gate 4 has limited ingress/egress for the heavy equipment and waste shipments due to high voltage power conductors overhead. | The heavy equipment and waste loads ingressing or egressing from NRF through gate 4 will have a load limit no greater than 13' in height that will require an alternate route or complicated high voltage power outage. | Open | Threat | Accept | Likely | Minor | 2-Low | \$ | 21,000 | \$ | 42,000 | \$ | 84,000 | 4 | 8 | 16 | Best Case: 4 days X 10 hrs./day X 7 FTEs X \$75/hr Most Likely Case: 8 days X 10 hrs./day X 7 FTEs X \$75/hr Worst Case: 16 days X 10 hrs./day X 7 FTEs X \$75/hr | N/A | N/A | 4/12/2022 | 7/10/2023 | | |
| NRF00010 | D.5.01.32 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: A1W Turnover Delayed | This work scope is based off an FMP schedule with a phased approach to turnover and transfer ancillary A1W facilities to IEC starting June 1, 2023. If the transfer does not happen as scheduled there is a risk of schedule and associated cost delays until turnover is completed. | A1W turnover phases are not turned over as scheduled. | Open | Threat | Accept | Rare | Minor | 1-Low | \$ | 21,000 | \$ | 42,000 | \$ | 84,000 | 4 | 8 | 16 | Best Case: 4 days X 10 hrs./day X 7 FTEs X \$75/hr. Most Likely Case: 8 days X 10 hrs./day X 7 FTEs X \$75/hr. Worst Case: 16 days X 10 hrs./day X 7 FTEs X \$75/hr. | N/A | N/A | 4/12/2022 | 7/10/2023 | | |
| NRF00011 | D.5.01.32 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: Personnel Attrition | Ability to acquire new trained individuals becomes harder, requiring subcontractor support to complete the work. The potential exists to incur additional costs & schedule delays. | Attrition realized. | Open | Threat | Accept | Rare | Moderate | 2-Low | \$ | 37,500 | \$ | 225,000 | \$ | 337,500 | 5 | 30 | 30 | Best Case: 5 days X 10 hrs./day X 10 FTEs X \$75/hr = \$37,500 Most Likely Case: 30 days X 10 hrs./day X 10 FTEs X \$75/hr = \$225,000 Worst Case: 30 days X 10 hrs./day X 15 FTEs X \$75/hr = \$337,500 | N/A | N/A | 8/11/2022 | 7/10/2023 | | |
| NRF00012 | D.5.01.32 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: 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 | Critical | 3-Moderate | \$ | 750,000 | \$ | 1,500,000 | \$ | 3,000,000 | 100 | 180 | 204 | Best Case: 100 days x 10 hrs./day x 8 people x \$93/hr. = \$750,000 Most Likely: 180 days x 10 hrs./day x 8 people x \$93/hr. = \$1,500,000 Worst Case: 204 days x 10 hrs./day x 8 people x \$93/hr. = \$3,000,000 | N/A | N/A | 3/20/2022 | 7/10/2023 | | |
| NRF00013 | D.5.01.32 | IEC | Burtenshaw, Shawna | Burtenshaw, Shawn | NRF Naval Reactors: Subcontract Management | Not securing a subcontractor that can do the work in the time allotted for the project can cause schedule delays. | Subcontractor is not readily accessible to perform work. | Open Closed | Threat | Mitigate | Rare | Moderate | 1-Low | \$ | 37,500 | \$ | 225,000 | \$ | 337,500 | 5 | 30 | 30 | Best Case: 5 days X 10 hrs./day X 10 FTEs X \$75/hr = \$37,500 Most Likely Case: 30 days X 10 hrs./day X 10 FTEs X \$75/hr = \$225,000 Worst Case: 30 days X 10 hrs./day X 15 FTEs X \$75/hr = \$337,500 | Secure Backup Crane Subcontractor for large component removal. | 3/20/2022 | 7/10/2023 | None | | |
| RHTRU001R2 | D.2.04.30.14 | IEC | Troesch, Pat | N/A | RH-TRU Waste Disposition: Achieving FY24/25 Milestones for Processing Lot 11 Containers Due to Critical Failure of Equipment | Achievement of the FY24 of processing 10 Lot 11 containers and the FY25 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. | Critical failure of facility support equipment and lack of funding specific to: 1. Procure manipulators 2. Design, procure, and modify FDP in-cell crane from analog to digital. | Open | Threat | Accept | 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 | | 3/20/2022 | 7/10/2023 | Has a mitigation action in the register, but no mitigation activity in the schedule. Remove Mitigation Action from Register? Not in DCES Moved Mitigation actions over to the right in Column AD so information wasn't lost but we were communicating correctly. | |
| RHTRU002R2 | D.2.04.30.14 | IEC | Troesch, Pat | N/A | RH-TRU Waste Disposition: Achieving FY24/25 Milestones for Processing Lot 11 Containers Due to Complex Geometries | Achievement of the FY24 milestone of processing 10 Lot 11 containers and the FY25 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. | Open | Threat | Accept | 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 | | 3/20/2022 | 7/10/2023 | Updated WBS. Has a mitigation action in the register, but no mitigation activity in the schedule. Remove Mitigation Action from Register? Reads like the same risk as RHTRU003. Not in DCES Deleted Mitigation action in column V. It was item number 2 for the above risk in column AD. | |
| RHTRU003 | D.2.04.30.14 | IEC | Troesch, Pat | N/A | RH-TRU Waste Disposition: 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. | Open | Threat | Mitigate | Possible | Minor | 2-Low | \$ | 24,900 | \$ | 49,800 | \$ | 97,600 | 2 | 4 | 8 | Best Case: 2 days OT X 20 FTEs X \$41.50/hr. X 10hr. X 1.5 OT = \$24,900 Most Likely: 4days OT X 20 FTEs X \$41.50/hr. X 10hr. X 1.5 OT = \$49,800 Worst Case: 8 days OT X 20 FTEs X \$41.50/hr. X 10hr. X 1.5 OT = \$97,600 | Implement overtime to recover schedule slippage and reduce further schedule interruptions. | N/A | | 4/23/2023 | 7/10/2023 | Updated WBS. Added secondary Mitigation Activity found in schedule. In DCES Updated Mitigation action to match what was in the DCES. |

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| SNF007R2 | D.1.02.32.31 | IEC | Ellsworth, Carla | N/A | <u>Advanced Test Reactor (ATR) SNF Receipt</u> ; CPP-603 PaR Manipulator Malfunction | ATR-Direct: Transfers are delayed because of a malfunctioning CPP-603 PaR manipulator (MAN-GSF-401). | 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. | Open | Threat | Accept | 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 | Maintain the PaR. Work with BEA to reschedule ATR Receipts. | | 3/20/2022 | 7/10/2023 | Not in DCS | |
| SNF008R2 | D.1.02.32.31 | IEC | Ellsworth, Carla | N/A | <u>Advanced Test Reactor (ATR) SNF Receipt</u> ; Camera Failures Due to High Radiation Fields | ATR-Direct: High rad fields in the cave cause premature failure of the cameras in the CPP-603 fuel handling cave. | Failed remote cameras hinder or prevent normal fuel handling operations in the CPP-603 IFSF cave and fuel storage area. | Open | Threat | Mitigate | Likely | Minor | 2-Low | \$ | 45,864 | \$ | 214,032 | \$ | 428,064 | 3 | 14 | 28 | Best Case: 3 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: 28 days X 12 hr. X 13 FTEs X \$98/hr | In the majority of instances, alternative cameras can be utilized to allow the continuation of operations. Perform camera replacement analysis. | N/A | | 3/20/2022 | 7/10/2023 | In DCS | |
| SNF009R2 | D.1.02.34.02 | IEC | Reynolds, Boedre | N/A | <u>CPP-749 1st Generation Vaults Remediation</u> ; Changing CPP-749 Security Requirements | CPP-749 Remediation: Project activities are delayed because of changing CPP-749 security requirements. | Requirements derived from planned security related vulnerability assessments impose more restrictive security controls. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 45,864 | \$ | 214,032 | \$ | 428,064 | 3 | 14 | 28 | Best Case: 3 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: 28 days X 12 hr. X 13 FTEs X \$98/hr | N/A | Purchase Back-up Cameras | Work with DOE/BEA to ensure project activities comply with security plan. | | 3/20/2022 | 7/10/2023 | |
| SNF010R2 | D.1.02.34.02 | IEC | Reynolds, Boedre | N/A | <u>CPP-749 1st Generation Vaults Remediation</u> ; Inadequate Shielding Results in Exorbitant Radiation Level | CPP-749 Remediation: Interim Storage Area (ISA)-4 shielding is determined to be inadequate, resulting in radiation levels higher than those allowed for extended work in the 1st Generation Vault area. | Radiation Technician surveys of the 1st Generation Vault area indicate higher than allowable radiation levels. | Open | Threat | Accept | Possible | 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 | | Work with Radiation protection, engineering, and waste management to mitigate radiation levels. | | 3/20/2022 | 7/10/2023 | |
| SNF011R2 | D.1.02.34.02 | IEC | Reynolds, Boedre | N/A | <u>CPP-749 1st Generation Vaults Remediation</u> ; Excessive Corrosion in The Peach Bottom Vaults | CPP-749 Remediation: Fuel packages stored in certain Peach Bottom vaults are found to have excessive corrosion, precluding normal fuel package retrieval methods. | 1.) During Peach Bottom vault inspections, corrosion capable of jeopardizing the structural integrity of the fuel package lifting feature is observed. 2.) A discharge of fuel is observed when lifting a fuel package to visually inspect its bottom. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 107,016 | \$ | 214,032 | \$ | 535,080 | 7 | 14 | 204 | 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 | | Fuel packages will be visually inspected prior to being lifted for the purposes of identifying corrosion issues. If an inspected fuel package is determined to be jeopardized because of corrosion then, retrieving the fuel package will be delayed until a recovery plan is developed/approved and readied to work. A conceptual design for retrieval equipment capable of safely lifting a jeopardized fuel package has been developed and reviewed/approved by DOE. | | 3/20/2022 | 7/10/2023 | |
| SNF013R2 | D.1.02.32.31 | IEC | Ellsworth, Carla | Ellsworth, Carla | <u>SNF NuPac 125B Cask Transfers: Heavy Haul Subcontractor Availability</u> | The subcontractor is unable to provide heavy haul services to relocate the NuPac 125B casks on the specified dates. | Subcontractor has other jobs during the readiness time frame. | Open | Threat | Accept | Possible | Critical | 4-High | \$ | 1,231,258 | \$ | 2,308,608 | \$ | 2,616,422 | 96 | 180 | 204 | Best Case: 96 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$1,231,258 Most Likely: 180 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$2,308,608 Worst Case: 204 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$2,616,422 | N/A | | | | 3/20/2022 | 7/10/2023 | |
| SNF015R2 | D.1.02.32.31 | IEC | Ellsworth, Carla | N/A | <u>Advanced Test Reactor (ATR) SNF Receipt</u> ; IEC schedule Delay Caused by ATR | ATR Direct: IEC schedule delay caused by ATR. | Equipment and/or operations delays at ATR cause delayed or moved shipment dates to INTEC. | Open | Threat | Mitigate | Possible | Minor | 2-Low | \$ | 45,864 | \$ | 214,032 | \$ | 428,064 | 3 | 14 | 28 | Best Case: 3 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: 28 days X 12 hr. X 13 FTEs X \$98/hr | Alternative work activities will be made available by upper management in the event of an ATR schedule delay. | N/A | | | 3/20/2022 | 7/10/2023 | |
| SNF016R2 | D.1.02.32.31 | IEC | Ellsworth, Carla | N/A | <u>Advanced Test Reactor (ATR) SNF Receipt</u> ; Destaco Clamps Malfunction | ATR-Direct: Destaco clamps 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. | Open | Threat | Accept | Possible | Critical | 4-High | \$ | 1,231,258 | \$ | 2,308,608 | \$ | 2,616,422 | 96 | 180 | 204 | Best Case: 96 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$1,231,258 Most Likely: 180 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$2,308,608 Worst Case: 204 days X 10 hr. X 13.36 FTEs X \$96/hr. = \$2,616,422 | N/A | | | | 3/20/2022 | 7/10/2023 | |
| SNF017R2 | D.1.04.02.02 D.1.04.02.03 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Personnel Attrition</u> | Ability to acquire new trained individuals becomes harder, requiring subcontractor support to complete the work. The potential exists to incur additional costs & schedule delays. | Attrition realized. | Open | Threat | Accept | Rare | Moderate | 3-Low | \$ | 6,000 | \$ | 120,000 | \$ | 240,000 | 8 | 32 | 64 | Best Case: 8 days X 10 hr./day X 1 FTE X \$75/hr. Most Likely Case: 32 days X 10 hr./day X 5 FTEs X \$75/hr. Worst Case: 64 days X 10 hr./day X 5 FTEs X \$75/hr. | N/A | | | | 1/11/2023 | 7/10/2023 | |
| SNF021R2 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Subcontract Management</u> | Not securing a subcontractor that can do the work in the time allotted for the project can cause schedule delays. | Subcontractor is not readily accessible to perform work. | Open | Threat | Accept | Rare | Serious | 2-Low | \$ | 30,000 | \$ | 60,000 | \$ | 120,000 | 12 | 42 | 72 | Best Case: 12 days (5% increase in subcontract cost) = \$600k X 5% Most Likely Case: 42 days (10% increase in subcontract cost) = \$600k X 10% Worst Case: 72 days (20% increase in subcontract cost) = \$600k X 20% | N/A | | | | 1/11/2023 | 7/10/2023 | |
| SNF023R2 | D.1.04.01.09 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Existing Power</u> | Insufficient power supply to meet new design requirements. | Conceptual design identifies need for additional power. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 12,000 | \$ | 30,000 | \$ | 60,000 | 8 | 16 | 32 | Best Case: 8 days (2% increase in subcontract cost) = \$600k X 2% Most Likely Case: 16 days (5% increase in subcontract cost) = \$600k X 5% Worst Case: 32 days (10% increase in subcontract cost) = \$600k X 10% | N/A | | | | 1/11/2023 | 7/10/2023 | |
| SNF042R2 | D.1.04.01.09 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Seismic Requirements</u> | Seismic requirements exceed CPP-2707 design requirements. | Conceptual design identifies need for increased protection. | Open | Threat | Accept | Possible | Minor | 2-Low | \$ | 12,000 | \$ | 30,000 | \$ | 60,000 | 8 | 16 | 32 | Best Case: 8 days (2% increase in subcontract cost) = \$600k X 2% Most Likely Case: 16 days (5% increase in subcontract cost) = \$600k X 5% Worst Case: 32 days (10% increase in subcontract cost) = \$600k X 10% | N/A | | | | 1/11/2023 | 7/10/2023 | |
| SNF052R2 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Qualified Subcontractors</u> | Subcontractor not on Qualified Supplier List (QSL) | No qualified vendor identified during solicitation process. | Open | Threat | Accept | Unlikely | Serious | 2-Low | \$ | 9,000 | \$ | 157,500 | \$ | 270,000 | 12 | 42 | 72 | Best Case: 12 days X 10 hr./day X 1 FTE X \$75/hr. Most Likely Case: 42 days X 10 hr./day X 5 FTEs X \$75/hr. Worst Case: 72 days X 10 hr./day X 5 FTEs X \$75/hr. | N/A | | | | 1/11/2023 | 7/10/2023 | |
| SNF034 | D.1.04.01.10 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: IEC CD-1 Submittal Date</u> | In the event that project scope changes, which delays submittal of the CD-1 review, this could lead to losing our position in queue for DOE Board Reviews. If this risk were realized, it would subsequently delay project schedule. | CD-1 submittal date is missed. | Open | Threat | Accept | Likely | Serious | 4-High | \$ | 58,840 | \$ | 95,040 | \$ | 121,840 | 41 | 58 | 75 | Best Case: 1 FTE for 4 weeks @ \$100/hr. and 1 FTE for 2 weeks @ \$80/hr. and 50,000 for subcontract design + 30day Most Likely: 1 FTE for 4 weeks @ \$100/hr. and 1 FTE for 2 weeks @ \$80/hr. and 80,000 for subcontract design + 60 days Worst Case: 1 FTE for 4 weeks @ \$100/hr. and 1 FTE for 2 weeks @ \$80/hr. and 100,000 for subcontract design + 90 days Each portion of design will need 10% of the subcontractor cost for IEC to manage. | N/A | | | | 4/23/2023 | 7/10/2023 | |
| SNF036 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Geotechnical Findings</u> | Discovery of unforeseen cavities underground and/or soil with low bearing pressure may cause major ground stabilization activities. | During drilling activities, vacancies or low bearing soil is found. | Open | Threat | Accept | Unlikely | Moderate | 2-Low | \$ | 20,000 | \$ | 32,000 | \$ | 48,000 | 20 | 32 | 48 | Review alternate locations and get DOE concurrence | Grout fill voids if they are minimal. adjust the location of the pad as necessary. | Design for ground stabilization to be performed based on soil investigation | | 4/23/2023 | 7/10/2023 | | |
| SNF037 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Subsurface Findings</u> | Unforeseen utilities and/or subsurface security systems that need to be rerouted based upon location of the staging facility. | Discovery of utility lines and/or subsurface security systems. | Open | Threat | Accept | Possible | Moderate | 2-Low | \$ | 51,600 | \$ | 126,000 | \$ | 242,000 | 16 | 32 | 64 | Best Case: Redesign the pad to not impact existing infrastructure/utilities: 1 subcontractor for 1 additional month worth of work for \$50k and 1 FTE in engineering for 1 month @ \$100/hr. Most Likely: 3 FTE for 2 months @ \$100/hr. to design reroutes and \$30,000 in construction costs Worst Case: 3 FTE for 4 months @ \$100/hr. to design reroute and \$50,000 in construction costs | N/A | | Relocate the pad or change the shape of the pad to avoid existing utilities if possible | | 4/23/2023 | 7/10/2023 | |
| SNF038 | D.1.04.03.02 | IEC | Cotterell, Jaksen | Cotterell, Jaksen | <u>SNF Staging Facility: Existing Environmental Impact Statement</u> | The existing environmental impact statement does not encompass the Staging Facility project requirements. A new environmental impact statement is required. | Completion of the environmental checklist determines that a new EIS or environmental assessment is required for the interim storage of Spent Nuclear Fuel. | Open | Threat | Accept | Unlikely | Critical | 3-Moderate | \$ | 500,000 | \$ | 750,000 | \$ | 1,000,000 | 208 | 312 | 416 | Best Case: 208 days and increase of \$500,000 Most Likely Case: 312 days and increase of \$750,000 Worst Case: 416 days and increase of \$1M | N/A | | | | 4/23/2023 | 7/10/2023 | |
| SNF039 | D.1.04.03.03 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Nuclear Safety Documents</u> | Per STD-1189-2016 it was determined that the Staging Facility will be a simple modification and be able to fall under existing SAR 112 and SAR 114. This means that a Safety Design Strategy will not be performed for this project. The building may not be a simple mod and that a Safety design strategy will be required. | DOE evaluation determines that the Staging Facility is a major modification. | Open | Threat | Accept | Possible | Critical | 4-High | \$ | 500,000 | \$ | 750,000 | \$ | 1,000,000 | 104 | 156 | 208 | Best Case: 104 days and increase of \$500,000 Most Likely Case: 156 days and increase of \$750,000 Worst Case: 208 days and increase of \$1M | N/A | | Discuss safety design strategy early in the project and frequently. IEC to state position and work with DOE Nuclear Safety group | | 4/23/2023 | 7/10/2023 | |
| SNF042 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility: Security System and Facility Design Contract</u> | One subcontractor will be utilized for the design of the facility and security system. If we cannot retain a subcontractor who will design both under one contract, we will need to identify a separate subcontractor for each design. The drawbacks with this scenario include: the statement of work would have to be reconfigured into two separate contracts, solicitation, and additional work to place the subcontractors on the Qualified Supplier List. | Contract cannot be awarded to one single subcontractor to perform both designs. | Open | Threat | Accept | Possible | Moderate | 2-Low | \$ | 15,600 | \$ | 31,600 | \$ | 71,600 | 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. | N/A | | Segregate the requirement of 1 contract. Develop a second statement of work and contract a local engineering firm to perform the security design. | | 4/23/2023 | 7/10/2023 | |
| SNF051 | D.1.02.36.07 | IEC | Reynolds, Boedre | N/A | <u>SNF Road Ready: Training Delay</u> | A subcontractor is planned to provide training on Multipurpose Canisters and closure/leak test procedures as well as the welding equipment, which leaves the possibility of project schedule delays if subcontractor is delayed. | Training received from subcontractor is delayed. | Open | Threat | Accept | Unlikely | Major | 3-Moderate | \$ | 100,000 | \$ | 150,000 | \$ | 200,000 | 64 | 96 | 128 | Best Case: 64 days plus equipment/materials Most Likely Case: 96 days plus equipment/materials Worst Case: 128 days plus equipment/materials | N/A | | | | 4/23/2023 | 7/10/2023 | |
| SNF054 | D.1.02.34.02 | IEC | Reynolds, Boedre | N/A | <u>Peach Bottom: Mobile Crane Maintenance</u> | Exceeding the Mobile Crane manufacturers recommended operating hours for performing routine maintenance delays Peach Bottom transfers. | Mobile Crane operator observes the machines monitoring system and concludes the manufactures recommended operating hours are exceeded. | Open | Threat | Mitigate | Possible | Minor | 2-Low | \$ | 15,500 | \$ | 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 | | 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 hisobon for preventative maintenance | | 4/23/2023 | 7/10/2023 | |

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|-----------|------------------------------|-----|-------------------|-------------------|--|---|---|------|--------|----------|----------------|----------|------------|----|---------------|----|---------------|----|---------------|-----|-------|-------|---|---|---|------------|-----------|
| SNF068 | D.1.04.02.02 | IEC | Cotterell, Jaksen | N/A | <u>SNF Staging Facility</u> : Geotechnical Drilling Subcontractor Equipment | The future staging facility location is in a CERCLA area and may have contaminated soil. If the drill rig is contaminated and the equipment or parts of the equipment have to be replaced. | Contamination is identified. | Open | Threat | Accept | Likely | Serious | 4-High | \$ | 316,000 | \$ | 564,000 | \$ | 1,300,000 | 8 | 16 | 64 | Impacts to schedule on IEC activities will be minimal if any. Major impacts are to the subcontracting's schedule with current work they have. Best Case: Equipment can be wiped down by IEC personnel spend 2 weeks wiping down subcontractor equipment 4 people @ \$50/hr. for 80 hours. Subcontractor loses 3 weeks on other projects - cost @ \$100K per week Most Likely: Parts of the equipment must be replaced equating to \$100K, and the subcontractor has delays on other project of 4 weeks @ \$100K per week and \$50K in delays on other projects. IEC personnel spend 2 weeks wiping down subcontractor equipment 4 people @ \$50/hr. for 80 hours Worst Case: Subcontractor must replace the piece of equipment, rent equipment for current projects and wait 4 months for new equipment. New equipment is \$500K, rental is \$200K per month | N/A | N/A | 4/24/2023 | 7/10/2023 |
| TO3002R2 | Project Wide | IEC | Multiple CAMs | Multiple Projects | <u>Global Risk</u> : 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. | Open | Threat | Accept | Possible | Serious | 3-Moderate | \$ | 500,000 | \$ | 1,000,000 | \$ | 7,000,000 | 0.5 | 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 | 4/13/2022 | 7/10/2023 |
| TO3005R2 | Project Wide | IEC | Multiple CAMs | Multiple Projects | <u>Global Risk</u> : 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 | Accept | Unlikely | Serious | 2-Low | \$ | 500,000 | \$ | 1,000,000 | \$ | 7,000,000 | 0.5 | 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 | 6/8/2022 | 7/10/2023 |
| TO3P2005a | Project Wide | IEC | Multiple CAMs | Multiple CAMs | <u>Line-Item Project Funding</u> | 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 | Almost Certain | Critical | 1-High | \$ | 1,000,000,000 | \$ | 1,350,000,000 | \$ | 1,700,000,000 | 900 | 1,350 | 1,800 | Best Case: Most Likely Case: Worst Case: | Proposed Share to DOE | | 11/20/2023 | 1/10/2024 |
| TRU007R2 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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. | Open | Threat | Mitigate | Unlikely | Major | 3-Moderate | \$ | 24,000 | \$ | 102,000 | \$ | 153,000 | 16 | 68 | 102 | Best Case: 16 days x 10 hr./day x 2 people x \$75/hr. = \$10,200 Most Likely: 68 days x 10 hr./day x 2 people x \$75/hr. = \$102,000 Worst Case: 102 days x 10 hr./day x 2 people x \$75/hr. = \$153,000 | Ensure/procure critical spare parts are on hand as availability allows. | Continue to perform maintenance on equipment, keep spare parts on hand, and monitor data quality to verify systems are operating normally. | 4/23/2023 | 7/10/2023 |
| TRU012R2 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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. | Open | Threat | Mitigate | Rare | Moderate | 1-Low | \$ | 48,000 | \$ | 96,000 | \$ | 144,000 | 16 | 32 | 48 | Best Case: 16 days x 10 hr./day x 4 people x \$75/hr. = \$48,000 Most Likely: 32 days x 10 hr./day x 4 people x \$75/hr. = \$96,000 Worst Case: 48 days x 10 hr./day x 4 people x \$75/hr. = \$144,000 | Provide additional monitoring for NDA results. Identify problematic waste, and make notification. Use dose to Currie results for any RH generated waste. | N/A | 4/23/2023 | 7/10/2023 |
| TRU019R2 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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 delay 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. | Open | Threat | Mitigate | Possible | Serious | 3-Moderate | \$ | 51,200 | \$ | 99,200 | \$ | 201,600 | 32 | 62 | 84 | Best Case: 32 days x 10 hr./day x 2 people x \$80/hr. = \$51,200 Most Likely: 62 days x 10 hr./day x 2 people x \$80/hr. = \$99,200 Worst Case: 84 days x 10 hr./day x 3 people x \$80/hr. = \$201,600 | Provide cross training between disciplines and increase communication with the DOE-ID and CBFO to minimize, and challenges with them as they arise. | | 4/23/2023 | 7/10/2023 |
| TRU022 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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, AK development, WIPP authorization, etc., may be required. | Identification of containers that do not allow for certification. | Open | Threat | Mitigate | Possible | Serious | 3-Moderate | \$ | 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 | Establish new capabilities by review and reconciliation of container data for waste destined for WIPP. | N/A | 4/23/2023 | 7/10/2023 |
| TRU023 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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-RCA facility will be required with potential update of ARP waste CERCLA requirements. | ARP waste requires reprocessing or testing. | Open | Threat | Mitigate | 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 | Short term-complete CBFO authorized testing. If results show that ammonium nitrate in ARP waste is acceptable, risk can be closed. If not, development of a DOE-ID/CBFO authorized sampling and/or remediation plan will be necessary using a facility that will not change the waste class from CERCLA to RCRA | Move forward with laboratory analysis of ammonium nitrate samples, observe testing start up, and keep COE-ID and the CBFO Difficult Waste Team apprised of testing and results to minimize potential impacts. | 4/23/2023 | 7/10/2023 |
| TRU024 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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. | Open | Threat | Mitigate | Possible | Moderate | 2-Low | \$ | 24,000 | \$ | 48,000 | \$ | 96,000 | 16 | 32 | 64 | Best Case: 16 days x 10 hr./day x 2 people x \$75/hr. = \$24,000 Most Likely: 32 days x 10 hr./day x 2 people x \$75/hr. = \$48,000 Worst Case: 64 days x 10 hr./day x 2 people x \$75/hr. = \$96,000 | Maintain capabilities for reprocessing waste if necessary. | Continue BoK calculations for waste destined for WIPP, and make notifications if any fail. | 4/23/2023 | 7/10/2023 |
| TRU025 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : 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. | Open | Threat | Mitigate | Possible | Serious | 3-Moderate | \$ | 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 | CBFO authorization of overpack bags for product drums, with the overpack bag FGE limit higher than of an SWB | Assign product drums to SWBs as they fail CI and make notifications if FGE assignment precludes overpack. | 4/23/2023 | 7/10/2023 |
| TRU026 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : Product Drums Require Reprocessing and Facility is Not Available | If TRU product drums must be reprocessed (liquid, high Fissile Gram Equivalence (FGE), crit cleanup 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. | Open | Threat | Mitigate | 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 | Identify and reprocess problematic product drums prior to AMWTF closure. | Identify problematic product drums while facilities still exist for reprocessing | 4/23/2023 | 7/10/2023 |
| TRU027 | D.2.03.31.06 | IEC | Byram, George | N/A | <u>CH-TRU Waste Disposition</u> : Small Waste Stream Resource Availability Issues | If development and approval of required TRU waste stream documentation overwhelms available internal personnel resources or those of the approving entity, then the waste cannot be certified. | Cannot certify populations of containers due to limited personnel and priorities associated with larger waste streams. | Open | Threat | Mitigate | Possible | Critical | 4-High | \$ | 96,000 | \$ | 192,000 | \$ | 384,000 | 64 | 128 | 256 | Best Case: 64 days x 10 hr./day x 2 people x \$75/hr. = \$96,000 Most Likely: 128 days x 10 hr./day x 2 people x \$75/hr. = \$192,000 Worst Case: 256 days x 10 hr./day x 2 people x \$75/hr. = \$384,000 | Utilize CCP AK Support and develop a system to work smaller waste streams and prioritize larger waste streams as they are being developed. | N/A | 4/23/2023 | 7/10/2023 |
| TRU029 | D.2.03.34.04 | IEC | Loftus, Nathan | N/A | <u>CH-TRU Storage & Movement</u> : 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. | Open | Threat | Mitigate | 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 | Continue to monitor and test integrity of waste drums as they come out of storage and in process of being moved. | Continued effort in monitoring, testing, and ensuring drum integrity and they prepare to be moved to off-site storage. | 4/23/2023 | 7/10/2023 |
| TRU030 | D.2.03.34.05 | IEC | Loftus, Nathan | N/A | <u>CH-TRU Storage & Movement</u> : 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. | Open | Threat | Mitigate | Likely | Moderate | 3-Moderate | \$ | 28,800 | \$ | 64,000 | \$ | 105,600 | 16 | 32 | 48 | Best Case: 16 days x 10hr./day x 4 people x \$45/hr. = \$28,800 Most Likely: 32 days x 10hr./day x 4 people x \$45/hr. = \$64,000 Worst Case: 48 days x 10hr./day x 4 people x \$55/hr. = \$105,600 | Maintain and log aging parts/vehicles that may be needing replacement in the future. | Monitoring of equipment and planning of purchasing replacement parts/vehicles for future use and aging equipment becomes obsolete. | 4/23/2023 | 7/10/2023 |
| TRU031 | D.2.03.35.06 | IEC | Hubler, Rachelle | N/A | <u>CH-TRU Packaging and Transportation</u> : 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. | Open | Threat | Mitigate | 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 | Maintain inventory of commodities and forecast for future purchases. | Find alternative commodities compatible with scope requirements. | 4/23/2023 | 7/10/2023 |
| TRU032 | D.2.03.35.04 D.2.03.35.05 | IEC | Hubler, Rachelle | N/A | <u>CH-TRU Packaging and Transportation</u> : 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. | Open | Threat | Mitigate | Likely | Major | 4-High | \$ | 80,000 | \$ | 100,000 | \$ | 250,000 | 50 | 75 | 90 | Best Case: 50 days x 10hr./day x 4 people x 45/hr. = \$80,000 Most Likely: 75 days x 10hr./day x 4 people x 45/hr. = \$100,000 Worst Case: 90 days x 10hr./day x 6 people x 45/hr. = \$250,000 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. | 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 | 4/23/2023 | 7/18/2023 |

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|--------|--------------|-----|------------------|------------------|--|---|--|----------------------|--------|----------|------------------|----------|-------------|-------------------------|-------------------------|------------|-----|---------|-----|---|---|--|-----------|-----------|
| TRU033 | D.2.03.36.05 | IEC | Vargeso, Matt | Zovi, Bruno | AMWTP/LLW/MLW Disposition; 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 (NNS), it will greatly increase cost. | IEC informed of shortage at the time of PR request. | Open | Threat | Mitigate | Possible | Minor | 2-Low | \$ 640,000 \$ 15,000 | \$ 640,000 \$ 15,000 | \$ 114,000 | 8 | 46 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 NNS. 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. | N/A | 4/23/2023 | 7/10/2023 |
| TRU034 | D.2.03.32.04 | IEC | Martin/Loftus | N/A | CH-TRU Treatment Facility Support: Difficult Waste Stream | Delays associated with the treatment of the AE 102/105 waste that prevent the start of the PCB Waste campaign. | Discovery during processing. | Open | Threat | Mitigate | Likely | Moderate | 3-Moderate | \$ 24,000 | \$ 48,000 | \$ 96,000 | 16 | 32 | 64 | Best Case: 16 days x 10 hr./day x 2 people x \$75/hr. = \$24,000 Most Likely: 32 days x 10 hr./day x 2 people x \$75/hr. = \$48,000 Worst Case: 64 days x 10 hr./day x 2 people x \$75/hr. = \$96,000 | Implement the usage of overtime to recover any schedule slippage and prevent total schedule loss. | N/A | 4/23/2023 | 7/10/2023 |
| TRU035 | D.2.03.32.05 | IEC | Martin/Loftus | N/A | CH-TRU Treatment Facility Support: Equipment Breakdown | Box lines, the Super-compact, or both are offline for a period of time as they are aging equipment in an aging facility. | Breakdown during processing. | Open | Threat | Mitigate | Possible | Serious | 3-Moderate | \$ 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 | Implement the usage of overtime to recover any schedule slippage and prevent total schedule loss. | N/A | 4/23/2023 | 7/10/2023 |
| TRU036 | D.2.03.32.05 | IEC | Martin/Loftus | N/A | CH-TRU Treatment Facility Support: 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. | Open | Threat | Mitigate | 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 | Implement the usage of overtime to recover any schedule slippage and prevent total schedule loss. | N/A | 4/23/2023 | 7/10/2023 |
| TRU039 | D.2.03.37.04 | IEC | Martin/Loftus | N/A | AMWTP BOP Maintenance: Replacement Parts Are Out of Compliance or Unavailable | Advanced Mixed Waste Treatment Project (AMWTP) is an aging facility and project in need of constant repairs for continued operations. | Parts and equipment are unavailable or obsolete to keep equipment operating. | Open | Threat | Mitigate | Likely | Serious | 4-High | \$ 48,000 | \$ 192,000 | \$ 384,000 | 16 | 64 | 128 | Best Case: 16 days x 10 hr./day x 4 people x \$75/hr. = \$48,000 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 | Innitate planned and regular communication with purchasing department and vendors to ensure that necessary items are stocked ahead of time to meet work scope demands and with additional stock for back-up purposes. | N/A | 4/23/2023 | 7/10/2023 |
| TRU040 | D.2.03.34.05 | IEC | Byram, George | N/A | CH-TRU Waste Disposition: 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 is not available for BEA document reviews. | Open | Threat | Accept | Likely | Critical | 5-Very High | \$ 156,000 | \$ 312,000 | \$ 468,000 | 104 | 208 | 312 | Best Case: 104 days x 10 hr./day x 2 people x \$75/hr. = \$156,000 Most Likely: 208 days x 10 hr./day x 2 people x \$75/hr. = \$312,000 Worst Case: 312 days x 10 hr./day x 2 people x \$75/hr. = \$468,000 | N/A | Attempt to ensure documents can be provided for CBFO review to support waste certification and the annual recertification audit. | 6/15/2023 | 7/10/2023 |
| TRU041 | D.2.05.30.17 | IEC | Zovi, James | Zovi, James | Non-AMWTP Treatment and Disposal: Equipment Failure | In the event that equipment fails, it will need to be repaired or the project will need to procure a replacement. | If any of the following equipment fails: Bobcat 650, Telehandler TL923, Iron Bull Deck Over 5th Wheel. | Open Price Option | Threat | Mitigate | Likely | Moderate | 3-Moderate | \$ 118,000 | \$ 236,000 | \$ 354,000 | 16 | 32 | 48 | Equipment Costs per DCES sheet / Lease Rates for Equipment Total \$56,700 - 20% Equipment Potential Failures - Daily Rates 20% Higher than Monthly Rates | Procure or lease backup equipment to resume operations | N/A | 4/23/2023 | 7/10/2023 |
| TRU042 | D.2.05.30.18 | IEC | Zovi, James | Zovi, James | Non-AMWTP Treatment and Disposal: 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. | Open Price Option | Threat | Mitigate | Possible | Minor | 2-Low | \$ 78,720 | \$ 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.) | Work overtime to recover and prevent further loss of schedule for treatment storage and disposal facility (TSDF). | N/A | 4/23/2023 | 7/10/2023 |
| TRU043 | D.2.05.30.19 | IEC | Zovi, Bruno | Orme, Jason | Non-AMWTP Treatment and Disposal: 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. | Open | Threat | Mitigate | Possible Rare | Minor | 2-Low | \$ 54,000 | \$ 81,000 | \$ 108,000 | 4 | 6 | 8 | Certification rework and repackaging to meet Waste Acceptance Criteria | Ensure proper training and qualifications | N/A | 4/23/2023 | 7/10/2023 |
| TRU049 | D.2.03.36.04 | IEC | Vargeso, Matthew | Vargeso, Matthew | 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 Permits based on the following rule: §3008(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. | 1) Higher priority scope causes this work package to not get funded. 2) IEC generated RCRA waste is not shipped in acceptable timeframe. | Open | Threat | Accept | Possible | Minor | 1-Low | \$ 37,000 | \$ 150,000 | \$ 600,000 | 1 | 4 | 16 | §3008(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 | 3/1/2024 | None |



TO7 Risk Register

Idaho Cleanup Project Programmatic Risk Register

Updated : 3.10.24

| Risk ID | WBS | Responsible Organization | Risk Owner | IEC Risk Back-up | 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) | Risk Corrective Actions | Date Identified | Last update |
|------------|------------------------------|--------------------------|-----------------|------------------|---|--|--|----------|-----------|-------------------|----------------------------|-------------|-------------|---------------|---------------|---------------|----------------------------|-------------|------------|--|---|---|---|-----------------|-------------|
| | | | | | | | | | | | | | | Best Case | Most Likely | Worst Case | Best Case | Most Likely | Worst Case | | | | | | |
| IWTU001R2 | D.3.06 | IEC | Nahay, Jordan T | N/A | IWTU: The Canister Decon System will not decontaminate the canisters to acceptable levels for transfer. | The Canister Decon System will not effectively or efficiently decontaminate the canister to levels acceptable for transfer between the Can Fill Cells and the canister storage vault and/or contamination spreads during can fill operations and the robotic decon system cannot remove sufficient contamination from the outside of a canister. This will most likely cause a spread of contamination outside of the can fill cells, thereby requiring additional contamination control mitigation. | Contamination levels exceed established limits and/or spreads outside of the can fill cells | Open | Threat | Accept | Possible | Moderate | 2-Low | \$ 84,000 | \$ 180,000 | \$ 900,000 | 14 | 30 | 150 | Best Case: 14 days X 10 hr/day X 6 FTE X \$100/hr = \$84,000 Most Likely Case: 30 days X 10 hr/day X 6 FTE X \$100/hr = \$180,000 Worst Case: 150 days X 10 hr/day X 6 FTE X \$100/hr = \$900,000 | N/A | N/A | | 3/20/2022 | 6/22/2023 |
| IWTU009aR2 | D.3.06.70.01 | IEC | Nowak, Joel T | N/A | 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. | Open | Threat | Mitigate | Unlikely | Moderate | 2-Low | \$ 133,920 | \$ 267,840 | \$ 401,760 | 12 | 24 | 36 | Best Case: 12 days x 10 hrs/day x 12 people x \$93/hr = \$133,920 Most Likely: 24 days x 10 hrs/day x 12 people x \$93/hr = \$267,840 Worst Case: 36 days x 10 hrs/day x 12 people x \$93/hr = \$401,760 | Investigate several different avenues to fill these gaps with subcontracted labor and hiring additional planners and supervisors. Routine communication with the Building Trades Business Agents on upcoming craft needs. | WTU7OPS-R9a WTU7OPS-R9b | | 3/20/2022 | 6/22/2023 |
| IWTU010R2 | D.3.06 | IEC | Nahay, Jordan T | N/A | 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. | Realized | Threat | Mitigate | Almost Certain | Serious | 5-Very High | \$ 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 = \$1,440,000, Material Cost = \$300,000 | Ramp up waste feed percentage (vs. simulant) during System Performance Test. Review original test results for accuracy and completeness. | | | 3/20/2022 | 3/10/2024 |
| IWTU016R2 | D.3.06.78.01 | IEC | Nahay, Jordan T | N/A | IWTU: GAC replacement takes longer than estimated and extends the GAC Outage. | The 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. | Open | Threat | Mitigate | Possible | Moderate | 2-Low | \$ 216,240 | \$ 432,480 | \$ 864,960 | 4 | 8 | 16 | Best Case: 4 days x 12 hrs/day x 17 people x \$265/hr = \$216,240 Most Likely: 8 days x 12 hrs/day x 17 people x \$265/hr = \$432,480 Worst Case: 16 days x 12 hrs/day x 17 people x \$265/hr = \$864,960 | Subcontractor to work additional days to complete GAC replacement. | WTU7GACB1-R16 | | 3/20/2022 | 6/22/2023 |
| IWTU030R2 | D.3.06.70.01 | IEC | Nowak, Joel T | N/A | 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. | Open | Threat | Accept | 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 | Upon completion of project testing significant spares were ordered and have been received. Redundant colloid mills and strainers. | 3/20/2022 | 6/22/2023 |
| IWTU036R2 | D.3.06.73.01 | IEC | Nahay, Jordan T | N/A | IWTU PSB: Change orders Requiring Major Design Changes. | Change orders requiring major design changes are issued during excavation or construction, causing an increase in cost and schedule. | A change order requiring extensive re-design is issued during construction. | Open | Threat | Mitigate | Possible | Moderate | 2-Low | \$ 180,000 | \$ 270,000 | \$ 405,000 | 20 | 30 | 45 | Best Case: 20 days x 10 hrs/day x 4 people x \$225/hr = \$180,000 Most Likely: 30 days x 10 hrs/day x 4 people x \$225/hr = \$270,000 Worst Case: 45 days x 10 hrs/day x 4 people x \$225/hr = \$405,000 | Discussions with Force Account and Engineering during additional walkdowns and reviews to identify potential issues before they impact schedule. | WTU7PSB-R36 | | 3/20/2022 | 6/22/2023 |
| IWTU037R2 | D.3.06.73.01 | IEC | Nahay, Jordan T | N/A | IWTU PSB: Multiple minor change orders issued during construction. | Multiple minor change orders are issued during construction, causing schedule delays and cost increases. | Multiple minor change orders are issued during construction or excavation. | Open | Threat | Mitigate | Possible Almost Certain | Minor | 3-Moderate | \$ 89,280 | \$ 178,560 | \$ 334,800 | 8 | 16 | 30 | Best Case: 8 days x 10 hrs/day x 12 people x \$93/hr = \$89,280 Most Likely: 16 days x 10 hrs/day x 12 people x \$93/hr = \$178,560 Worst Case: 30 days x 10 hrs/day x 12 people x \$93/hr = \$334,800 | Discussions with Force Account and Engineering during additional walkdowns and drawing to identify potential issues before they impact schedule. | WTU7PSB-R37 | | 3/20/2022 | 6/22/2023 |
| IWTU041R2 | D.3.06.75.01 | IEC | Oliver, David M | N/A | IWTU: Vendor weld prepping does not keep pace with production. | Vendor weld prepping of existing canisters cannot keep pace with IWTU production. | Onsite weld prepped canisters fall <120 canisters. | Open | Threat | Mitigate | Rare | Minor | 1-Low | \$ 36,000 | \$ 60,000 | \$ 90,000 | 2 | 9 | 13 | Best Case: \$300/canister expedite fee x 120 canisters = \$36,000 Most Likely: \$300/canister expedite fee x 200 canisters = \$60,000 Worst Case: \$300/canister expedite fee x 300 canisters = \$90,000 | Evaluate use of Non-weld prep canisters and excel shipping of canisters to subcontractor to build reserve inventory. | WTU7CAN-R41 | | 3/20/2022 | 3/10/2024 |
| IWTU043R2 | D.3.06.75.01 | IEC | Oliver, David M | N/A | IWTU: Weld prep damages welds and canisters. | Weld Prep damages the weld and canister on a few canisters (<5). | Five canisters fail inspection after weld prep. | Open | Threat | Mitigate | Unlikely | Minor | 2-Low | \$ 2,000 | \$ 8,000 | \$ 22,000 | 4 | 8 | 12 | Best Case: Additional rework on 1 canister Most Likely: Additional rework on 5 canisters Worst Case: New canister \$22,900 | Order back-up replacement canisters. | WTU7CAN-R43 | | 3/20/2022 | 6/22/2023 |
| IWTU049 | D.3.06.78.01 | IEC | Oliver, David M | N/A | IWTU: Unable to release vendor supplied equipment for GAC replacement. | Added cost due to the required purchase of vendor supplied equipment | Detectable contamination found on vendor supplied equipment. | Open | Threat | Accept | 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 | | 4/23/2023 | 6/22/2023 |
| IWTU053 | D.3.06.73.01 | IEC | Oliver, David M | N/A | 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 incomplete. | Open | Threat | Mitigate | 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. | WTU7PSB-R53 | | 4/23/2023 | 6/22/2023 |
| IWTU054b | D.3.06 | IEC | Nahay, Jordan T | N/A | IWTU: BEA Support Services do not Meet IWTU Scheduled Need Dates. | 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. | Open | Threat | Shared | Unlikely | Moderate | 2-Low | \$93,000 | \$390,600 | \$1,116,000 | 5 | 21 | 60 | Best Case: 5 days X 10 hrs/dy X 20 FTEs X \$93/hr Most Likely Case: 21 days X 10 hrs/dy X 20 FTEs X \$93/hr Worst Case: 60 days X 10 hrs/dy X 20 FTEs X \$93/hr | Propose sharing risk with DOE. | N/A | | 2/2/2023 | 9/11/2023 |
| IWTU055 | D.3.06.77.01 D.3.06.77.02 | IEC | Oliver, David M | N/A | 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. With only 5 vaults remaining for storage the project anticipates running out by approximately April 2024. | Having more canisters to place in Vaults for storage after remaining 5 vaults are filled. | Open | Threat | Accept | Almost Certain | Critical | 5-Very High | \$ 14,571,420 | \$ 29,142,840 | \$ 43,714,260 | 60 | 120 | 180 | Best Case: 60 days X \$242,857/dy Most Likely Case: 120 days X \$242,857/dy Worst Case: 180 days X \$242,857/dy | N/A | N/A | | 6/19/2023 | 3/10/2024 |
| IWTU056 | D.3.06.75.02 | IEC | Oliver, David M | N/A | IWTU: No waste canisters available for storage. | If subcontractor is unable to produce additional waste canister production by the time they are needed the project will run out of waste canisters. With only 80 canisters remaining for storage the project anticipates running out by approximately May 2024. | Having more waste to store in canisters after remaining 80 canisters are filled. | Open | Threat | Accept | Almost Certain | Critical | 5-Very High | \$ 7,285,710 | \$ 10,928,565 | \$ 14,571,420 | 30 | 45 | 60 | Best Case: 30 days X \$242,857/dy Most Likely Case: 45 days X \$242,857/dy Worst Case: 60 days X \$242,857/dy | N/A | N/A | | 6/19/2023 | 3/10/2024 |