**ENGINEERING CHANGE NOTICE**

Prepared For the U.S. Department of Energy, Assistant Secretary for Environmental Management

By Washington River Protection Solutions, LLC., PO Box 850, Richland, WA 99352

Contractor For U.S. Department of Energy, Office of River Protection, under Contract DE-AC27-08RV14800

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1a. **ECN No:** ECN-714666  
1b. **Rev.** 00

2. **Title:**  
Install 310 transfer line flow meter at LERF Basin 42

3. **WA or Redline ECN:**
   - [ ] WA  
   - [x] REDLINE  
   - [ ] N/A

4. **Temporary Modification:**
   - [ ] Yes  
   - [x] No

5. **Design Type:**
   - [ ] NA

6. **Design Verification Required:**
   - [ ] Yes  
   - [x] No

7. **Safety Classification:**
   - [ ] SC  
   - [ ] SS  
   - [x] GS  
   - [ ] N/A

8. **USQ Number:**
   - [ ] N/A

9. **PrHA Number**  
   - [ ] N/A

10. **Commodity**  
   - [ ] Piping, Tubing  
   - [ ] Mechanical

11. **Design Authority Designator**
    LERF - MECHANICAL SYSTEMS

12. **Approvals**

<table>
<thead>
<tr>
<th>Title</th>
<th>Name</th>
<th>Signature</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Design Authority</td>
<td>Joslyn, Cameron C</td>
<td>Joslyn, Cameron C</td>
<td>12/20/2018</td>
</tr>
<tr>
<td>Checker</td>
<td>Lovelady, James T</td>
<td>Lovelady, James T</td>
<td>12/31/2018</td>
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<tr>
<td>Document Control Approval</td>
<td>Manville, Kira</td>
<td>Manville, Kira</td>
<td>01/10/2019</td>
</tr>
<tr>
<td>Originator</td>
<td>Huntington, Matthew R</td>
<td>Huntington, Matthew R</td>
<td>12/27/2018</td>
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<tr>
<td>Responsible Engineering Manager</td>
<td>Rutherford, Wally</td>
<td>Rutherford, Wally</td>
<td>01/09/2019</td>
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<tr>
<td>USQ Evaluator</td>
<td>Dosramos, Eduardo</td>
<td>Dosramos, Eduardo</td>
<td>01/02/2019</td>
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13. **Problem**

Project W-519 which installed the Transfer line 80W (310) from WTP node 8A to LERF 42 left the flow meter out at LERF basin 42 to provide a positive means of air gap isolation between LERF 42 and WTP (which is currently a not radiological facility). To support LAW/EMF commissioning and operations this flow meter must be installed in the operational position which functionally connects WTP to LERF.

14. **Solution**

Install flow meter FE-80W-002. Torque fasteners per W-519-W Performance Spec, Pipe Code M-17 for Double Pipe Containment System. Exact torque value will be provided to planner per W-519-W Performance Spec, Pipe Code M-17 for Double Pipe Containment System.

15. **Analysis**

All required analysis was performed within the W-519 project.

16. **Description of Change**

Install flow meter FE-80W-002

17. **Work Package Number(s)**

TBD

18. **TBDs or Holds**

- [x] N/A

19. **Related Structures, Systems, and Components**

   a. **ETF Building/Facilities**
      - [ ] N/A

   b. **LERF Building/Facilities**
      - [x] N/A

   c. **Related Equipment ID Nos. (EIN)**
      - [ ] N/A

   80W-006  
   80W-007  
   FE-80W-002  
   FT-80W-002

20. **Related Documents**

<table>
<thead>
<tr>
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<tr>
<td>MT-50373</td>
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<td>310/311 Waste Transfer Lines Leak Detection</td>
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### 23. Distribution

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