

Contract No:

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Annual Radioactive Waste Tank Inspection Program – 2017

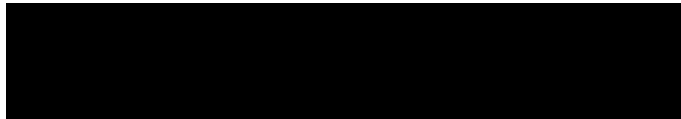
July 2018



**Savannah River Remediation
Savannah River Site
Aiken, SC 29808**

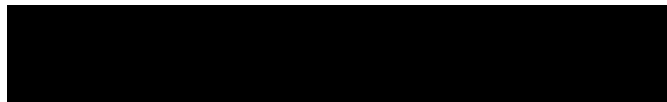
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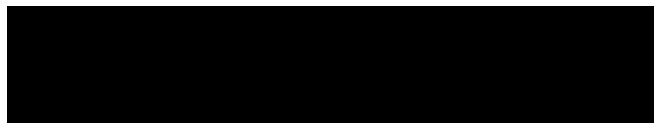
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Executive Summary

The Department of Energy (DOE) requires that Savannah River Remediation LLC (SRR), the Liquid Waste contractor, maintain a robust and timely Structural Integrity Program for waste tanks that are leak-tight and for waste tanks that have leaked or are suspect. These requirements are promulgated in DOE Manual 435.1-1, Section II.Q.(2). A key aspect of SRR's implementation of these requirements is its annual tank inspection program.

In 2017, the SRR Visual and In-Service Inspection Program used two visual imagery techniques to ascertain the integrity of the Savannah River Site (SRS) waste tanks: high resolution digital photography and closed-circuit television. The primary inspection method made use of direct photograph techniques, e.g., making a series of photographs providing detailed views of the tank and wide-angle photography for obtaining overviews of large areas. Closed-circuit television was then typically used to further investigate conditions found during the initial inspection. During 2017, a total of 6,130 photographs were taken and 71 video inspections were performed as part of this inspection program.

Of the 51 waste tank systems at SRS that were designed, constructed, and placed into active service storing radioactive liquid waste, 43 remain in active service. Eight tanks have been cleaned, stabilized by filling with engineered grout, and removed from service (also known as operationally closed) – Tanks 5, 6, and 12 (Type I tanks); Tank 16 (Type II tank); and Tanks 17, 18, 19, and 20 (Type IV tanks). For the 43 waste tanks, inspections were successfully conducted in 2017 through all accessible annulus risers and inspection ports for nine Type I tanks, three Type II tanks, and 27 Type III/IIIA tanks; at least one inspection was made in the interior of four Type IV tanks (i.e., the tanks without annular spaces) above the liquid level in the tank.

Rainwater continues periodically to be observed migrating into the annuli of some tanks. Evidence of this infiltration was primarily noted by observation of surface stains, and occasionally by calciferous deposits, changed configuration of salt deposits in the associated annulus, and mild surface corrosion. The conditions of the 43 tanks remained essentially unchanged from the conditions reported in 2016. The one key exception was the identification of two new cracks in the Tank 15 primary tank wall. These newly identified cracks were located at 30 inches and 160 inches above the tank bottom. **The 2017 inspection program confirmed the structural integrity and waste confinement capability of all 43 waste tanks.**

In addition to the visual tank inspections, the SRR Visual and In-Service Inspection Program requires routinely scheduled physical walkdowns to inspect specific ancillary equipment in the Tank Farms. These walkdowns are in addition to the camera/video inspections documented in Appendix A. During 2017, inspections were conducted on the following equipment:

- H-Area Diversion Box 4 Passive Vent;
- H-Area Diversion Box 8 Process Vessel Ventilation System;
- H-Area Diversion Box 8 Diesel Generator;
- Various Leak Detection Boxes, Modified Leak Detection Boxes, Leak Probe Sleeves, and Clean Out Ports;
- Tank 48 Oxygen Analyzers; and

- Tank 48 Normal Nitrogen System.

For all the ancillary equipment inspected in 2017, no material degradation was noted that would prevent the equipment from performing its credited function.

A third facet of the SRR Structural Integrity Program is the performance of ultrasonic nondestructive examinations on the waste tanks on a routine schedule. In 2017, ultrasonic testing inspections were performed on Tanks 35, 36, 37, and 38, per this schedule. **These examinations showed no reportable thinning, pitting, stress corrosion cracking, or evidence of service induced thinning of the primary tank wall, or the secondary liner (also known as the annular pan) wall and floor.**

Consistent with the provisions set forth in the Industrial Wastewater Treatment Facility Construction Permit for F-Area Tank Farm (FTF) and H-Area Tank Farms' (HTF) liquid radioactive waste storage tanks, construction permit number 17,424-IW, this annual structural integrity report is provided to the South Carolina Department of Health and Environmental Control (SCDHEC) and the U.S. Environmental Protection Agency (EPA).

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Acronyms

| | |
|--------|---|
| ASME | American Society of Mechanical Engineers |
| DOE | Department of Energy |
| EPA | Environmental Protection Agency |
| FFA | Federal Facility Agreement |
| FTF | F-Area Tank Farm |
| HTF | H-Area Tank Farm |
| RBOF | Receiving Basin for Offsite Fuels |
| SCDHEC | South Carolina Department of Health and Environmental Control |
| SRR | Savannah River Remediation |
| SRS | Savannah River Site |
| UT | Ultrasonic Testing |

1 Introduction

Since the site's design, construction, and startup in the 1950s, the primary mission of the Savannah River Site (SRS) had been to produce nuclear materials for the national defense and deep space missions. The processes used to recover many of these nuclear materials from production reactor fuel and target assemblies in the F- and H-Area chemical separations facilities (i.e., F Canyon and H Canyon) generated significant volumes of liquid radioactive waste. Today, over 35 million gallons of liquid radioactive waste is stored in 43 underground, carbon steel waste tanks. Many of these tanks are now over 60 years in age, having been constructed and placed into active service in the 1950's. In addition, many of these tanks lack full secondary containment and some have known leak sites in the primary tank walls.

Savannah River Remediation LLC (SRR), the liquid waste contractor at SRS, has implemented a robust structural integrity program for the waste tanks at SRS. This program is designed to ensure the continued safe storage of the radioactive liquid waste by ensuring the tanks will not collapse, rupture, or fail during their operational life. As part of this structural integrity program, annual inspections are conducted on each of the 43 waste tanks in active service to ensure conditions have not degraded over time.

The purpose of this report is to summarize the results of these individual inspections that were conducted in calendar year 2017.

2 Requirements

The Department of Energy (DOE) requires SRR maintain a robust and timely structural integrity program for both tanks that are leak-tight and for tanks that have leaked or are suspect. These requirements are documented in DOE Manual 435.1-1, Section II.Q.(2). For tanks that are considered "Leak-Tight Tanks In-Service," a structure integrity program must be implemented that is capable of:

1. Verifying the current leak-tightness and structural strength of each tank in service;
2. Identifying corrosion, fatigue, and other critical degradation modes;
3. Adjusting the chemistry of tank waste, calibrating cathodic protection systems, wherever employed, and implementing other necessary corrosion protective measures;
4. Providing credible projections as to when structural integrity of each tank can no longer be assured; and
5. Identifying the additional controls necessary to maintain an acceptable operating envelope.

Further, for tanks that are considered "In-Service Tanks that Have Leaked or Are Suspect," a modified structural integrity program must be implemented to "identify the safe operational envelope." In addition to the five elements listed above, the modified program for these tanks must be capable of:

6. Determining which of the tanks that have leaked or are suspect may remain in service by identifying an acceptable safe operating envelope.

This section also requires that the “structural integrity of other storage components shall be verified to assure leak tightness and structural strength.”

In *United States Department of Energy / Westinghouse Savannah River Company, Savannah River Site, Aiken, South Carolina, As-Built Construction Permit Application for an Industrial Wastewater Treatment Facility for the F and H-Area High-Level Radioactive Waste Tank Farms*, construction permit number 17,424-IW, dated April 1991, Section 1.6, Assessment and Inspections, it is noted for each waste tank system that did not meet secondary containment criteria described in Section IX.C of the SRS Federal Facility Agreement (FFA):

“... information is provided to demonstrate that these waste tank systems are adequately designed and have sufficient structural strength and compatibility with the hazardous and/or radioactive substances that will be stored or treated, to ensure that the waste tank system will not collapse, rupture, or fail.”

This section of the As-Built Construction Permit Application further states:

“In addition to the attached assessment report, annual inspection reports will be submitted to SCDHEC on or before July 1st of each year. These inspection reports will satisfy the requirements of Section IX.A.2 of the FFA for on-going demonstrations. These inspections will be conducted annually for each waste tank system until the waste tank system is removed from service.”

Section IX.A.2 of the FFA states, in pertinent part, the following:

“The permit applications submitted under Subsection A.1 above shall include a description of past leaks and demonstrations, subject to the review and approval of SCDHEC, that each high-level waste tank system is not leaking. The permit applications submitted by DOE under Subsection A.1 shall include proposed methods and a schedule for ongoing demonstrations that these tank system(s) are not leaking. Such methods and schedule shall be complied with until such time as the waste tank system(s) is removed from service under Subsection E herein.”

This report has been developed, in part, to fulfill the regulatory requirements for annual inspections of the waste tanks at SRS consistent with the provisions of the 17,424-IW permit. It should be noted that, as stated above, these annual inspections are only required for those tanks still in active service. Tanks 5, 6, 12, 16, 17, 18, 19 and 20 have been operationally closed and no longer require inspections under these requirements. Instead, as established in the Interim Record of Decision for each of these tanks, SRR conducts annual viable engineered barriers inspections and performs any maintenance necessary as a result of these inspections.

3 Waste Tank Descriptions

There were 51 underground liquid radioactive waste storage tanks constructed and placed into service at SRS. Twenty-two waste tanks are in the F-Area Tank Farm (FTF) and 29 waste tanks are in the H-Area Tank Farm (HTF). The main component of a waste tank is the primary liner, typically referred to as the primary tank, which is designed to contain the liquid waste and

associated precipitated solids. The primary tanks are cylindrical and fabricated of welded carbon steel plates. There are four principal waste tank designs designated as Type I, II, III/IIIA, and IV.

The waste tanks were constructed during different time periods and design features were changed to incorporate improvements and lessons learned. Table 3-1 summarizes the FTF and HTF waste tank design types.

Table 3-1: Summary of SRS Waste Tank Design Types

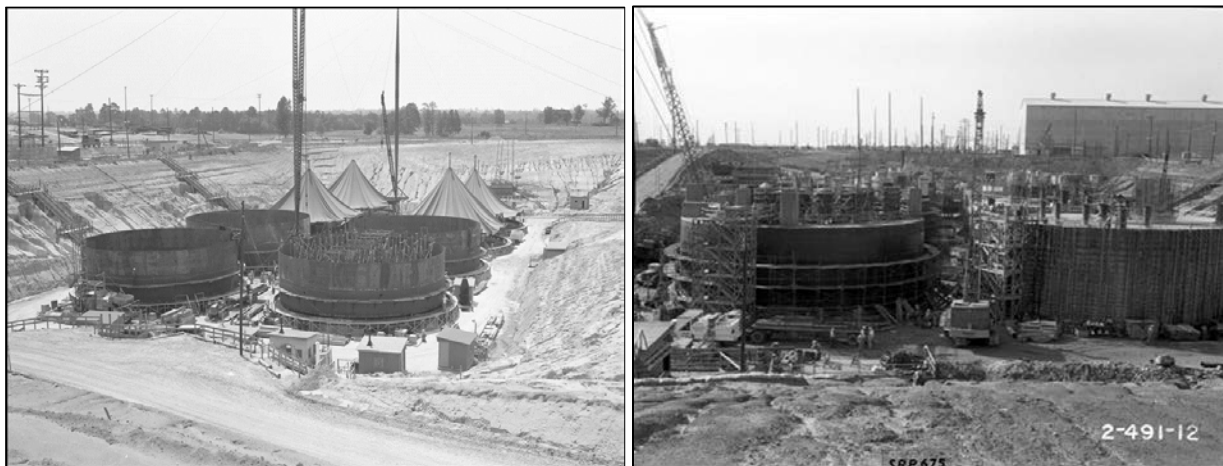
| Tank Number | Tank Farm | Design Type | Year Constructed | Type of Construction | Volume (gallons) ^a |
|-------------|-----------|-------------|------------------|----------------------|-------------------------------|
| 1 - 8 | F | I | 1952 | Double Wall-Cooled | 750,000 |
| 9 - 12 | H | I | 1953 | Double Wall-Cooled | 750,000 |
| 13 - 16 | H | II | 1956 | Double Wall-Cooled | 1,070,000 |
| 17 - 20 | F | IV | 1958 | Single Wall-Uncooled | 1,300,000 |
| 21 - 24 | H | IV | 1961-1962 | Single Wall-Uncooled | 1,300,000 |
| 25 - 28 | F | IIIA | 1978 | Double Wall-Cooled | 1,300,000 |
| 29 - 32 | H | III | 1970 | Double Wall-Cooled | 1,300,000 |
| 33 | F | III | 1969 | Double Wall-Cooled | 1,300,000 |
| 34 | F | III | 1972 | Double Wall-Cooled | 1,300,000 |
| 35 - 43 | H | IIIA | 1976-1979 | Double Wall-Cooled | 1,300,000 |
| 44 - 47 | F | IIIA | 1980 | Double Wall-Cooled | 1,300,000 |
| 48 - 51 | H | IIIA | 1981 | Double Wall-Cooled | 1,300,000 |

^a Nominal Fill Capacity

3.1 Type I Tanks

There are eight Type I tanks in FTF (Tanks 1 through 8) and four Type I tanks in HTF (Tanks 9 through 12); all were constructed in the early 1950s as part of the original site construction activities. Tanks 5 and 6 in FTF were operationally closed in 2013 and Tank 12 in HTF was operationally closed in 2016. Figure 3.1-1 shows the Type I tanks during construction.

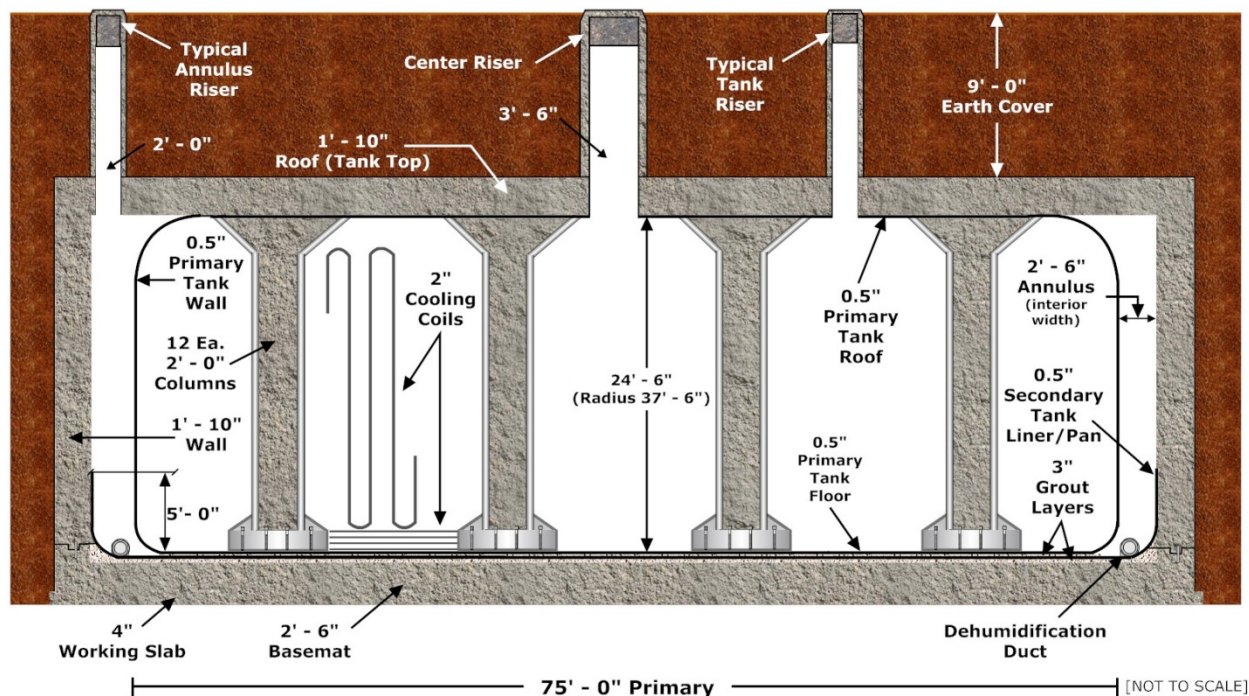
Figure 3.1-1: Construction of the Type I Tanks in FTF



Type I primary tanks have a 75-foot inside diameter and are 24 feet, 6 inches high with a nominal operating capacity of 750,000 gallons. [N-ESR-G-00001] The primary tank sits inside a 5-foot high, 79-foot 11-inch inside diameter secondary liner (also known as the annular pan). The primary tank and secondary liner are enclosed within an 83-foot, 8-inch outside diameter concrete vault that creates an approximately 2-foot, 5.5-inch wide annular space. The Type I vault roofs in both FTF and HTF are approximately 9 feet below grade.

A typical Type I tank cross-section is shown in Figure 3.1-2. [SRS-REG-2007-00002]

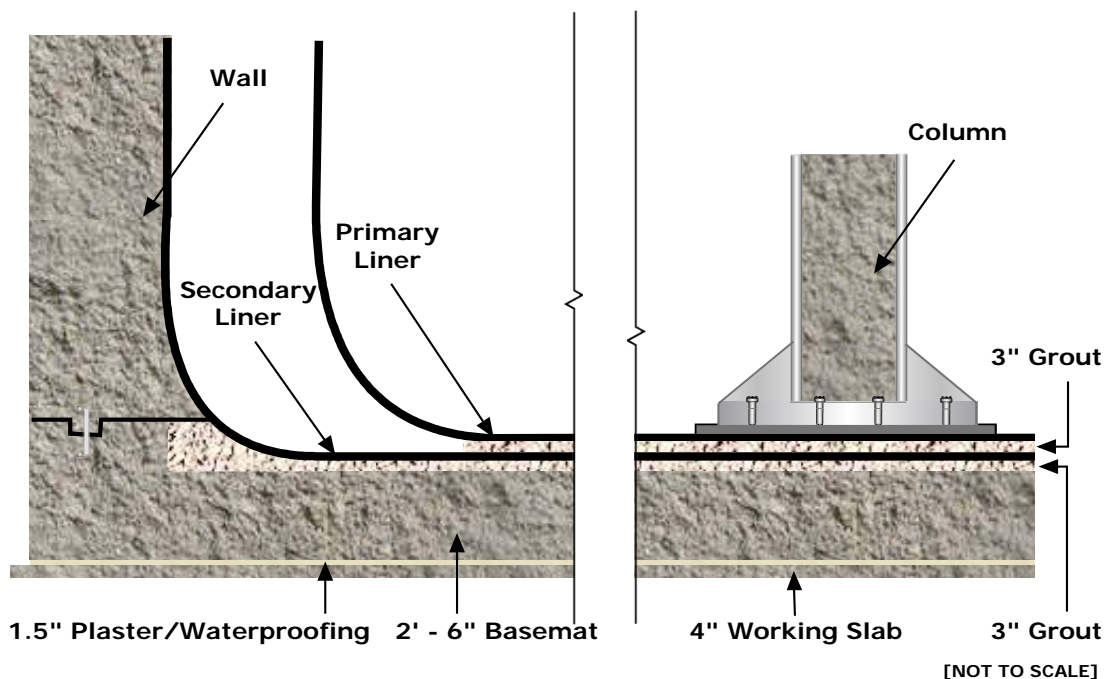
Figure 3.1-2: Typical Type I Tank Cross-Section



The Type I primary tank is constructed of 0.5-inch thick carbon steel. The tank wall is joined to the roof and floor with non-stress-relieved welded knuckle plates also made of carbon steel. It should be noted that none of the Type I tanks were post-weld heat treated to relieve stresses following construction. The secondary liner is made of 0.5-inch thick carbon steel. The top edge of the secondary liner has a riglet – an L-shaped carbon steel stiffener lip that is wrapped in lead and extends 6 inches perpendicularly inward from the liner edge with another 4-inch long section extending perpendicularly down from that edge. [W145367] The primary tank roof is supported by twelve 2-foot diameter columns.

The primary tank rests on a 3-inch thick layer of grout inside the secondary liner and the secondary liner sits on a 3-inch thick grout layer on top of the concrete basemat (Figure 3.1-3).

Figure 3.1-3: Typical Type I Tank Floor Configuration

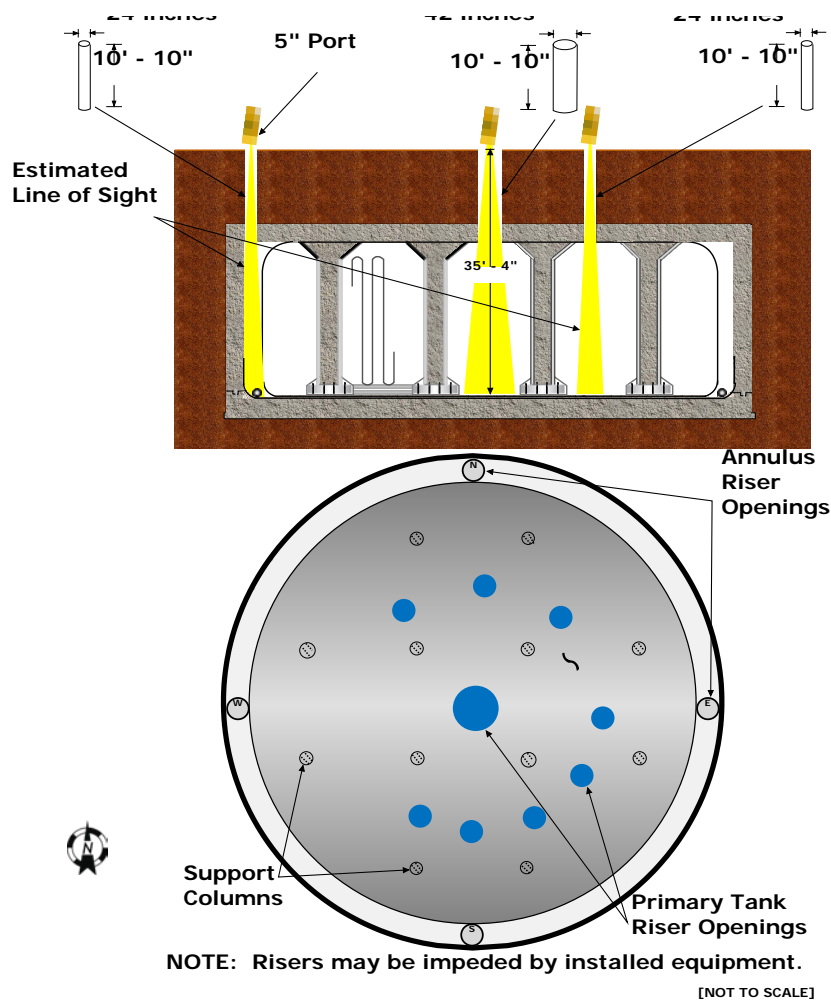


At the time of construction, all welds in the primary and secondary liners were radiographically inspected, defects were corrected, and the welds were rechecked radiographically. The welds in the flat bottoms of both the primary and secondary liners were vacuum-tested for leaks. Additionally, both the secondary liners and the primary tanks were hydrostatically tested. The water was maintained at full height in the primary tanks and secondary liners for 24 hours before inspection for leaks was made.

Access to the primary tank interior is limited to nine locations, and to the annular space at four locations, through riser pipes that extend through the concrete vault roof and up through the approximately 9 feet of soil. Each of the 13 riser pipes is capped at the top with a concrete shield plug. Each plug is typically provided with two 5-inch diameter ports equipped with removable plugs (unless equipment has been installed to support waste removal or tank closure activities). The center plug port may provide access through three 4- to 8-inch diameter ports. Some of

these ports provide access for inspections. Figure 3.1-4 shows a typically layout of the Type I tank riser locations.

Figure 3.1-4: Typical Type I Tank Access Area



3.2 Type II Tanks

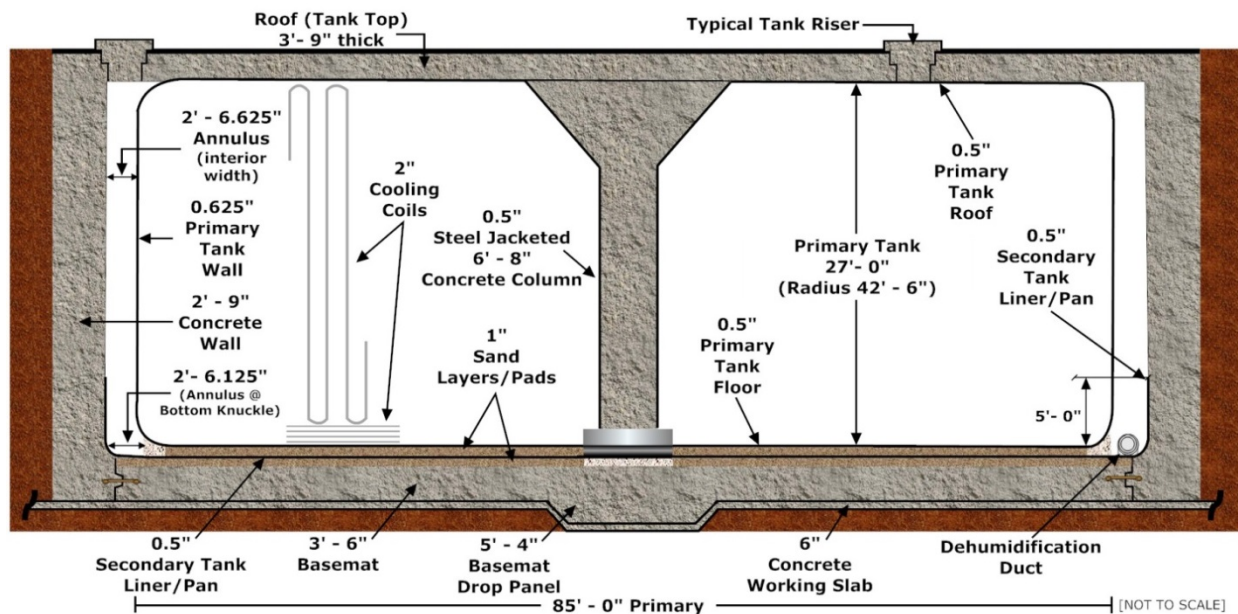
The second generation of waste tanks, the Type II tanks, completed construction in 1956 soon after the Type I tanks were placed into service. They are similar in design concept to the Type I tanks, but with some notable differences. There were only four Type II tanks constructed, Tanks 13 through 16, and were built as a four-pack in the HTF. There are no Type II tanks in the FTF. Tank 16 was operationally closed in 2015. Figure 3.2-1 shows the Type II tanks during construction.

Figure 3.2-1: Construction of the Type II Tanks in HTF



The Type II primary tanks have an 85-foot inside diameter and are 27 feet high with a nominal operating capacity of 1,070,000 gallons. The primary tank sits inside a 5-foot high, approximately 90-foot, 1.25-inch inside diameter secondary liner. The primary tank and secondary liner (also known as the annular pan) are enclosed within a 95-foot, 8.5-inch outside diameter concrete vault that creates an approximately 2-foot, 6.625-inch wide annular space. Unlike the Type I tanks, these tanks were built so that the roof of the concrete vault was at grade level; this concrete roof is 3 feet, 9 inches thick. A typical Type II tank cross-section is shown in Figure 3.2-2.

Figure 3.2-2: Typical Type II Tank Cross-Section

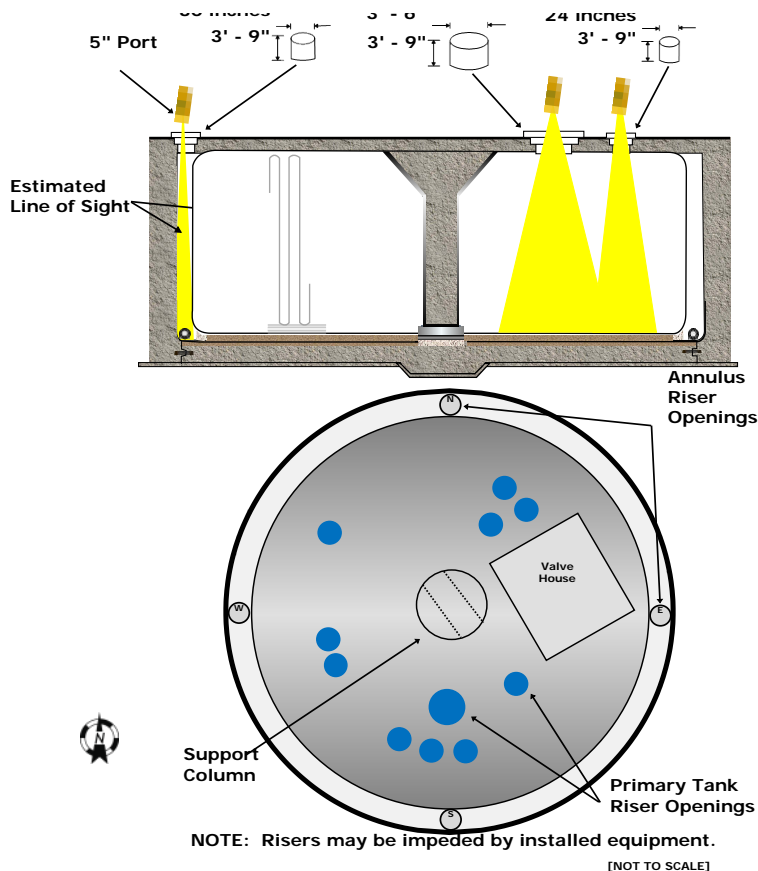


The primary tank is made of 0.625-inch thick carbon steel. The tank wall is joined to the primary tank roof and floor with non-stress relieved welded knuckle plates also made of carbon steel. The top knuckle is 0.5625 inches thick, the bottom knuckle is 0.875 inches thick, and the associated top and bottom plates are 0.5 inches thick; all are made of carbon steel. It should be noted that none of the Type II tanks were post-weld heat treated to relieve stresses following construction. The secondary liner is made of 0.5-inch thick carbon steel. [W162688] The top edge of the secondary liner has a riglet – an L-shaped carbon steel stiffener lip that is wrapped in lead and extends 6 inches perpendicularly inward from the liner edge with another 4-inch long section extending perpendicularly down from that edge. The primary tank was constructed above a 1-inch thick sand pad placed on top of the secondary liner. An additional 1-inch thick sand pad is between the secondary liner and the basemat. Unlike the Type I tanks, the Type II tanks do not have a series of roof support columns. Instead, these tanks have a single, large roof support in the center of the tank.

At the time of construction, all welds in the primary tanks were radiographically inspected, defects were corrected, and the welds were rechecked radiographically. However, the secondary liners were not inspected radiographically. The welds in the flat bottoms of these liners and the primary tanks were vacuum-tested for leaks, and the primary tanks and secondary liners were hydrostatically tested.

Access to the primary tank interior is provided at eight locations and, originally, to the annular spaces at four locations, through riser openings. Each of the original twelve riser openings is capped at the top with a concrete plug. Each plug is provided with two 5-inch diameter ports equipped with removable plugs. The ports provide access for inspection. In addition to the original four annulus risers, other access openings (10 to 14 additional openings per tank) have been core-drilled into the annulus of each of these tanks to permit inspection of 89 to 96% of the exterior walls of the primary tanks. These supplemental inspection ports were added following the formation of numerous leak sites soon after each of these tanks began receiving and storing liquid radioactive waste from H Canyon. Figure 3.2-3 shows a typical layout of the original Type II tank riser locations prior to the addition of the supplemental inspection ports.

Figure 3.2-3: Typical Type II Tank Access Area

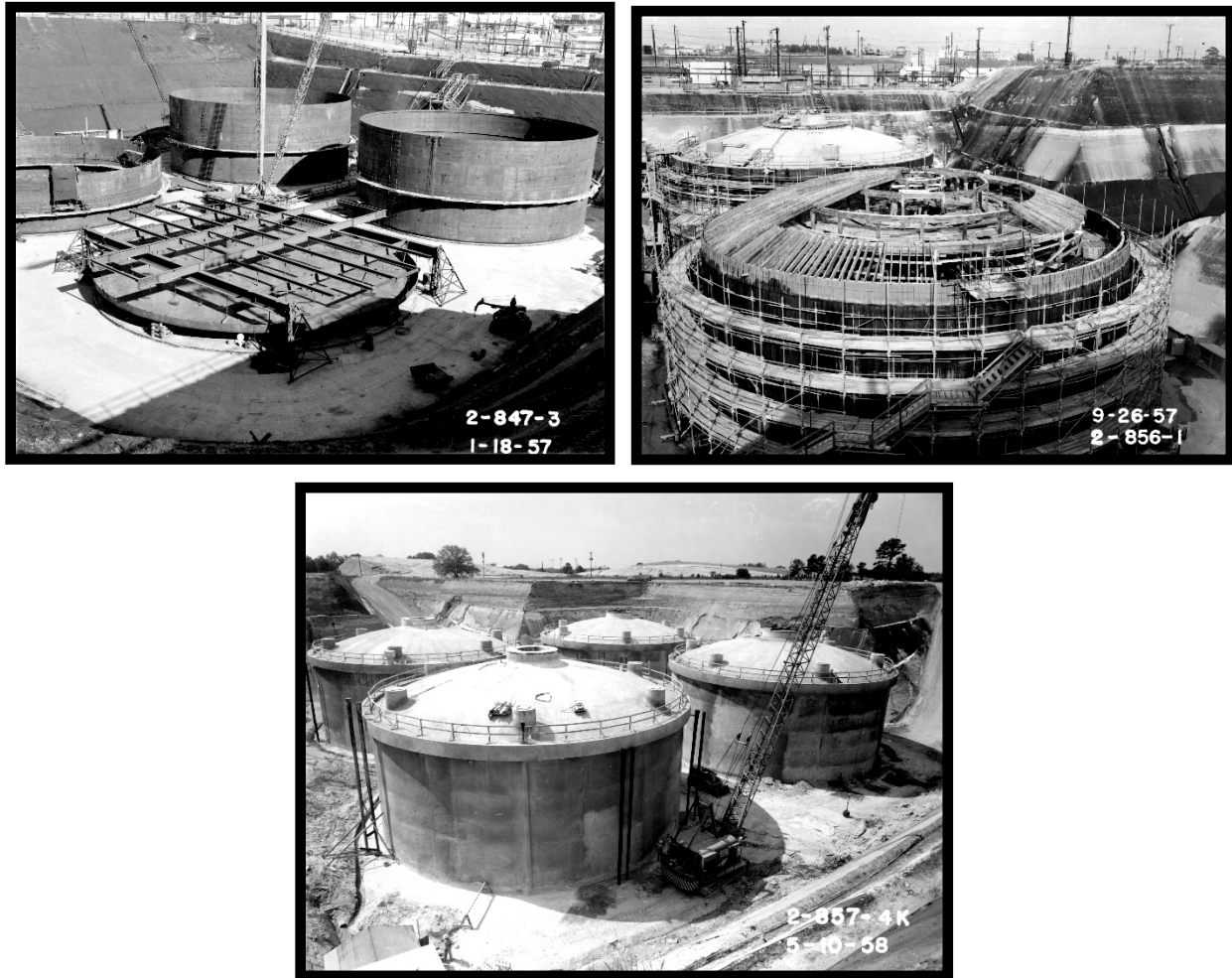


Riser configuration at time of construction.

3.3 Type IV Tanks

The Type IV tanks are single-walled tanks that have no auxiliary cooling capability. These tanks were specifically designed to store waste that contained significantly lower concentrations of radioactive material. There are four Type IV tanks in FTF that were constructed during the late 1950s (Tanks 17 through 20) and four Type IV tanks in HTF that were constructed between 1958 and 1962 (Tanks 21 through 24). All four of the FTF Type IV tanks have been operationally closed – Tanks 17 and 20 in 1997, and Tanks 18 and 19 in 2012. Figure 3.3-1 shows the Type IV tanks during construction.

Figure 3.3-1: Construction of Type IV Tanks



Type IV tanks have a single carbon steel liner with a hemispherical, reinforced concrete roof. These tanks are 85 feet in diameter and approximately 34 feet high at the side wall with a nominal operating capacity of 1,300,000 gallons. The liner wall and floor are made of 0.375-inch thick carbon steel with 0.4375-inch thick knuckle plates. The liner wall is reinforced internally by three circumferential 4- by 4-inch, L-shaped, carbon steel stiffener bands. This liner is anchored externally to the enclosing concrete vault wall. The liner floor is essentially flat with no sump, significant low points, or slope.

The Type IV tank roof is a self-supporting, hemispherical dome made of 7- to 10-inch thick concrete. The dome has an internal curvature radius of 90 feet, 4 inches and a maximum rise of 10 feet, 7.5 inches above the springline. The tank roof is not lined with carbon steel on the inside.

Each Type IV tank wall is enclosed in concrete; this concrete was placed in layers using a shotcrete technique. The concrete wall is cylindrical with an inside diameter of 85 feet and a height of 34 feet, 3.75 inches at the springline surmounted by a dome ring. The concrete wall is 7-inches thick at the top and 11-inches thick at the bottom. This wall was prestressed with steel bands that

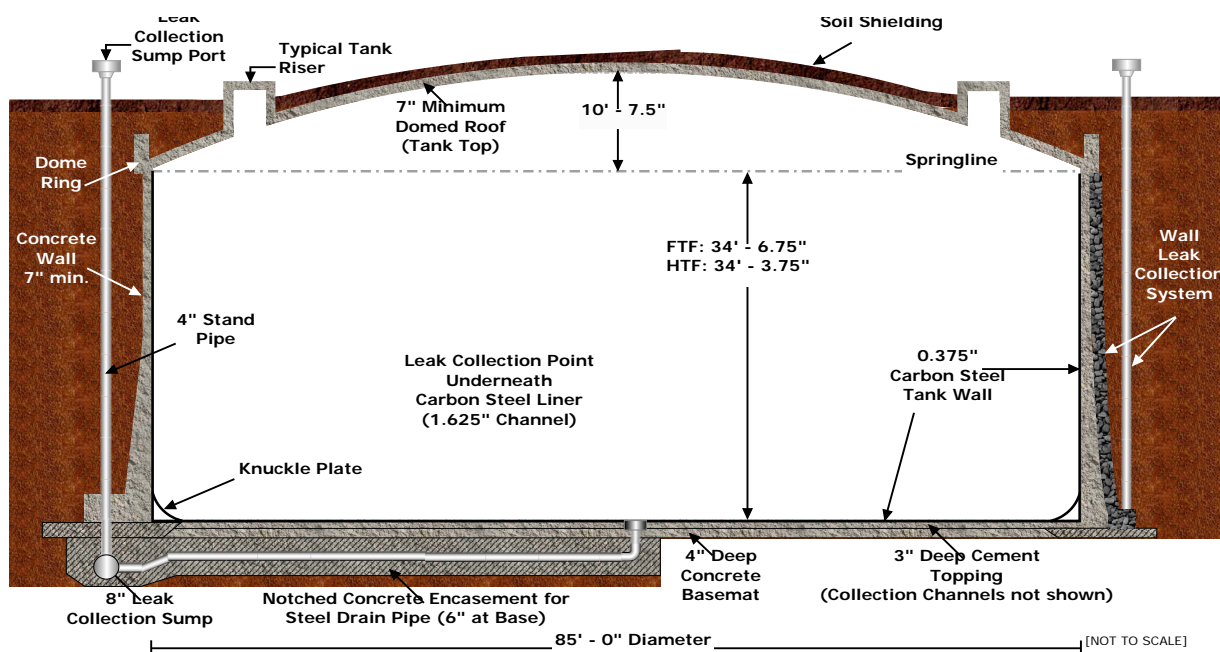
remained in place and were covered with the concrete. Figure 3.3-2 shows these bands and associated turnbuckles prior to the formation of the concrete wall.

Figure 3.3-2: Steel Bands and Turnbuckles on the Type IV Tank Walls



There is no secondary containment (secondary liner) or an annulus in the Type IV tanks. Instead, drainage channels were formed in a 3-inch thick concrete topping layer above the basemat and drain to a collection point, which empties to a collection chamber (sump) below the waste tank footing at the edge of the waste tank wall. A riser pipe to the surface enables a leak detection probe to be placed in the chamber and for sampling of any liquid that was to accumulate. A typical Type IV tank cross-section is shown in Figure 3.3-3.

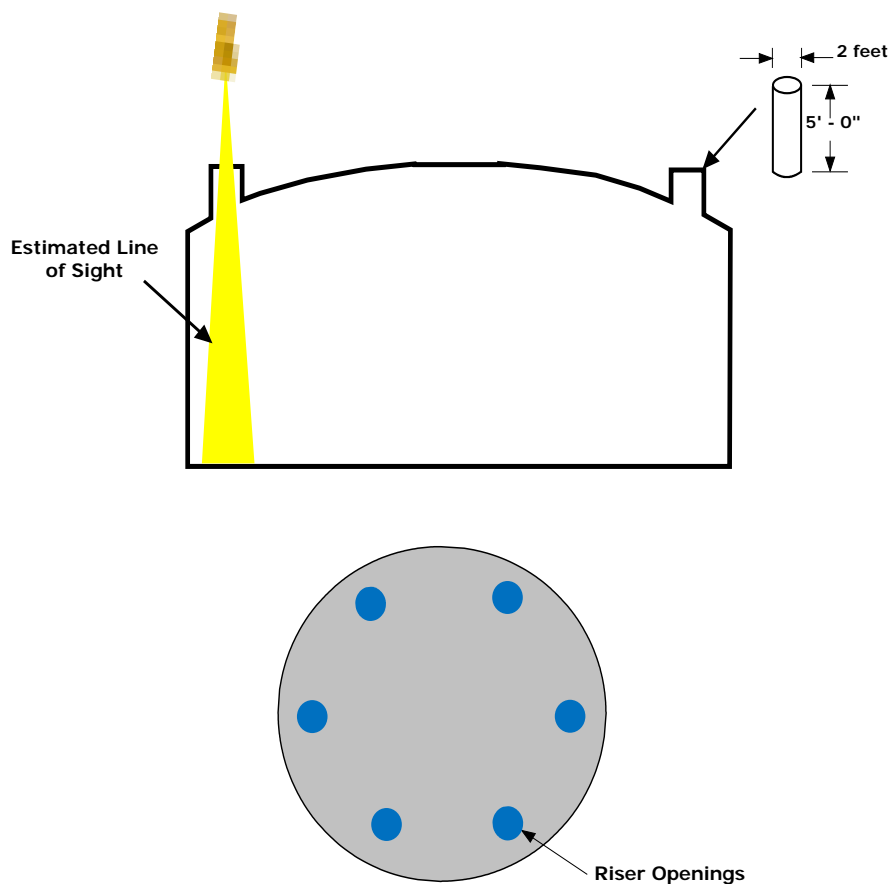
Figure 3.3-3: Typical Type IV Tank Cross-Section



All welds in the carbon steel liners were radiographically inspected. All of the welded liner-bottom seams and the upper seams of the knuckle rings were vacuum leak-tested. Prior to the backfilling/placement of surrounding soils, each tank was hydrostatically tested by filling with water to the normal fill height. These tanks remained filled with these non-radioactive solutions until it was to be placed in active waste storage.

Access to the interior of the HTF Type IV tanks is provided at six locations through perimeter riser pipes that are 2-foot in diameter and 5 feet long. The Type IV tanks in FTF had a center roof riser while those in HTF do not. Each riser opening is capped at the top with a concrete plug. Some of these risers provide access for inspection. There is no access to inspect the outside of the carbon steel liner as it is in direct contact with the surrounding concrete wall. Further, the outside of the concrete wall is covered in soil for shielding purposes. Figure 3.3-4 shows the typical access locations for a HTF Type IV tank.

Figure 3.3-4: Typical Type IV Tank Access Locations



NOTE: Risers may be impeded by installed equipment.

[NOT TO SCALE]

3.4 Type III/IIIA Tanks

The Type III/IIIA tank designs captured many of the lessons learned from the earlier waste tank design, construction and operational histories. These tanks have full secondary containment and are essentially designed as a tank within a tank. There are two Type III tanks and eight Type IIIA tanks in the FTF. There are four Type III tanks and 13 Type IIIA tanks in the HTF. The waste tank numbers, associated tank farm, and construction years are listed in Table 3-1.

There are relatively minor construction detail differences between Type III and IIIA tanks, but the major differences are related the type of cooling coils used inside the primary tank and the design of the purge ventilation system.

Figure 3.4-1: Typical Construction of Type III/IIIA Tanks



The Type III/IIIA primary tank is 85 feet in diameter and 33 feet high with a nominal operating capacity of 1,300,000 gallons. Type III/IIIA tanks have both a center and outer annulus. The center annulus is formed between the primary tank wall and the roof support column. The primary tank is made of concentric carbon steel cylinders joined to circular top and bottom plates by curved knuckle plates. The top plate of the primary tank is 0.5 inches thick, the middle plate is 0.625 inches thick and the bottom plate is 0.875 inches thick; the top knuckle is 0.5 inches thick and the bottom knuckle is 0.875 inches thick. After construction, the Type III/IIIA primary liners were fully stress-relieved by heating to help prevent the nitrate-induced, stress corrosion cracking seen in both the Type I and Type II tanks. The Type III/IIIA secondary liner is 0.375-inch thick carbon steel and is the full height of the primary liner with a 90-foot, 1.75-inch outside diameter forming a 2-foot, 6-inch wide annular space between the primary tank and secondary liner. [W702700]

The primary tank sits on a bed of insulating material with a system of grooves radiating outward from the base of the central column so ventilating air can flow through the slots and any leakage

Type III/IIIA tanks have an air ventilation/cooling system embedded in the center support column with supply ducts extending to the radial air grooves built into the insulating layer between the primary tank and secondary liner. Typical Type III and Type IIIA tank cross-sections are shown in Figures 3.4-2 and 3.4-3, respectively.

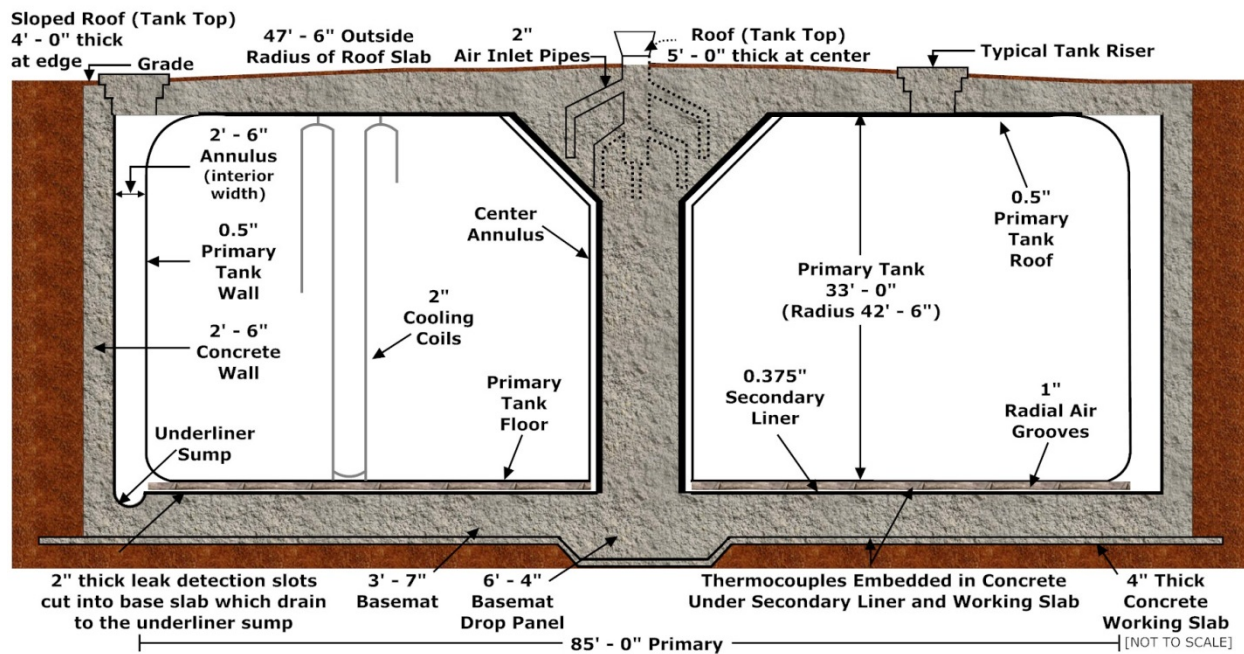
The diagram illustrates a cross-section of a two-tank system designed for hazardous waste containment. The system consists of a primary tank and a secondary tank, both with a 33' - 0" diameter (radius 42' - 6").

Primary Tank Details:

- Roof (Tank Top):** 4' - 0" thick.
- Annulus (interior width):** 2' - 6".
- Primary Tank Wall:** 0.5" thick.
- Concrete Wall:** 2' - 6" thick.
- Primary Tank Floor:** 3' - 6" basemat.
- Center Annulus:** The space between the primary and secondary tanks.
- Air Inlet Pipes:** 2" diameter.
- Typical Tank Riser:** Located on the secondary tank roof.
- Insertable Coolers:** Located in the secondary tank.
- 0.5" Primary Tank Roof:** The roof of the primary tank.
- 0.375" Secondary Liner:** The liner under the secondary tank.
- 1" Radial Air Grooves:** Located in the concrete working slab.
- Thermocouples Embedded in Concrete Under Secondary Liner and Working Slab:** For monitoring temperature.
- 85' - 0" Primary:** The overall diameter of the primary tank.
- HTF: 6" Thick** and **FTF: 4" Thick** are noted for the concrete working slab.
- 5' - 4" Basemat Drop Panel:** A specific section of the basemat.

The diagram is labeled "[NOT TO SCALE]" in the bottom right corner.

Figure 3.4-3: Typical Type IIIA Tank Cross-Section



All butt welds on the primary tanks were radiographically inspected, except welds on the horizontal roof surface. On the secondary liners of Tanks 29 through 34, all butt welds joining bottom plates, knuckle plates, and the lowest courses of center-column and outer-wall plates, were radiographically inspected. On all other Type III tanks, all plate welds in the secondary tanks were radiographically inspected. All defects were corrected, and the welds were rechecked radiographically.

The Quality Assurance Program included inspection of all radiographs by two independent groups of certified weld inspectors, and all radiographs were permanently stored for future reference. All spots on the inside or outside of the primary tanks and the inside of the secondary liners, where clips or lugs were removed and where other excisions were made, were examined by magnetic particle or liquid penetrant techniques and any defects were repaired.

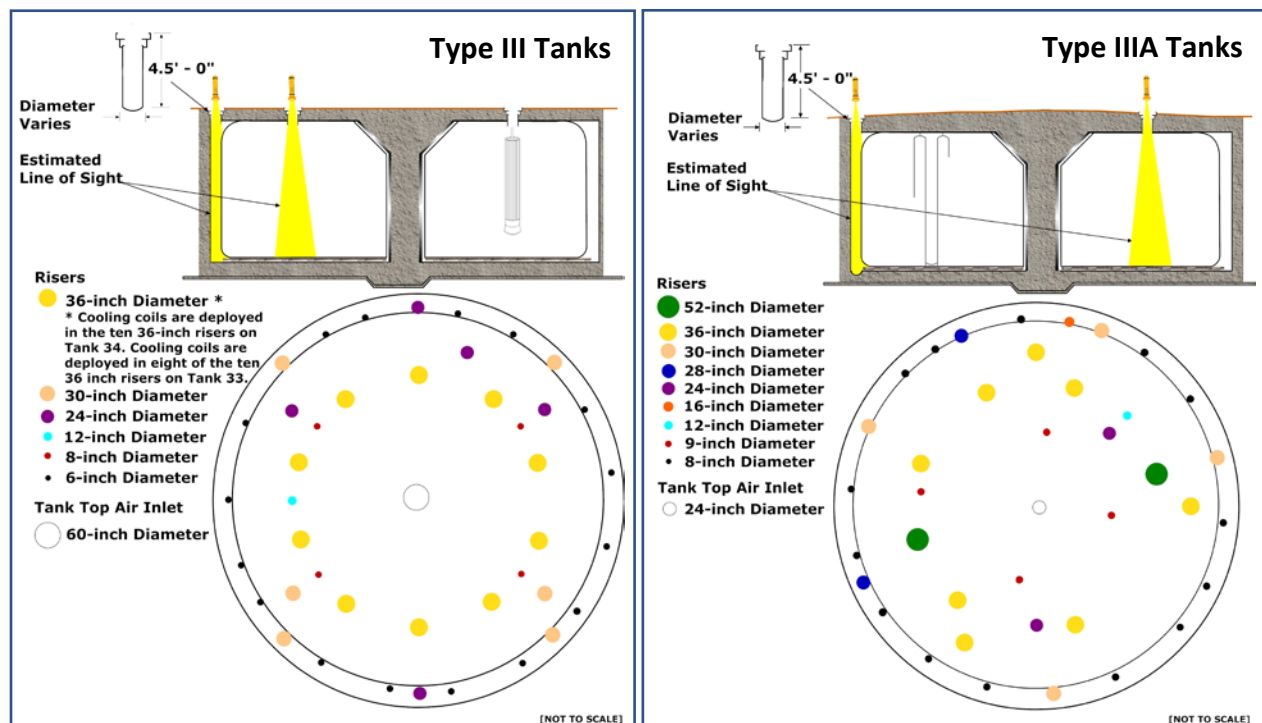
All butt welds on the secondary liners were vacuum leak-tested. All welds in the bottom assemblies of the primary tanks, including knuckle rings and lowest course welds, were vacuum leak-tested before each bottom assembly was lowered into final position, and then tested a second time after the stress-relieving operation. A full hydrostatic test, the filling of each primary tank to a depth of 32 feet and allowing it to stand 48 hours, was conducted after stress relieving. No leaks were found by the hydrostatic tests.

The primary tank was *postweld heat treated* in place after all high temperature work, other than roof attachments, had been completed. Post-weld heat treatment was accomplished in accordance with the general requirements of the ASME Boiler and Pressure Vessel code.

Tanks 29 through 34 were placed in service prior to 1976. These tanks were constructed with annulus riser openings at four locations providing inspection access through 5-inch diameter

ports. All other Type III/IIIA tanks were placed in service after 1976 and have annulus riser openings at 18 locations that are 8-inches in diameter. These ports are equidistant around the tank and provide for inspection of the entire exterior wall of the primary vessel. In 1982, 14 to 16 additional 8-inch diameter ports per tank were drilled in the tops of Tanks 29 through 34 to provide adequate access ports for inspection of the entire exterior wall of their primary vessels. All Type III tanks have interior riser openings at various locations that provide inspection access through ports with diameters ranging from 4 to 8 inches. All inspection access ports are equipped with removable plugs.

Figure 3.4-4: Typical Type III/IIIA Tank Access Locations



4 Inspection Program Description

4.1 Background

The waste tanks have differing types of containment and leak detection. The first 24 tanks constructed and placed into service (Types I, II, and IV) do not meet current standards for secondary containment and/or leak detection and some of these tanks have experienced leakage from their primary tanks into secondary containment. Eight of the 24 tanks have now been operationally closed. The 27 new style tanks (Type III/IIIA) meet the standards for secondary containment and/or leak detection.

The detection of leaked waste is based on two principles: disappearance of material from its primary location and appearance of material in a secondary location. At SRS, primary reliance is on the latter because the quantity of the waste detectable in an improper location is much less than that detectable by inventory change in a large tank (i.e., nominal capacities ranging from 0.75 to 1.3 million gallons). Although rigorous tank inventory surveillance is practiced, primary

leak detection methods rely on automatic surveillance of those areas into which the leaked waste is most likely to migrate.

The annulus of each tank with secondary containment (i.e., Types I, II, and III/IIIA tanks) that remains in service is equipped with at least two single-point conductivity probes for leak detection. These probes are located at the bottom of the annulus and on opposite sides of the tank where possible. The single-wall tanks (i.e., Type IV tanks) are built on slabs with a network of leak collection channels that drain to a common sump. Sump levels are continuously monitored with alarm capability in control rooms. Besides the automatic surveillance, routine direct visual surveys are made in the annular spaces, and nonroutine direct visual surveys are made in primary tanks through risers and/or inspection ports in the roof.

In 1961-1962, following leakage of waste into the annuli of Tanks 9, 10, 14, and 16, the first remote imaging inspections were made of some tanks using a periscope, with random inspections continuing through 1970. A program was initiated in November 1971 to periodically inspect all waste tanks using remote visual imagery techniques to monitor for corrosion and other degradation, waste leakage, anomalies of any type, and to investigate process or equipment concerns.

Steel thickness measurements have been made periodically of the waste tanks using ultrasonic techniques to monitor for general corrosion. An analog-type instrument was used in 1967 and 1969 to measure the thickness of the primary wall of tanks with annuli. In 1972, a more precise instrument was put in service. About 24,000 measurements made over a period of 14 years (1972 through 1985) indicated that no general thinning trends of SRS tanks had occurred. Steel thickness measurements were resumed in 1994 using an updated ultrasonic testing (UT) system. The system was updated again in 2002 using improved technology to detect thinning, pitting, and cracks.

To date, the only visually observed, service-induced corrosion was in Tank 23, a tank with a unique service history. The upper wall interior surfaces show general corrosion with mild pitting. The pitting is broad, but shallow. Evaluation of this condition is documented in DPSPU-85-11-4. This tank was used to receive contaminated water from 244-H, the Receiving Basin for Off-Site Fuels (RBOF), and 245-H, the Resin Regeneration Facility. No increase in the pitting or general corrosion has been observed. The 244-H and 245-H facilities are out of service, and Tank 23 is now used to store dissolved salt solutions.

Inspections of waste tanks are complicated by factors such as radiation and radioactive contamination, remote operation as far as 40 feet below grade, and insertion of equipment through small, generally 5- to 8-inches in diameter, access openings. Inspection techniques to circumvent these difficulties have been developed, and yield quality visual images (photographic) and/or volumetric measurements (i.e., UT). The techniques include photographic systems, closed-circuit television systems, and ultrasonic systems to measure steel thickness, cracking, and pitting.

Waste tank inspection has been important in leak detection. The leak sites in 10 of 14 tanks have been discovered by direct visual inspection or by one of the remote inspection techniques. Since the inspection program was initiated in 1971, eight tanks were found to have leak sites that were

not identified by the installed leak detection equipment. The waste evaporated to dryness, sealing the leak sites before any liquid reached a leak detection probe. The remote inspections identified the dry deposits of salt in the annuli and/or on the walls of these tanks.

The waste tank Visual and In-Service Inspection Program is ongoing. This report gives results of the 2017 UT and visual inspection data and summarizes significant findings of UT and visual inspections for each waste tank.

4.2 Inspection Methods

Techniques have been developed for remote examination and evaluation of the waste tanks and waste tank ancillaries. For visual imaging, direct photography systems developed at SRS were the primary method used. Closed-circuit television systems were also used where direct photography was not possible or where these systems provided a more comprehensive examination. Only the direct photography systems will be described since the video systems are similar to systems used widely in industry.

Due to significant improvements and advantages of digital photography, a conversion was made from film to digital photography in 2007. Wide-angle direct photography was used for general inspections of tank annuli and the primary vessels. This technique surveys a large area of the tank and annulus floor in a single photograph.

Another direct photography technique was used for detailed inspections. This technique provides detailed views of the tank in a series of photographs.

4.3 Visual Imagery

The 2017 inspection program used two visual imagery techniques: photography and closed-circuit television. The primary inspection methods were direct photography techniques, e.g., making a series of photographs providing detailed views of the tank and wide-angle photography for obtaining overviews of large areas. Closed-circuit television systems were generally used to further investigate conditions found during scheduled inspections and to document conditions and troubleshoot process problems in tanks and ancillaries.

The inspection program objective to continuously evaluate the waste tanks was satisfied in 2017 by photographic and video documentation. Inspections were made through all accessible annulus risers of the Type I, II, and III/IIIA tanks and at least one inspection was made in the interior of each Type IV tank (i.e., Tanks 21 – 24).

For Tanks 1 through 4 and 7 through 11, inspections are limited to no more than 25% of the exterior of the primary vessel wall and the annular space due to limited annulus access. These tanks are monitored for leakage by instrumentation or cameras that can be installed in their annuli. Due to early leak site occurrences in the Type II tanks, Tanks 13 through 15 had additional inspection ports installed in their annuli allowing greater access and larger visual inspection capabilities.

Additionally, for those tanks that have known leak sites in the primary vessel and are not undergoing waste removal, the supernate phase has been removed, minimized, or the level

lowered below the level of known leak sites.

5 Calendar Year 2017 Inspection Program Results

5.1 Overview

The 2017 inspection program was successfully completed. The annuli of all Type I, II, and III/IIIA tanks were inspected via all accessible risers and the interiors of the Type IV tanks remaining in service were inspected. Other inspections of waste tanks and ancillaries were performed as required by operating conditions and equipment performance requirements.

In addition to the waste tank Visual and In-Service Inspection Program, the Structural Integrity program requires inspections/measurements to be performed on safety equipment to ensure that the structural configuration and condition will allow the equipment to perform its intended design function under operational and accident conditions. The Structural Integrity program principally involves periodic visual and non-destructive inspection and test activities of safety equipment, concentrating on structural (i.e., passive) aspects of active and passive components. Equipment inspection frequency ranges from two to ten years, based on materials of construction, operating environment, etc. Equipment and systems that are physically accessible are evaluated through visual walk downs by a Structural Integrity subject matter expert and those that are inaccessible for walk down are inspected remotely by camera or video equipment. All inspections in 2017 were satisfactory with no material degradation noted that would prevent the equipment from performing its credited function. The following are the required equipment inspections that were completed in 2017, as scheduled:

- H-Area Diversion Box 4 Passive Vent per T-DS-G-00022,
- H-Area Diversion Box 8 Process Vessel Ventilation System per T-DS-G-00026,
- H-Area Diversion Box 8 Diesel Generator per T-DS-G-00027,
- Leak Detection Boxes/Modified Leak Detection Boxes/Leak Probe Sleeves/Clean Out Ports per T-DS-G-00028,
- Tank 48 Oxygen Analyzers per T-DS-G-00056, and
- Tank 48 Normal Nitrogen System per T-DS-G-00057.

Ultrasonic nondestructive examinations were performed in Tanks 35, 36, 37, and 38. The findings are documented in SRNL-STI-2017-00539, *Tank Inspection NDE Results for Fiscal Year 2017, Waste Tanks 35, 36, 37, and 38*, Revision 0.

Rainwater continues to periodically be observed leaking into the annulus of some tanks. Inleakage, which is water migrating into the annulus, was evidenced primarily by surface stains, occasionally by calciferous deposits, changed configuration of salt deposits in the annulus, and mild surface corrosion. The conditions of the tanks remained essentially unchanged from the conditions reported in 2016. The one key exception was the identification of two new cracks in the Tank 15 primary tank wall. These newly identified cracks were located at 30 inches and 160 inches above the tank bottom. **The 2017 inspection program confirmed the structural integrity and waste confinement capability of all 43 waste tanks that remain in active service.**

Specific details and results for inspections of the tanks and ancillaries performed in 2017 are listed in Appendix A.

5.2 Tank Inspection Summary Sheets

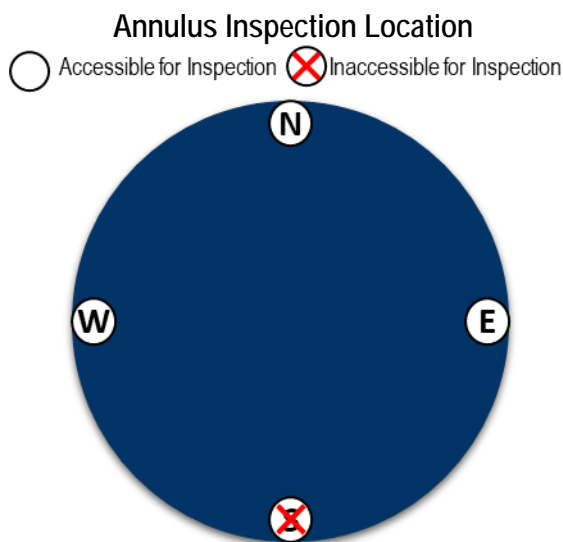
Tank Inspection Summary Sheets are provided on the following pages for the 43 tanks that remain in active service. The sheets are designed to reflect most recent information and build from the previous annual structural integrity reports. Sheets for the eight tanks that have been grouted and operationally closed (Tanks 5, 6, 12, 16,17, 18, 19, and 20) are not included. The individual tank sheets provide concise structural integrity-related information for each tank and a diagram of each tank type to depict inspection camera accessible locations. [NOTE: The statuses of the Type I, II, and IV tanks, the tanks that do not meet current requirements for secondary containment, are reported in SRR-ESH-2018-00007, *CY2017 Annual Report Status of F/H Area Radioactive Waste Tanks Being Removed from Service.*]

Tank 1

Placed into Service

1954

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 3

Inspection Capability: 19%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|-------------------------|----------|----------------------------|
| ≥ 1 | Feb 1969 | Small deposits on floor | Unknown | Unknown |

Last Visual Inspections: Three annulus risers in November 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1978, 1979, 1981, 1983, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

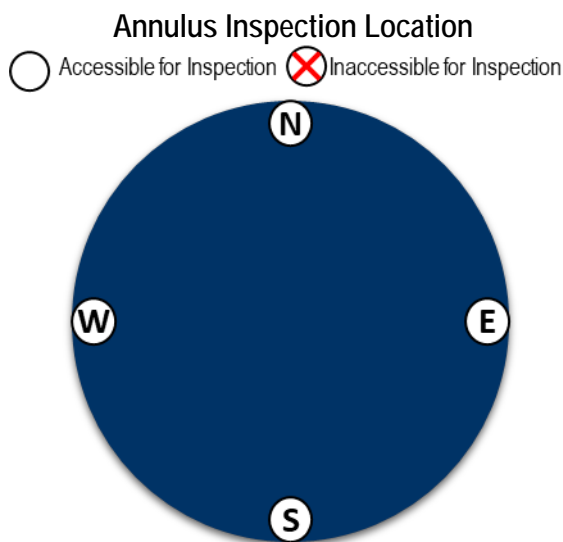
Conclusions following 2017 Inspections: No additional leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 1.

Tank 2

Placed into Service

1955

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 4

Inspection Capability: 25%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All four annulus risers in September and October 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1967, 1972, 1973, 1977, 1981, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

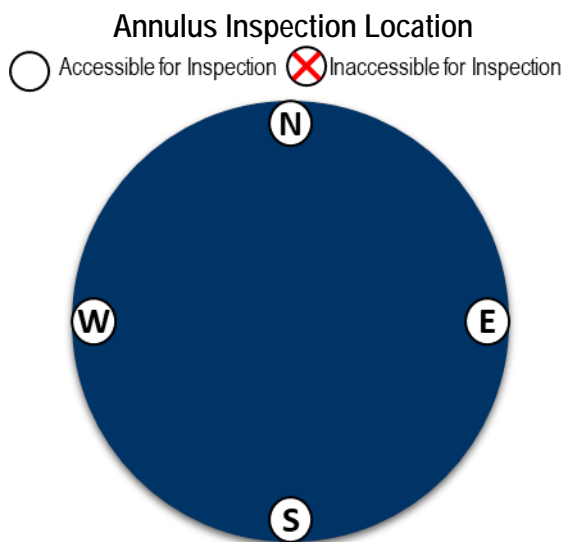
Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 2.

Tank 3

Placed into Service

1956

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 4

Inspection Capability: 25%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All four annulus risers in September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1973, 1977, 1981, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

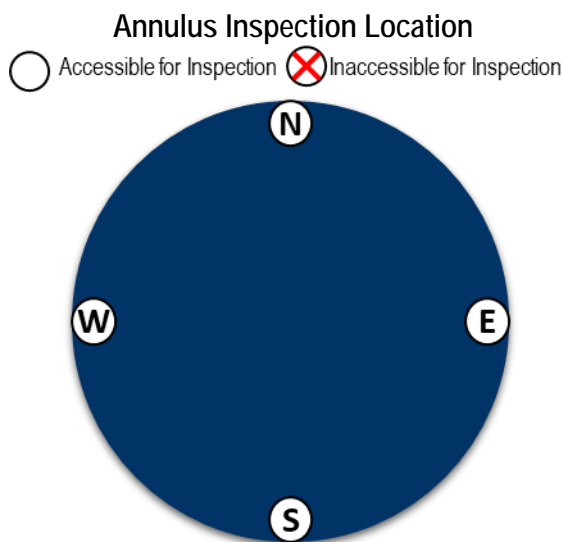
Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 3.

Tank 4

Placed into Service

1961

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 4

Inspection Capability: 25%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| 4 | Oct 2011 | None | South | 234 in. |
| | Sep 2013 | None | North | 234 in. |
| | Sep 2013 | None | North | 234 in. |
| | Sep 2013 | None | North | 234 in. |

Last Visual Inspections: All four annulus risers in September 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1973, 1977, 1981, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

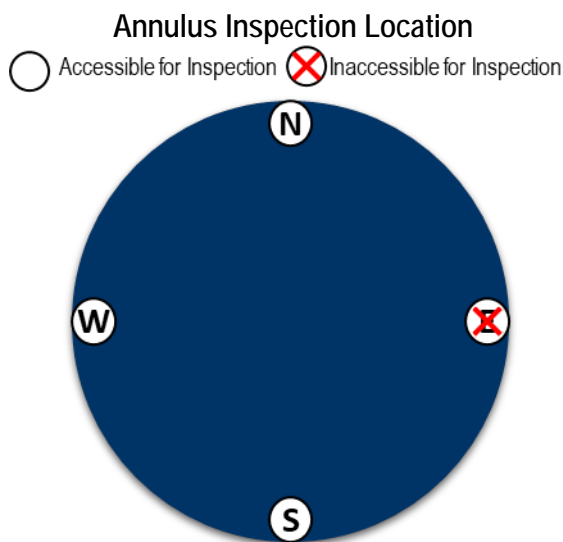
Conclusions following 2017 Inspections: No leakage, significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 4.

Tank 7

Placed into Service

1954

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 3

Inspection Capability: 19%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Three annulus risers in September and October 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1974, 1979, 1981, 1983, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

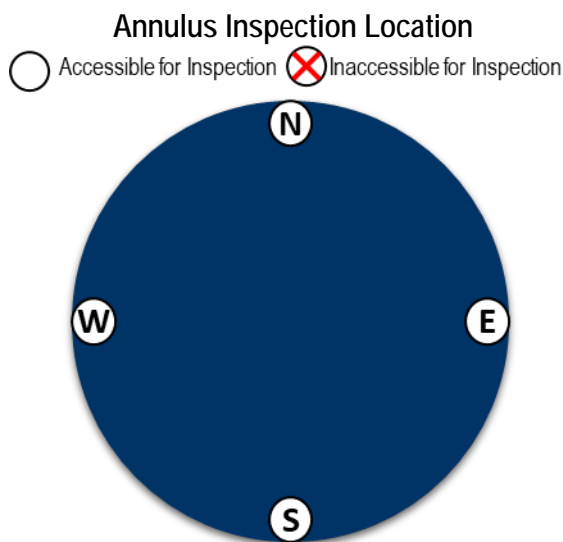
Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 7.

Tank 8

Placed into Service

1956

- Type I Tank
- F Tank Farm



Annulus Risers Available for Inspection: 4

Inspection Capability: 25%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All four annulus risers in September, October, and November 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1973, 1977, 1981, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

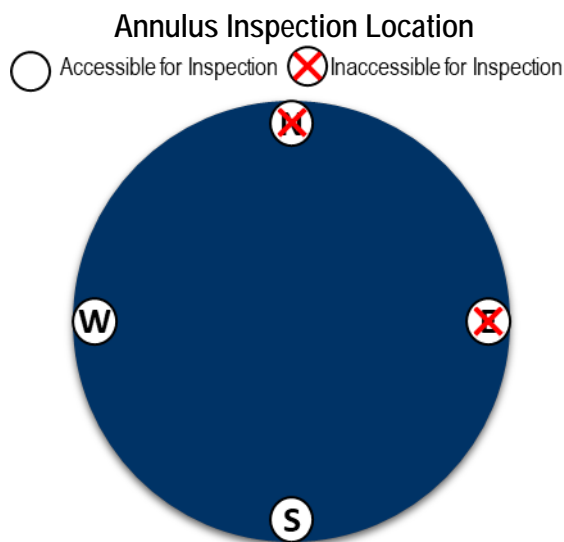
Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 8.

Tank 9

Placed into Service

1955

- Type I Tank
- H Tank Farm



Annulus Risers Available for Inspection: 2

Inspection Capability: 13%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|--|----------------------------------|---|
| ≥ 4 | Oct 1957 | 8-10 in. of salt deposits – 3 identified leak sites are not the source of the salt deposits in the annular pan; source has not been identified | West West South Unknown | 276 in. 271 in. 269 in. Source of waste in pan unknown |

Last Visual Inspections: Two annulus risers in October 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1979 and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

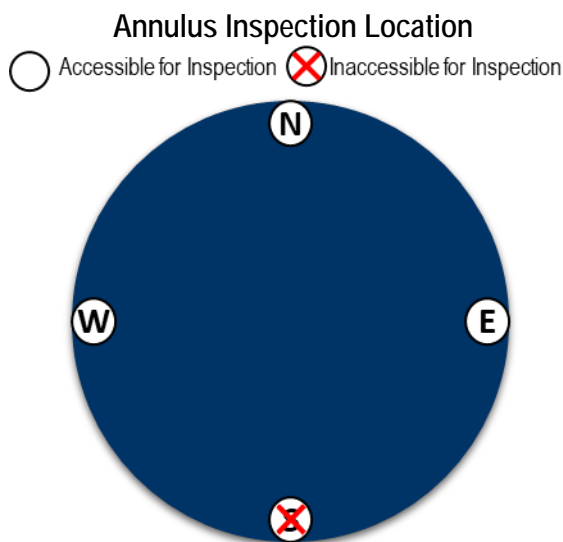
Conclusions following 2017 Inspections: **No additional significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 9.**

Tank 10

Placed into Service

1955

- Type I Tank
- H Tank Farm



Annulus Risers Available for Inspection: 3

Inspection Capability: 19%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|--|----------|----------------------------|
| ≥ 1 | Jul 1959 | 2-3 in. of salt deposits – source of waste has not been identified | Unknown | Unknown |

Last Visual Inspections: Three annulus risers in September and October 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1979 and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

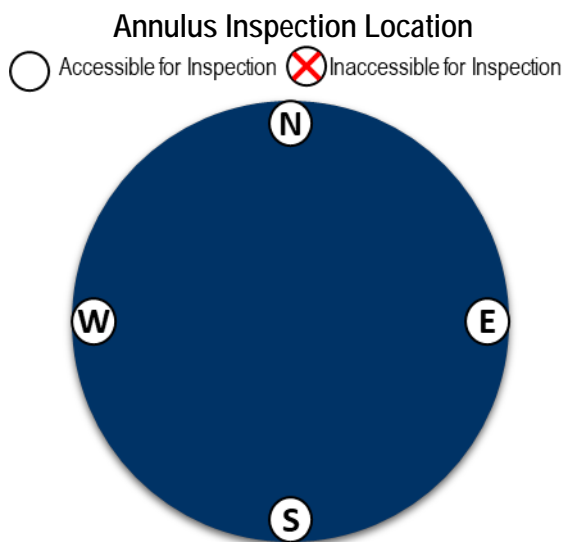
Conclusions following 2017 Inspections: No additional significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 10.

Tank 11

Placed into Service

1955

- Type I Tank
- H Tank Farm



Annulus Risers Available for Inspection: 4

Inspection Capability: 25%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|---|---------------|----------------------------|
| 2 | Apr 1974 | Salt nodules on wall and trace amounts on annulus pan | West South | 235 in. 189 in. |

Last Visual Inspections: All four annulus risers in September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1973, 1977, 1981, and 1985

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

Conclusions following 2017 Inspections: No additional significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 11.

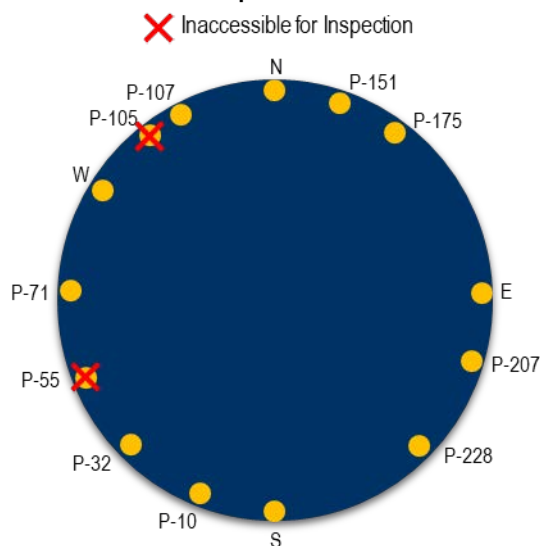
Tank 13

Placed into Service

1956

- Type II Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 12

Inspection Capability: 90%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|---|----------|----------------------------|
| 3 | Mar 1977 | Salt nodules on outside wall of primary tank and trace amounts in annular pan | West | 279 in. |
| | May 1980 | Salt nodules on outside wall of primary tank and trace amounts in annular pan | North | 269 in. |
| | Oct 2012 | Salt nodules on outside wall of primary tank and trace amounts in annular pan | West | 270 in. |

Last Visual Inspections: Twelve of 14 annulus inspection ports in October 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1974, 1979, 1985, and 2000

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

Conclusions following 2017 Inspections: **No additional significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 13.**

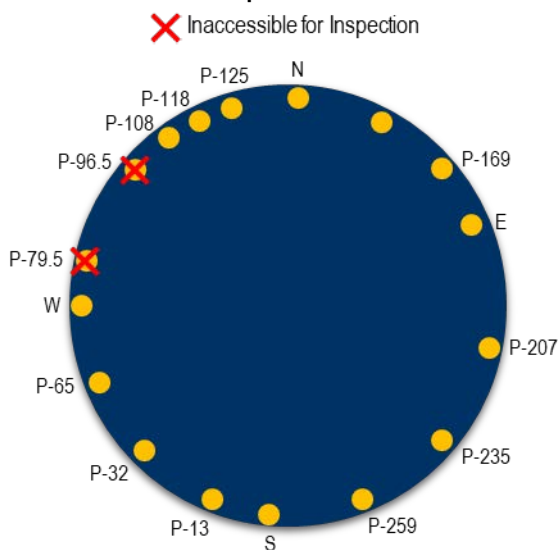
Tank 14

Placed into Service

1957

- Type II Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 13

Inspection Capability: 89%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|--------------------------------|----------------------------|-------------------------|----------------------------------|
| ~50 | May 1959 – 1974 Oct 2012 | 12-13 in. of salt deposits | Majority on bottom weld | Lowest 16 in. Highest 288 in. |

Last Visual Inspections: Thirteen of 15 annulus inspection ports in October 2017.

Summary of Visual Inspections: No changes were noted since the inspections in 2016.

Ultrasonic Testing Inspections Performed: 1979 and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of tank wall.

Conclusions following 2017 Inspections: No additional significant surface corrosion or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 14.

Tank 15

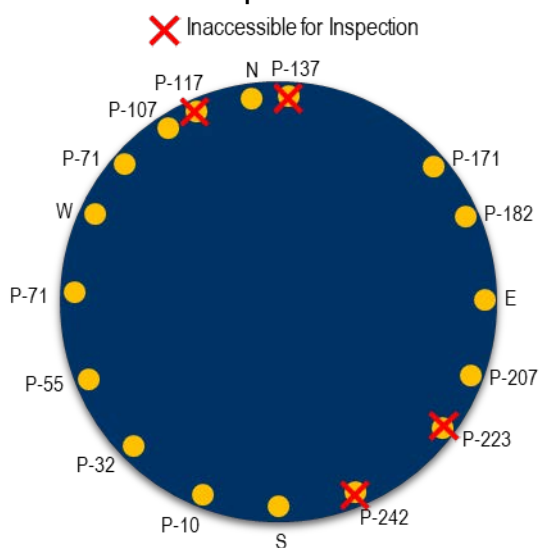
(Page 1 of 2)

Placed into Service

1960

- Type II Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 13

Inspection Capability: 96%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location* | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|-----------|----------------------------|
| 26 | Apr 1972 | Nodules on tank wall | 140 | 34 in. |
| | Apr 1972 | | 144 | 34 in. |
| | 1973 | Waste on annulus floor | 13 | 150 in. |
| | 1973 | | 115 | 88 in. |
| | 1973 | | 112 | 30 in. |
| | 1973 | | 105 | 96 in. |
| | 1973 | | 102 | 30 in. |
| | 1973 | | 171 | 74 in. |
| | 1973 | | 176 | 30 in. |
| | 1973 | | 173 | 30 in. |
| | 1973 | | 171 | 150 in. |
| | 1973 | | 136 | 34 in. |
| | 1973 | | 165 | 150 in. |
| | 1997 | | 207 | 150 in. |
| | 1998 | | 192 | 150 in. |
| | 1997 | | 53 | 200 in. |
| | 2000 | | 50 | 30 in. |
| | 2000 | | 205 | 30 in. |
| | 2002 UT | | 175 | 129 in. |
| | 2005 | | 211 | 31 in. |
| | 2015 | | 5 | 73 in. |
| | 2015 | | 205 | 100 in. |
| | 2015 | | 5 | 92 in. |
| | 2015 | | 171 | 126 in. |
| | 2017 | | 99 | 30 in. |
| | 2017 | | 20 | 160 in. |

*Circumferential feet clockwise from South riser.

Tank 15

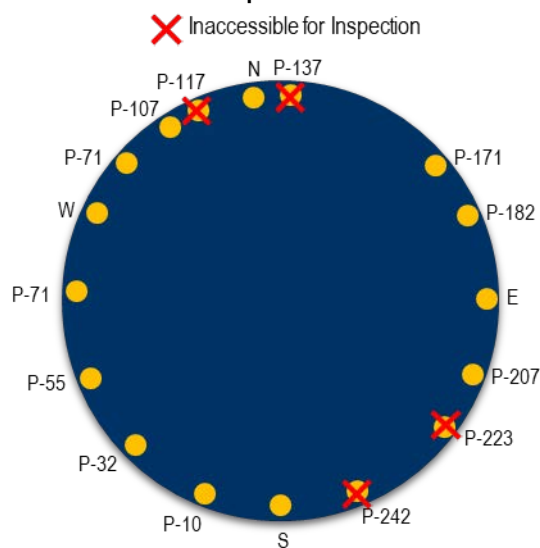
(Page 2 of 2)

Placed into Service

1960

- Type II Tank
- H Tank Farm

Annulus Inspection Locations



Last Visual Inspections: Thirteen of 17 annulus inspection ports in September and October 2017

Summary of Visual Inspections: **Inspections in 2017 revealed two new leak sites at 30 and 160 in. above the tank bottom. Visual examinations have shown mild corrosion of the steel surfaces in the tank annulus. Periodic visual inspections continue to be performed since Tank 15 was rewetted, bulk waste removal efforts were completed, and heel removal was initiated.**

Ultrasonic Testing Inspections Performed: 1972, 1977, 1980, 1984, 2002, 2007, and 2015

Ultrasonic Testing Inspections Results: UT examinations in 2002 revealed a new leak site at 150 inches on the middle circumferential weld and four partial through wall cracks. [WSRC-TR-2002-00590] In 2007, UT examinations showed no reportable thinning or pitting areas on the tank wall. Ten cracks that were examined in 2002 were reexamined in 2007 with four cracks showing growth. Evaluations concluded the cracks would remain stable under bounding future waste loading conditions. [SRNS-STI-2008-00028] In 2015, eight of these cracks were again reexamined; four cracks showed growth within expected ranges and four showed no changes. [SRNL-STI-2015-00421]

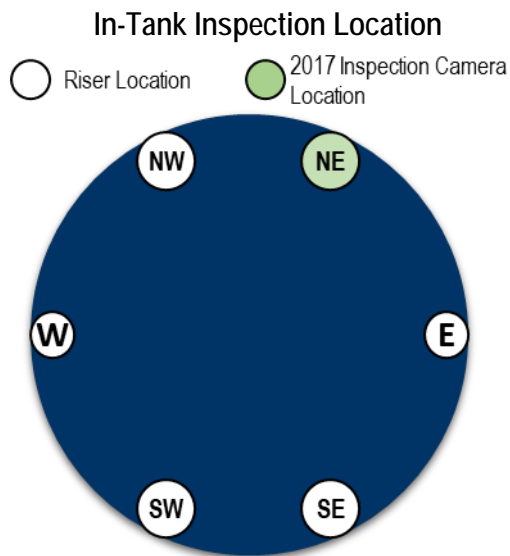
Conclusions following 2017 Inspections: **No significant surface corrosion or other anomalies were noted apart from the two new identified leak sites. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 15.**

Tank 21

Placed into Service

1961

- Type IV Tank
- H Tank Farm



Exposed Wall Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Northeast riser in September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016. Examination of concrete dome roof did not reveal any degradation; continues to meet ACI 318-95 code requirements

Ultrasonic Testing Inspections Performed: 1973, 1977, 1980, and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of tank liner bottom.

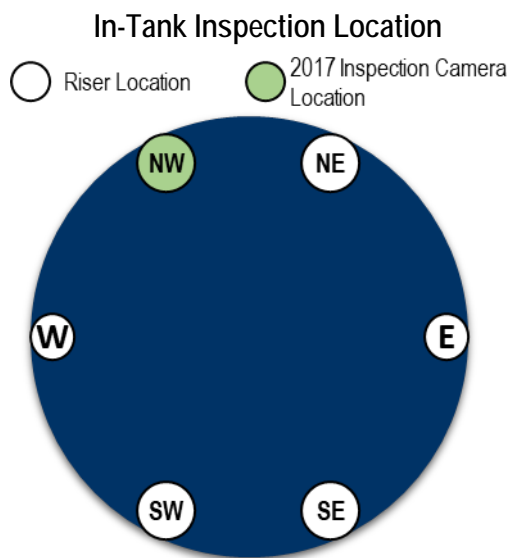
Conclusions following 2017 Inspections: **No evidence of failure, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 21.**

Tank 22

Placed into Service

1965

- Type IV Tank
- H Tank Farm



Exposed Wall Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Northwest riser in September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1974, 1977, 1980, and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of the tank liner bottom.

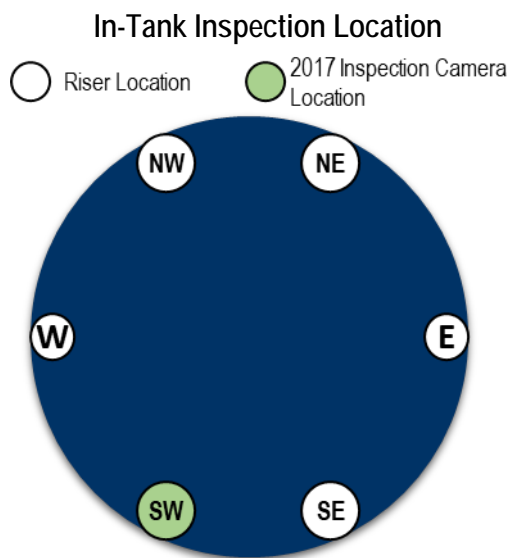
Conclusions following 2017 Inspections: No evidence of failure, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 22.

Tank 23

Placed into Service

1964

- Type IV Tank
- H Tank Farm



| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Southwest riser in December 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016. Visual examinations of the steel liner have revealed corrosion, including rust and tubercles on the surface of the upper position of liner wall, but there is no evidence of failure. Broad and shallow pitting was observed. The dome was inspected and continues to meet ACI 318-95 code requirements

Ultrasonic Testing Inspections Performed: 1973, 1977, 1980, and 1983

Ultrasonic Testing Inspections Results: No detectable thinning of the liner bottom.

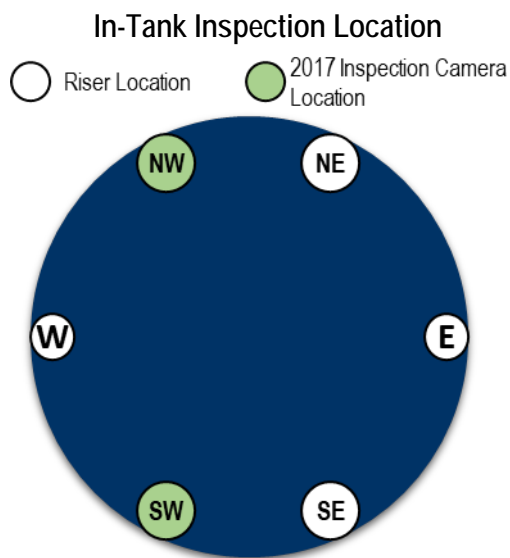
Conclusions following 2017 Inspections: **No evidence of failure, additional surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 23.**

Tank 24

Placed into Service

1963

- Type IV Tank
- H Tank Farm



| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Northwest and Southeast risers in September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016. No evidence of degradation of the concrete dome; continues to meet ACI 318-95 code requirements.

Ultrasonic Testing Inspections Performed: 1984

Ultrasonic Testing Inspections Results: No detectable thinning of tank liner.

Conclusions following 2017 Inspections: **No evidence of failure, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 24.**

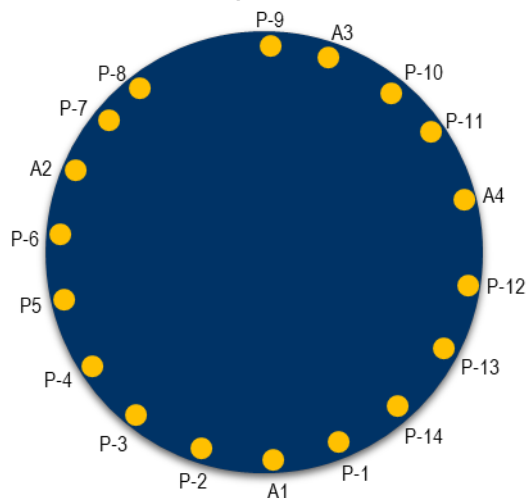
Tank 25

Placed into Service

1980

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1979, 1983, 2004, and 2011

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2011-00495]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 25.

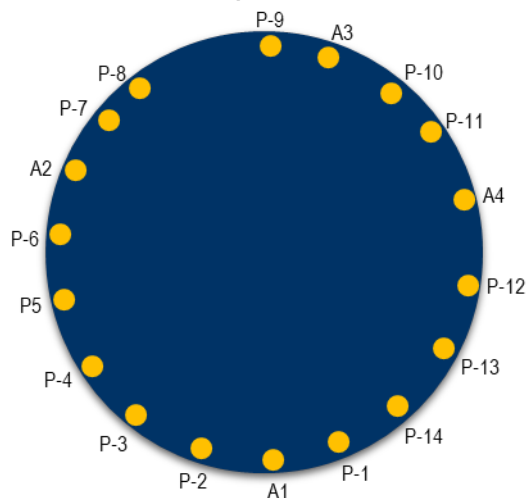
Tank 26

Placed into Service

1980

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in March 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1979, 1983, 2003, 2011, and 2014

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2014-00328]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 26.

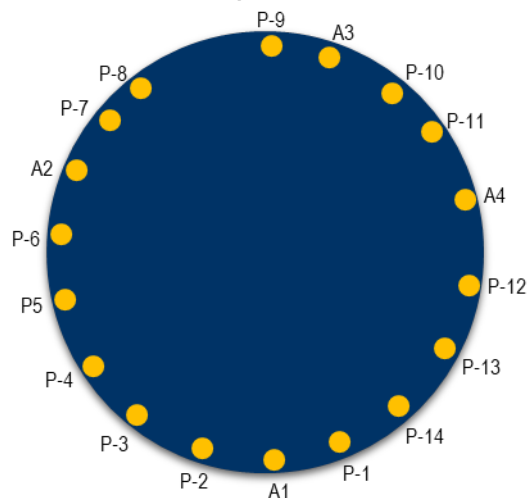
Tank 27

Placed into Service

1980

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in March, April, May, and November 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1979, 1983, 2005, and 2014

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2014-00328]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 27.

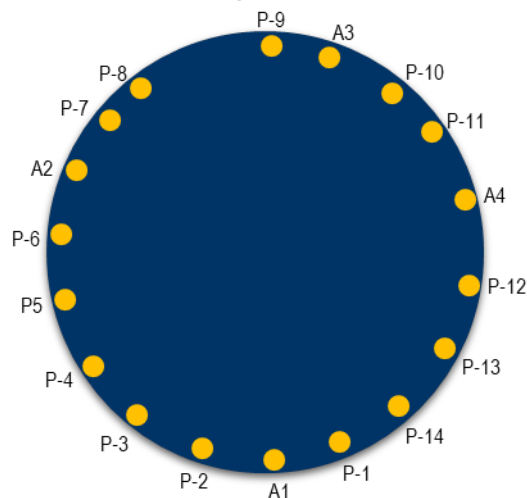
Tank 28

Placed into Service

1980

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in March, April, May, and June 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1979, 1983, 2005, and 2014

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2014-00328]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 28.**

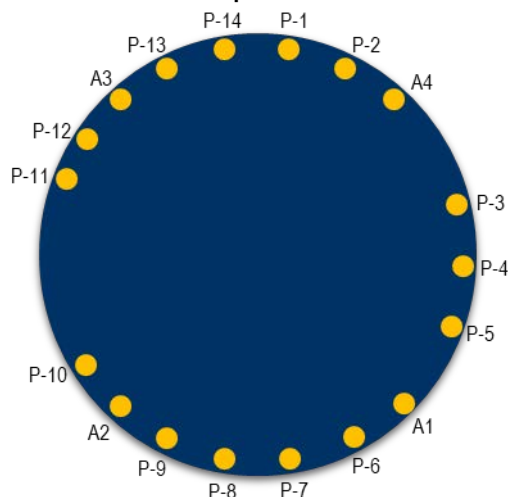
Tank 29

Placed into Service

1971

- Type III Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February, March, May, June, July, and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1973, 1974, 2006, and 2009

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Incipient pitting was detected in several locations, with the deepest pit measuring 0.063" deep. [SRNL-STI-2009-00559]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 29.

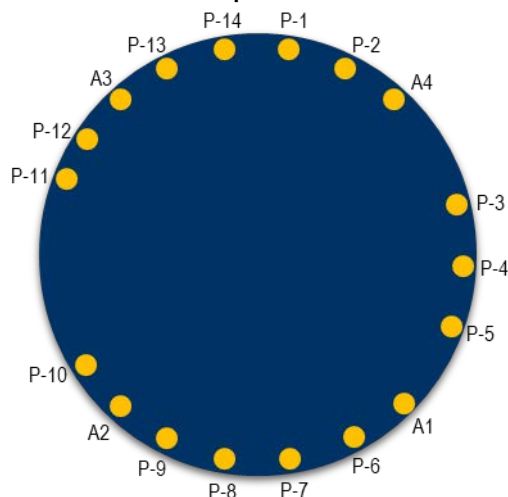
Tank 30

Placed into Service

1974

- Type III Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in May and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1975, 2003, and 2010

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Ten incipient pits were documented; however, all of the pits are consistent with pre-service pitting with no evidence of active corrosion or growth. [SRNL-STI-2010-00533]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 30.

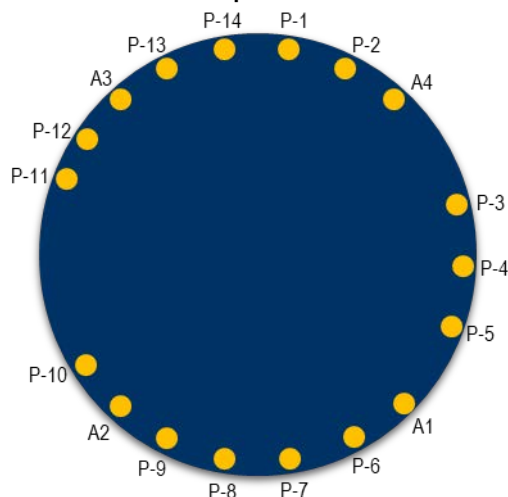
Tank 31

Placed into Service

1972

- Type III Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in April and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 2003 and 2010

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Nine incipient pits were documented; however, all of the pits are consistent with pre-service pitting with no evidence of active corrosion or growth. [SRNL-STI-2010-00533]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 31.

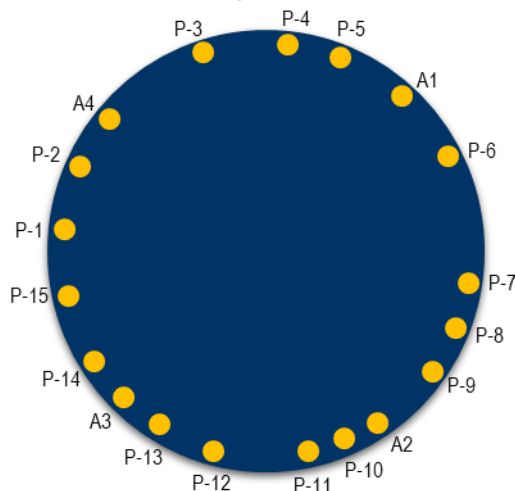
Tank 32

Placed into Service

1971

- Type III Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 19

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 19 annulus inspection ports in April and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 2003 and 2010

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Seven incipient pits were documented; however, all of the pits are consistent with pre-service pitting with no evidence of active corrosion or growth. [SRNL-STI-2010-00533]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 32.

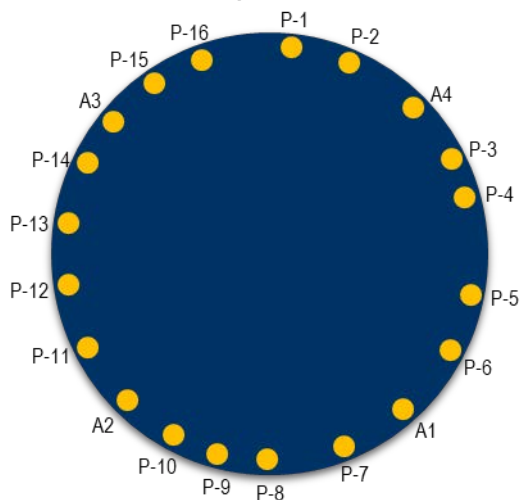
Tank 33

Placed into Service

1969

- Type III Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 20

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 20 annulus inspection ports in March and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 2005 and 2014

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2014-00328]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 33.**

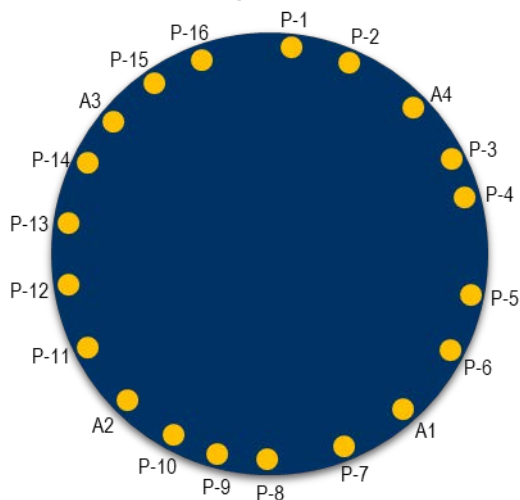
Tank 34

Placed into Service

1972

- Type III Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 20

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 20 annulus inspection ports in March and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 2003 and 2011

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2011-00495]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 34.**

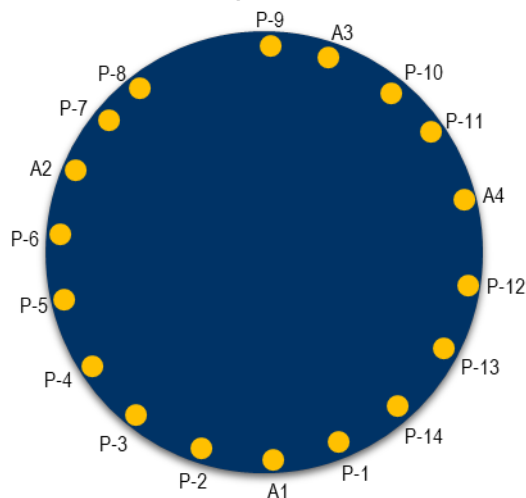
Tank 35

Placed into Service

1977

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in March, April, July, and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1977, 1981, 1985, 2006, and 2017

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2017-00539]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 35.

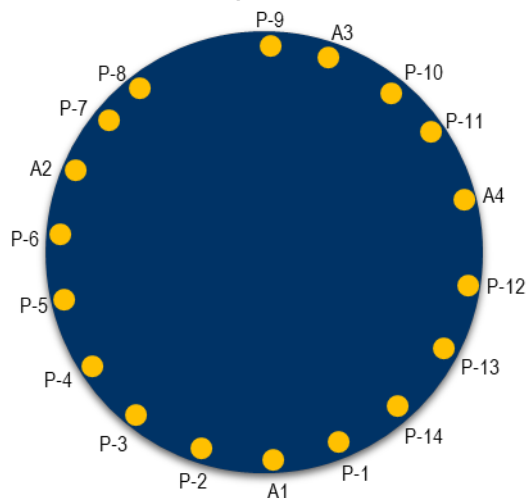
Tank 36

Placed into Service

1977

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in April and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1977, 1981, 1985, 2007, and 2017

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2017-00539]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 36.

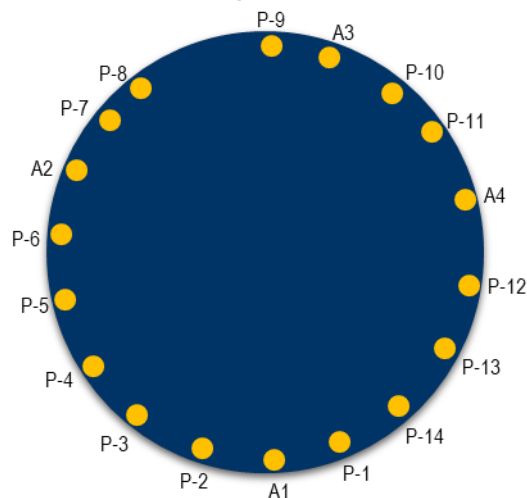
Tank 37

Placed into Service

1978

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in May and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1977, 1981, 1985, 2007, and 2017

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2017-00539]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 37.

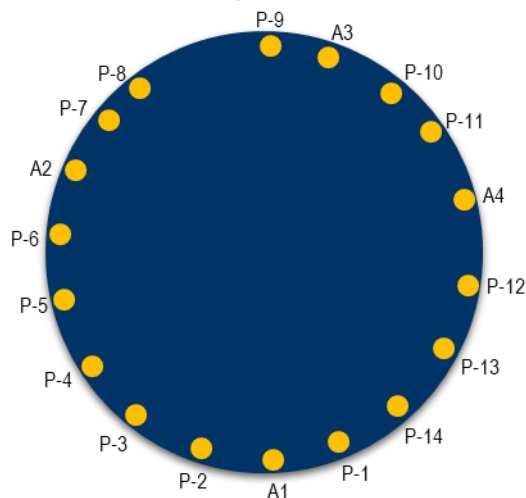
Tank 38

Placed into Service

1981

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in May, July, August, and September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2007, and 2017

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2017-00539]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 38.**

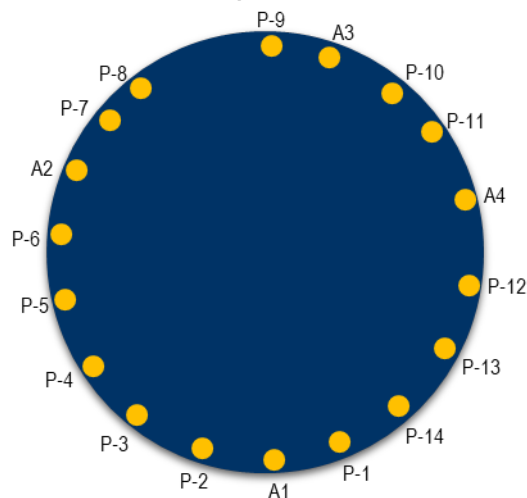
Tank 39

Placed into Service

1982

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in March, August, September, and November 2016.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 1985, 2005, and 2016

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Several grinding areas in the upper plate of the primary tank wall had areas below the 10% reporting criteria. [SRNL-STI-2016-00454]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 39.

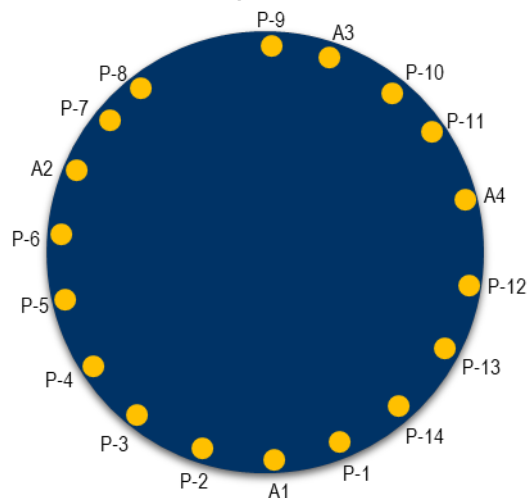
Tank 40

Placed into Service

1986

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in May and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2006, and 2016

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Reportable thicknesses were detected in the top plate of the primary tank wall, but were attributed to fabrication artifacts. [SRNL-STI-2016-00454]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 40.

Tank 41

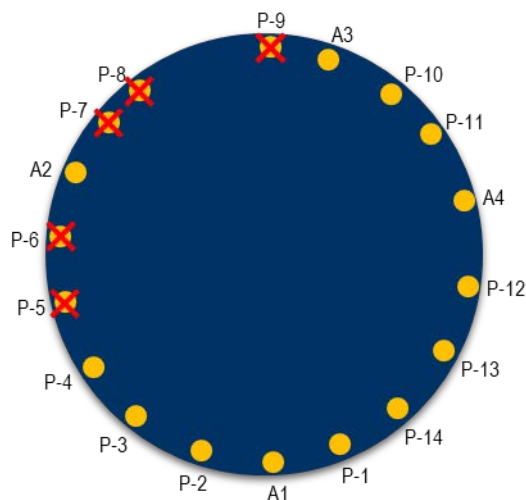
Placed into Service

1982

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations

✗ Inaccessible for Inspection



Annulus Inspection Ports Available: 13

Inspection Capability: 75%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Thirteen of the 18 annulus inspection ports in March and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2006, 2010, and 2016

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2016-00454]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 41.**

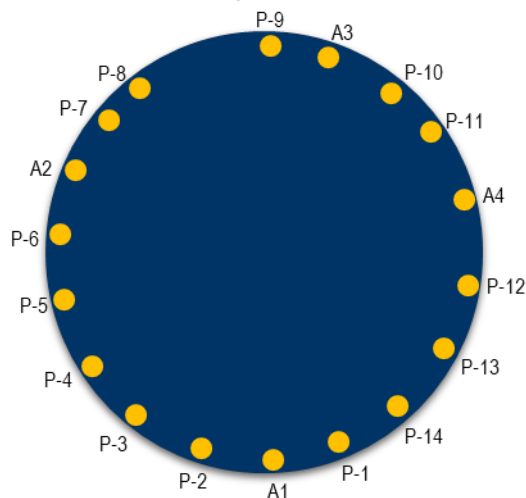
Tank 42

Placed into Service

1982

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in May and September 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 1985, 1990, 2004, and 2015

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2015-00421]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 42.**

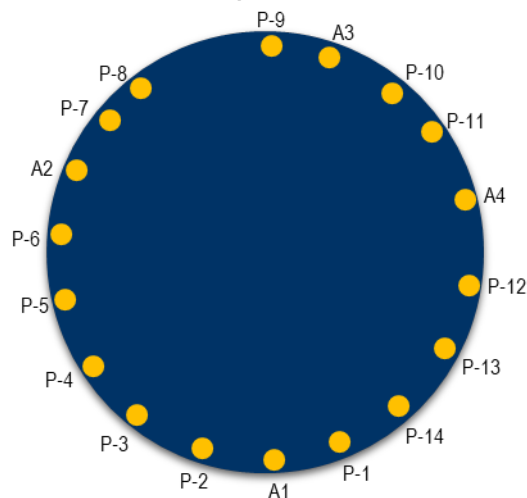
Tank 43

Placed into Service

1982

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February, May, June, and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 1985, 2006, and 2015

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. Reportable thicknesses were detected in the top and middle plates of the primary tank, but are attributed to fabrication artifacts. [SRNL-STI-2015-00421]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 43.

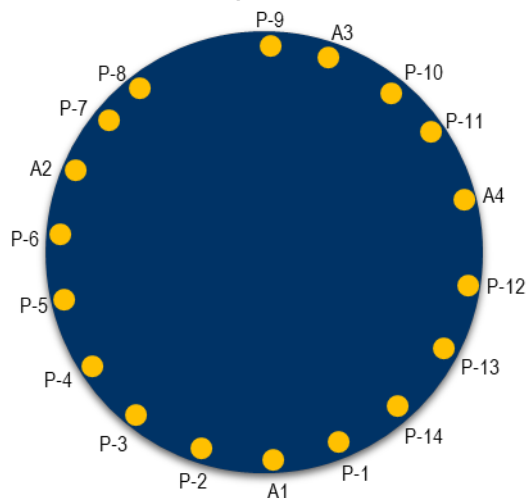
Tank 44

Placed into Service

1982

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February and May 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2005, and 2013

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2013-00557]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 44.**

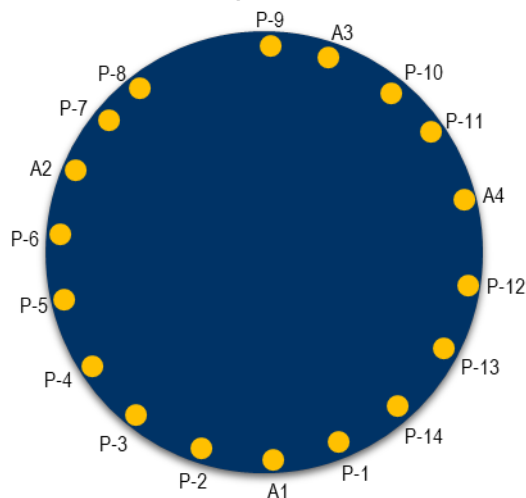
Tank 45

Placed into Service

1982

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February, May, and June 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2005, and 2013

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2013-00557]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 45.**

Tank 46

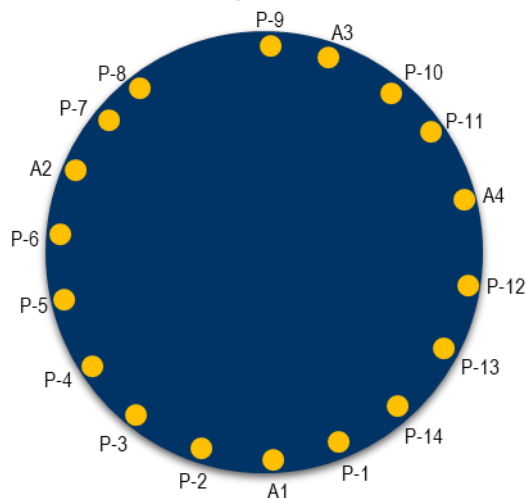
Placed into Service

1980

Placed into Waste Storage in 1994

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February, May, and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2005, and 2013

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2013-00557]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 46.**

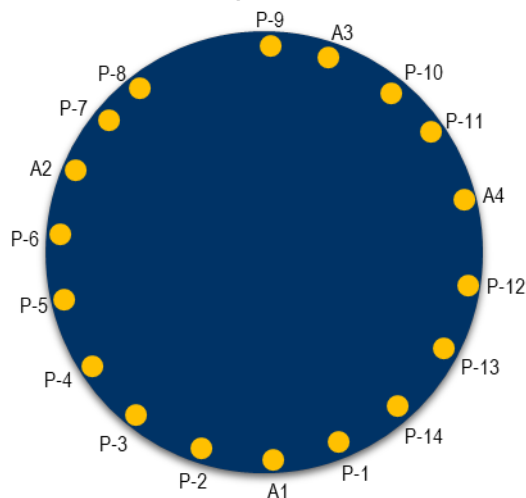
Tank 47

Placed into Service

1980

- Type IIIA Tank
- F Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February and May 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1980, 1981, 1984, 2005, and 2013

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. An incipient pit was noted in the lower plate of the primary tank wall. [SRNL-STI-2013-00557]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 47.

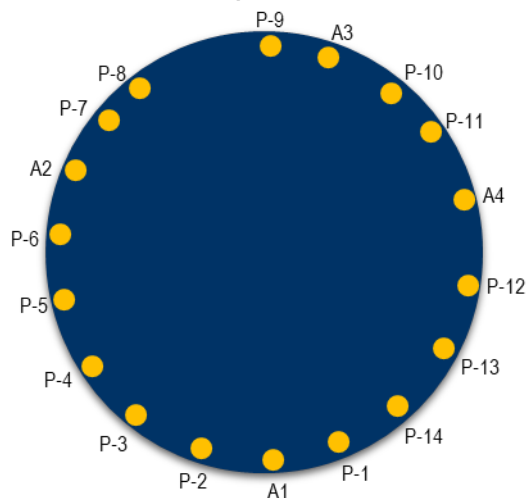
Tank 48

Placed into Service

1983

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in January and July 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1982, 2004, and 2012

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2012-00749]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 48.**

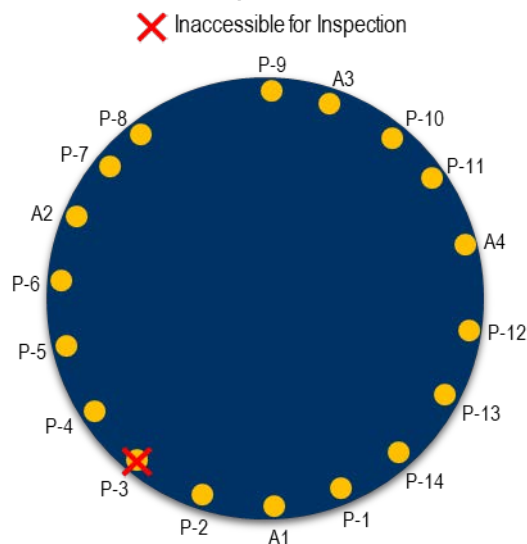
Tank 49

Placed into Service

1983

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 17

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Seventeen of the 18 annulus inspection ports in May, August, and November 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1982, 2004, and 2012

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2012-00749]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 49.**

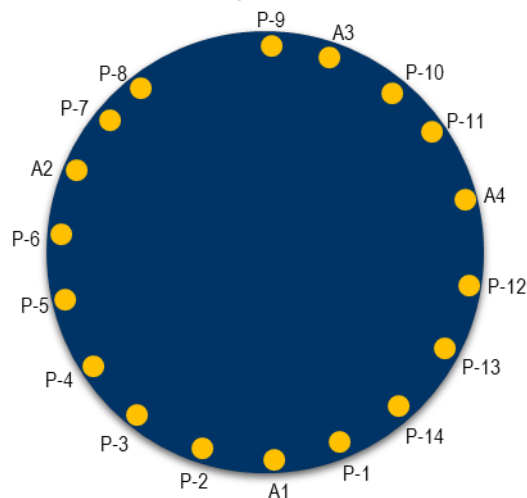
Tank 50

Placed into Service

1983

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 18

Inspection Capability: 100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: All 18 annulus inspection ports in February and August 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1982, 2004, and 2012

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2012-00749]

Conclusions following 2017 Inspections: No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 50.

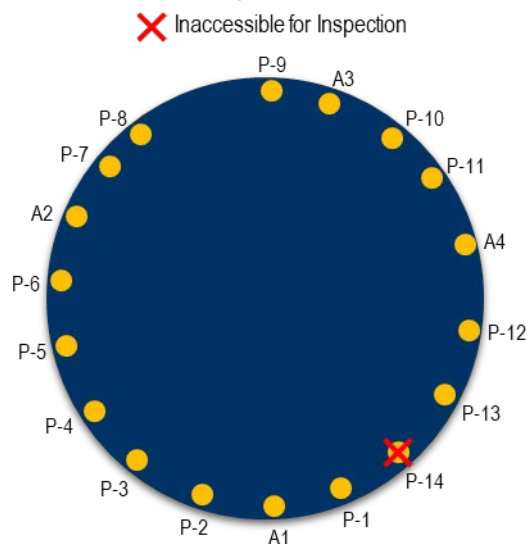
Tank 51

Placed into Service

1986

- Type IIIA Tank
- H Tank Farm

Annulus Inspection Locations



Annulus Inspection Ports Available: 17

Inspection Capability: ~100%

| Number of Known Leak Sites | Date of Discovery | Waste on Annulus Floor | Location | Elevation from Tank Bottom |
|----------------------------|-------------------|------------------------|----------|----------------------------|
| No known leak sites | n/a | n/a | n/a | n/a |

Last Visual Inspections: Seventeen of the 18 annulus inspection ports in April, August, and November 2017.

Summary of Visual Inspections: No areas of concern since last evaluated in 2016.

Ultrasonic Testing Inspections Performed: 1982, 2004, and 2012

Ultrasonic Testing Inspections Results: No reportable thinning, pitting or stress corrosion cracking, or evidence of service-induced tank wall thinning on the primary tank wall. [SRNL-STI-2012-00749]

Conclusions following 2017 Inspections: **No leakage, significant surface corrosion, or other anomalies were noted. The 2017 inspection confirmed the structural integrity and waste confinement capability of Tank 51.**

6 Conclusion

The conditions of the 43 tanks remained essentially unchanged from the conditions reported in 2016. The one key exception was the identification of two new cracks in the Tank 15 primary tank wall. These newly identified cracks were located at 30 inches and 160 inches above the tank bottom. The 2017 inspection program confirmed the structural integrity and waste confinement capability of all 43 waste tanks currently in services for waste storage at SRS.

7 References

DPSPU-85-11-4, Jenkins, C.F., and Bird, P.S., *Dye Penetrant Inspections of Internal Walls, Waste Tanks 17, 20, 23, March-July 1984*, Revision 0, DuPont Savannah River Plant, Aiken, SC, September 1985.

N-ESR-G-00001, Williams, F.L., *High Level Waste Emergency Response Data and Waste Tank Data*, Revision 848, Savannah River Remediation, Aiken, SC, July 2018.

SRNL-STI-2009-00559, Elder, J.B., *Tank Inspection NDE Results for Fiscal Year 2009, Waste Tank 29*, Revision 0, Savannah River National Laboratory, Aiken, SC, October 2009.

SRNL-STI-2010-00553, Elder, J.B., *Tank Inspection NDE Results for Fiscal Year 2010, Waste Tanks 30, 31 and 32*, Revision 0, Savannah River National Laboratory, Aiken, SC, September 2010.

SRNL-STI-2011-00495, Elder, J.B., *Tank Inspection NDE Results for Fiscal Year 2011, Waste Tanks 25, 26, 34 and 41*, Revision 0, Savannah River National Laboratory, Aiken, SC, September 2011.

SRNL-STI-2012-00749, Elder, J.B. and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2012, Waste Tanks 48, 49, 50 and 51*, Revision 0, Savannah River National Laboratory, Aiken, SC, January 2013.

SRNL-STI-2013-00557, Elder, J.B. III and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2013, Waste Tanks 44, 45, 46 and 47*, Revision 0, Savannah River National Laboratory, Aiken, SC, September 2013.

SRNL-STI-2014-00328, Elder, J.B. III and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2014, Waste Tanks 26, 27, 28 and 33*, Revision 0, Savannah River National Laboratory, Aiken, SC, August 2014.

SRNL-STI-2015-00421, Elder, J.B. III, and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2015, Waste Tanks 42, 43, and 15*, Revision 0, Savannah River National Laboratory, Aiken, SC, September 2015.

SRNL-STI-2016-00454, Elder, J.B. III, and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2016, Waste Tanks 39, 40, and 41*, Revision 0, Savannah River National Laboratory, Aiken, SC, September 2016.

SRNL-STI-2017-00539, Elder, J.B. III, and Vande Kamp, R.W., *Tank Inspection NDE Results for Fiscal Year 2017, Waste Tanks 35, 36, 37, and 38*, Revision 0, Savannah River National Laboratory, Aiken, SC, November 2017.

SRNS-STI-2008-00028, Wiersma, B.J., and Elder, J.B., *A Structural Impact Assessment of Flaws Detected During Ultrasonic Examination of Tank 15*, Revision 0, Savannah River National Laboratory, Aiken, SC, August 2008.

SRR-ESH-2018-00007, *CY2017 Annual Report Status of F/H Area Radioactive Liquid Waste Tanks Being Removed from Service*, Revision 0, Savannah River Remediation, Aiken, SC, March 2018.

SRS-REG-2007-00002, *Performance Assessment for F-Tank Farm at the Savannah River Site*, Revision 1, Savannah River Remediation, Aiken, SC, March 2010.

T-DS-G-00022, *Structural Integrity (S.I.) Data Sheet*, Revision 4, September 2016.

T-DS-G-00026, *Structural Integrity (S.I.) Data Sheet*, Revision 3, September 2016.

T-DS-G-00027, *Structural Integrity (S.I.) Data Sheet*, Revision 3, September 2016.

T-DS-G-00028, *Structural Integrity (S.I.) Data Sheet*, Revision 5, August 2016.

T-DS-G-00056, *Structural Integrity (S.I.) Data Sheet*, Revision 2, August 2016.

T-DS-G-00057, *Structural Integrity (S.I.) Data Sheet*, Revision 2, September 2016.

W145367, *Savannah River Plant 200 Area Waste Storage Tanks 241-F and H Steel Pan Plate Details Steel*, Revision 1, July 1954.

W162688, *Waste Storage Tanks Pan for 85'-0" Diam Tank – Plate Details*, Revision 14, August 1955.

W236993, *Savannah River Plant 200 Area Bldg 241H High Level Waste Storage Facilities Cooling Slots, Plans & Details Steel*, Revision 8, April 2015.

W702700, *Additional Waste Storage Tanks Cooling Slots Plan & Details*, Revision 7, September 1977.

WSRC-TR-2002-00590, Wiersma, B.J., *A Structural Impact Assessment of Flaws Detected During Ultrasonic Examination of Tank 15*, Revision 0, Westinghouse Savannah River Company, Aiken, SC, March 2003.

Appendix A – Summary of 2017 Inspection

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| F | 01 | East (A) | 11/01/17 | DP / P17283:01-21 | Remote visual tank wall inspection revealed no changes since last evaluated on 8/23/16. |
| F | 01 | North (A) | 11/01/17 | DP / P17281:01-23 | Remote visual tank wall inspection revealed no changes since last evaluated on 8/23/16. |
| F | 01 | North (A) | 11/01/17 | DP / P17282:01-20 | Remote visual inspection of the secondary vessel wall revealed no changes since last evaluated on 10/24/13. |
| F | 01 | West (A) | 11/01/17 | DP / P17280:01-18 | Remote visual tank wall inspection revealed no changes since last evaluated on 8/23/16. |
| F | 02 | East (A) | 09/02/17 | DP / P17196:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 5/28/16. |
| F | 02 | East (A) | 09/02/17 | DP / P17197:01-20 | Remote visual inspection of the secondary vessel wall revealed no changes since last evaluated on 6/26/14. |
| F | 02 | North (A) | 10/07/17 | WAP / P17236:01 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/26/16. |
| F | 02 | South (A) | 10/07/17 | WAP / P17236:02 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 5/28/16. |
| F | 02 | West (A) | 10/07/17 | WAP / P17236:03 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 5/28/16. |
| F | 03 | East (A) | 09/02/17 | DP / P17202:01-23 | Remote visual tank wall inspection revealed no areas of concerns since last evaluated on 6/26/16. |
| F | 03 | North (A) | 09/02/17 | DP / P17200:01-20 | Remote visual tank wall inspection revealed no areas of concerns since last evaluated on 6/1/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| F | 03 | North (A) | 09/02/17 | DP | / P17201:01-21 | Remote visual secondary vessel wall inspection revealed no areas of concerns since last evaluated on 9/28/13. |
| F | 03 | South (A) | 09/02/17 | DP | / P17198:01-20 | Remote visual tank wall inspection revealed no areas of concerns since last evaluated on 6/26/16. |
| F | 03 | West (A) | 09/02/17 | DP | / P17199:01-20 | Remote visual tank wall inspection revealed no areas of concerns since last evaluated on 6/26/16. |
| F | 04 | East (A) | 09/04/17 | DP | / P17203:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/24/16. |
| F | 04 | North (A) | 09/04/17 | CCTV | / V170594 | Remote visual tank wall inspection revealed no changes since last evaluated on 6/30/16. |
| F | 04 | South (A) | 09/04/17 | DP | / P17204:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/24/16. |
| F | 04 | West (A) | 09/04/17 | DP | / P17205:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/24/16. |
| F | 07 | VB-01 | 09/01/17 | CCTV | / V170590 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | 07 | VB-02 | 09/01/17 | CCTV | / V170590 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | 07 | VB-03 | 09/01/17 | CCTV | / V170590 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | 07 | VB-04 | 09/01/17 | CCTV | / V170590 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | 07 | VB-05 | 09/01/17 | CCTV | / V170590 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| F | 07 | North (A) | 09/03/17 | DP | / P17209:01-21 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/29/16. |
| F | 07 | South (A) | 09/03/17 | DP | / P17207:01-20 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 8/26/12. |
| F | 07 | South (A) | 10/07/17 | WAP | / P17237:01 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/29/16. |
| F | 07 | West (A) | 09/03/17 | DP | / P17208:01-20 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/29/16. |
| F | 08 | LDB-17 | 08/18/17 | CCTV | / V170558 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9 |
| F | 08 | East (A) | 09/04/17 | DP | / P17206:01-20 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/12/16. |
| F | 08 | North (A) | 10/07/17 | WAP | / P17238:01 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/12/16. |
| F | 08 | South (A) | 10/07/17 | WAP | / P17238:03 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/12/16. |
| F | 08 | South (A) | 11/15/17 | DP | / P17296:01-25 | Remote visual inspection of the secondary tank wall revealed no areas of concern since last evaluated on 10/25/13. |
| F | 08 | West (A) | 10/07/17 | WAP | / P17238:02 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 6/12/16. |
| H | 09 | South (A) | 10/03/17 | DP | / P17234:01-21 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 09 | West (A) | 10/03/17 | WAP / P17233:01 | Remote visual tank wall inspection revealed no changes since last evaluated on 9/13/15. |
| H | 10 | East (A) | 10/01/17 | DP / P17243:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 9/9/16. |
| H | 10 | North (A) | 10/01/17 | DP / P17241:01-22 | Remote visual tank wall inspection revealed no changes since last inspected on 9/11/16. |
| H | 10 | North (A) | 10/01/17 | DP / P17242:01-22 | Remote visual inspection of the secondary vessel wall revealed no changes since last evaluated on 10/27/13. |
| H | 10 | West (A) | 09/24/17 | WAP / P17239:01 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 9/9/16. |
| H | 11 | East (A) | 09/24/17 | WAP / P17240:02 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 9/8/16. |
| H | 11 | North (A) | 09/24/17 | WAP / P17240:01 | Remote visual tank wall inspection revealed no areas of concern since last inspected on 9/8/16. |
| H | 11 | South (A) | 09/16/17 | DP / P17246:01-21 | Remote visual tank wall inspection revealed no changes since last inspected on 9/7/16. |
| H | 11 | West (A) | 09/16/17 | DP / P17244:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 9/7/16. |
| H | 11 | West (A) | 09/16/17 | DP / P17245:01-20 | Remote visual inspection of the secondary vessel wall revealed no changes since last evaluated on 1/22/13. |
| H | 11 | 06 (I) | 09/04/17 | CCTV / V170593 | Inspection of the transfer isolation valves 624, 625 and piping was satisfactory per T-DS-G-00003 and SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| H | 13 | 010 (A) | 10/11/17 | DP | / P17267:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/4/16. |
| H | 13 | 032 (A) | 10/10/17 | WAP | / P17258:03 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 13 | 071 (A) | 10/11/17 | DP | / P17268:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/9/16. |
| H | 13 | 107 (A) | 10/10/17 | WAP | / P17258:04 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 13 | 151 (A) | 10/11/17 | DP | / P17269:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/7/16. |
| H | 13 | 151 (A) | 10/11/17 | DP | / P17270:01-20 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 10/9/12. |
| H | 13 | 175 (A) | 10/12/17 | DP | / P17266:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/9/16. |
| H | 13 | 207 (A) | 10/10/17 | WAP | / P17258:05 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 13 | 228 (A) | 10/10/17 | WAP | / P17258:06 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 13 | East (A) | 10/12/17 | DP | / P17265:01-22 | Remote visual tank wall inspection revealed no changes since last inspected on 8/6/16. |
| H | 13 | North (A) | 10/10/17 | WAP | / P17258:02 | Remote visual tank wall inspection revealed no changes since last inspected on 8/9/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 13 | South (A) | 10/10/17 | WAP / P17258:01 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 13 | West (A) | 10/11/17 | DP / P17271:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/8/16. |
| H | 14 | 013 (A) | 10/14/17 | WAP / P17276:01 | Remote visual tank wall inspection revealed no changes since last inspected on 8/13/16. |
| H | 14 | 032 (A) | 10/14/17 | WAP / P17276:02 | Remote visual tank wall inspection revealed no changes since last inspected on 8/11/16. |
| H | 14 | 065 (A) | 10/14/17 | WAP / P17276:03 | Remote visual tank wall inspection revealed no changes since last inspected on 8/15/16. |
| H | 14 | 108 (A) | 10/14/17 | WAP / P17276:04 | Remote visual tank wall inspection revealed no changes since last inspected on 8/15/16. |
| H | 14 | 118 (A) | 10/22/17 | DP / P17272:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/11/16. |
| H | 14 | 125 (A) | 10/14/17 | WAP / P17276:05 | Remote visual tank wall inspection revealed no changes since last inspected on 8/15/16. |
| H | 14 | 151 (A) | 10/22/17 | DP / P17273:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/11/16. |
| H | 14 | 169 (A) | 10/22/17 | DP / P17274:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 8/11/16. |
| H | 14 | 207 (A) | 10/14/17 | WAP / P17276:06 | Remote visual tank wall inspection revealed no changes since last inspected on 8/15/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 14 | 235 (A) | 10/24/17 | DP / P17278:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 811/16. |
| H | 14 | 259 (A) | 10/24/17 | DP / P17279:01-21 | Remote visual tank wall inspection revealed no changes since last inspected on 811/16. |
| H | 14 | East (A) | 10/24/17 | DP / P17277:01-20 | Remote visual tank wall inspection revealed no changes since last inspected on 813/16. |
| H | 14 | North (A) | 10/22/17 | DP / P17275:01-22 | Remote visual tank wall inspection revealed no changes since last inspected on 813/16. |
| H | 15 | 010 (A) | 09/30/17 | WAP / P17226:01 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 010 (A) | 10/10/17 | DP / P17260:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 032 (A) | 09/30/17 | WAP / P17226:02 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 032 (A) | 10/06/17 | DP / P17261:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 055 (A) | 09/30/17 | WAP / P17226:03 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 055 (A) | 10/06/17 | DP / P17262:01-17 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 071 (A) | 09/30/17 | WAP / P17226:04 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 15 | 071 (A) | 10/06/17 | DP | / P17263:01-18 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | 107 (A) | 10/01/17 | DP | / P17228:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. A previously unidentified crack was identified on the bottom girth weld 30 inches above the tank bottom. |
| H | 15 | 107 (A) | 10/05/17 | WAP | / P17235:03 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. |
| H | 15 | 171 (A) | 10/01/17 | DP | / P17229:01-21 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. |
| H | 15 | 171 (A) | 10/05/17 | WAP | / P17235:04 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/13/16. |
| H | 15 | 182 (A) | 10/02/17 | DP | / P17232:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/13/16. |
| H | 15 | 182 (A) | 10/05/17 | WAP | / P17235:05 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/13/16. |
| H | 15 | 207 (A) | 10/01/17 | DP | / P17230:01-22 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. |
| H | 15 | East (A) | 09/30/17 | WAP | / P17226:05 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/2/16. |
| H | 15 | North (A) | 10/01/17 | WAP | / P17227:02 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | North (A) | 10/10/17 | DP | / P17259:01-21 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 15 | South (A) | 10/01/17 | DP / P17231:01-20 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/02/16. |
| H | 15 | South (A) | 10/05/17 | WAP / P17235:01-02 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/12/16. |
| H | 15 | West (A) | 10/01/17 | WAP / P17227:01 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15 | West (A) | 10/06/17 | DP / P17264:01-23 | Remote visual tank wall inspection revealed no changes since last evaluated on 7/10/16. |
| H | 15/16 | VB | 02/14/17 | CCTV / V170087 | Inspection of the valve box, valves and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 21 | VB | 03/27/17 | CCTV / V170180 | Inspection of the cover, stainless steel liner, conductivity probe, floor and valves was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 21 | NE (I) | 09/03/17 | CCTV / V170591 | Remote visual inspection of the tank wall and concrete dome revealed no areas of concern since last evaluated on 12/11/16. The HLLCP was properly positioned. |
| H | 22 | VB | 08/27/17 | CCTV / V170577 | Inspection of the stainless steel liner, jumpers, valves, cover and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 22 | NW (I) | 09/14/17 | CCTV / V170610 | Remote visual inspection of the tank wall and concrete dome revealed no areas of concern since last evaluated on 04/27/16. |
| H | 23 | SW (I) | 12/17/17 | CCTV / V170814 | Remote visual inspection of the tank wall and concrete dome revealed no areas of concern since last evaluated on 6/22/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 24 | NW (I) | 09/15/17 | CCTV / V170614 | Remote visual inspection of the tank wall and concrete dome revealed no areas of concern since last evaluated on 12/31/16. The HLLCP was properly positioned. |
| H | 24 | SE (I) | 09/15/17 | CCTV / V170614 | Remote visual inspection of the tank wall and concrete dome revealed no areas of concern since last evaluated on 12/31/16. The HLLCP was properly positioned. |
| F | 25 | A-01 (A) | 02/20/17 | WAP / P17015:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/15. |
| F | 25 | A-02 (A) | 02/20/17 | WAP / P17015:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/15. |
| F | 25 | A-03 (A) | 02/20/17 | WAP / P17015:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/15. |
| F | 25 | A-04 (A) | 02/20/17 | WAP / P17015:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/15. |
| F | 25 | P-01 (A) | 03/21/17 | DP / P17031:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-02 (A) | 03/21/17 | DP / P17032:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-02 (A) | 03/21/17 | DP / P17033:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 4/2/13. |
| F | 25 | P-03 (A) | 02/20/17 | WAP / P17015:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 25 | P-04 (A) | 02/20/17 | WAP / P17015:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-05 (A) | 02/20/17 | WAP / P17015:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-06 (A) | 02/20/17 | WAP / P17015:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-07 (A) | 03/24/17 | DP / P17027:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-08 (A) | 03/24/17 | DP / P17028:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-09 (A) | 03/24/17 | DP / P17029:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-09 (A) | 03/24/17 | DP / P17030:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/6/13. |
| F | 25 | P-10 (A) | 02/20/17 | WAP / P17015:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-11 (A) | 02/20/17 | WAP / P17015:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-12 (A) | 02/20/17 | WAP / P17015:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 25 | P-13 (A) | 02/20/17 | WAP / P17015:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 25 | P-14 (A) | 02/20/17 | WAP / P17015:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/25/16. |
| F | 26 | A-01 (A) | 03/02/17 | WAP / P17018:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | A-02 (A) | 03/02/17 | WAP / P17018:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | A-03 (A) | 03/02/17 | WAP / P17018:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | A-04 (A) | 03/02/17 | WAP / P17018:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-01 (A) | 03/02/17 | WAP / P17018:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 26 | P-02 (A) | 03/02/17 | WAP / P17018:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 26 | P-03 (A) | 03/25/17 | DP / P17034:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-04 (A) | 03/25/17 | DP / P17035:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-05 (A) | 03/02/17 | WAP / P17018:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-06 (A) | 03/02/17 | WAP / P17018:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 26 | P-07 (A) | 03/02/17 | WAP / P17018:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 26 | P-08 (A) | 03/02/17 | WAP / P17018:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 26 | P-09 (A) | 03/02/17 | WAP / P17018:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 26 | P-10 (A) | 03/25/17 | DP / P17036:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-11 (A) | 03/25/17 | DP / P17037:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-12 (A) | 03/25/17 | DP / P17038:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-12 (A) | 03/25/17 | DP / P17039:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/6/13. |
| F | 26 | P-13 (A) | 03/02/17 | WAP / P17018:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 26 | P-14 (A) | 03/02/17 | WAP / P17018:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 27 | A-01 (A) | 03/02/17 | WAP / P17019:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 27 | A-02 (A) | 03/02/17 | WAP / P17019:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 27 | A-03 (A) | 03/02/17 | WAP / P17019:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 27 | A-04 (A) | 03/02/17 | WAP / P17019:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 27 | P-01 (A) | 03/02/17 | WAP / P17019:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 27 | P-02 (A) | 03/02/17 | WAP / P17019:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-02 (A) | 04/08/17 | DP / P17040:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-03 (A) | 11/11/17 | WAP / P17297:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-04 (A) | 03/02/17 | WAP / P17019:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-05 (A) | 11/11/17 | WAP / P17297:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-06 (A) | 11/11/17 | WAP / P17297:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-07 (A) | 03/02/17 | WAP / P17019:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-08 (A) | 04/08/17 | DP / P17041:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD</u> <u>IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--|
| F | 27 | P-09 (A) | 03/02/17 | WAP / P17019:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-09 (A) | 04/08/17 | DP / P17042:01-24 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-09 (A) | 04/08/17 | DP / P17284:01-26 | Remote visual inspection of the secondary tank wall revealed no areas of concern since last evaluated on 5/7/13. |
| F | 27 | P-10 (A) | 03/02/17 | WAP / P17019:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-11 (A) | 03/02/17 | WAP / P17019:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-12 (A) | 03/02/17 | WAP / P17019:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-12 (A) | 04/08/17 05/14/17 | DP / P17043:01-20 P17067:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-12 (A) | 04/08/17 05/14/17 | DP / P17044:01-25 | Remote visual inspection of the secondary tank wall revealed no areas of concern since last evaluated on 5/7/13. |
| F | 27 | P-13 (A) | 03/02/17 | WAP / P17019:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 27 | P-14 (A) | 03/02/17 | WAP / P17019:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 28 | VB-01 | 02/17/17 | CCTV / V170095 | Inspection was satisfactory per SW11.6-SVP-4.5, Section 7.9. |

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|-------------|------------------------------|------------------------------------|-------------|--|---|
| F | 28 | VB-03 | 12/13/17 | CCTV / V170803 | Inspection of the stainless steel liner, cover, jumpers, valves and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | 28 | A-01 (A) | 03/11/17 | WAP / P17024:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | A-02 (A) | 03/11/17 | WAP / P17024:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | A-03 (A) | 03/11/17 | WAP / P17024:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | A-04 (A) | 03/11/17 | WAP / P17024:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-01 (A) | 03/11/17 | WAP / P17024:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 28 | P-02 (A) | 03/11/17 | WAP / P17024:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-03 (A) | 04/16/17 | DP / P17045:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-04 (A) | 03/11/17 | WAP / P17024:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 28 | P-05 (A) | 04/16/17 | DP / P17046:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-06 (A) | 05/14/17 | DP / P17069:01-25 | Remote inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/1/13. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD</u> <u>IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--|
| F | 28 | P-06 (A) | 05/14/17 06/14/17 | DP / P17068:01-15 P17089:01-10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-07 (A) | 03/11/17 | WAP / P17024:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 28 | P-08 (A) | 05/14/17 | DP / P17070:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-09 (A) | 03/11/17 | WAP / P17024:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-10 (A) | 03/11/17 | WAP / P17024:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-11 (A) | 03/11/17 | WAP / P17024:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 28 | P-12 (A) | 03/11/17 | WAP / P17024:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/14/16. |
| F | 28 | P-13 (A) | 03/11/17 | WAP / P17024:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| F | 28 | P-14 (A) | 03/11/17 | WAP / P17024:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/24/16. |
| H | 29 | COP 101 | 06/12/17 | DSP / P17102:01-09 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 29 | A-01 (A) | 03/04/17 | WAP / P17020:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 29 | A-02 (A) | 03/04/17 | WAP / P17020:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | A-03 (A) | 02/22/17 | WAP / P17017:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | A-04 (A) | 02/22/17 | WAP / P17017:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-01 (A) | 02/22/17 | WAP / P17017:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/30/16. |
| H | 29 | P-02 (A) | 05/13/17 | DP / P17060:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/30/16. |
| H | 29 | P-03 (A) | 02/22/17 | WAP / P17017:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-04 (A) | 02/22/17 | WAP / P17017:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/11/16. |
| H | 29 | P-05 (A) | 03/04/17 | WAP / P17020:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/30/16. |
| H | 29 | P-06 (A) | 02/22/17 | WAP / P17017:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-07 (A) | 02/22/17 | WAP / P17017:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/30/16. |
| H | 29 | P-07 (A) | 07/20/17 | CCTV / V170476 | Inspection verified the condition of the exterior of the sump transfer line from HDB-04 was satisfactory per T-DS-G-00019. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|---|
| H | 29 | P-08 (A) | 05/13/17 | DP | / P17061:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-08 (A) | 05/13/17 08/19/17 | DP | / P17062:01-20 P17161:01-05 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/22/13. |
| H | 29 | P-09 (A) | 02/22/17 | WAP | / P17017:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-10 (A) | 02/22/17 | WAP | / P17017:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-11 (A) | 02/22/17 | WAP | / P17017:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-11 (A) | 05/13/17 | DP | / P17063:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-11 (A) | 05/13/17 | DP | / P17064:01-26 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/22/13. |
| H | 29 | P-12 (A) | 02/22/17 | WAP | / P17017:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-12 (A) | 05/13/17 | DP | / P17065:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/22/17. |
| H | 29 | P-13 (A) | 02/22/17 | WAP | / P17017:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |
| H | 29 | P-14 (A) | 05/13/17 | DP | / P17066:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/28/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 29/30 | COP 104 | 06/12/17 | DSP | / P17104:01-09 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 29/30 | COP 105 | 06/12/17 | DSP | / P17105:01-11 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 29/32 | COP 112 | 06/12/17 | DSP | / P17106:01-06 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 30 | A-01 (A) | 05/07/17 | WAP | / P17056:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | A-02 (A) | 05/07/17 | WAP | / P17056:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | A-03 (A) | 05/07/17 | WAP | / P17056:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | A-04 (A) | 05/07/17 | WAP | / P17056:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-01 (A) | 05/07/17 | WAP | / P17056:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/21/16. |
| H | 30 | P-02 (A) | 08/25/17 | DP | / P17184:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-03 (A) | 05/07/17 | WAP | / P17056:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-04 (A) | 05/07/17 | WAP | / P17056:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/21/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
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| H | 30 | P-05 (A) | 08/25/17 | DP | / P17185:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-06 (A) | 05/07/17 | WAP | / P17056:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-07 (A) | 05/07/17 | WAP | / P17056:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/21/16. |
| H | 30 | P-08 (A) | 08/25/17 | DP | / P17186:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-08 (A) | 08/25/17 | DP | / P17187:01-26 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/8/13. |
| H | 30 | P-09 (A) | 05/07/17 | WAP | / P17056:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-10 (A) | 05/07/17 | WAP | / P17056:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-11 (A) | 05/07/17 | WAP | / P17056:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/21/16. |
| H | 30 | P-12 (A) | 05/07/17 | WAP | / P17056:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/21/16. |
| H | 30 | P-13 (A) | 05/07/17 | WAP | / P17056:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |
| H | 30 | P-14 (A) | 08/25/17 | DP | / P17188:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |

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|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 31 | COP 102 | 06/12/17 | DSP | / P17103:01-05 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 31 | A-01 (A) | 04/30/17 | WAP | / P17050:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | A-02 (A) | 04/30/17 | WAP | / P17050:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | A-03 (A) | 04/30/17 | WAP | / P17050:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | A-04 (A) | 04/30/17 | WAP | / P17050:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-01 (A) | 04/30/17 | WAP | / P17050:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-02 (A) | 07/22/17 | DP | / P17121:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-03 (A) | 04/30/17 | WAP | / P17050:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/15. |
| H | 31 | P-04 (A) | 04/30/17 | WAP | / P17050:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/27/16. |
| H | 31 | P-05 (A) | 04/30/17 | WAP | / P17050:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-06 (A) | 04/30/17 | WAP | / P17050:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 31 | P-07 (A) | 04/30/17 | WAP / P17050:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-08 (A) | 07/22/17 | DP / P17122:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-08 (A) | 07/22/17 | DP / P17123:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/2/13. |
| H | 31 | P-09 (A) | 04/30/17 | WAP / P17050:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-10 (A) | 04/30/17 | WAP / P17050:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-11 (A) | 04/30/17 | WAP / P17050:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/15. |
| H | 31 | P-12 (A) | 07/22/17 | DP / P17124:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-13 (A) | 04/30/17 | WAP / P17050:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 31 | P-14 (A) | 07/22/17 | DP / P17125:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/11/16. |
| H | 32 | COP 109 | 06/12/17 | DSP / P17112:01-10 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 32 | COP 110 | 06/12/17 | DSP / P17111:01-10 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 32 | COP 111 | 06/12/17 | DSP | / P17110:01-10 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 32 | A-01 (A) | 04/30/17 | WAP | / P17051:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | A-02 (A) | 04/30/17 | WAP | / P17051:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | A-03 (A) | 04/30/17 | WAP | / P17051:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | A-04 (A) | 04/30/17 | WAP | / P17051:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-01 (A) | 04/30/17 | WAP | / P17051:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 32 | P-02 (A) | 04/30/17 | WAP | / P17051:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 32 | P-03 (A) | 04/30/17 | WAP | / P17051:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-04 (A) | 04/30/17 | WAP | / P17051:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 32 | P-05 (A) | 07/30/17 | DP | / P17133:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-06 (A) | 04/30/17 | WAP | / P17051:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 32 | P-07 (A) | 04/30/17 | WAP / P17051:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 32 | P-08 (A) | 07/30/17 | DP / P17134:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-09 (A) | 04/30/17 | WAP / P17051:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-10 (A) | 04/30/17 | WAP / P17051:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-11 (A) | 04/30/17 | WAP / P17051:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 32 | P-12 (A) | 07/30/17 | DP / P17135:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-12 (A) | 07/30/17 | DP / P17136:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/23/13. |
| H | 32 | P-13 (A) | 04/30/17 | WAP / P17051:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-14 (A) | 07/30/17 | DP / P17137:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 32 | P-15 (A) | 07/30/17 | DP / P17138:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| F | 33 | A-01 (A) | 03/20/17 | WAP / P17025:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 33 | A-02 (A) | 03/20/17 | WAP / P17025:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | A-03 (A) | 03/20/17 | WAP / P17025:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | A-04 (A) | 03/20/17 | WAP / P17025:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-01 (A) | 03/20/17 | WAP / P17025:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 33 | P-02 (A) | 07/20/17 | DP / P17285:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-03 (A) | 03/20/17 | WAP / P17025:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-04 (A) | 03/20/17 | WAP / P17025:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 33 | P-05 (A) | 07/20/17 | DP / P17286:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-06 (A) | 03/20/17 | WAP / P17025:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-07 (A) | 03/20/17 | WAP / P17025:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 33 | P-08 (A) | 07/20/17 | DP / P17287:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| F | 33 | P-08 (A) | 07/20/17 | DP | / P17288:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/26/13. |
| F | 33 | P-09 (A) | 03/20/17 | WAP | / P17025:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-10 (A) | 03/20/17 | WAP | / P17025:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-11 (A) | 03/20/17 | WAP | / P17025:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 33 | P-12 (A) | 07/20/17 | DP | / P17289:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-12 (A) | 07/20/17 | DP | / P17290:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/26/13. |
| F | 33 | P-13 (A) | 03/20/17 | WAP | / P17025:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-14 (A) | 07/20/17 | DP | / P17291:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-15 (A) | 07/20/17 | DP | / P17292:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 33 | P-16 (A) | 03/20/17 | WAP | / P17025:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 34 | A-01 (A) | 03/20/17 | WAP | / P17026:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| F | 34 | A-02 (A) | 03/20/17 | WAP / P17026:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | A-03 (A) | 03/20/17 | WAP / P17026:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | A-04 (A) | 03/20/17 | WAP / P17026:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-01 (A) | 03/20/17 | WAP / P17026:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 34 | P-02 (A) | 07/30/17 | DP / P17139:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-03 (A) | 03/20/17 | WAP / P17026:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-04 (A) | 03/20/17 | WAP / P17026:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 34 | P-05 (A) | 07/30/17 | DP / P17140:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-06 (A) | 03/20/17 | WAP / P17026:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-07 (A) | 03/20/17 | WAP / P17026:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 34 | P-08 (A) | 07/30/17 | DP / P17141:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |

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| F | 34 | P-08 (A) | 07/30/17 | DP | / P17142:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/15/13. |
| F | 34 | P-09 (A) | 03/20/17 | WAP | / P17026:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-10 (A) | 03/20/17 | WAP | / P17026:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-11 (A) | 03/20/17 | WAP | / P17026:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| F | 34 | P-12 (A) | 07/30/17 | DP | / P17143:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-12 (A) | 07/30/17 | DP | / P17144:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/15/13. |
| F | 34 | P-13 (A) | 03/20/17 | WAP | / P17026:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-14 (A) | 07/30/17 | DP | / P17145:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-15 (A) | 07/30/17 | DP | / P17146:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/22/16. |
| F | 34 | P-16 (A) | 03/20/17 | WAP | / P17026:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/15/16. |
| H | 35 | A-01 (A) | 03/06/17 | WAP | / P17023:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/4/16. |

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| H | 35 | A-01 (A) | 07/20/17 | CCTV / V170476 | Inspection verified the condition of the exterior of the sump transfer line from HDB-06 was satisfactory per T-DS-G-00019. |
| H | 35 | A-02 (A) | 03/06/17 | WAP / P17023:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | A-03 (A) | 03/06/17 | WAP / P17023:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | A-04 (A) | 04/29/17 | WAP / P17048:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-01 (A) | 03/06/17 | WAP / P17023:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-02 (A) | 03/06/17 | WAP / P17023:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-03 (A) | 03/06/17 | WAP / P17023:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-04 (A) | 03/06/17 | WAP / P17023:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-05 (A) | 07/23/17 | DP / P17126:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-06 (A) | 03/06/17 | WAP / P17023:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/16/16. |
| H | 35 | P-07 (A) | 07/23/17 | DP / P17127:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |

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| H | 35 | P-07 (A) | 07/23/17 | DP / P17128:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/18/13. |
| H | 35 | P-08 (A) | 03/06/17 | WAP / P17023:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-09 (A) | 07/23/17 | DP / P17129:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-10 (A) | 03/06/17 | WAP / P17023:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/16/16. |
| H | 35 | P-11 (A) | 07/23/17 08/19/17 | DP / P17130:01-20 P17162:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-11 (A) | 07/23/17 | DP / P17131:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/18/13. |
| H | 35 | P-12 (A) | 03/06/17 | WAP / P17023:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/16/16. |
| H | 35 | P-13 (A) | 07/23/17 | DP / P17132:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/12/16. |
| H | 35 | P-14 (A) | 04/29/17 | WAP / P17048:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/16/16. |
| H | 36 | A-01 (A) | 04/29/17 | WAP / P17049:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/23/16. |
| H | 36 | A-02 (A) | 04/29/17 | WAP / P17049:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |

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|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 36 | A-03 (A) | 04/29/17 | WAP / P17049:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | A-04 (A) | 04/29/17 | WAP / P17049:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-01 (A) | 04/29/17 | WAP / P17049:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-02 (A) | 04/29/17 | WAP / P17049:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-03 (A) | 04/29/17 | WAP / P17049:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-04 (A) | 04/29/17 | WAP / P17049:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-05 (A) | 07/09/17 | DP / P17114:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-06 (A) | 04/29/17 | WAP / P17049:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/17/16. |
| H | 36 | P-07 (A) | 07/09/17 | DP / P17116:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-07 (A) | 07/09/17 | DP / P17117:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/20/13. |
| H | 36 | P-08 (A) | 04/29/17 | WAP / P17049:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/17/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| H | 36 | P-09 (A) | 07/09/17 | DP | / P17115:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-10 (A) | 04/29/17 | WAP | / P17049:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/17/16. |
| H | 36 | P-11 (A) | 07/09/17 | DP | / P17118:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-11 (A) | 07/09/17 | DP | / P17119:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/21/13. |
| H | 36 | P-12 (A) | 04/29/17 | WAP | / P17049:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/26/16. |
| H | 36 | P-13 (A) | 07/09/17 | DP | / P17120:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 36 | P-14 (A) | 04/29/17 | WAP | / P17049:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/26/16. |
| H | 37 | COP 106 | 06/12/17 | DSP | / P17107:01-07 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 37 | COP 107 | 06/12/17 | DSP | / P17108:01-09 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 37 | COP 108 | 06/12/17 | DSP | / P17109:01-08 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 37 | A-01 (A) | 05/06/17 | WAP | / P17055:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|--------------|--|
| H | 37 | A-02 (A) | 05/06/17 | WAP | / | P17055:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | A-03 (A) | 05/06/17 | WAP | / | P17055:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | A-04 (A) | 05/06/17 | WAP | / | P17055:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-01 (A) | 05/06/17 | WAP | / | P17055:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-02 (A) | 05/06/17 | WAP | / | P17055:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-03 (A) | 05/06/17 | WAP | / | P17055:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-04 (A) | 05/06/17 | WAP | / | P17055:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-05 (A) | 05/06/17 | WAP | / | P17055:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-05 (A) | 08/27/17 | DP | / | P17189:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-06 (A) | 05/06/17 | WAP | / | P17055:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/6/16. |
| H | 37 | P-07 (A) | 05/06/17 | WAP | / | P17055:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| H | 37 | P-07 (A) | 08/27/17 | DP | / P17190:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-07 (A) | 08/27/17 | DP | / P17191:01-26 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/21/13. |
| H | 37 | P-08 (A) | 05/06/17 | WAP | / P17055:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/6/16. |
| H | 37 | P-09 (A) | 05/06/17 | WAP | / P17055:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-09 (A) | 08/27/17 | DP | / P17192:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-10 (A) | 05/06/17 | WAP | / P17055:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/6/16. |
| H | 37 | P-11 (A) | 05/06/17 | WAP | / P17055:15 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-11 (A) | 08/27/17 | DP | / P17193:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-11 (A) | 08/27/17 | DP | / P17194:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/21/13. |
| H | 37 | P-12 (A) | 05/06/17 | WAP | / P17055:16 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/6/16. |
| H | 37 | P-13 (A) | 05/06/17 | WAP | / P17055:17 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 37 | P-13 (A) | 08/27/17 | DP | / P17195:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/13/16. |
| H | 37 | P-14 (A) | 05/06/17 | WAP | / P17055:18 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/6/16. |
| H | 38 | COP 103 | 07/31/17 | DSP | / P17113:01-24 | Inspection of the transfer lines within the cleanout port was satisfactory per T-DS-G-00001. |
| H | 38 | A-01 (A) | 05/05/17 | WAP | / P17053:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | A-01 (A) | 07/20/17 | CCTV | / V170476 | Inspection verified the condition of the exterior of the sump transfer line from HDB-07 was satisfactory per T-DS-G-00019. |
| H | 38 | A-02 (A) | 05/05/17 | WAP | / P17053:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | A-03 (A) | 05/05/17 | WAP | / P17053:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | A-04 (A) | 05/05/17 | WAP | / P17053:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-01 (A) | 05/05/17 | WAP | / P17053:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-02 (A) | 05/05/17 | WAP | / P17053:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-03 (A) | 05/05/17 | WAP | / P17053:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|---|------------------------------|--|
| H | 38 | P-04 (A) | 05/05/17 | WAP | / | P17053:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-05 (A) | 05/05/17 | WAP | / | P17053:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 38 | P-06 (A) | 05/05/17 | WAP | / | P17053:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 38 | P-07 (A) | 05/05/17 | WAP | / | P17053:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 38 | P-08 (A) | 05/05/17 | WAP | / | P17053:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 38 | P-09 (A) | 05/05/17 | WAP | / | P17053:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 38 | P-10 (A) | 08/13/17 | DP | / | P17165:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-11 (A) | 08/13/17 09/08/17 | DP | / | P17166:01-10 P17210:01-15 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-12 (A) | 08/13/17 | DP | / | P17167:01-27 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 38 | P-12 (A) | 08/13/17 | DP | / | P17168:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 10/24/13. |
| H | 38 | P-13 (A) | 08/13/17 | DP | / | P17169:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|--|
| H | 38 | P-14 (A) | 08/13/17 09/08/17 | DP | / P17170:01-20 P17211:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/14/16. |
| H | 39 | A-01 (A) | 03/03/17 | WAP | / P17022:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | A-02 (A) | 03/03/17 | WAP | / P17022:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | A-03 (A) | 03/03/17 | WAP | / P17022:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | A-04 (A) | 03/03/17 | WAP | / P17022:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | P-01 (A) | 03/03/17 | WAP | / P17022:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-02 (A) | 03/03/17 | WAP | / P17022:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 39 | P-03 (A) | 03/03/17 | WAP | / P17022:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-04 (A) | 03/03/17 | WAP | / P17022:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | P-05 (A) | 03/03/17 | WAP | / P17022:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-06 (A) | 03/03/17 | WAP | / P17022:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|---|
| H | 39 | P-07 (A) | 03/03/17 | WAP / P17022:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-08 (A) | 03/03/17 | WAP / P17022:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-09 (A) | 03/03/17 | WAP / P17022:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 39 | P-10 (A) | 03/03/17 | WAP / P17022:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/24/16. |
| H | 39 | P-11 (A) | 08/07/17 | DP / P17153:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | P-12 (A) | 08/07/17 | DP / P17154:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | P-12 (A) | 08/07/17 09/29/17 | DP / P17155:01-20 P17256:01-05 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/22/13. |
| H | 39 | P-13 (A) | 08/07/17 | DP / P17156:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 39 | P-14 (A) | 08/07/17 11/05/17 | DP / P17157:01-20 P17294:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/16. |
| H | 40 | VB | 12/16/17 | CCTV / V170813 | Inspection of the jumpers, valves and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 40 | A-01 (A) | 08/29/17 | DP / P17247:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|--|
| H | 40 | A-02 (A) | 08/29/17 | DP | / P17248:01-27 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | A-03 (A) | 08/29/17 | DP | / P17249:01-27 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | A-04 (A) | 08/29/17 | DP | / P17250:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-01 (A) | 05/05/17 | WAP | / P17054:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/22/16. |
| H | 40 | P-02 (A) | 08/29/17 | DP | / P17251:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 40 | P-03 (A) | 05/05/17 | WAP | / P17054:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 40 | P-04 (A) | 05/05/17 | WAP | / P17054:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-05 (A) | 05/05/17 | WAP | / P17054:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-06 (A) | 05/05/17 | WAP | / P17054:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-07 (A) | 05/05/17 | WAP | / P17054:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/24/16. |
| H | 40 | P-08 (A) | 05/05/17 | WAP | / P17054:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 40 | P-09 (A) | 05/05/17 | WAP / P17054:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 8/29/15. |
| H | 40 | P-09 (A) | 08/29/17 | DP / P17252:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 5/5/17. |
| H | 40 | P-09 (A) | 08/29/17 | DP / P17253:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 1/26/12. |
| H | 40 | P-10 (A) | 05/05/17 | WAP / P17054:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-11 (A) | 05/05/17 | WAP / P17054:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-12 (A) | 05/05/17 | WAP / P17054:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-13 (A) | 08/29/17 | DP / P17254:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 40 | P-13 (A) | 08/29/17 | DP / P17255:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/27/13. |
| H | 40 | P-14 (A) | 05/05/17 | WAP / P17054:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/27/16. |
| H | 41 | A-01 (A) | 03/04/17 | WAP / P17021:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/1/16. |
| H | 41 | A-02 (A) | 03/04/17 | WAP / P17021:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 41 | A-03 (A) | 03/04/17 | WAP / P17021:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | A-04 (A) | 03/04/17 | WAP / P17021:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-01 (A) | 03/04/17 | WAP / P17021:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. The annulus jet installed in the F-Riser was satisfactory per T-DS-G-00043. |
| H | 41 | P-02 (A) | 03/04/17 | WAP / P17021:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-03 (A) | 03/04/17 | WAP / P17021:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-04 (A) | 03/04/17 | WAP / P17021:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-10 (A) | 03/04/17 | WAP / P17021:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-10 (A) | 08/21/17 | DP / P17172:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-11 (A) | 03/04/17 | WAP / P17021:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-11 (A) | 08/21/17 | DP / P17173:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-12 (A) | 03/04/17 | WAP / P17021:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| H | 41 | P-12 (A) | 08/21/17 | DP | / P17174:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-13 (A) | 03/04/17 | WAP | / P17021:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-13 (A) | 08/21/17 | DP | / P17175:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-13 (A) | 08/21/17 | DP | / P17176:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/24/13. |
| H | 41 | P-14 (A) | 08/18/17 | WAP | / P17158:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 41 | P-14 (A) | 08/21/17 | DP | / P17177:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/13/16. |
| H | 42 | VB | 02/16/17 | CCTV | / V170094 | Inspection was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 42 | A-01 (A) | 09/01/17 | DP | / P17212:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | A-02 (A) | 09/01/17 | DP | / P17213:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | A-03 (A) | 09/01/17 | DP | / P17214:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | A-04 (A) | 09/01/17 | DP | / P17215:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 42 | P-01 (A) | 05/07/17 | WAP / P17057:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-02 (A) | 05/07/17 | WAP / P17057:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-03 (A) | 05/07/17 | WAP / P17057:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-03 (A) | 05/08/17 | WAP / P17058:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-04 (A) | 05/08/17 | WAP / P17058:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/28/16. |
| H | 42 | P-05 (A) | 05/08/17 | WAP / P17058:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/28/16. |
| H | 42 | P-06 (A) | 05/08/17 | WAP / P17058:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-07 (A) | 05/08/17 | WAP / P17058:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-08 (A) | 05/08/17 | WAP / P17058:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/28/16. |
| H | 42 | P-09 (A) | 05/08/17 | WAP / P17058:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-10 (A) | 05/08/17 | WAP / P17058:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| H | 42 | P-11 (A) | 05/08/17 | WAP | / P17058:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-12 (A) | 05/08/17 | WAP | / P17058:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-12 (A) | 09/01/17 | DP | / P17216:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-12 (A) | 09/01/17 | DP | / P17217:01-26 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/27/13. |
| H | 42 | P-13 (A) | 05/08/17 | WAP | / P17058:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-13 (A) | 09/01/17 | DP | / P17218:01-24 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-14 (A) | 05/08/17 | WAP | / P17058:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 42 | P-14 (A) | 09/01/17 | DP | / P17219:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/16/16. |
| H | 43 | A-01 (A) | 02/15/17 | WAP | / P17010:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | A-02 (A) | 02/15/17 | WAP | / P17010:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | A-03 (A) | 02/15/17 | WAP | / P17010:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 43 | A-04 (A) | 02/15/17 | WAP / P17010:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-01 (A) | 02/15/17 | WAP / P17010:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-02 (A) | 02/15/17 | WAP / P17010:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-03 (A) | 05/07/17 | WAP / P17163:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 6/1/16. |
| H | 43 | P-04 (A) | 02/15/17 | WAP / P17010:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-05 (A) | 02/15/17 | WAP / P17010:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/26/16. |
| H | 43 | P-06 (A) | 02/15/17 | WAP / P17010:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/26/16. |
| H | 43 | P-07 (A) | 02/15/17 | WAP / P17010:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/26/16. |
| H | 43 | P-08 (A) | 02/15/17 | WAP / P17010:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/26/16. |
| H | 43 | P-09 (A) | 02/15/17 | WAP / P17010:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/26/16. |
| H | 43 | P-10 (A) | 02/15/17 | WAP / P17010:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|---|
| H | 43 | P-10 (A) | 06/08/17 | DP | / P17091:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 2/15/17. |
| H | 43 | P-11 (A) | 06/08/17 | DP | / P17092:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-11 (A) | 06/08/17 | DP | / P17171:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/21/13. |
| H | 43 | P-12 (A) | 06/08/17 | DP | / P17093:01-26 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-13 (A) | 06/08/17 08/20/17 | DP | / P17094:01-20 P17164:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 43 | P-14 (A) | 06/08/17 | DP | / P17095:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| F | 44 | A-01 (A) | 05/18/17 | DP | / P17071:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | A-02 (A) | 05/18/17 | DP | / P17072:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | A-03 (A) | 05/18/17 | DP | / P17073:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | A-04 (A) | 05/18/17 | DP | / P17074:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-01 (A) | 02/16/17 | WAP | / P17011:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| F | 44 | P-02 (A) | 02/16/17 | WAP / P17011:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-03 (A) | 02/16/17 | WAP / P17011:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-04 (A) | 02/16/17 | WAP / P17011:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-05 (A) | 02/16/17 | WAP / P17011:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-06 (A) | 02/16/17 | WAP / P17011:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-07 (A) | 02/16/17 | WAP / P17011:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-08 (A) | 02/16/17 | WAP / P17011:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-09 (A) | 05/18/17 | DP / P17075:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/15/16. |
| F | 44 | P-09 (A) | 05/18/17 | DP / P17076:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/12/13. |
| F | 44 | P-10 (A) | 02/16/17 | WAP / P17011:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/27/16. |
| F | 44 | P-11 (A) | 02/16/17 | WAP / P17011:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/27/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD</u> <u>IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--|
| F | 44 | P-12 (A) | 02/16/17 | WAP / P17011:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/27/16. |
| F | 44 | P-13 (A) | 02/16/17 | WAP / P17011:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/27/16. |
| F | 44 | P-14 (A) | 02/16/17 | WAP / P17011:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/27/16. |
| F | 45 | A-01 (A) | 05/20/17 | DP / P17077:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | A-02 (A) | 05/20/17 06/14/17 | DP / P17078:01-20 P17090:01-06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | A-03 (A) | 05/20/17 | DP / P17079:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | A-04 (A) | 05/20/17 | DP / P17080:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-01 (A) | 02/16/17 | WAP / P17012:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-02 (A) | 02/16/17 | WAP / P17012:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-03 (A) | 02/16/17 | WAP / P17012:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-04 (A) | 02/16/17 | WAP / P17012:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|--------------|---|
| F | 45 | P-05 (A) | 02/16/17 | WAP | / | P17012:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-06 (A) | 02/16/17 | WAP | / | P17012:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-07 (A) | 02/16/17 | WAP | / | P17012:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-08 (A) | 02/16/17 | WAP | / | P17012:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-09 (A) | 05/20/17 | DP | / | P17081:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/17/16. |
| F | 45 | P-09 (A) | 05/20/17 | DP | / | P17082:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/19/13. |
| F | 45 | P-10 (A) | 02/16/17 | WAP | / | P17012:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/30/16. |
| F | 45 | P-11 (A) | 02/16/17 | WAP | / | P17012:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/30/16. |
| F | 45 | P-12 (A) | 02/16/17 | WAP | / | P17012:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/30/16. |
| F | 45 | P-13 (A) | 02/16/17 | WAP | / | P17012:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/30/16. |
| F | 45 | P-14 (A) | 02/16/17 | WAP | / | P17012:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/30/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|--|
| F | 46 | A-01 (A) | 05/27/17 08/18/17 | DP | / P17083:01-20 P17159:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | A-02 (A) | 05/27/17 | DP | / P17084:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | A-03 (A) | 05/27/17 | DP | / P17085:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | A-04 (A) | 05/27/17 | DP | / P17086:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-01 (A) | 02/16/17 | WAP | / P17013:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-02 (A) | 02/16/17 | WAP | / P17013:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-03 (A) | 02/16/17 | WAP | / P17013:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-04 (A) | 02/16/17 | WAP | / P17013:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-05 (A) | 02/16/17 | WAP | / P17013:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-06 (A) | 02/16/17 | WAP | / P17013:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-07 (A) | 02/16/17 | WAP | / P17013:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|---|
| F | 46 | P-08 (A) | 02/16/17 | WAP | / P17013:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-09 (A) | 05/27/17 08/18/17 | DP | / P17087:01-20 P17160:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 46 | P-09 (A) | 05/27/17 | DP | / P17088:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/18/13. |
| F | 46 | P-10 (A) | 02/16/17 | WAP | / P17013:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/10/16. |
| F | 46 | P-11 (A) | 02/16/17 | WAP | / P17013:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/10/16. |
| F | 46 | P-12 (A) | 02/16/17 | WAP | / P17013:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/10/16. |
| F | 46 | P-13 (A) | 02/16/17 | WAP | / P17013:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/10/16. |
| F | 46 | P-14 (A) | 02/16/17 | WAP | / P17013:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 7/10/16. |
| F | 47 | A-01 (A) | 05/29/17 | DP | / P17096:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 47 | A-02 (A) | 05/29/17 | DP | / P17097:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 47 | A-03 (A) | 05/29/17 | DP | / P17098:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |

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|-------------|------------------------------|------------------------------------|-------------|--|----------------|---|
| F | 47 | A-04 (A) | 05/29/17 | DP | / P17099:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 47 | P-01 (A) | 02/20/17 | WAP | / P17016:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-02 (A) | 02/20/17 | WAP | / P17016:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-03 (A) | 02/20/17 | WAP | / P17016:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-04 (A) | 02/20/17 | WAP | / P17016:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-05 (A) | 02/20/17 | WAP | / P17016:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-06 (A) | 02/20/17 | WAP | / P17016:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-07 (A) | 02/20/17 | WAP | / P17016:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |
| F | 47 | P-08 (A) | 05/29/17 | DP | / P17100:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/19/16. |
| F | 47 | P-08 (A) | 05/29/17 | DP | / P17101:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 5/11/13. |
| F | 47 | P-09 (A) | 02/20/17 | WAP | / P17016:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 3/20/16. |

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| F | 47 | P-10 (A) | 02/20/17 | WAP / P17016:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/3/16. |
| F | 47 | P-11 (A) | 02/20/17 | WAP / P17016:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/3/16. |
| F | 47 | P-12 (A) | 02/20/17 | WAP / P17016:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/3/16. |
| F | 47 | P-13 (A) | 02/20/17 | WAP / P17016:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/3/16. |
| F | 47 | P-14 (A) | 02/20/17 | WAP / P17016:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 4/3/16. |
| H | 48 | A-01 (A) | 01/23/17 | WAP / P17008:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | A-02 (A) | 01/23/17 | WAP / P17008:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | A-03 (A) | 01/23/17 | WAP / P17008:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | A-03 (A) | 07/20/17 | CCTV / V170476 | Inspection verified the condition of the exterior of the sump transfer line jacket from the LDB Drain Cell was satisfactory per T-DS-G-00019. |
| H | 48 | A-04 (A) | 01/23/17 | WAP / P17008:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-01 (A) | 01/23/17 | WAP / P17008:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/18/16. |

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|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 48 | P-02 (A) | 01/23/17 | WAP / P17008:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/18/16. |
| H | 48 | P-03 (A) | 01/23/17 | WAP / P17008:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-04 (A) | 01/12/17 | DP / P17001:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-04 (A) | 01/23/17 | WAP / P17008:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-05 (A) | 01/12/17 | DP / P17002:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-05 (A) | 01/23/17 | WAP / P17008:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-06 (A) | 01/23/17 | WAP / P17008:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/18/16. |
| H | 48 | P-07 (A) | 01/23/17 | WAP / P17008:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/18/16. |
| H | 48 | P-08 (A) | 01/12/17 | DP / P17003:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-09 (A) | 01/12/17 | DP / P17004:01-24 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-10 (A) | 01/12/17 | DP / P17005:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|--------------------------------|---|
| H | 48 | P-11 (A) | 01/12/17 | DP | / P17006:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 1/10/12. |
| H | 48 | P-11 (A) | 01/12/17 | WAP | / P17007:10 | Remote visual tank wall inspection showed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-12 (A) | 01/23/17 | WAP | / P17008:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-13 (A) | 01/23/17 | WAP | / P17008:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 48 | P-14 (A) | 01/23/17 | WAP | / P17008:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/16/16. |
| H | 49 | VB | 03/03/17 | CCTV | / V170129 | Inspection of the stainless steel liner, jumpers, valves and cover and the conductivity probe were satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 49 | A-01 (A) | 08/23/17 | DP | / P17178:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | A-02 (A) | 08/23/17 11/05/17 | DP | / P17179:01-20 P17293:01-05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | A-03 (A) | 08/23/17 | DP | / P17180:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | A-04 (A) | 08/23/17 | DP | / P17181:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-01 (A) | 05/03/17 | WAP | / P17052:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|--------------|---|
| H | 49 | P-02 (A) | 05/03/17 | WAP | / | P17052:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-04 (A) | 05/03/17 | WAP | / | P17052:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-05 (A) | 05/03/17 | WAP | / | P17052:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-06 (A) | 05/03/17 | WAP | / | P17052:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-07 (A) | 05/03/17 | WAP | / | P17052:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-08 (A) | 08/23/17 | DP | / | P17182:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-08 (A) | 08/23/17 | DP | / | P17183:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 6/29/13. |
| H | 49 | P-09 (A) | 05/03/17 | WAP | / | P17052:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 49 | P-10 (A) | 05/03/17 | WAP | / | P17052:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/27/16. |
| H | 49 | P-11 (A) | 05/03/17 | WAP | / | P17052:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/27/16. |
| H | 49 | P-12 (A) | 05/03/17 | WAP | / | P17052:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/27/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 49 | P-13 (A) | 05/03/17 | WAP / P17052:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/27/16. |
| H | 49 | P-14 (A) | 05/03/17 | WAP / P17052:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/27/16. |
| H | 50 | A-01 (A) | 08/07/17 | DP / P17150:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | A-02 (A) | 08/07/17 | DP / P17151:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | A-03 (A) | 08/04/17 | DP / P17147:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | A-04 (A) | 08/07/17 | DP / P17152:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-01 (A) | 02/19/17 | WAP / P17014:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-02 (A) | 02/19/17 | WAP / P17014:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-03 (A) | 02/19/17 | WAP / P17014:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-04 (A) | 02/19/17 | WAP / P17014:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-05 (A) | 02/19/17 | WAP / P17014:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | 50 | P-06 (A) | 02/19/17 | WAP / P17014:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-07 (A) | 02/19/17 | WAP / P17014:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-08 (A) | 08/04/17 | DP / P17148:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-08 (A) | 08/04/17 | DP / P17149:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/23/13. |
| H | 50 | P-09 (A) | 02/19/17 | WAP / P17014:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-10 (A) | 02/19/17 | WAP / P17014:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-11 (A) | 02/19/17 | WAP / P17014:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-12 (A) | 02/19/17 | WAP / P17014:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-13 (A) | 02/19/17 | WAP / P17014:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 50 | P-14 (A) | 02/19/17 | WAP / P17014:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/24/16. |
| H | 51 | Drain VB | 12/18/17 | CCTV / V170817 | Inspection of the stainless steel liner, cover, jumpers, valves and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | 51 | VB | 05/12/17 | CCTV / V170322 | Inspection of the stainless steel liner, jumpers, valves, conductivity probe and cell cover was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | 51 | A-01 (A) | 04/17/17 | WAP / P17047:01 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-01 (A) | 08/28/17 | DP / P17220:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-02 (A) | 04/17/17 | WAP / P17047:02 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-02 (A) | 08/28/17 | DP / P17221:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-03 (A) | 04/17/17 | WAP / P17047:03 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-03 (A) | 08/28/17 | DP / P17222:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-04 (A) | 04/17/17 | WAP / P17047:04 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | A-04 (A) | 08/28/17 | DP / P17223:01-25 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-01 (A) | 04/17/17 | WAP / P17047:05 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-02 (A) | 04/17/17 | WAP / P17047:06 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 11/30/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|----------------------|--|---|
| H | 51 | P-03 (A) | 04/17/17 | WAP / P17047:07 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 11/30/16. |
| H | 51 | P-04 (A) | 04/17/17 | WAP / P17047:08 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-05 (A) | 04/17/17 | WAP / P17047:09 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-06 (A) | 04/17/17 | WAP / P17047:10 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-07 (A) | 04/17/17 | WAP / P17047:11 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-08 (A) | 04/17/17 | WAP / P17047:12 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-08 (A) | 08/28/17 11/05/17 | DP / P17224:01-11 P17295:01-17 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-08 (A) | 08/28/17 | DP / P17225:01-25 | Remote visual inspection of the secondary vessel wall revealed no areas of concern since last evaluated on 9/27/13. |
| H | 51 | P-09 (A) | 04/17/17 | WAP / P17047:13 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/31/16. |
| H | 51 | P-10 (A) | 04/17/17 | WAP / P17047:14 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/16. |
| H | 51 | P-11 (A) | 04/17/17 | WAP / P17047:15 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/16. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | | | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|-----------|---|
| H | 51 | P-12 (A) | 04/17/17 | WAP | / | P17047:16 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/16. |
| H | 51 | P-13 (A) | 04/17/17 | WAP | / | P17047:17 | Remote visual tank wall inspection revealed no areas of concern since last evaluated on 1/28/16. |
| H | 96 | VB | 11/12/17 | CCTV | / | V170727 | Inspection of the valve box cover, stainless steel liner, conductivity probe, jumpers and valves was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | Catch Tank | | 12/19/17 | CCTV | / | V170819 | Inspection not completed. Unable to access area. |
| F | DB-02 | SW | 11/17/17 | CCTV | / | V170738 | Inspection of the cell cover, stainless steel liner, jumpers, valve and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | DB-03 | North | 05/21/17 | CCTV | / | V170345 | Inspection of the stainless steel liner, cell cover, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | DB-03 | South | 05/21/17 | CCTV | / | V170345 | Inspection of the stainless steel liner, cell cover, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-03 | Sump | 06/10/17 | CCTV | / | V170384 | Inspection of the liner, jumpers, cell covers and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| F | DB-04 | FLWB | 08/12/17 | CCTV | / | V170542 | Inspection was satisfactory per T-DS-G-00001. |
| F | DB-04 | NW | 04/29/17 | CCTV | / | V170284 | Inspection of the jumpers, valve, cell covers, conductivity probe and stainless steel liner was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|---|
| H | DB-04 | Sump | 06/10/17 | CCTV / V170385 | Inspection of the cell covers, stainless steel liner, jumpers, valves and conductivity probe was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-05 | FWB | 07/23/17 | CCTV / V170483 | Inspection was satisfactory per T-DS-G-00001. |
| H | DB-05 | Sump | 05/28/17 | CCTV / V170360 | Inspection of the cell cover, stainless steel liner, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-06 | FWB | 06/17/17 | CCTV / V170617 | Inspection was satisfactory per T-DS-G-00001. |
| H | DB-06 | NE | 05/28/17 | CCTV / V170361 | Inspection of the cell cover, stainless steel liner, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-07 | FLWB | 08/10/17 | CCTV / V170537 | Inspection was satisfactory per T-DS-G-00001. |
| H | DB-07 | North | 07/29/17 | CCTV / V170504 | Inspection of the cell covers, stainless steel liner, jumper, valves, and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-07 | SW | 07/29/17 | CCTV / V170504 | Inspection of the cell covers, stainless steel liner, jumper, valves, and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | DB-08 | FLWB | 08/06/17 | CCTV / V170528 | Inspection was satisfactory per T-DS-G-00001. |
| H | DB-08 | NE | 08/06/17 | CCTV / V170525 | Inspection of the cell covers, stainless steel liner, jumpers, valves and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | DB-08 | SW | 08/06/17 | CCTV / V170525 | Inspection of the cell covers, stainless steel liner, jumpers, valves and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | EVAP-16 | NW | 02/06/17 | CCTV / V170078 | Inspection of the cell covers, stainless steel liner, jumpers, valves and piping was satisfactory per SW11.6-SVP-45, Section 4.5. |
| H | EVAP-16 | SW | 02/06/17 | CCTV / V170078 | Inspection of the cell covers, stainless steel liner, jumpers, valves and piping was satisfactory per SW11.6-SVP-45, Section 4.5. |
| H | EVAP-25 | GDL Cell | 09/13/17 | CCTV / V170606 | Inspection was satisfactory per SW11.6-SVP-4.5, Section 4.6. |
| H | EVAP-25 | NE | 12/08/17 | CCTV / V170779 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 4.6. |
| H | EVAP-25 | SW | 12/08/17 | CCTV / V170779 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 4.6. |
| H | EVAP-25 Pot | S6 Flange | 11/21/17 | CCTV / V170743 | Inspection of the evaporator vessel revealed that the interior is essentially clean. Details are documented in SRR-LWE-2017-00124. |
| H | IAL Flush Box | IT-V-42 | 07/31/17 | CCTV / V170508 | Inspection of the cell covers, stainless steel liner, jumpers and valves was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | IAL Flush Box | IT-V-45 | 07/31/17 | CCTV / V170508 | Inspection of the cell covers, stainless steel liner, jumpers and valves was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | LDB Drain Cell | Sump | 08/01/17 | CCTV / V170513 | Inspection of the cell cover, stainless steel liner, jumpers, conductivity probe and valves was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-05 | Sump | 08/11/17 | CCTV / V170540 | Inspection of the cell covers, stainless steel liner, valves, jumpers, passive vent and overflow were satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-06 | NE/Sump | 05/21/17 | CCTV / V170341 | Inspection of the cell covers, stainless steel liner, jumpers, valves, passive vent and overflow were satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-07 | NE | 08/04/17 | CCTV / V170521 | Inspection of the cell covers, stainless steel liner, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-07 | SW | 08/04/17 | CCTV / V170521 | Inspection of the cell covers, stainless steel liner, valves and jumpers was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-08 | NW | 08/05/17 | CCTV / V170524 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-08 | SE | 08/05/17 | CCTV / V170524 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-09 | NW | 08/05/17 | CCTV / V170524 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-09 | SE | 08/05/17 | CCTV / V170524 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |

| <u>AREA</u> | <u>TANK OR ANCILLARY</u> | <u>ACCESS OPENING (A OR I)</u> | <u>DATE</u> | <u>INSPECTION METHOD IDENTIFICATION NUMBER</u> | <u>REMARKS</u> |
|-------------|------------------------------|------------------------------------|-------------|--|--|
| H | PP-10 | NW | 08/06/17 | CCTV / V170527 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | PP-10 | SE | 08/06/17 | CCTV / V170527 | Inspection of the cell covers, stainless steel liner, jumpers and piping was satisfactory per SW11.6-SVP-45, Section 7.9. |
| H | WLE | 02 | 03/18/17 | CCTV / V170162 | Inspection of encasement walls, floor, cell covers, supports and transfer lines was satisfactory. |
| H | WLE | 02 | 03/30/17 | CCTV / V170185 | Inspection of the transfer line and supports was satisfactory. |
| H | WLE | 05 | 03/18/17 | CCTV / V170162 | Inspection of encasement walls, floor, cell covers, supports and transfer lines was satisfactory. |
| H | WLE | 06 | 03/18/17 | CCTV / V170162 | Inspection of encasement walls, floor, cell covers, supports and transfer lines was satisfactory. |
| H | WLE | 07 | 03/18/17 | CCTV / V170162 | Inspection of encasement walls, floor, cell covers, supports and transfer lines was satisfactory. Visual segments of transfer lines HL-241035-WTS-13 and HL-241035-WTS-L-9 H2B2 were satisfactory. |
| H | WLE | 07 | 03/30/17 | CCTV / V170185 | Inspection of the transfer line and supports was satisfactory. |

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