APPENDIX T

Preparatory Meeting Minutes

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Preparatory Meeting Checklist

Landfill Operable Unit

Tonawanda Landfill Vicinity Property, New York

Definable Feature of Work: **1- Pre-Mobilization Activities**

Date: 5/28/2019 11:00am Presented by: [redacted]

Contract Number: **W912QR-12-D-0010, Task Order (TO) Number W912P418F0049.**

Invitees/Attendees:

[redacted]

1. CONTRACT REQUIREMENTS

1.1 Scope

The purpose of this definable Feature of Work (DFOW) is to prepare the site for site operations. The tasks that will be accomplished under this DFOW include:

- Civil Survey.
- Radiation Survey (Gamma Walkover).
- Joint Condition Survey Report.

NOTE: There are discrepancies on the activities included under DFOW 1. The CQCP identifies the above activities. In the APP/SSHP, the pre-mobilization civil survey is identified as DFOW 2 – Mobilization and the radiation survey as DFOW 3 – Monitoring, Sampling, Testing and Analysis. In the SOP, perimeter air monitoring is identified as a pre-mobilization task (no associated DFOW indicated). In the UFP-QAPP, the civil and radiation surveys are identified under Mobilization and Preparatory Work. The Joint Condition Survey Report is not identified in any DFOW but is detailed in Specification 01 50 00.

1.2 Contract

The following must be accomplished prior to starting work:

- Approval of Plans – Revised Final plans are under backcheck by USACE.

1.3 Review of each paragraph of applicable specifications and contracts plans.

APPLICABLE DOCUMENTS:

- Scope of Work Section 5.1.1.1 Pre-mobilization Survey
- Specification Section 02 61 13
- Specification Section 01 50 00
- Specification Section 01 57 20
- CQCP – Section 4.1 Pre-Mobilization Activities

- SOP – Section 4.1 Civil Survey & Section 4.3 Radiation Monitoring
- APP/SSHP – Section B.4.1.1 Baseline Gamma Walkover Survey
- UFP-QAPP – Worksheet #11 Project/Data Quality Objectives, WS #22 Field Equipment Calibration, Maintenance, Testing, and Inspection, RSP-035 Operation of the Trimble Backpack Gamm Survey System.
- PAMP – Not applicable.

REVIEW OF APPLICABLE DOCUMENTS

- Review of SOW:
    - Site Activities:
        - Conduct property boundary and topographic surveys prior to site activities.
        - Conduct pre- and post- construction gamma walk-over surveys for work areas that may be impacted.
    - 5.1.1.1: The Contractor will conduct a pre-mobilization civil and radiation surveys of site areas that will be used or remediated in accordance with Appendix B (Section 02 61 13).
    - 5.1.2.4: "For example, a sampling plan documenting… …and plan for pre-construction and post construction gamma walkover surveys of handling areas and roads."
    - 5.2.2 Radiation Monitoring: Initial baseline surveys during premobilization and post mobilization (note: gamma walkover survey data must be graphed and analyzed; the results must be provided to USACE as soon as possible)."
        - HP Tech should be able to review/process data Wednesday evening then provide to graphics. Team discussed target of 5/31 for data but is dependent on several factors (e.g., weather, GIS availability).
- Review of Section 02 61 13 Excavation and handling of Contaminated Material:
    - Para 1.4 SD-02 Surveys
    - Para 1.4.1 Other Submittal Requirements: Requires submittal of civil survey drawing of all site areas that will (have) be used and remediated prior to mobilization and after demobilization.
    - Para 3.1.1 Premobilization survey: Conduct a pre-mobilization civil and gamma walkover survey of site areas that will be used of remediated.
- Review of Section 01 50 00
    - Para 1.3 Submittals: Joint Condition Survey Report in accordance with 1.7 PROTECTION OF FEATURES. (NOTE: Protection of Features is within 01 57 20 as paragraph 1.6)
- Review of Section 01 57 20
    - Para 1.6 Protection of Features: Prior to start of any on-site construction activities, the Contractor will make a condition survey of areas that will be used or remediated. The survey must include:
        - Photographs and/or videos showing existing conditions at and adjacent to areas that will be used or remediated, including proposed haul routes. The photos/videos must be taken in the presence of the KO/COR
        - A topographic survey of the site and areas that will be affected by the remedial action, including the gravel/dirt road adjacent to the site.

      Immediately following the survey, the Contractor will prepare a brief report including a plan describing the features requiring protection under the provisions of the Contract Clauses, which are not specifically identified on the drawings as environmental features

requiring protection along with the condition of trees, shrubs and grassed areas immediately adjacent to the site of work and adjacent to the Contractor's assigned storage area and access route(s), as applicable. This survey report will be signed by both the Contractor and the KO/COR upon mutual agreement as to its accuracy and completeness. The Contractor must protect those environmental features included in the survey report and any indicated on the drawings, regardless of interference which their preservation may cause to the work under the contract.

- Review of CQCP Section 4.1:
    - Identifies activities in DFOW 1
- Review Site Operations Plan Section 4:
    - Section 4.1 Civil Survey: A civil survey will be conducted to establish the baseline conditions of the site. The civil survey will be conducted to document the initial topography of the area and identify the excavation limits. The initial topography data will be used to restore the site prior to demobilization. Civil surveys will also be conducted during site operations and post-demobilization as necessary.
    - Section 4.3 Radiation Monitoring: A gamma walkover survey will be conducted during premobilization to establish the baseline conditions of the site. The results of the gamma walkover survey will be graphed for analysis.
- Review of APP/SSHP
    - A walkover survey prior to remediation activities will be conducted to determine and document baseline (existing) conditions at the excavation locations, transition areas, and haul roads. Walkover surveys will be performed in accordance with Plexus RSP-035, Operation of the Trimble Backpack Gamma Survey System, using a Ludlum Model 44-10 2 × 2 NaI (Tl) gamma scintillation detector with a Ludlum Model 2241 rate meter to measure ambient radiation levels in the field. The Ludlum Model 2241 is equipped with a RS-232 data output coupled to a Trimble Global Positioning System (GPS) handset for automated data logging at one measurement per second. The detector will be held 3 to 4 inches above the ground surface throughout the walkover survey. The baseline gamma walk over results will be presented in both tabular and graphic (i.e., mapped) form and will present mean background and three standard deviations (i.e., 1-sigma, 2-sigma, and 3-sigma), each presented in a different color. If evaluation indicates a hot spot, a soil sample may be collected and analyzed for radionuclide at the off-site laboratory. Gamma survey sampling is described in the UFP-QAPP (Plexus, 2019b).
- Review of UFP-QAPP:
    - WS #11
        - Goal: Conduct gamma surveying
        - Information inputs: Gamma Survey Samples – to evaluate baseline gamma walkover survey data and contamination control measures during the completion of the soils remediation project.
        - Boundary: The landfill OU
        - Analytical Approach: Gamma Survey Samples – radionuclides (Ra-226, Th-230, and U-238 for Utotal) will be analyzed to determine if contamination control measures are preventing the spread of COCs above the cleanup goals. If gamma survey sampling identifies an area (e.g., haul road) where COCs exceed the cleanup goals, then the area will be remediated until cleanup goals are

achieved. Baseline gamma walkover survey samples will be submitted for radionuclide analyses (Ra-226, Th-230, and Utotal) for informational purposes only (i.e., to determine background conditions).

- Decision on sample collection will be done after data/graphics provided to USACE.

- WS #22:
- Field equipment: Ludlum model 2241 rate meter with Ludlum 44-10 gamma detector.
  - Note that the existing documents identify a 2350 data logger. This is an error. The correct instrument is the 2241 rate meter paired with the 44-10 detector.
- SOP reference: RSP-008, RSP-028
  - RSP-008 discusses instrumentation calibration and handling.
  - RSP-028 discusses QA procedures.
- Annual calibration and daily QC check
  - NaI is due for annual calibration the end of June 2019.
  - All meters have calibration stickers that identify efficiencies.

- Review Activity Hazard Assessments (see below)

2. STATUS OF TECHNICAL SUBMITTALS.

2.1 A check to ensure that the portion of the plan for the work to be performed has been accepted by the Contracting Officer.

- All Revised Final Plans are under backcheck with USACE. There are no changes impact this work from the Final Plans.

2.2 A check to ensure that all materials and/or equipment have been tested, submitted, and approved:

No pre-field submittals for materials or equipment for this DFOW. Testing equipment will be as presented in the Planning Documents.

Ludlum Model 2241 rate meter with Ludlum Model 44-10 gamma detector. This is different that what is written in the plans.

3. CONTROL TESTING AND INSPECTIONS

3.1 A check to ensure that provisions have been made to provide required control testing:

- Gamma Survey Samples (If needed)– radionuclides (Ra-226, Th-230, and U-238 for U_{total}) will be analyzed to determine if contamination control measures are preventing the spread of COCs above the cleanup goals. Baseline gamma walkover survey samples may be submitted for radionuclide analyses (Ra-226, Th-230, and U_{total}) for informational purposes only (i.e., to determine background conditions).
  - Again, this decision will be made based on aa review of the baseline data.

3.2 A check to ensure that provisions have been made to provide required control inspection

- The individual performing the walkover will perform initial and daily inspections.
  - A discussion was held on the background location. USACE will get with their technical people to determine where background will be established. This information is needed

5/28 or 5/29 so the area can be surveyed while HP Tech is on site (5/28-5/29) and is needed to evaluate the data collected.

4. STATUS OF PRELIMINARY WORK

4.1 Limits of the civil survey

Excavation areas and 20-foot buffer to be surveyed at 20-ft spacing. Other areas are at 50-fott spacing. Haul roads not that vital for civil survey, thus is was agreed that the density of data can be significantly less. Perhaps just centerline and a few topo shots.

4.2 Limits of the radiation survey

Radiation survey limits were identified as the storage areas, haul roads from Pirson Parkway to storage area, storage areas, haul road to work areas, each work are with 20 foot buffer, and second trailer area. The priority is for the storage areas and haul roads. Work areas may need to be surveyed the week of 6/3. Walk over will be done at brisk walking pace. Lanes/transects will be approximately 1 meter apart.

5. ACCIDENT PREVENTION AND SAFETY (ACTIVITY HAZARD ANALYSIS).

5.1 A review of the appropriate activity hazard analyses to assure safety requirements are met.

- Review AHA Table 10-1 –Mobilization Surveys (DFOW 2), Radiation Monitoring.
    - Although optional, hard hats should be worn.
- Review of AHA Table 10-15 – General hazards
    - Safety on the active landfill. Trucks will not be able to see adequately when climbing or descending the ramp to the top of the landfill. Use spotters to stop truck or move technician performing the survey. EnSol may be able to stop work to allow survey or active landfill area. Use buddy system as there are many areas where tech may have high slip, trip, fall potential.

6. A PHYSICAL EXAMINATION OF ALL MATERIAL AND EQUIPMENT.

6.1 A physical examination of required equipment was performed prior to shipping to the site.

Equipment will be inspected when it arrives at the site.
GPS has audible alarm is coverage is lost.

7. EQUIPMENT INSPECTION CHECKLIST

Annual calibration due July 2019.

8. Initial Control Phase

The Government will be notified of Initial Phase Inspection to take place on 5/28/2019

8. Miscellaneous

8.1 Schedule

Pre-mobilization is starting 5/28/2019. Will arrive on site approximately 9am. Work will be conducted until 4:00 PM but is allowed to go longer because there's no heavy equipment /noise involved.

8.2 Cleanliness

The site will be maintained in a neat and clean condition at all times. All trash will be placed in trash bags which need to be removed each day or placed in containers until removed.

8.3 Other

The planned placement of millings on the active landfill for a road may result in elevated readings. USACE understands that the data may not be ideal and will consider this when evaluating.

When on the active landfill. Do not approach heavy equipment without first making positive eye contact with the operator, the equipment has been idled or turned off and the operator's hands are off the controls.

Notify the USACE and EnSol is any equipment does not have working backup/movement alarms.

Preparatory Meeting Checklist

Landfill Operable Unit

Tonawanda Landfill Vicinity Property, New York

Definable Feature of Work: **2- Mobilization and Preparatory Work, 3- Monitoring, Sampling, Testing and Analysis, 4- Site Work, 5- Surface Water Collection and Control**

Date: 5/30/2019 9:00am Presented by [redacted]

Contract Number: **W912QR-12-D-0010, Task Order (TO) Number W912P418F0049.**

Invitees/Attendees:

[redacted]

1.0 Definable Feature of Work addressed:

Mobilization and Preparatory Work (APP/SSHP DFOW 2)

Personnel Mobilization and Training
Mobilization of Construction Equipment and Facilities
Setup/Construction of Temporary Facilities

Monitoring, Sampling, Testing and Analysis (APP/SSHP DFOW 3)

Meteorological Station
Radiation Monitoring
Air Monitoring and Sampling
Monitoring Wells

To be covered in separate preparatory meeting:

Sampling Surface Water/Groundwater/Liquid Waste
Sampling Soil
Sampling Radioactive Contaminated Material
Laboratory Chemical Analysis
Geotechnical Testing

Site Work (APP/SSHP DFOW 4)

Clearing and Grubbing

Surface Water Collection and Control (APP/SSHP DFOW 5)

Sediment Barriers

2.0 SCHEDULE:

2.1 Mobilization and Preparatory Work

Construction personnel began mobilizing on 5/28/19. Mobilization is starting 5/29/2019 (dozer and skid steer delivered). Temporary facilities began arriving 5/28/19 (portable toilet) other temporary facilities will begin 5/30/19, 40 foot trailer arriving 5/30/19, and other temporary facilities will continue arriving into the week of 6/3/19. Temporary monitoring wells are schedule for abandonment 5/30/19 and 5/31/19. Storage areas will be prepared for IMCs starting 5/30/19 with the expectation to be done by 6/7/19 or sooner.

2.2 Monitoring, Sampling, Testing and Analysis (APP/SSHP DFOW 3)

Radiation monitoring is on-going and will continue for the duration of the project. Air monitoring for baseline/background conditions to being 5/30/19. Soil samples (chemical, radiological, geotechnical) will be collected from backfill material. Site work, to include clearing and grubbing, earthwork, roads, and fencing to begin 5/30/19.

2.3 Site Work (APP/SSHP DFOW 4)

Clearing and grubbing in non-impacted areas started. Reeds and brush being cleared to facilitate surveying and utility clearance. Clearing and grubbing will continue this week and next.

2.4 Surface Water Collection and Control (APP/SSHP DFOW 5)

Erosion controls will begin to be installed the week of 6/3/19.

3.0 Mobilization and Preparatory Work (APP/SSHP DFOW 2)

3.1 Personnel Mobilization and Training

All personnel must be HAZWOPER trained. Personnel performing specialized activities (e.g., radiation monitoring, supervisory position, excavation competent person, etc.) must have documentation of applicable training.

All site personnel must have read ad acknowledged the Accident Prevention Plan and Site Safety and Health Plan.

All personnel must receive a site-specific in-briefing.

All visitors must sign-in.

Morning tailgate safety meetings are held at 7am or alternate time communicated to the site workers.

Copies of certificates and training are retained on Plexus's file share system and are available for review. Once the trailer is established, they can be printed.

3.2 Mobilization of Construction Equipment and Facilities & Setup/Construction of Temporary Facilities

Gamma walkover of northern site trailer area will be performed 6/3/19. Stone/trailers cannot be placed until the gamma walkover is complete.

Several trailers will be placed on site. The southern trailer will act as Plexus's main administrative office. Two additional trailers will be placed to the north at the foot of the capped landfill. The northern trailers may be powered by permanent power.

Both the northern and southern areas will have toilet and hand wash facilities.

Southern, administrative trailer will be placed between Storage Areas A & B in lieu of the location shown on Figure 5-1 of the SOP. Doors will face Area B. This trailer will be run on temporary (generator) power.

Northern trailers will be oriented east-west with doors facing south. These trailers will likely be run from permanent power. Installation date to be determined.

All trailers are converted connex boxes and lay on the ground. No anchoring is needed and the are as level as the surface they are placed on.

4.0 Monitoring, Sampling, Testing and Analysis (APP/SSHP DFOW 3)

4.1 Meteorological Station

Meteorological station to be installed at the northern trailer. Installation height will be per manufacturer's recommendation. A 1.5inch diameter pole will be installed to mount the sensors.

4.2 Radiation Monitoring

This discussion focuses on radiation control monitoring, not gamma scanning of the excavations, ISOCS of IMCs, or confirmation sampling. Those topics will be discussed at a separate preparatory meeting.

Radiation monitoring of incoming IMCs will be performed only on a random basis. They are assumed to have been released clean.

Radiation monitoring of incoming equipment will be done on all equipment intended to enter the exclusion zone. If equipment not originally intended to enter the exclusion zone, is later determined to be needed in the exclusion zone, it will be scanned prior to entering the exclusion zone.

Personnel will be instructed on self-frisking to facilitate existing the exclusion zone. The contamination reduction zone will include entrance/exit log with frisking acknowledgement. Disposable boot covers will be used in the exclusion zone.

Frisking of small tools and equipment will be added as comment column on sheets maintained at CRZ.

EnSol wanted to know about training. USACE provided info to address their concern. Their employees are not to be coming to the FUSRAP area. No need to screen.

4.3 Air Monitoring and Sampling

Background air monitoring will begin 5/30/19. Four perimeter samplers and one background sampler will be set up for background data collection. Weather station data will also be collected.

Discussion on the location of the perimeter samplers:

TSP meters automated, GPS and internet enabled. Sends alerts on response and action levels as well as loss of data.

Four high volume samplers at the excavation area and one background sampler.

Discussion on impact of current weather conditions vs weather conditions during later time periods (specifically the current rainy weather vs dry summer months):

Potential to shut down excavation operations if there are problems with dust and radioactivity during operations. Might need to shut down our operations to monitor landfill operations to account for their activity.

4.4 Monitoring Wells

Temporary monitoring wells will be abandoned by Earth Dimensions starting 5/30/19. Wells will be pulled and grouted. All wells have been flagged in the field. Pulled casings will be wrapped in plastic and stored within a planned excavation area for later disposal in an IMC.

Town Wells have been temporarily flagged for protection. Additional protection consisting of orange fencing will be installed prior to clearing a grubbing.

5.0 Site Work (APP/SSHP DFOW 4)

5.1 Clearing and Grubbing

Vegetation cleared from outside the excavation areas to be disposed of at Erie County Disposal Center.

Material from within the excavation areas above grade, are to be disposed of off-site. Material from below grade material (root balls etc.) get placed in IMCs for off-site disposal.

6.0 Surface Water Collection and Control (APP/SSHP DFOW 5)

6.1 Sediment Barriers

Erosion controls to be installed starting 6/3/19. No changes from plans. Soil berms for excavation protection from surface water may be obtained from EnSol.

7.0 Safety

Discussion of Applicable AHAs:

AHAs to be gone over prior to work at the daily tailgate. AHAs to be initialed by each reviewer each time reviewed. AHAs can be modified in the field to account for job-specific changes. Initialed AHAs should be included in daily report.

Preparatory Meeting Checklist

Landfill Operable Unit

Tonawanda Landfill Vicinity Property, New York

Definable Feature of Work: **3- Monitoring, Sampling, Testing and Analysis**

Date: 6/11/2019 1:00pm Presented by [redacted]

Contract Number: **W912QR-12-D-0010, Task Order (TO) Number W912P418F0049.**

Invitees/Attendees:

[redacted]

1.0 Definable Feature of Work addressed:

Monitoring, Sampling, Testing and Analysis (APP/SSHP DFOW 3)

Sampling Surface Water/Groundwater/Liquid Waste
Sampling Soil
Sampling Radioactive Contaminated Material
Laboratory Chemical Analysis
Geotechnical Testing

2.0 Schedule:

Water sampling will occur post treatment of stored water. The specific date is unknown and dependent on the quantity of water captured.

Soil sampling and sampling of radioactive contaminated material is anticipated to begin Tuesday June 11. Laboratory chemical analysis will begin the following day.

Geotechnical testing for backfill will begin this week, possibly today. Geotechnical testing of topsoil will occur once source is identified.

3.0 Review of UFP-QAPP Worksheet #17

The following is excerpted from the Revised Final UFP-QAPP. Changes/Clarifications from Preparatory meeting are highlighted:

Worksheet #17: Sampling Design and Rationale

(UFP-QAPP Manual Section 3.1.1)

(USEPA 2106-G-05 Section 2.3.1)

The sampling design and rationale for the soils remediation project is presented below. Sampling activities, including the use of personal protective equipment, will be conducted in accordance with the APP/SSHP (Plexus, 2019b). Sample containers, preservation, and holding times for collected samples are identified on Worksheet #19 & 30. Collected samples will be labeled and sampled in accordance with Worksheet #18. Quality control sampling, including field duplicates, equipment blanks, and MS/MSDs, will be conducted at the frequency indicated on Worksheet #20. Field equipment decontamination procedures, investigation-derived waste (IDW) handling are discussed at the end of this worksheet. Sample handling, including chain-of-custody and shipping procedures, are presented on Worksheet #26 & 27.

Excavation Areas Sampling Design and Rationale

Excavation of the FUSRAP-contaminated material will be conducted in accordance with the Site Operations Plan (Plexus, 2019a). The initial limits of excavation are presented on **Figure 11-1**. Prior to the collection of confirmation soil samples, the sidewalls of each excavation will be surveyed using an uncollimated NaI detector. If needed, a collimated detector can be used to focus in on a potential source area. Sidewall surveys will begin at the bottom of each excavation and continue upward one layer at a time. If survey measurements taken by the uncollimated NaI detector are less than the soil screening criteria (1.5 -2 x the background of 8,500 cpm as determined in the March 2011 Final Report – Phase 2 RI), then Plexus will proceed with confirmation soil sampling. If survey measurements taken by the uncollimated NaI detector are greater than the soil screening criteria (estimated to be 1.5 -2 x the background of 8,500 cpm), then the exceeding layer and area will be resurveyed with a collimated NaI detector to confirm the exceedance. If the exceedance is confirmed, then additional material will be removed until sidewall survey measurements are less than the soil screening criteria (1.5 -2 x the background of 8,500 cpm) and confirmation soil sampling can be conducted. Soil screening criteria may be adjusted if evaluation of initial confirmation sample results indicate an adjustment is warranted.

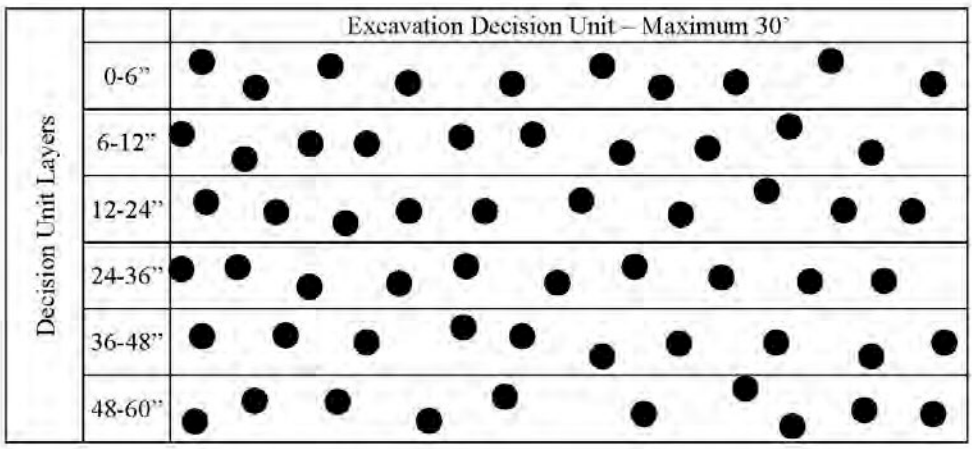
If screening data indicate an exceedance, the excavation will be stepped out in 6-12 inch increments (or the smallest quantity the excavator can manage).

The confirmation soil sampling procedure is:

- An excavation decision unit is a maximum 30 feet in length within each excavation area. There must be a minimum of two decision units per excavation area.
- The excavation decision unit is divided into layers. Samples will be collected within the excavation decision unit at the following depths (called excavation decision unit layers [EDULs]):
    - Layer 1: 0 – 6 inches;
    - Layer 2: 6 – 12 inches;
    - Layer 3: 12 – 24 inches;
    - Layer 4: 24 – 36 inches;
    - Layer 5: 36 – 48 inches; and
    - Layer 6: 48 – 60 inches.
- Samplers will don a clean pair of new, non-powdered, disposable latex or nitrile gloves and collect ten random aliquots approximately 6-inches deep into the sidewall from within each

EDUL. Aliquots will be collected with a clean, stainless-steel spoon. Collect a consistent volume of soil for each aliquot, i.e., aliquots should be of equal mass.

- Composite these 10 random aliquots from within one EDUL into a single sample using a clean, round, stainless-steel bowl. Compositing will be accomplished by stirring the material with a stainless-steel spoon or by hand in a circular fashion, reversing direction, and occasionally turning the material over. Stainless-steel sampling equipment (i.e., spoon and bowl) will be decontaminated between the collection of each composite sample. Samplers will change their disposable gloves between the collection of EDUL samples to prevent cross-contamination. Field duplicate samples will be collected in the same manner as the primary sample.
- Six composited samples will be collected from each excavation decision unit, one from each EDUL. A conceptual illustration of confirmatory sidewall soil sampling is presented on **Figure 17-2** below.



- If the results of an EDUL are greater than the cleanup goals, then the excavation decision unit will be expanded laterally by approximately five feet or "stepped-out" to the depth of the EDUL whose results were greater than the cleanup goals. Once the excavation decision unit has been expanded, an additional set of EDUL samples will be collected, one from each layer as described above.

IMC Sampling Design and Rationale

The IMCs will be handled in accordance with the Site Operations Plan (Plexus, 2019a). IMC sampling will be conducted to evaluate WAC compliance for off-site disposal of filled IMCs at a permitted disposal facility. To evaluate WAC compliance, one composite sample will be collected for every ten IMCs that are filled. The composite sample will be comprised of one aliquot collected from each of the ten IMCs (as soon as they are filled) that it represents, ten aliquots in total. Samplers will don a clean pair of new, non-powdered, disposable latex or nitrile gloves before collecting aliquots for each IMC from the excavator bucket while they are being loaded. The collected aliquots will be placed in a clean, round, stainless-steel bowl for compositing. Compositing will be accomplished by stirring the material by hand in a circular fashion, reversing direction, and occasionally turning the material over. The stainless-steel mixing bowl will be decontaminated between the collection of each composite sample. Samplers will change their disposable gloves between the collection of each composited IMC sample to prevent cross-

contamination. Field duplicate samples will be collected in the same manner as the primary sample. IMC sampling results will be provided to the USACE for preparation of waste documentation.

Wastewater Sampling Design and Rationale

The collection and treatment of wastewater is described in the Site Operations Plan (Plexus, 2019a). Wastewater sampling will be conducted to evaluate compliance with the discharge limits of the Town of Tonawanda POTW discharge permit. To evaluate discharge limit compliance, a grab sample will be collected from the wastewater storage tank at a frequency of once every six months and once every 20,000 gallons of wastewater that is collected. Samplers will don a clean pair of new, non-powdered, disposable latex or nitrile gloves before collecting a grab wastewater sample from the wastewater storage tank using a disposable polyethylene bailer with check valve. Sample bottles will be filled directly from the bailer. Additional volume will be removed from the wastewater storage tank as needed to fill the required sample bottles. Grab wastewater sampling results will be reported to the Town of Tonawanda POTW for approval prior to discharge to the sanitary sewer.

Backfill Sampling Design and Rationale

The restoration of excavation areas, including the sourcing and placement of backfill, is described in the SOP (Plexus, 2019b). Backfill sampling will be conducted to determine if a given backfill source complies with the applicable SCOs and the requirements of the SOW. To evaluate compliance, one grab sample will be collected from every 1,000 CY of backfill. Samplers will don a clean pair of new, non-powdered, disposable latex or nitrile gloves before collecting backfill samples by hand. The collected backfill material will be directly placed into the appropriate containers for laboratory analysis. Backfill grab sampling results will be reported to the USACE for approval prior to the placement of any off-site backfill within an excavated area.

Perimeter Air Monitoring Sampling Design and Rationale

Perimeter air sampling will be conducted to determine background conditions and evaluate compliance with 10 CFR 20, Appendix B. The perimeter air monitoring program is described in the Perimeter Air Monitoring Plan (PAMP; Plexus, 2019c). To evaluate 10 CFR 20, Appendix B compliance, filter samples from perimeter and work area monitoring will be collected only when the most restrictive DAC or ALI is exceeded based on on-site gross alpha/beta results. Perimeter air sampling procedures are presented on Worksheet #18. Perimeter air sampling results will be reported to the USACE for review.

Gamma Survey Sampling Design and Rationale

Gamma survey sampling will be conducted to determine background conditions and evaluate compliance with the cleanup goals. At least one grab sample will be collected at locations (e.g., haul roads) when gamma survey results exceed the soil screening criteria. Samplers will don a clean pair of new, non-powdered, disposable latex or nitrile gloves before collecting gamma survey samples by hand. The collected material will be directly placed into the appropriate containers for laboratory analysis. The procedures for conducting gamma surveys are described in the Radiation Protection Plan (RPP; Plexus, 2019d). Gamma survey sampling results will be reported to the USACE for review.

Field Equipment Decontamination and Equipment Blank Sampling Procedures

When possible, disposable sampling equipment will be used to minimize the potential for cross-contamination. For reusable sampling equipment, including stainless steel spoons and bowls, the following decontamination procedure will be used:

- Scrub the equipment with a solution of potable water and Alconox (or equivalent laboratory-grade detergent). Spray bottles, one with potable water and one with an Alconox solution, and paper towels may be used for this step;
- Rinse the equipment with potable water;
- Rinse the equipment with distilled water; and
- Dry the equipment with a paper towel or air-dry the equipment on a clean surface. If the sampling equipment will not be used immediately after being decontaminated, wrap the equipment in aluminum foil or place it in sealable container away from sources of contamination, e.g., exhaust or dust.

If an equipment blank sample is required, then it will be collected immediately following decontamination using only laboratory-provided deionized water. Following decontamination, the laboratory-provided deionized water will be poured over non-dedicated equipment (i.e., spoon or bowl) and collected in an appropriately labeled container for laboratory analysis.

IDW Handling Procedures

Sampling activities for the soils remediation project are anticipated to generate IDW consisting of used latex or nitrile gloves, polyethylene bailers, stainless-steel sampling equipment, and a small amount of decontamination materials, including used paper towels; no free liquids are planned to be produced. If free liquids are generated, they will be absorbed with paper towels or other absorbent material and handled as solid material. The IDW materials generated during all sampling activities except for backfill sampling will be managed as FUSRAP-related wastes in accordance with Section 12 of the SOP (Plexus, 2019a). IDW materials derived from backfill sampling will be disposed of without special handling precautions.

4.0 Review of UFP-QAPP Worksheet #19 & 30

The following is excerpted from the Revised Final UFP-QAPP:

Worksheet #19 & 30: Sample Containers, Preservation, and Hold Times

(UFP-QAPP Manual Section 3.1.2.2)

(USEPA 2106-G-05 Section 2.3.2)

Matrix	Method	Analyte	Container(s)	Preservation	Holding Time (Preparation/Analysis)	TAT[3]
Soil (Backfill)	8260C	VOCs	(1) 40 milliliter (ml) amber, (1) 2 ounce jar Teflon lined lid	Methanol (MeOH) (vial only), < 4 Degrees Celsius (º C)	14 days	7 days
	8270D	SVOCs	(1) 4 ounce jar, Teflon lined lid	None, < 4º C	14 days to extraction/ 40 day extract	7 days
	6020A/7471B	TAL Metals	(1) 4 ounce jar, Teflon lined lid	None, < 4º C	180 days 6020/28 days 7471	7 days
	8082	PCBs	(1) 4 ounce jar, Teflon lined lid	None, < 4º C	365 days	7 days
	8081A	Pesticides	(1) 4 ounce jar, Teflon lined lid	None, < 4º C	7 days to extraction/ 40 day extract	7 days
	9012B	Cyanide	(1) 4 ounce jar, Teflon lined lid	None, < 4º C	14 days	7 days

Matrix	Method	Analyte	Container(s)	Preservation	Holding Time (Preparation/Analysis)	TAT[3]
	ASTM D422	Grain Size	1-gallon Ziploc® bag; If > 30% gravel, 2-gallon Ziploc®	None	60 Days	7 days
	ASTM 2487	Soil Type	50 lb Bucket	None	60 Days	7 days
	ASTM D698	Compaction	1-gallon Ziploc® bag	None	60 Days	7 days
	ASTM D2974-14	Organic Matter	1-gallon Ziploc® bag	None	60 Days	7 days
Soil (Backfill/Confirmation), Solid (Filter/Other)[1]	HASL 300 Ga-01	Ra-226, U-238	1-gallon Ziploc® bag	None	6 Months	3 days
	LANL ER 200M	Th-230	1-gallon Ziploc® bag	None	6 Months	3 days
Soil (IMC)[2]	HASL 300 Ga-01	Ra-226	1-gallon Ziploc® bag	None	6 Months	20 days
	LANL ER 200M	Isotopic Thorium	1-gallon Ziploc® bag	None	6 Months	20 days
	ASTM D3972 M	Isotopic Uranium	1-gallon Ziploc® bag	None	6 Months	20 days
Water (Wastewater)	SM7500 RaB M	Total/Soluble Ra-226	2 x 1-Liter Poly	None	5 Days to filter in the lab; 6 Months after preserved	Variable
	ASTM D3972 M	Total/Soluble Isotopic Uranium	2 x 1-Liter Poly	None	5 Days to filter in the lab; 6 Months after preserved	Variable
	LANL ER 200M	Total/Soluble Isotopic Thorium	2 x 1-Liter Poly	None	5 Days to filter in the lab; 6 Months after preserved	Variable
	8260C	VOCs	(3) 40 ml vials	hydrochloric acid (HCl) < 2 pH, < 4º C	14 days	Variable

Matrix	Method	Analyte	Container(s)	Preservation	Holding Time (Preparation/Analysis)	TAT[3]
	8270D	SVOCs	(2) 1,000 ml amber glass	None, < 4º C	7 days to extraction/40 day extract	Variable
	6020A/7470B	TAL Metals	(1) 250 ml Poly	nitric acid (HNO_3) < 2 pH, < 4º C	180 days 6020/28 days 7471	Variable
	8082	PCBs	(2) 1,000 ml amber glass	None, < 4º C	365 days	Variable
	8081A	Pesticides	(2) 1,000 ml amber glass	None, < 4º C	7 days to extraction/40 day extract	Variable
	4500CN	Cyanide	(1) 250 ml Poly	sodium hydroxide (NaOH) > 12 pH, < 4º C	14 days	Variable

1) Soil (confirmation) and Solid (filter/other) samples for HASL 300 Ga-01 and LANL ER 200 M analyses may be submitted in a single 1-gallon Ziploc® bag.

2) Soil (IMC) samples for HASL 300 Ga-01, LANL ER 200 M, and ASTM D3972 M analyses may be submitted in a single 1-gallon Ziploc® bag.

3)Variable TATs are based on need and laboratory capacity.

5.0 Review of UFP-QAPP Worksheet #18

The following is excerpted from the Revised Final UFP-QAPP. Changes/Clarifications from Preparatory meeting are highlighted. Note that tracking the specific IMC unit number that each IMC sample was created from is important. The COC may be the method for documenting the individual IMCs that make up the IMC sample:

Worksheet #18: Sampling Locations and Methods

(UFP-QAPP Manual Sections 3.1.1 and 3.1.2)

(USEPA 2106-G-05 Sections 2.3.1 and 2.3.2)

Sample Location / ID Number[1,2]	Matrix	Depth	Type	Analyte(s)	Sampling SOP	Quantity
Confirmation Soil Samples						
TLVP – E*X* – DU# – L# – ST#[3]	Soil	Variable	Composite	Ra-226, Th-230, and U-238 for U_{total}	See Worksheet #17	One composite sample from each EDUL
IMC Samples						
TLVP – IMC – ##	Soil	N/A	Composite	Ra-226, Isotopic Thorium, and Isotopic Uranium	See Worksheet #17	One composite sample for every ten IMCs filled
Wastewater Samples						
TLVP – WWA – ##	Water	N/A	Grab	Total and Soluble: Ra-226, Isotopic Thorium, Isotopic Uranium	See Worksheet #17	One grab sample for every 20,000 gallons of wastewater collected for discharge
TLVP – WWB – ##	Water	N/A	Grab	Priority Pollutants (VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Cyanide)	See Worksheet #17	One grab sample every 6 months of operation
Backfill Samples						

Sample Location / ID Number[1,2]	Matrix	Depth	Type	Analyte(s)	Sampling SOP	Quantity
TLVP – BF – #	Soil	N/A	Grab	Ra-226, Th-230, and U-238 for $U_{total,}$ VOCs, SVOCs, TAL Metals, PCBs, Pesticides, Cyanide, Grain Size, Soil Type, Compaction, Organic Matter by Weight	See Worksheet #17	One grab sample for every 1,000 CY of backfill
Perimeter Air Monitoring Samples						
TLVP – PA – ##	Solid (Filter)	N/A	Grab	Ra-226, Th-230, and U-238 for U_{total}	RSP-022	TBD
Gamma Survey Sampling						
TLVP – GS – #	Solid (Other)	N/A	Grab	Ra-226, Th-230, and U_{total}	See Worksheet #17	TBD

TBD = To-Be-Determined

1) "##" to be numbered sequentially starting with "01"; "*X*" to be lettered "A" through "H" to represent a given excavation area.

2) QC sample nomenclature: Field duplicates samples will be appended with "-FD", MS/MSD samples will be appended with "-MS" or "-MSD", equipment blank samples will be identified as "EB-2 digit day/2 digit month/2 digit year", trip blank samples will be identified as "TB-2 digit day/2 digit month/2 digit year".

3) "E*X*" = Excavation Area ("EA through "EH"); "DU#" = Decision Unit ("DU1", "DU2"…); "L#" = EDUL ("L1" through "L6"); "ST#" = Step Out ("ST1", "ST2",…), the suffix "–ST#" only added to Sample ID to identify step out excavation decision units.

6.0 Review of UFP-QAPP Worksheet #26 & 27

The following is excerpted from the Revised Final UFP-QAPP:

Worksheet #26 & 27: Sample Handling, Custody, and Disposal

(UFP-QAPP Manual Section 3.3)

(USEPA 2106-G-05 Section 2.3.3)

Sampling Organization: Plexus		
Laboratory: Pace National		
Pace National Sample Shipping Address: ATTN: Sample Receiving, 12065 Lebanon Road, Mt. Juliet, TN 37122		
Laboratory: Beaver Engineering		
Beaver Engineering Sample Shipping Address: 7378 Cockrill Bend Boulevard, Nashville, TN 37209		
Method of sample delivery (shipper/carrier): FedEx		
Number of days from reporting until sample disposal: 60 days		
Activity	**Organization and Title or Position of Person Responsible for the Activity**	**SOP Reference**
Sample Identification	Plexus, CQCSM	See below.
Chain-of-Custody Procedures	Plexus, CQCSM	See below.
Sample Packaging, Shipping, and Coordination	Plexus, CQCSM	See below.
Sample Receipt, Inspection, and Log-in	Pace National	Pace National SOP 060105
Sample Custody and Storage	Pace National	Pace National SOPs 060105 and 060106
Sample Disposal	Pace National	Pace National SOP 060106 and RAD_20

Sample Identification

Sample identification will be legibly recorded with waterproof, non-erasable ink, unless otherwise specified. If errors are made, corrections will be made by crossing a single line through the error and entering the correct information. All corrections must be initialed and dated. If possible, all corrections should be made by the individual making the error.

Samples collected for laboratory analysis will be identified by using a stick-on label or a tag, which is attached to the sample container. In some cases, such as large samples, the label or tag may have to be affixed to a bag containing the sample. If a sample tag is used, the sample should be placed in a bag, then the sample and the tag will be placed in a second bag.

The following information will be included on the sample label or tag using waterproof, non-erasable ink:

- Project number; 108330.002
- Sample location / ID number;
- Date and time of sample collection;
- Designation of the sample as a grab or composite;
- Whether the sample is preserved or unpreserved; and
- The general types of analyses to be performed.

Chain-of-Custody Procedures

Chain-of-custody procedures are comprised of the following elements: 1) maintaining custody of samples or other evidence, and 2) documentation of the chain-of-custody for evidence. To document chain-of-custody, an accurate record must be maintained to trace the possession of each sample, or other evidence, from the moment of collection to its introduction into evidence.

A sample or other physical evidence is in custody if:

- It is in the actual possession of an investigator;
- It is in the view of an investigator, after being in their physical possession;
- It was in the physical possession of an investigator and then they secured it to prevent tampering; and/or
- It is placed in a designated secure area.

The chain-of-custody record is used to document the custody of all samples collected and maintained by the field staff. All physical evidence or samples will be accompanied by a chain-of-custody record. This form may be generated by the laboratory or it may be a pre-printed multi-sheet carbonless form for hand entry of required information. The chain-of-custody record documents transfer of custody of samples from the sample

custodian to another person, to the laboratory or other organizational elements. The chain-of-custody record serves as a sample logging mechanism for the laboratory sample custodian.

All information necessary to fully and completely document the sample collection and required analyses must be recorded in the appropriate spaces to complete the chain-of-custody record. Chain-of-custody information will be legibly recorded with waterproof, non-erasable ink, unless otherwise specified. If errors are made, corrections will be made by crossing a single line through the error and entering the correct information. All corrections must be initialed and dated. If possible, all corrections should be made by the individual making the error.

The field sample custodian, project leader or other designee, and subsequent transferee(s) should document the transfer of the samples listed on the chain-of-custody record. Both the person relinquishing the samples and the person receiving them must sign the form. The date and time that this occurs should be documented in the proper space on the chain-of-custody record. The exception to this requirement would be when packaged samples are shipped with a common carrier (e.g., FedEx). Even though the common carrier accepts the samples for shipment, they do not sign the chain-of-custody record as having received the samples.

The chain-of-custody record is a uniquely identified document. Once the record is completed, it becomes an accountable document and must be maintained in the project file. The suitability of any other form for chain-of-custody should be evaluated based upon its inclusion of all of the above information in a legible format.

Sample Packaging, Shipping, and Coordination

The procedures contained in this document are to be used by field personnel when packing and shipping environmental samples by air transport. The collection of samples that would classify as hazardous materials (dangerous goods) is not expected. Samples that classify as dangerous goods originate from areas contaminated with high levels of hazardous materials, and these areas will not be encountered. Environmental samples should be packed prior to shipment by air using the following procedures:

1. Allow sufficient headspace (ullage) in all bottles (except VOA containers with a septum seal) to compensate for any pressure and temperature changes (approximately 10% of the volume of the container).
2. Ensure that the lids/seals on all bottles/containers are tight (will not leak).
3. Place bottles/containers in separate and appropriately sized polyethylene bags and seal the bags.
4. Select a sturdy cooler in good repair. Secure and tape the drain plug with fiber or duct tape inside and outside. Line the cooler with a large heavy-duty plastic bag.
5. Place cushioning/absorbent material in the bottom of the cooler and then place the bottles/containers in the cooler with sufficient space to allow for the addition of cushioning between the containers.

6. Put "blue ice" (or ice that has been "double bagged" in heavy-duty polyethylene bags and properly sealed) on top of and/or between the containers. The addition of ice may be omitted for sample shipments containing only radionuclide samples. Fill all remaining space between the containers with cushioning material.
7. Securely fasten the top of the large garbage bag with tape (preferably plastic electrical tape or duct tape).
8. Place the chain-of-custody record into a plastic bag and tape the bag to the inner side of the cooler lid.
9. Close the cooler and securely tape (preferably with fiber tape) the top of the cooler shut. Chain-of-custody seals (if available) should be affixed to the top and sides of the cooler within the securing tape so that the cooler cannot be opened without breaking the seal.

The shipment of environmental samples from the field to the laboratory will be coordinated by the CQCSM. Samples will be shipped via common carrier (e.g., FedEx) via air transport to Pace National or Beaver Engineering (addresses listed above). The CQCSM will communicate the shipment of the samples to the receiving laboratory via cellphone or email and provide the tracking number of the package. The CQCSM will also provide the tracking number to the Project Chemist. Sample receipt and login by the receiving laboratory will be reviewed the Project Chemist. Any deficiencies noted by the receiving laboratory regarding the chain-of-custody or sample condition will be addressed by the Project Chemist.

7.0 Review of Chain of Custody

Example chain of custody reviewed.

8.0 Safety

Discussion of Applicable AHAs:

AHAs to be gone over prior to work at the daily tailgate. AHAs to be initialed by each reviewer each time reviewed. AHAs can be modified in the field to account for job-specific changes. Initialed AHAs should be included in daily report.

Preparatory Meeting Checklist
Landfill Operable Unit
Tonawanda Landfill Vicinity Property, New York

Date: 6/7/2019 10:30am Presented by [redacted]

Contract Number: **W912QR-12-D-0010, Task Order (TO) Number W912P418F0049.**

Attendees:
[redacted]

1.0 Definable Feature of Work addressed:

DFOW 6 – Pumping/Draining/Collection

Manage groundwater and/or storm water that infiltrates excavation areas.

DFOW 7 – Solids Collection and Containment

Contaminated Soil Collection – excavate FUSRAP-contaminated soil and debris from the limits of eight distinct areas.

Waste Containment – place excavated contaminated soil and debris into IMCs, survey, and manifest for transportation.

DFOW 8 – Liquid/Sediment/Sludge Collection and Containment

Manage and treat groundwater and/or storm water that infiltrates excavation areas as needed.

DFOW 9 – Disposal

Container Handling – transport filled IMC back to staging area.

2.0 Schedule:

Excavation is planned to begin Tuesday June 11 at excavation areas A, B and C.

Discharge piping for contact water will be setup as received or when needed.

Shipping of full IMCs likely Wednesday at the earliest.

3.0 Pumping/Draining/Collection (APP/SSHP DFOW 6) & Liquid/Sediment/Sludge Collection and Containment (APP/SSHP DFOW 8)

The NPDES Discharge permit from the town is valid starting June 1 and is good through 30 Sep 19. The permit covers 40,000 gallons. Any additional discharge is permitted, but at an additional cost, therefore

the discharge amount must be monitored (which is a permit requirement). USACE requested a copy of the discharge permit.

A sump will be excavated at the edge of the excavation area to collect water.

A pump will be used to transfer the water to the 18,000 gallon weir tank where solids will settle out. Once the weir tank is at or near capacity, the water will be pumped through the treatment trailer and discharged into the 21,000 gallon holding tank. A sample will be collected from the holding tank to determine compliance with the discharge permit. Shallow groundwater likely different than the deeper groundwater. Additional tanks will be added as needed.

At a minimum the treatment must include the use of a 10 micron filter. The permit contains the required analytical suite. When approved for discharge, the POTW has requested that the water be released at or below the rate of 100 gallons per minute. Filter bags will be disposed of a FUSRAP waste. Copies of the analytical results will be provided to the USACE. Note that weather (e.g., precipitation) may impact the ISCOS readings.

Solids in the weir tank will be removed either by flushing from outside the tank, or a confined space entry will be performed to remove the solids. The APP/SSHP will be modified to include confined space entry.

Any solids removed will be disposed of as FUSRAP wastes.

4.0 Solids Collection and Containment (APP/SSHP DFOW 7)

Additional utility clearance is required at excavation areas A and ½ of B. This s scheduled for Monday June 10. Additional civil survey is also scheduled for Friday. Erosion controls still need to be installed in the FUSRP area. The topography of the area appears to be different than the plan, and once the area is cleared out more, the appropriate controls

4.1 Contaminated Soil Collection

All excavations have been marked out by the civil surveyor. Areas have been or are being cleared for excavation. Erosion controls remain to be installed but will be installed before any excavation takes place.

Excavator will remove soil within the excavation limits until water is encountered. If water is encountered, a sump will be dug on the edge of the excavation area as previously discussed. The excavation will continue to a depth of 4 feet and sidewalls will be screened and confirmation samples will be collected when screening levels indicate. The excavation will then be benched or sloped and dug the last foot to a total depth of 5 feet below grade. Additional screening and confirmation sampling will be performed. Screening and sampling will be discussed at a follow-up Preparatory Meeting for DFOW 3.

The excavator will begin excavating the Northern side of the excavation, and work towards the south. The objective is to minimize the excavator contacting contaminated soil. Technicians will be on hand to scan the equipment as it moves from area to area. Technicians will also scan the roll-off truck and tires prior to releasing the IMC from the excavation area.

LiquiSorb 2000 will be used to solidify the waste material as needed. The LiquiSorb will be broadcast from a 5 gallon bucket (or similar) across the waste. Past experience has shown that small applications are better than placing a large amount initially.

Truckers will utilize CB channel 17 to communicate with EnSol as needed.

Plexus (DNT and USACE) to use handheld radios for on-site communication in addition to cell phones.

EnSol has identified material for use as backfill and has collected samples. Plexus will review the analytical results to determine compliance. If the material meets that requirements, radionuclide and geotechnical samples will be collected.

4.2 Waste Collection

IMCs will be covered with plastic to prevent contamination of the IC and the truck. When loaded, any excess soil on the plastic will be brushed off and placed in the IMC or returned to the excavation. Any material that drops to the ground will be picked up, placed back in the excavation, and the area that it dropped will be scanned to ensure that all contaminated material has been recovered.

No personnel will be allowed on top of the IMCs without fall protection.

5.0 Disposal (APP/SSHP DFOW 9)

Full IMCs will be sealed at the excavation area and visually inspected for obvious contamination then scanned with a pancake probe for a qualitative assessment of radioactivity before being transported to the storage area for ISOCS scan. IMCs will be transported by roll off truck to the storage area, stopping before leaving the FUSRAP area to be weighed. Several empty IMCs will be weighed to obtain an average empty weight which will be used to estimate the weight of the waste. It may take several IMCs to establish consistent loading near capacity.

The ISOCS scan will take place at the storage area. The ISOCS operator will screen the IMC to determine if there are any hot spots. If a hot spot is detected, USACE will be notified. Unless directed otherwise, the ISOCS will consist of a single reading at the midpoint of the waste within the IMC. He midpoint will be determined when loading. It is likely that the center of mass within the IMC will be in the back 2/3rds of the unit due to lifting of the IMC onto the truck and tilting to drop the IMC.

Trucks will be weighted at axel scales at the northern trailer area. Weights will be communicated to the ISCOS operator.

Full IMCs will be placed as close together without impacting ISCOS readings. If an ISOCS results for an IMC are too high, the IMC may first be moved away from other IMCs and re-shot before a decision is made to re-configure the load.

An IMC manifest package will be assembled by the Waste Manager and will consist of the IMC number, the date the date the IMC arrived on site, the date filled, certification that the IMC was released from the excavation area, the weight of the IMC, and the ISCOS reading. Initially, manifest packages will be provided on an on-gong basis but will later be provided at the end of the day.

Plexus will retain one copy of the manifest and provide a copy to USACE. USACE will provide an email with the complete contents of the manifest package.

The manifest package be delivered in hardcopy.

6.0 Safety

Discussion of Applicable AHAs:

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