

## **MODULE IV – SWMU CORRECTIVE ACTION PROGRAM (CAP)**

### **IV.A CORRECTIVE ACTION PROGRAM**

- IV.A.1. The Permittee shall conduct a CAP for all Solid Waste Management Units (SWMUs) and Hazardous Waste Management Units (HWMUs) identified in the most recent modification of Table 1-1 in Attachment 9. The Groundwater Management Unit (GWMU) shall be managed in accordance with Module V of this Permit.
- IV.A.2. The Director may add HWMUs or SWMUs to Table 1-1 of Attachment 9 as described in Condition IV.H.
- IV.A.3. This Permit has been developed in accordance with the applicable requirements of UAC R315-1 through 101. All conditions within this Permit shall supersede conflicting statements, requirements, or procedures found in UAC R315-1 through 101 or attachments to this Permit.
- IV.A.4. At the completion of the CAP the Permittee shall conduct a site-wide ecological risk assessment.

### **IV.B STANDARD CONDITIONS**

- IV.B.1. Failure to submit the information required in this Module or falsification of any submitted information is ground for enforcement action.
- IV.B.2. The Permittee shall submit a minimum of two copies of each plan or report to the Director. The document shall also be submitted in an acceptable electronic format.
- IV.B.3. Upon written approval by the Director, all final plans, schedules, and reports required by the conditions in Module IV are incorporated by reference into Module IV. Any non-compliance with such approved plans and schedules shall be deemed non-compliance with this permit and may be subject to enforcement action.
- IV.B.4. The Permittee shall submit all draft final, final plans, reports, and schedules as specified in Conditions below. The Permittee shall revise draft final plans, reports, and schedules in the time frames specified by the Director. The Permittee may request an extension to these schedules for approval by the Director.
- IV.B.5. The Permittee shall notify the Director of planned fieldwork once the plan for the specific fieldwork has been approved by the Director. The Permittee shall provide the Director with 7 days notification before conducting any sampling or other activities specified in the approved plans and reports described in this Module. All raw data, such as sample results, laboratory reports, drilling logs, bench scale or pilot scale data, survey data and other supporting information gathered or generated during activities undertaken pursuant to Conditions in this module shall be maintained at ATK during the effective term of this permit, unless the Director approves alternate timeframes upon request of the Permittee. The Permittee shall provide copies of reports, logs, and other data to the Director upon request.
- IV.B.6. All plans for remediation work, to include both corrective and interim actions, shall contain sections discussing procedures and physical processes for classification and containment of any hazardous waste identified. These procedures shall be site specific and

include provisions for both expected and the potential for unexpected waste. For sites that include uncharacterized waste, generated waste shall be handled in a manner to minimize dispersion of the waste to the environment. Waste shall be characterized within 90 days of generation/excavation.

#### **IV.C. PRIORITIZATION AND TRACKING**

IV.C.1. The Permittee has prioritized the SWMUs and HWMUs into thirteen groups. The SWMU and HWMU investigation priority list is included in Table 1-1 of Attachment 9. The Permittee shall update and submit Table 1-1 to the Director for approval by January 15<sup>th</sup> of every calendar year for the life of the Permit or until the corrective action program is complete and the Director has concurred.

IV.C. 2 Included with Table 1-1, submitted to the Division in accordance with Condition IV.C.1, the Permittee shall submit a SWMU and HWMU investigation schedule for the upcoming calendar year for approval to the Director. This schedule shall identify when the Permittee plans to submit the RFI, CMI, Interim Measures, or other work plans and reports for a SWMU or groups of SWMUs identified in Table 1-1.

IV.C.3. Conditions IV.C.1 and IV.C.2 apply to newly identified SWMUs.

#### **IV.D. RCRA FACILITY INVESTIGATION (RFI) AND RFI REPORT**

IV.D.1. The Permittee shall conduct an RFI for each SWMU identified in Table 1-1, in accordance with the approved RFI Work Plan. The objective of the RFI is to determine the nature, magnitude, and extent of known and suspected releases of solid and/or hazardous wastes and constituents. The data collected during the RFI shall be used to support the evaluation of risk to human health and the environment and natural resources and a final site recommendation as described in Condition IV.D.5. for a SWMU and or group of SWMUs.

IV.D.2. RFI Work Plans shall address data quality according to the requirements in quality assurance project plan (QAPP) in Appendix C. Site-specific data quality requirements shall also be addressed as needed.

IV.D.3. The RFI Work Plans described in Condition IV.D.1. shall be developed in accordance with a site-specific conceptual model for each SWMU or group SWMUs, and R315-101. Each work plan shall be submitted to the Director for approval. The Permittee shall implement all RFI Work Plans according to the schedule provided in each approved final RFI Work Plan. The Permittee may modify the RFI implementation schedule upon approval by the Director.

IV.D.4. Within 14 days of obtaining all information needed to prepare the RFI Report, the Permittee shall provide a schedule for submittal the RFI Report to the Director for approval.

IV.D.5. The RFI Report shall be submitted for approval to the Director as described in IV.D.5., and shall include the following: 1) all data collected during the RFI and other relevant data held by the Permittee, 2) a description of the nature and extent of contamination at the site, 3) human health and ecological risk assessment and an evaluation of the potential for impacts to natural resources as defined in R315-101, and 4) if the RFI Report recommends corrective action for a specific SWMU or group of SWMUs, the RFI Report shall include an evaluation of possible corrective measures technologies and recommend a technology or remedy. The Director may approve use of the corrective measures technology described in the RFI Report

or may require a more extensive Corrective Measures Study (CSM) and submittal of a CMS Report.

- IV.D.6. The RFI Report shall include one of the following recommendations for each SWMU or group of SWMUs: 1) additional sampling as described in IV.D.7, 2) No Further Action (NFA) as defined in R315-101, 3) corrective action as defined in R315-101, or 4) site management without corrective action as defined in R315-101.
- IV.D.7. If the Director or the Permittee determine additional information or sample data is needed to support the recommendations in Condition IV.D.5, the Permittee shall amend the RFI report and include a schedule for submittal of a Phase II RFI Work Plan for approval by the Director. The scheduling, work implementation, and RFI report submittal requirements in Conditions IV.D.1-6 apply to Phase II RFI Work Plans and Phase II RFI Reports.
- IV.D.8. A determination of NFA in accordance with R315-101, shall not preclude the Director from requiring further investigations, studies, or remediation at a later date if new information or subsequent analysis indicates an actual or potential release has/may occur from a SWMU at the Permittee's facility.

**IV.E. SITE MANAGEMENT PLANS**

- IV.E.1. Any SWMU that does not meet the NFA requirements of R315-101 and does not need corrective action, or any SWMU or group of SWMUs that needs site management following corrective action, as described in UAC R315-101, must be managed to control the risk to human health and the environment. Following the Director's approval of an RFI Report proposing site management without corrective action, or where site management will be needed following corrective action, the Permittee shall develop a Site Management Plan (SMP). The SMP shall meet the requirements of R315-101 and at a minimum include the following:
  - IV.E.1.a. A description of the SWMU and summary of the site characterization as described in the RFI Report, including a summary of the magnitude, nature, and extent of the contamination;
  - IV.E.1.b. A summary of the conclusions of the risk assessment in the RFI Report, including identification of all potential receptors, and a conceptual model that describes the actual and potential human and environmental impact(s) from the residual contaminants at the site;
  - IV.E.1.c. A detailed description of how the risk at the SWMU will be managed to protect human health and the environment (e.g., fencing, inspection, maintenance, monitoring, etc.);
  - IV.E.1.d. An inspection program that will be used to monitor the SWMU or group of SWMUs to ensure that the site conditions have not changed and that the site conceptual model is still appropriate. The inspection program shall include, at a minimum, a description of what will be inspected, the inspection frequency, a description of what the inspector should evaluate, how to document and resolve problems, and an inspection checklist;
  - IV.E.1.e. Photos and figures, as needed, to describe the SWMU or group of SWMUs, show the location, explain access, and highlight distinctive features;
  - IV.E.1.f. An environmental covenant developed in accordance with UCA Section 57-25-101 et seq., and;

- IV.E.1.g. A legal description and survey plat of the property.
- IV.E.2. Within 90 days of Director approval of the RFI Report, the Permittee shall submit an SMP to the Director for approval. The Director shall provide for public participation prior to approving a SMP as required by UAC R315-101-7.
- IV.E.5. The Permittee shall implement the SMP within 30 days of receipt of approval by the Director. If approval of the SMP or environmental covenant is delayed, the Director may require the Permittee to begin inspection, maintenance, monitoring, or other activities prior to SMP approval.

**IV.F. CORRECTIVE ACTION**

- IV.F.1. If the approved RFI Report recommends corrective action the Permittee shall submit to the Director for approval a Corrective Measures Implementation Plan (CMIP). The CMIP shall be designed to implement the remedy selected in the RFI Report or CMS Report and shall be submitted according to the schedule contained in the approved RFI Report or CMS Report. This schedule may be modified upon approval by the Director. The CMIP shall include:
  - IV.F.1.a. An introduction describing the overall purpose of the corrective action;
  - IV.F.1.b. A summary on the current conditions and conceptual site model for SWMUs included in the CMIP;
  - IV.F.1.c. Corrective measure objectives, including proposed media cleanup standards;
  - IV.F.1.d. A detailed description of any proposed or completed pilot, laboratory, and/or bench scale studies that the Permittee has or will conduct in conjunction with the implementation of this CMIP;
  - IV.F.1.e. A description of long-term data collection, monitoring, or other requirements that may be needed as part of a long-term site management plan.
  - IV.F.1.f. Engineering design plans and specifications for the approved corrective measure(s);
  - IV.F.1.g. Operation and Maintenance Plan for the approved corrective measure(s), if applicable;
  - IV.F.1.h. A monitoring plan that describes how the effectiveness of the approved corrective measure will be assessed;
  - IV.F.1.i. Completion criteria to determine when corrective measures have achieved the cleanup objectives;
  - IV.F.1.j. A Construction Work Plan and construction quality assurance objectives, if applicable;
  - IV.F.1.k. A schedule for the implementation of the corrective measures;
  - IV.F.1.l. Detailed plans for confirmation soil sampling or other sampling and sample quality control. Data quality requirements are included in Appendix C. Site specific data quality requirements shall also be addressed as needed; and,

- IV.F.1.m. Detailed plans for waste management and documentation of waste disposal.
- IV.F.2. Upon approval of the CMIP, the Permittee shall implement the corrective measure(s) according to the schedule contained in the CMIP.
- IV.F.3. The CMI Report will be submitted according to the schedule in each approved CMIP. This schedule may be updated as needed based on cleanup progress. The CMI Report shall certify that the project was built according to the design plans and specifications, and that the corrective measure is performing adequately. The report shall also include, at a minimum, the following elements:
  - IV.F.3.a. A summary on the construction of the corrective measure(s), including any deviation or modification to the design plans and specifications;
  - IV.F.3.b. Construction quality assurance documentation in accordance with UAC R315-8-2.10., and;
  - IV.F.3.c. As-built drawings and photographs.

**IV.G. INTERIM MEASURES (IM)**

- IV.G.1 If at any time during the CAP the Permittee or the Director determine a release or a potential release of solid or hazardous waste or hazardous waste constituents from a SWMU poses a threat to human health, environment, or natural resources, the Director may require the Permittee to perform interim measures, or the Permittee may voluntarily perform interim measures. In determining the need for interim measures, the Director or the Permittee shall consider the following:
  - IV.G.1.a The actual or potential exposure(s) to human or environmental receptors;
  - IV.G.1.b. The potential for further degradation of environmental media absent of any interim measure;
  - IV.G.1.c. The presence of containers of solid or hazardous waste constituents that may result in a release or represent a compliance issue;
  - IV.G.1.d. Presence and concentration of solid or hazardous waste constituent(s) in soils that have the potential to migrate to surface or ground water;
  - IV.G.1.e. Weather conditions that may increase the potential migration or leaching of contamination;
  - IV.G.1.f. Risks of fire, explosion, or accident;
  - IV.G.1.g. The time required to develop and implement a final remedy; and,
  - IV.G.1.h. Funding, contracting, or other administrative situations.
- IV.G.2. If the Director or the Permittee determine the need for IM the Permittee shall submit an IM Plan for Director approval.
- IV.G.3. The IM Plan shall identify specific actions to be taken to implement the IM and an implementation schedule. The IM Plan shall be incorporated into this permit upon Director

approval, and may be subject to public comment as determined necessary by the Director. The IM Plan shall include the following:

- IV.G.3.a. Sampling plan, data collection, quality assurance project plan, and data management plan;
- IV.G.2.b. The design plans and specifications, construction requirements, operation and maintenance requirements, project schedules, and final design documents;
- IV.G.2.c. The construction quality assurance objectives, inspection activities, sampling requirements, and documentation; and,
- IV.G.2.d. A schedule for submittal of progress reports and final Interim Measures report.
- IV.G.3. The Permittee shall implement the IM Plan as described in the approved IM Plan.
- IV.G.4. The Permittee shall submit an IM Report and meet the RFI reporting and other requirements of Conditions IV.D.1-7.

**IV.H. NOTIFICATION REQUIREMENTS FOR AND ASSESSMENT OF NEWLY IDENTIFIED SOLID WASTE MANAGEMENT UNITS**

**IV.H.1** The Permittee shall notify the Director in writing within 30 days of discovery of any newly identified sites, which the Permittee believes may meet the definition of a SWMU or HWMU. Upon notification, the Director and Permittee shall schedule a visit to the site(s). During the site visit, the Permittee shall present available information about the site as need to justify a decision about the status of the site. These decisions shall determine whether: 1) the site should be declared a SWMU or HWMU; 2) the site will be addressed through the process outlined in Condition IV.G for interim measures (if managed as an interim measure the site does not need to be added to Table 1-1 of Attachment 9), or 3) the site is a SWMU and must be added to Table 1-1 and will be included in the RFI program.

**IV.H.2** If information is presented during the decision making process described in Condition IV.H.1., that the hazardous wastes were or may have been placed in the newly identified SWMU after November 19, 1980, the Director may consider the site as a HWMU (non-notifier) and require the Permittee to close the unit under the requirements of R315-7 and R315-101.

**IV.H.3** Within 30 days of making a decision as described in Condition IV.H.1, the Permittee shall provide a schedule for submittal of an interim measures plan or an RFI Work Plan.

**IV.H.4** The RFI Work Plan or Interim Measures plan for the newly identified SWMU(s) shall meet the requirements and follow the process outlined in Conditions IV.D and IV.G.

**IV.I. REPORTING REQUIREMENTS**

**IV.I.1** In addition to the reporting requirements in this module the Permittee shall submit to the Director for approval written quarterly progress reports of activities conducted pursuant to the Conditions of this module. The progress reports may be letter reports or minutes from programmatic update meetings.

IV.I.2. The Director may require the Permittee to conduct new or more extensive assessments, investigations, or studies, as needed, based on information provided in these progress reports or other supporting information.

**IV.J. FINANCIAL ASSURANCE FOR CORRECTIVE ACTION**

IV.J.1. The Permittee shall be financially responsible for the development and implementation of the corrective action program in accordance with UAC R315-8-6.12(b).

**IV.K. PUBLIC PARTICIPATION**

IV.K.1. Prior to approving any RFI, CMIP, IMP, SMP, or NFA petition, the Director may provide for public participation as defined by UAC R315-101-7.