

## ATTACHMENT II-1-1

### WASTE ANALYSIS PLAN AND FORMULA DEVELOPMENT FOR TREATMENT WASTES

#### I. PURPOSE AND SCOPE

1. The purpose of this plan is to verify that wastes treated at the Facility meet the applicable treatment standards in Utah Admin. Code R315-13-1 and other treatment objectives.
2. This plan is an attachment to the Waste Analysis Plan and applies to wastes subject to the Land Disposal Restrictions in Utah Admin. Code R315-13-1 that are treated at the Facility.
3. This plan describes the additional and alternative waste analysis procedures applicable for wastes to be treated by stabilization.
4. For purposes of this plan, treatment refers to stabilization as described in Attachment II-1-3, *Waste Stabilization Plan*.

#### II. ESTABLISHMENT OF A TREATMENT FORMULA

1. The Permittee shall establish a formula for treating waste as follows:
  - a. The Permittee shall establish and document the following treatment parameters:
    - i. Composition and amount of treatment reagents as listed in Attachment II-1-2, *Approved Treatment Reagents*, to be used;
    - ii. consistency of treatment residues;
    - iii. measurement and documentation of the physiochemical changes to the treatability sample as the result of measured amounts of water and reagents added;
    - iv. mixing effort applied;
    - v. sequence, by amount, of reagents and water as added;
    - vi. whether a pH adjustment is necessary; and



- a. which standards were not met,
  - b. which treatment runs were affected,
  - c. what were possible causes of the incomplete treatment, and
  - d. what steps will be taken to remediate the situation.
2. The Permittee shall document the determinations made above in the Operating Record.
  3. If an adjustment to a treatment formula can be identified and established, the affected waste residues may be re-treated using that formula.
  4. Retreatment formulas shall be established using the requirements of Condition II.
  5. The waste-to-additives weight ratio for the retreatment formula or for the combined treatment shall not exceed the requirements of Condition IV.5. of Attachment II-1-3, *Waste Stabilization Plan*, unless prior approval is received from the Director.

END OF ATTACHMENT II-1-1