## CROW BUTTE RESOURCES, INC.

# **Technical Report Marsland Expansion Area**



into a cone bottom tank (well work-over fluid tank) at the satellite plant. That tank will feed a belt filter or other separation equipment to separate solids from water. Filtered water will be discharged to the DDW water supply tank for disposal in the onsite DDWs. Solids will be bagged for 11e.(2) disposal. This will allow treatment and disposal of the fluids without the accumulation of waste solids.

As a backup to this system, the well fluids would be transported to the existing evaporation ponds at the CPF. This option would only be used if there were equipment issues with the separation system.

### 4.2.1.2 Liquid Process Waste

The operation of the satellite facility results in one primary source of liquid waste, a production bleed, as previously discussed in Section 3. This bleed will be routed to wastewater tanks housed in the satellite building and then pumped from the tanks to the DDW.

#### 4.2.1.3 Waste Petroleum Products and Chemicals

Small quantities of waste petroleum products and chemicals typical of ISR facilities will be generated and will include items such as waste oil and out-of-date or partially used reagents/chemicals. All such wastes that are non-hazardous will be temporarily stored in appropriate sealed containers above ground prior to disposal by a contracted waste disposal entity at an approved waste disposal or recycling facility. Such wastes are not considered to be affiliated with the processing or generation of 11e.(2) byproduct material and will not be classified as Atomic Energy Act-regulated waste. It is estimated that less than 50 gallons of waste petroleum products and chemicals will be disposed of annually. Any used oil that may be generated will be recycled by employing an approved commercial recycler, and such materials are not classified as a hazardous waste. Hazardous waste generation is discussed in Section 4.2.2.4.

#### 4.2.1.4 Aquifer Restoration Waste

Following mining operations, restoration of the affected aquifer results in the production of wastewater. The current groundwater restoration plan consists of four activities:

- 1. Groundwater transfer
- 2. Groundwater sweep
- 3. Groundwater treatment
- 4. Wellfield circulation

Only the groundwater sweep and groundwater treatment activities will generate wastewater. Based on historical restoration activities at the current Crow Butte operation, it is unlikely that groundwater transfer and/or groundwater sweep will be used. Therefore these activities were not reflected in the restoration schedule (Figure 1.7-4 and Appendix T).

During groundwater sweep, water would be extracted from the mining zone without injection, causing an influx of baseline quality water to sweep the affected mining area. The extracted water must be sent to the wastewater disposal system during this activity. As has been the case with past operations at Crow Butte, it is anticipated that, during restoration, groundwater at the