APPENDIX D

Investigation Derived Waste Analytical Data

INVESTIGATION DERIVED WASTE (IDW) MANAGEMENT

The procedures used for the management of IDW for the DuPont Chamber Work remedial investigation fieldwork are described below:

- Soil cuttings were placed in 55-gallon drums.
- Purge waters from groundwater investigation tasks were containerized in 5-gallon buckets and then transferred to 55-gallon drums.
- Decontamination fluids were also drummed as necessary.
- Personal protective equipment (PPE) and plastics were placed into drum liners within 55-gallon drums.
- Metal drums were used for the storage of all IDW materials.
- The start date and contents were labeled on the side of each drum.
- Each drum's exterior surface was scanned by a radiological technician for radioactivity prior to being removed from the exclusion zone.
- All drums were transferred to the appropriate 90-day storage impoundment area located adjacent to each AOC.
- The drums were segregated based on the contents of the drum. Liquid drums were placed
  on secondary containment pallets.
- Weekly inspections were conducted during the RI fieldwork to monitor the numbers, placement of drums, condition of drums, and condition of storage area.
- Composite samples for most analytes were collected from the drums for IDW characterization, save for VOC analyses, which required grab samples. Analysis results for IDW samples are included in this Appendix.
- Once the analytical results were received for the samples representing the contents of the drums, the values were compared to the appropriate federal regulations regarding hazardous waste determinations and radiological activity.

For IDW generated during the OU 1 soils investigation fieldwork, five liquid drums with radiological activity were determined to have hazardous waste characteristics. These five drums were removed from the 90-day storage impoundment and transferred to the

DuPont Environmental Treatment (DET) Chemical Waste 1-year hazardous waste storage pad in November 2002.

In March 2003, all the liquid drums generated during fieldwork (23 drums) were solidified to facilitate disposal. The nonhazardous drums (18) stored in the original 90-day storage impoundments were solidified using a product (Aquaset) manufactured by Fluid Tech, Inc. The five hazardous waste drums were solidified using the same product along with a stabilizer for the hazardous constituents (Petroset II). During the solidification process, two additional drums of PPE/plastics were generated. Two solidified liquid drums were also generated as a result of the solidifying products expansion. Five drums were sampled for hazardous waste and radiological constituents. The results indicated no hazardous constituents exceeding the federal regulations.

A total of 128 drums of IDW were generated during the OU 1 soils fieldwork. No additional treatment was required prior to disposal. The drums were shipped for offsite disposal at US Ecology in Grandview, Idaho. The final amount of drummed IDW generated during the OU 1 soils fieldwork is as follows:

OU 1 SOILS IDW SUMMARY	
Media	**Volume**
PPE	64 drums
Soil	20 drums
Water	25 drums
Plastic/acetate Geoprobe sleeves	16 drums
Wood	3 drums

A total of 39 drums of IDW were generated during the OU 2 soils investigation fieldwork. No additional treatment was required prior to disposal. The drums were shipped for offsite disposal at US Ecology in Grandview, Idaho. The final amount of drummed IDW generated during the OU 2 soils fieldwork is as follows:

OU 2 SOILS IDW SUMMARY	
Media	**Volume**
PPE, core liners, sampling material	33 drums
Soil	2 drums
Water	4 drums

A total of 110 drums of IDW were generated during the OU 3 soils investigation fieldwork No addition treatment was required prior to disposal. The drums were shipped for offsite disposal at US Ecology in Grandview, Idaho. The final amount of drummed IDW generated during the OU 3 soils fieldwork is as follows:

OU 3 SOILS IDW SUMMARY	
Media	**Volume**
PPE, core liners, sampling material	10 drums
Soil	27 drums
Water	73 drums

A total of 277 drums of IDW were generated during the groundwater investigation fieldwork done at all OUs. No addition treatment was required prior to disposal. The drums were shipped for offsite disposal at US Ecology in Grandview, Idaho. The final amount of drummed IDW generated during the groundwater investigation fieldwork is as follows:

GROUNDWATER IDW SUMMARY	
Media	**Volume**
PPE, core liners, sampling material	126 drums
Soil	49 drums
Water	102 drums

Analytical data is provided on accompanying DVD