

PROTOCOL

Unit-Specific Constituents

Introduction

The following protocol has been developed in order to support the Savannah River Site environmental remediation program. This protocol addresses the identification of unit-specific constituents (USCs). The exposure groups to be used in this process have been described in the Exposure Group Protocol. This process is intended to be used after application of the Unit-Background Data Processing Protocol and the Unit-Source Data Processing Protocol.

Details¹

1. For each constituent in each unit-source exposure group², compare the unit-source maximum concentration to twice the unit-background average concentrations. In a table, identify the unit-source maximum concentration as either greater than twice the unit-background concentration or less than the twice the unit-background concentration. Those constituents whose unit-source maximum concentrations are greater than twice the unit-background concentration are labeled as Unit Specific Constituents (USCs).
2. Based on professional judgment, prepare planar maps, cross-sectional plots, or other illustrations for each USC in each exposure group which will be useful in illustrating the nature and extent of contamination at the unit. At a minimum, plots will be provided for each constituent which is identified as a *preliminary* COC (ARAR, HH, CM, ECO)³. It is expected that data for all preliminary COCs will be interpreted. The nature and extent of contamination summary and conclusions will provide the method of managing uncertainty where interpretation is not possible based on inadequate data quality or quantity.

¹ Note that the USC screening is used for nature and extent discussion and for contaminant migration analysis. It is not used as the basis for risk analysis.

² For the soils medium, use only the 0 to WT exposure groups for the unit-source and the unit-background.

³ Preliminary COC – constituents found at the unit that have undergone detailed analysis and have been found to present a potential threat to human health and the environment.