

APPENDIX F

Analytical Data Processing Procedures

Analytical Data Processing Procedures

This appendix describes the procedures to be used for processing chemical analytical data obtained during the site inspection (SI), site characterization (SC), and remedial investigation (RI) field investigations at the Former Galena Forward Operating Location (FOL). Data obtained from the environmental samples will be validated as defined in Worksheet #35 (*Validation [Steps IIa and IIb] Process*) and Worksheet #36 (*Validation [Steps IIa and IIb] Summary*). The analytical data processing procedures presented in this Appendix meet the requirements of the *Alaska Department of Environmental Conservation Division of Spill Prevention and Response, Contaminated Sites Program, Guidelines for Data Reporting, Data Reduction, and Treatment of Non-detect Values - Technical Memorandum 08-001 (August 12, 2008)*, Data Reporting Sections 1 and 2.

Before data presentation and evaluation, the raw validated data will be processed to produce a working dataset with which to run statistical summaries and prepare the baseline risk assessment. Data processing will include the following procedures:

- Resolving multiple results for a single chemical reported by different analytical methods (for example, naphthalene reported by both Methods SW8260 and SW8270-SIM) to produce a single value for each chemical per sample
- Resolving field duplicate results to produce a single value for each sampling location

To resolve multiple results for single chemicals, the following procedures will be used to create a single best result:

- If both results are detections, the maximum detected value will be used. If there are multiple results at the same value, nonqualified valid detections will be used.
- The lowest quantitation limit will be used when all results are nondetections.
- If one result is a detection and the other a nondetection, the detected value will be used.

Once the working dataset is complete, data are ready for processing to create the Environmental Resource Program Information Management System (ERPIMS) deliverable as described in Worksheet #29 (*Project Documents and Records*).

