

8. RECORD KEEPING AND REPORTING REQUIREMENTS

8.1 RECORD KEEPING

The Rayonier project file will include copies of the SAPs and QAPP, which document the proposed approaches to the collection and analyses of samples. Additionally, records that document any departures from the SAPs and QAPP (such as site logbooks and FCR forms) will be maintained in the project file. The results of all analyses, including laboratory reports and summary tables or interpretive reports, will also be retained.

All records will be maintained for a period of at least 10 years after the cleanup site delisting. The records will be furnished upon request or made available for inspection by any authorized representative of Ecology.

8.2 REPORTING REQUIREMENTS

8.2.1 Laboratory Reports

Final written laboratory reports will be required for both chemical and bioassay testing. Key elements of these reports are described below. It is expected that these reports, or summaries of these reports (as appropriate), will be appended to the final report.

8.2.1.1 Chemistry Reports

Final written laboratory reports and data deliverables will contain the following in a Contract Laboratory Program (CLP)-like format:

- Case narrative
- Identification of all protocols
- Summary results of initial and continuing calibrations
- Method and instrument blanks
- All field sample and field QA/QC sample results
- Surrogate recoveries (organic analyses)
- Summary results of laboratory control samples

- Summary results of matrix spikes
- Summary results of matrix spike duplicates
- Supporting raw data
- Supporting sample tracking information (e.g., sample receipt forms, chain-of-custody form)
- Supporting documentation on any corrective actions

Initial calibration information must include concentrations of each standard analyzed, response factors for each analyte at each standard concentration, and percent relative standard deviation (or correlation coefficients) over all standards for individual analytes. The percent relative standard deviation control limit range will also be indicated in the initial calibration summary data.

Continuing calibration information must include the response factor (for organic analytes) for each analyte, and the calculated percent difference or percent recovery as compared to initial calibration. Control limits for each analyte also will be indicated on each continuing calibration summary data sheet.

Method blank and field sample data pages must indicate the method reporting limit and the dilution factor. Surrogate reporting forms must list control limits for surrogate recovery. Spike reporting forms (blank spikes and matrix spikes) must indicate spike percent recovery and relative percent difference control limits (if spikes are analyzed in duplicate).

Documentation of detection limits (detection limit studies) and results of performance evaluation samples (supplied by regulatory agencies or purchased from certified vendors) are not required for the data deliverable. However, these records must be supplied to Foster Wheeler Environmental upon request. Total measurement error determination for field duplicate samples will be calculated by Foster Wheeler Environmental.

Electronic data deliverables (EDDs) will also be required from the laboratories. Field sample and QC sample results will be presented in standard spreadsheet format on the EDDs.

8.2.1.2 Biological Reports

The biological laboratory will document all of the activities associated with sample analyses and will prepare a written report. As a minimum, the following will be included in the report:

- Results of the laboratory bioassay analyses and QA/QC results, reported both in hard copy and electronic format
- All protocols used during analyses, including explanation of any deviation from the recommended protocols and the approved sampling and analysis plan
- Chain-of-custody procedures, including explanation of any deviation from the identified protocols
- Location and availability of data, laboratory notebooks, and chain-of-custody forms.

8.2.2 Quality Assurance Report

The QC Manager will prepare a QA Report based upon activities involved with the field sampling and review of the laboratory analytical data. Laboratory data QA/QC reports and any data package validation reports (if applicable) will be incorporated by reference. This report will identify any field and laboratory activities that deviated from the approved sampling plan and the referenced protocols and will include a statement regarding the overall validity of the data collected. The QA/QC Report will be incorporated into the Final Report.

8.2.3 Final Report

A final written report will be prepared by Foster Wheeler Environmental documenting all activities associated with collection, transportation of samples, and chemical and biological analysis of samples. The chemical and biological laboratory reports (or appropriate summaries) will be included as appendices. At a minimum, the following will be included in the Final Report:

- Brief description of the project and its objectives
- Type of sampling equipment used

- Identification and description of protocols used during sampling and testing and an explanation of any deviations from the sampling plan protocols
- Description of each sample accompanied by photographs adequate to provide a visual representation
- Summary of methods used to locate the sampling positions and a discussion of the position accuracy
- Locations where the samples were collected
- A plan view of the site showing the actual sampling location
- Summary of all laboratory results
- Final QA Report (as an appendix).