EVOS ANNUAL PROJECT REPORT

Project Number: 05290

Project Title: The Exxon Valdez Trustee Hydrocarbon Database and Interpretation

Service

PI Name: Bonita Nelson and Jeff Short

Time Period Covered by Report: FY2005

Date of Report: August 5, 2005

Report prepared by: Bonita Nelson

Work Performed: The Auke Bay Laboratory provides data and sample archiving services for all samples collected for hydrocarbon analysis in support of the Exxon Valdez Trustee Council projects. These data represent samples collected since the oil spill in 1989 to the present and include environmental and laboratory Response and Restoration data as well as subsistence information. During FY2005, 400 new hydrocarbon samples (sample collection information) were added to PWSOIL which is the archival form of the Hydrocarbon Database. As the hydrocarbon information is analyzed through the chemistry lab and quality controlled it will be added to the public release version of the database. This public release version, EVTHD (Exxon Valdez Hydrocarbon Database) has changed format this fiscal year. Previously, updated data were put into a version of EVTHD which was a stand-alone Visual Basic program. However, since ACCESS is such a widely used database, and since our attempts to update the Visual Basic program to work in the Windows XP have proved extremely labor intensive, we have decided to convert all macro functions (converting analytes to dry weight and using the minimum detection level ((MDL)) filter) of EVTHD to queries in ACESS. This project has also prepared the hydrocarbon data associated with projects 04740, and 050763 for FOIA requests. Finally, we provide interpretive services for the hydrocarbon analyses designed specifically for investigators and managers and FOIA response which include: (1) identification of the probable sources of the hydrocarbons observed in the samples, (2) evaluation of new hydrocarbon data for evidence of systematic bias, (3) hydrocarbon data editing according to consistent criteria. Archived frozen hydrocarbon samples were surveyed. A thorough inventory of frozen samples and their condition was completed.

A public version of the analyzed environmental samples was released in 1996 (Exxon Valdez Oil Spill of 1989: State/Federal Trustee Council Hydrocarbon Database 1989 **B** 1995 / EVTHD) and is updated annually. Maintaining the main database, PWSOIL, and the set of analyzed data is an on-going program. Although the number of volume of samples has decreased over the past few years, new samples are still being added to the database, usually during the same fiscal year they are collected depending on completion of laboratory analyses.

Future Work:

Data from EVOS projects associated with hydrocarbon analyses will be added to the database as they are funded by the Trustee Council, including more analysis information from project We

are expecting a continuation of FOIA requests and possible data verification efforts. Interpretation services will continue and samples and original custody sheets will be maintained. During FY06 we will make the public release of the analyzed data available on our website.

Coordination/Collaboration:

- 1. PWSOIL and EVTHD are dynamic structures that require periodic maintenance. This project provides a service that insures that the Trustee hydrocarbon data will be available to interested parties for as long as necessary. This project is designed to provide easy access to the Trustee hydrocarbon database and ensure the accuracy of the data. These data for the basis of all toxicological studies performed by the Trustees, and provide an important baseline against which future analyses can be compared . We work with other entities with our FOIA requests and data interpretation services. Our information is available on our website or by contacting the Principal Investigators.
- 1. **Community Involvement/TEK & Resource Management Applications:** Any requests for information for resource and management applications are given if requested.

Information Transfer: Data/Information Product:

Exxon Valdez Oil Spill of 1989: State/Federal Trustee Council Hydrocarbon Database 1989 **B** 1995 / EVTHD - version 2. This is a CD-ROM that contains hydrocarbon data in a stand-alone application. Database requirements with metadata comply with Trustee Council's data although this database was started in 1989 and the same format used continues.

Conference and workshop attendance: EVOS Trustee Council Workshop, Anchorage, AK.

Budget:: The budget was spent according to plan.

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Project Web Site Address: www.afsc.noaa.gov/abl/OilSpill/oilspill.htm____