

## **DATA MANAGEMENT PLAN**

### **1) the types of data, samples, physical collections, software, curriculum materials, and other materials to be produced in the course of the project**

This project will generate laboratory and analytical results, and field data from research cruises. Underway data will be collected across transects from a UNOLS research vessel.

### **2) the standards to be used for data and metadata format and content (where existing standards are absent or deemed inadequate, this should be documented along with any proposed solutions or remedies)**

We will follow best practices for generating and storing analytical data. All data are stored electronically, including field notes and sample descriptions. Mercury data from the Merx and Tekran instruments and elemental data from the ICP-MS instruments are stored as raw files on instrument computers, which are automatically backed up to a password protected server (“geo”) in the Department of Earth Sciences at Dartmouth. Processed data will also be stored in folders for the project on the geo server, and individual data points will be clearly marked with sample ID, type, date and location sampled, to tie them to ancillary and raw data. Meta data including associated calibration, blank, sample, and quality control and assurance information will also be associated with each file. An extra measure of quality assurance will be attained by comparing mercury analyses for samples run at both UConn and Dartmouth labs, and by taking part in intercalibration exercises (eg. round-robin comparisons of Hg analyses organized by GEOTRACES) where possible.

### **3) policies for access and sharing including provisions for appropriate protection of privacy, confidentiality, security, intellectual property, or other rights or requirements**

Data will be stored at the institution where it was generated, but files will be shared between Dartmouth and UConn via Dropbox or Slack. Prior to peer-review, data will be made available to all colleagues and institutions upon reasonable request. Published data will be made readily accessible by means of supplemental files, and through upload to public databases. Published papers will thoroughly describe all experimental protocols and conditions. We see no specific privacy, confidentiality, security or intellectual property concerns relevant to this project, and support openness and transparency of methods and results.

### **4) policies and provisions for re-use, re-distribution, and the production of derivatives**

There are no plans for re-use, re-distribution or production of derivatives.

### **5) plans for archiving data, samples, and other research products, and for preservation of access to them**

The finalized data, along with details about our methods, will be made available long-term in the form of publications and supplementary materials. Data files including raw and finalized data and will be archived for at least three years beyond the project’s completion, saved to the Dartmouth server geo, and to an external hard drive once the project is complete. Underway data will be archived in the National Oceanographic Data Center (NODC). When field and lab data have undergone QA processing, they will be submitted to be archived in the Biological and Chemical Oceanography Data Management Office (BCO-DMO) database, and submission will comply with their recommendations with regard to data formatting and metadata generation in all instances.