Deepwater Horizon Oil Spill (DWHOS)
Water Column Technical Working Group

Addendum #2 to the
NRDA CTD Processing Plan: Density Check

November 5, 2012

Prepared by:
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Reviewed by:
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Louisiana: Amanda Vincent (LDEQ)
BP: Tim Thompson, Jodi Harney

Except as amended herein, all provisions of the Natural Resource Damage Assessment (NRDA) Conductivity, Temperature, Depth (CTD) Processing Plan ("Processing Plan") and Addendum (NRDA CTD Processing Plan – Processing of Towed CTD Data; "Towed Addendum") remain in effect.

Background:
The processing of NRDA CTD data is currently being implemented as described in the signed Processing Plan and Towed Addendum. During the manual quality assurance and quality control (QA/QC) effort, it was determined that applying the Global Temperature and Salinity Profile Program (GTSPP) Density Inversion test introduced a possible bias into the final dataset. This Addendum addresses the potential bias by removing the GTSPP Density Inversion test from the QA/QC review procedures. Density inversion anomalies will instead be reviewed during the manual QA/QC review.

Scope of Work:
All cruises already processed under both the Processing Plan and the Towed Addendum will be reprocessed by NODC following this revised procedure. All cruises not yet processed by NODC will be processed in accordance with the Processing Plan or the Towed Addendum (as applicable) and the revised manual QA/QC review as specified in this Addendum.

Procedure:
The Sea-Bird procedure for processing both the casted CTD data and the towed CTD data will remain exactly as listed in the NRDA CTD Processing Plan and the Towed Addendum. However, the automated review (conducted during the NetCDF file creation step) will no longer include the GTSPP Density Inversion test for temperature and salinity. All other automatic tests will be applied as listed in the original plan (see pages 5-7 of the Processing Plan). As described in the original plan, the un-binned dataset (in NetCDF format) will be delivered to ASA where it will undergo a manual QA/QC review which includes a visual inspection of all data for potential anomalies, including density inversion.

Data Deliverables:
Deliverables and schedule will remain unchanged from stipulations included in Processing Plan or the Towed Addendum (as applicable).

Budget:
The Parties acknowledge that this budget represents additional funds to the budgets listed in the NRDA CTD Processing Plan and Addendum for Towed CTD Data, that it is an estimate, and that actual costs may prove to be higher due to a number of potential factors. The costs indicated in the budget chart below and any additional reasonable costs within the scope of this workplan that may arise shall be reimbursed by BP upon receipt of written invoices submitted by the Trustees. The Trustees will make a good faith effort to notify BP in advance of any such increased costs.

Budget Chart #1. NOAA labor costs.

Re-Processing and QA/QC Review	**$50,000**

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Approvals

Approval of this addendum is for the purposes of obtaining data for the Natural Resource Damage Assessment. Each party reserves the right to produce its own independent interpretation and analysis of any data collected pursuant to this work plan.

BP Approval	Joyce Miley Printed Name	Joyce Miley Signature	12/7/12 Date
Federal Trustee Approval	Daniel Hahn Printed Name	[signature] Signature	12/6/12 Date
Louisiana Approval	KAROLIEN DEBUSSCHER Printed Name	[signature] Signature	1/7/13 Date