UNITED STATES DEPARTMENT OF COMMERCE



National Oceanic and Aviation Operations
NOAA Marine and Aviation Operations
Marine Operations Center - Pacific
2002 SE Marine Science Drive
Newport, OR 97365

LET'S DISCUSS

13 March, 2013

| MEMORANDUM FOR: | Captain Wade J. Blake, NOAA Commanding Officer, Marine Operations Center - Pacific | | | | |
|---|--|--|--|--|--|
| FROM: | Commander Brian W. Parker, NOAA Chief of Operations, Marine Operations Center - Pacific | | | | |
| SUBJECT: | Amendment 1 to final project instructions, <i>Oscar Dyson</i> DY-13-03. | | | | |
| Please amend the subject project instructions dated 13 February 2013, as follows: (Please see included .pdf file) | | | | | |

DISAPPROVED

APPROVED



Please amend DY-13-03 Project Instructions to include the following:

I. Project Overview

B. Service Level Agreements

1 DAS has been transferred from DY-13-04 to DY-13-03 in order to accomplish PMEL mooring work during NOAA Ship *Oscar Dyson*'s transit from Kodiak to Seward, this DAS is funded by OMAO. The operations conducted are estimated to exhibit a High Operational Tempo.

F. Personnel (embarking in Kodiak, disembarking in Seward)

| Name (Last, First) | Title | Date | Date | Gender | Affiliation | Nationality |
|--------------------|-----------------|----------|-----------|--------|-------------|-------------|
| | | Aboard | Disembark | | | |
| Floering, William | Chief Scientist | March 28 | March 29 | Male | PMEL | USA |
| Naber, Dan | Scientist | March 28 | March 29 | Male | UAF | USA |
| Monacci, Natalie | Scientist | March 28 | March 29 | Female | UAF | USA |

II. Operations

A. Project Plan/Itinerary

Upon departure from Kodiak, NOAA Ship *Oscar Dyson* will proceed to the location of the two moorings $(57^{\circ} 43.32 \text{ N} 152^{\circ} 17.64 \text{ W}$, second mooring within .5 nm). Upon deployment of the moorings, the ship will proceed to Seward.

The following mooring equipment will be loaded aboard NOAA Ship *Oscar Dyson* in Kodiak:

1 anchor at 1800 lbs
1 anchor at 4900 lbs
1 surface mooring float and tower at 2600 lbs
chain for surface mooring 4500 lbs
chain for PMEL Chiniak subsurface mooring 400 lbs
two metal floats 250 lbs

2 acoustic releases 250 lbs

misc instruments 200 lbs

IV. Hazardous Materials

A. Policy and Compliance

The Chief Scientist is responsible for complying with FEC 07 Hazardous Materials and Hazardous Waste Management Requirements for Visiting Scientific Parties (or the OMAO procedure that supersedes it). By Federal regulations and NOAA Marine and Aviation

Operations policy, the ship may not sail without a complete inventory of all hazardous materials by name and the anticipated quantity brought aboard, MSDS and appropriate neutralizing agents, buffers, or absorbents in amounts adequate to address spills of a size equal to the amount of chemical brought aboard, and a chemical hygiene plan. Documentation regarding those requirements will be provided by the Chief of Operations, Marine Operations Center, upon request.

| Common Name | Qty | Notes | Trained | Spill |
|-----------------------------|---------------------------|---------------------|-------------------|---------|
| of Material | Q G | 110165 | Individual | control |
| Lithium 9v | 25 | In SeaBird and | Wm. Floering | N/A |
| Batteries | | Wetlabs | ,, in Tiourng | 1,712 |
| | | Instruments | | |
| | | Instruments | | |
| Lithium AA | 12 | In SeaBird | Wm. Floering | N/A |
| Batteries | | Microcats Saft | | |
| | | LS14500 | | |
| | | 1314300 | | |
| Lithium D Cell | 40 | In ISUS instrument | Wm. Floering | N/A |
| Batteries | | | | |
| Sodium | 1L of 0.16M | | Dan Naber | ST |
| Thiosulfate | | | | |
| Potasium Iodate | 1L of 0.0003M | Oxidizing, keep | Dan Naber | PI |
| | | away from | | |
| | | combustibles | | |
| Sulfuric Acid | 0.5L of 5M | Clean up with | Dan Naber | A |
| | | Sodium | | |
| | | Bicarbonate | | |
| Sodium Hydroxide | 0.5L of 8M | Neutralize with | Dan Naber | В |
| 2.6 | 17 60) (| available acid | D M I | MC |
| Manganese | 1L of 3M | Sweep up in case of | Dan Naber | MC |
| Chloride Mercuric Chloride | 0.1I 100/ Cala | spill See 'M' below | Dan Mahan | M |
| | 0.1L 10% Soln 1L of 3M | For use with | Dan Naber | IVI |
| Manganese Chloride | IL OI SIVI | Oxygen titrations | Wm Floering | |
| Sodium | 1L of 8M | For use with | Wm Floering | В |
| Iodide/NaOH Soln | IL OI OIVI | Oxygen titrations | will Flocing | ם |
| Sulfuric Acid | 1L of 5M | For use with | Wm Floering | A |
| Sulfulle Acid | 112 01 3141 | Oxygen titrations | , viii i iociiiig | 11 |
| Sodium | 1L of 0.11M | For use with | Wm Floering | ST |
| Thiosulfate | 01 0.111,1 | Oxygen titrations | | |
| Potassium Iodate | 1L of 0.00167M | For use with | Wm Floering | PI |
| | | Oxygen titrations | | |

A: ACID

- Wear appropriate protective equipment and clothing during clean-up. Keep upwind. Keep out of low areas.
- Ventilate closed spaces before entering them.
- Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible.
- Large Spills: Dike far ahead of spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.
- **Small Spills**: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.
- Never return spills in original containers for re-use.
- Neutralize spill area and washings with soda ash or lime. Collect in a non-combustible container for prompt disposal.
- J. T. Baker NEUTRASORB® acid neutralizers are recommended for spills of this product.

B:Base

- Use proper PPE.
- Ventilate area.
- Neutralize with dilute acid such as HCl if possible.
- Absorb with cat litter or vermiculite.
- Vacuum or sweep up material and place into suitable disposal container.
- Do not breath dust.
- Do not get water on spilled substances.

M: Mercury

Spills: Pick up and place in a suitable container for reclamation or disposal in a method that does
not generate dust. Sprinkle area with sulfur or calcium polysulfide to suppress mercury. Use
Mercury Spill Kit if need be.

F: Formalin/Formaldehyde

- Ventilate area of leak or spill. Remove all sources of ignition.
- Wear appropriate personal protective equipment.
- Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible.
- Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container.
- Do not use combustible materials, such as saw dust.

PI:Potassium Iodate

- Avoid Contact with combustibles (wood, paper, clothing ...).
- Keep substance damp with water spray.
- Vacuum or sweep up material and place into suitable disposable container (plastic bag).

MC:Mercuric Chloride

- Vacuum or sweep up material and place into suitable disposable container (plastic bag).
- Wear SCBA or other appropriate breathing apparatus and PPE.
- Avoid breathing dust.
- Keep in closed container for disposal.

ST: Sodium Thiosulfate

- Ventilate area of leak or spill.
- Wear protective gloves and clean body-covering
- Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.
- Recover liquid or particulate in 5 gallon bucket. Absorb with a kitty litter and place in disposable bag. Do not use combustible materials, such as saw dust to absorb.

S: Salt

- Sweep into container and dispose of
- Avoid prolonged exposure

Inventory of Spill Kit supplies

| Product Name | Amount | Chemicals it is useful against | Amount it can clean up |
|-----------------|--------|--------------------------------|------------------------|
| Sodium | 1kg | Sulfuric Acid | 1.5L of HCl |
| Bicarbonate | | | |
| Absorbent Pads | 15 | All brought aboard | N/A |
| Universal | 2 | All brought aboard | N/A |
| Medium Socks | | | |
| Pair Nitrile | 1 | All brought aboard | N/A |
| Gloves | | | |
| Disposable Bags | 2 | All brought aboard | N/A |
| Cat Litter | 40 lbs | All brought aboard | N/A |

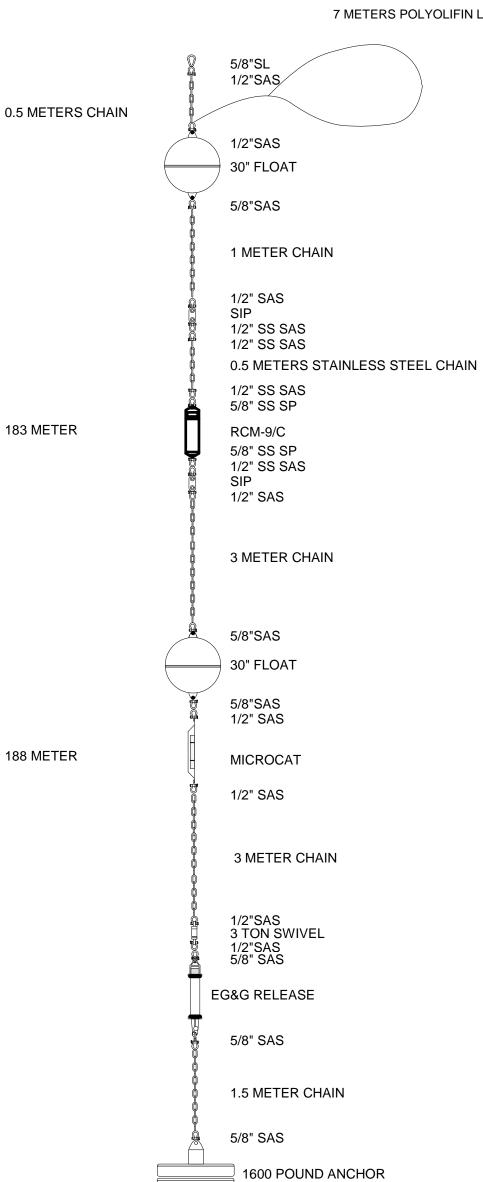
Upon embarkation and prior to loading hazardous materials aboard the vessel, the scientific party will provide to the CO or their designee:

- An inventory list showing actual amount of hazardous material brought aboard
- An MSDS for each material
- Confirmation that neutralizing agents and spill equipment were brought aboard sufficient to contain and cleanup all of the hazardous material brought aboard by the program.

Upon departure from the ship, scientific parties will provide the CO or their designee an inventory of hazardous material indicating all materials have been used or removed from the vessel. The CO's designee will maintain a log to track scientific party hazardous materials. MSDS will be made available to the ship's complement, in compliance with Hazard Communication Laws.

Scientific parties are expected to manage and respond to spills of scientific hazardous materials. Overboard discharge of scientific chemicals is not permitted during projects aboard NOAA ships.

7 METERS POLYOLIFIN LINE SPLICED INTO LOOP



| INSTRUMENT | DEPTH | SN |
|------------|-------|----|
| RCM-9/C | 183 | |
| MICROCAT | 188 | |
| воттом | 194 | |
| | | |



NOAA-PMEL-FOCI

7600 Sandpoint Way NE Seattle, Wa. 98115 (206) 526-6175

| VI | O | O | RI | IN | G | : | |
|----|---|---|----|----|---|---|--|
| | | | | | | | |

LOCATION:

| 13CB-1A |
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| DRAWN BY: | ck Miller | DATE: 20 DEC. 2012 | 2 |
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| APPROVED BY: | D | DATE: | |