

Dispersant Working Group  
November 16, 2007

*Meeting Notes*

---

**Attendees:** Nancy Kinner, Joe Mullin, Victoria Broje, Tom Coolbaugh, Don Davis, Mark Meza, Al Venosa, Ken Lee, Kurt Hansen, David Fritz, Francois Merlin via phone

I. Updates on Current Research Projects

- Joe Mullin (Mineral Management Services)
  - Calm Seas Research paper is now under peer review
  - Research project off coast of California under peer review
  - Exxonmobil PERF project with steering committee evaluation – MMS will post this on their website eventually
  - Dispersant Training class to be offered in 2008. This is a 3-day dispersant training class. SL Ross and Al Allen are currently developing curriculum
  - MMS OHMSETT Visitor's Day pending
  
- Victoria Broje (Shell)
  - See handout of current study – posted on DWG website
  - Oil in Ice – next step biological research funded by Shell and API (Marc Hodges); will distribute – names/contacts associated with this literature view; upcoming workshop to discuss; plans to coordinate with Environment Canada, Sintef and Statoil
  - Proposing workshop on effects of dispersants and come up with decisions for cold climate (per Captain Steve Hudson)
  - Shell will give \$1M at University of Alaska Fairbanks for oil-in-ice work
  
- Tom Coolbaugh (Exxonmobil)
  - Coordinated effort with Upstream and R&D to enhance Dispersants for Heavy Oils: Working on new formulas; have done tests at OHMSETT; different viscosity in real world; scalability tests comparison to open water
  - February 2008 test – how to treat thin oil films: get it down to concentrate thicker level and then apply dispersant (still securing funding for this) i.e., NEATSWEEP-like, diversion boom/funnel process
  - IOSC – offering 4-hour intro dispersant course; primarily Exxon course with some environmental
  - Dispersant manual being revised; may be available on CD (English, Spanish and Russian translations)
  - Hope to start toxicity research project next year; on new cold water dispersant 1-2 year completion; new formulation (white color) so it can be seen; can use aerosol air applicator, but must be applied with new equipment

- Don Davis (LAOSRADP)
  - Comprehensive dispersants bibliography by Conover of LUMCON; abstracts included; currently up and running; next step-attempting to find gray literature (so may extend with additional funding); 600 sources currently online, perhaps 1900 total references
  
- Mark Meza (USCG)
  - Assess cold climate; equipment & infrastructure
  - Technical group at Maritime Organization (IMO) is drafting updated version – must update for Cold Climate, but anything done in cold climate is very important
  
- Al Venosa (EPA)
  - Completed a batch of studies at BIO tank – quantified the energy dispersion rates = higher the energy – smaller particle size, smaller droplets
  - Modeling still ongoing, continuous flow, analyzing this data
  - Upcoming research: initiating biological study related to heavier oils
  
- Ken Lee (Environment Canada, DFO)
  - Chemical oil dispersants
  - Arctic – impact of oil spills in Arctic; these are very important to Canada (sovereignty and climate change)
  - Effectively measure dispersants and oil droplet size in water column (using new flo urometry method)
  - With modified BIO tank now can have flow-through of fresh sea water; also new tanks allow for exposure studies
  - DFO laboratory that specializes in fish studies in controlled conditions (i.e., salmon smolts, juvenile cod fish, herring eggs and a species of shrimp)
  - Oil particle interaction this winter; experimental spill in St. Lawrence River (with ice) experiments; will be presented at IOSC. MMS is co-sponsor
  - Future DFO/NOAA/Russia toxicity testing
  - Develop sensors – fluourometry in water column, water plankton, AUV build sensors. It was strongly suggested to DFO collaborate with Jim Bonner of Texas A&M and CRRC Carter Ohlmann/Garfield project and David Fritz funded project
  - Lee is organizing experimental spills in Arctic; has ship time, but needs other researchers and collaborative funding in order to proceed
  - Collaborate with US Navy – Arctic, Barrow Strait cold climate lab (ask Mesa/Lloyd about contacting for future collaborative opportunities and to join the DWG) CRREL now does oil research. Meza will write letter to invite the Navy into collaboration

- DFO/Canada Coast Guard/USCG = need international support (Canadian governmental structure is challenging to deal with from USCG standpoint)

- Spray the oil on broken ice – add mixing agent; applied clay, barge propeller mixed it up; suggestion was made to collaborate with Tim Nedwed's ExxonMobil project

- Kurt Hansen (USCG R&D)

- Joint MMS SMART protocol and will look into CRRC-funded Jim Payne project

- What do researchers need? SL Ross is looking at data; January 2008 decision for proposals on looking at literature & equipment, users group

- David Fritz (API)

- Industry did droplet size study

- Out of airplane where does the 20% dispersant really go?

- Dispersant mission planner

- Nancy Kinner (Coastal Response Research Center)

- Jim Payne dispersion project – posted on website

- Seth Tuler Human dimensions project – posted on website

- Carys Mitchelmore coral project ( not yet final)

- IOSC short course (confirmed with Amy Holman that this does not conflict with the intro dispersant course)

- Francois Merlin ( CEDRE)

- Discobiol project (see powerpoint presentation on DWG website)

- Wants to get others from DWG involved

II. Next meeting to be held at IOSC (Kathy will schedule this ASAP).