Dispersant Working Group Monday, May 5, 2008 In conjunction with IOSC

# Meeting Notes

**Attendees:** Nancy Kinner, Victoria Broje, Jim Clark, Don Davis, John French, David Fritz, Kurt Hansen, Bruce Hollebone, Ken Lee, Francois Merlin, Lt Wade Gough, Lt Kelly Detrich, Scott Pegau, Tom Purcell, Silvia Giuliani, Erik Demicco, Jon Rødal

Updates on Current Research Projects.

Please update the information on the Dispersant Research spreadsheet and return by July 18 to Kathy.mandsager@unh.edu

## I. Victoria Broje (Shell)

- Update on cold water workshop Beaufort and Chukchi Seas: <u>http://www.newfields.com/dl/alaskaworkgroup</u> (user: alaskaworkgroup; pass: guest). This has workshop deliverables, literature review (111 pages about dispersants testing & effects) searchable database of articles, & workshop presentations. Workshop proceedings will be posted shortly.
- JIP proposal for this project is being written and will be available soon.
- Shell is interested in creating a laboratory on North Slope and then donating to Univ of Alaska, Fairbanks (UAF) (i.e., North Slope Research Center).
  - International interest in toxicity testing (e.g., Russia)
  - o Collaborators to be determined
  - Scope being determined
  - Potential construction of test tank??
  - o Include local tribes/indigenous peoples in research and training (e.g., Navy)

#### II. Kurt Hansen (USCG R&D)

- Update of SMART monitoring protocols (on DWG project list) DONE
  - Report to be posted on MMS or USCG website
  - SMART protocol intended to inform command center
- Need \$30-40K in order to finish next step of project. Report available.
- OSRL & MMS to coordinate SMART teams and National Strike Force Coordination Center (NSFCC) on dispersant testing project to further develop data (instrument to instrument comparison)
- EPA may be doing testing at Ohmsett in June
- OSRL testing instrument
- June 9 13 Norfo all dispersant tests at once; submit proposal if interested
- NOFO (per Jon Rødal) has some money to do research and will post his invitation for proposals on the CRRC DWG web page

# III. John French and Walt Parker (Prince William Sound RCAC)

- Efficacy RFP \$50K "PWS conditions" tank test of efficacy placeholder for now
- 2002-2008 Dispersant Literature Review & Synthesis funded to include nontraditional (e.g., coagulants) Merv Fingas id PI. Will be available on web
- 2 year, \$200K Effects of oil, WAF, CEWAF, in-situ burn residue toxicity of these tovarious species
  - RFP currently posted on website
  - Small in-situ burn component
  - Focus on dispersants stockpiled in AK

• total scope is too broad for good science; may have to juggle which research topics really should be addressed

# IV. Ken Lee (Environment Canada, DFO)

- Oil spills in ice field trial. Test spill in St. Lawrence
  - Apply dispersant 4 experiments on ice
  - Funding from DFO & Canadian CG for 2010
- Arctic research COOGER, NOAA & Auke Bay
- Wave tank efficacy studies (CRRC-funded) waiting on fluoromerty results prior to completing report.
- Tank upgrade flow through operating and adding aquaria for sub-lethal toxicity testing of fish. Toxicity studies in salt water on salmon smolts, etc.
  - Also to look at metabolites. Bringing in large group of toxicity experts (NEK suggested Lee contact R.Tjeerdema (UC, Davis), who has done metabolites research with salmon smolts)
- Oil-mineral aggregates project (MMS-funded) energy and formation of oil-mineral fine aggregates
- Biodegradation of oil-based drilling fluids (funded) Nova Scotia spill
- Monitoring oil when dispersed into water column. Using u/v fluorescents with submerged sensor equipment

# V. Francois Merlin (CEDRE)

- Discobiol updates Phase I underway on standard operating procedures
  - Questions about criteria for sub-lethal effects
  - Concentrations to test?
- Dispersability of heavy fuel oil, characterizations, quantity
- Upcoming workshop
- Testing application & droplet size

# VI. Scott Pegau (Oil Spill Recovery Institute - OSRI)

- No dispersants projects currently funded
- Contributing to PWS RCAC literature review
- \$50 100K for next year's budget for dispersants
- Recently held workshop on detectors for hydrocarbons In-situ and remote; report available soon

#### VII. Eric Demicco (Clean Caribbean Americas)

- No funded research but as biologist very interested in dispersant studies
- Revisited Panama site TROPIC study

## VIII. Silvia Giuliani (ICRAM)

- Presently no funded research on dispersants research done on a previous project focused on toxicological tests for dispersants approval
- Italy is currently undertaking a full revision of the approval procedure for products to be used at sea in case of oil spill

## IX. Tom Purcell (API)

- CROSERF text version to post on API's website (see above)
- Dispersant Training Seminar Sept 16-17 in Galveston, TX co-sponsored by TX GLO & Clean Channels
- NOAA tool kit –Update of the NOAA Dispersant Mission Planner (DMP) to account for new equipment and capabilities.

## X. Jim Clark (ExxonMobil)

- Completed project "Development of OSCAR-3D Plume"
- IOSC poster presentation by T Nedwed on new cold water dispersant; update on testing of gel data for prototype. Toxicity test data completed in June. They are holding the patent; vendor issued

#### XI. Bruce Hollebone (Environment Canada)

- Khelifa project update on dispersant and OMA; next step students doing follow-up study
- Continuing program salinity testing on new products as they come up
- Dispersant Guidelines revisions underway, draft by June; this will be update of Canadian approval process for use of dispersants on oil, more in depth
  - Will cover chemical beach cleaners
  - Effectiveness and eco-toxicity
- Biodiesel & diesel mixture is an effective dispersant; effects management and fate studies received funding; full time researcher devoted to biodiesel and oil mixture which causes natural dispersion

#### XII. Nancy Kinner (Coastal Response Research Center)

- Ken Lee completing project, final report due
- Ali Khelifa final report draft currently under review
- Mark Reed numerical algorithm
- Joe Katz mechanisms, not yet complete
- Mitchelmore Cnidarian toxicity test, final report due
- Rowe toxicity to turtles final report draft currently under review; interestingly did not find statistically significant any effects
- Don Aurand final report due

- Newly funded project: Deborah French McCay developing field guide for dispersant use decision making
- Other: Modeling Working Group this large group is coming together after CRRC workshop, divided into 4 areas of topics and pursuing best practices in modeling backed by data. Involves 3D modeling with dispersants.

## XIII. Don Davis (LAOSRADP)

- Comprehensive dispersants bibliography by Conover of LUMCON has been completed, available on website <a href="http://www.lumcon.edu/library/dispersants/">http://www.lumcon.edu/library/dispersants/</a>
- No other funded dispersant-related projects

## **XIV.** David Fritz (BP)

- API/ Industry did droplet size study previously mentioned
- BP is doing only product research with Alaska

## IV. Lt Wade Gough (USCG)

• No currently funded projects

## V. Overview

- No RFP to post except French's PWS RCAC
- Send link on Discobiol & other information to Jim Myers of Chevron
- Update data spreadsheet with completed projects info, web links, and new projects