

**Ninth Biennial**

**OSPR/Chevron Oil Spill Response Technology Workshop**

Virtual via Zoom

February 22 -26, 2021

**AGENDA**

February 22, 2021

**Session 1 UPDATES FROM FEDERAL AGENCIES, CANADA AND OSPR**  
**Session Chair: Greg McGowan** Co-Hosts: Lindsey Saum, Jenna Driscoll (Presenters log in at 0805 PST)

Time (PST)		Presenter(s), Affiliation
0815-0830	Welcome and Agenda Review	Tom Cullen, OSPR Mark Ross, Chevron Shipping
0830-0855	USCG Research and Development Center for Oil Spill Response Research Update	Alex Balsley, USCG R&D Elizabeth Murphy, USCG R&D Benedette Adawale, USCG R&D
0855-0920	Bureau of Safety and Environmental Enforcement (BSEE) Oil Spill Response Research Update	Karen Stone, BSEE
0920-0945	Ohmsett Update – Capabilities, Focus Areas and Recent Projects	Tom Coolbaugh, ARA
0945-0955	<b>Break</b>	
0955-1020	US EPA Office of Research and Development Oil Research Update: Focus on Surface Washing Agent Protocol Development and Salinity Impacts on Oil Dispersion	Robyn Conmy, EPA
1020-1045	Interagency Coordinating Committee on Oil Pollution Research (ICCOPR): ICCOPR Research and Technology Plan Overview and Updates on Research Priorities for the Next 2-6 Years	Clifton Graham, USCG
1045-1110	NOAA Spill Science Update	Jordan Stout, NOAA
1120-1145	The Multi-Partner Research Initiative: A Scientific Research Network under Canada's Oceans Protection Plan to Support Decision Making in Oil Spill Response	Ken Lee, DFO-MPRI
1145-1210	OSPR Update	Tom Cullen, OSPR
1210-1245	<b>Lunch Break</b>	

**Session 2 REMOTE SENSING, SAMPLING AND GIS: Synthetic Aperture Radar**  
**Session Chair: Judd Muskat** Co-Hosts: Jenna Driscoll, Lindsey Saum (Presenters log in at 1235 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1245-1310	Can Imaging Radar Derive Quantifiable Oil Spill Properties?	Benjamin Holt, NASA/JPL Cathleen Jones, NASA/JPL
1310-1335	Satellite-based Marine Oil Spill Detection Using Optical and SAR Data	Juan Velasco, NOAA-NESDIS
1335-1400	Comparison of Techniques for Estimation of Relative Oil Thickness from Spaceborne SAR	Gordon Staples, MDA
1400-1410	<b>Break</b>	

**Session 3 REMOTE SENSING, SAMPLING AND GIS: Data Modelling and Prediction**  
**Session Chair: Judd Muskat** Co-Hosts: Lindsey Saum, Jenna Driscoll (Presenters log in at 1400 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1410-1435	The NOAA GNOME Suite of Oil Spill Modeling Tools	Chris Barker, NOAA
1435-1500	3D Visualization – Utilizing the Potential of Your Incident Information	Josh Gravenmier, Arcadis Eric Rogoff, Arcadis
1500-1525	Estimating Plume Trajectories and Travel Times in Rivers	Peter McCarthy, USGS
1525-1540	<b>End Day 1+ Preview Day 2</b>	

February 23, 2021

**Session 4 REMOTE SENSING, SAMPLING AND GIS: Open Ocean Data Sources**  
**Session Chair: Judd Muskat** Co-Hosts: Jenna Driscoll, Lindsey Saum (Presenters log in at 0750 PST)

Time (PST)	Topic	Presenter(s), Affiliation
0800-0815	Welcome and Agenda Review	OSPR
0815-0840	Use of Autonomous Vessel Technology in Spill Recovery	Phil Bourque, Sea Machines
0840-0905	Characterizing Oil in the Water, On the Water and Beneath a Slick: Science-ing at the Santa Barbara Seep Site	Lisa DiPinto, NOAA
0905-0930	Slick Sleuth Update and Applied Uses of UV-Sensor Tech for Spill Prevention & Control	Chris Chase, Slick Sleuth
0930-0940	<b>Break</b>	
0940-1005	Updates on the National HF Radar Network	Lisa Hazard, UCSD
1005-1030	Oil Remote Sensing within the Disaster Management Cycle for Chemical Release Disasters	Ira Leifer, Bubbleology
1030-1040	<b>Break</b>	

**Session 5 REMOTE SENSING, SAMPLING AND GIS: Shoreline and Inland Data Sources**  
**Session Chair: Maria Hartley** Co-Hosts: Lindsey Saum, Jenna Driscoll (Presenters log in at 1030 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1040-1105	Multispectral UAS Mapping for Injury Assessment of Oiled Marshes	Oscar Garcia, WaterMapping
1105-1130	PipeWATCH: Early Release Detection Monitoring using High Resolution/High Frequency Satellite Imagery	Grant Wiseman, Stantec
1130-1155	Aerostats vs. Small Unmanned Aircraft Systems (sUAS)	Kevin Hoskins, MSRC
1155-1225	<b>Lunch Break</b>	

**Session 6 REMOTE SENSING, SAMPLING AND GIS: Airborne and sUAS Data Imaging**  
**Session Chair: Judd Muskat** Co-Hosts: Jenna Driscoll, Lindsey Saum (Presenters log in at 1215 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1225-1250	Surveillance of Sea Surface Activities in Canada: Updates & Recent Cases	Kim Pearce, Transport CAN
1250-1315	Using Small Unmanned Aircraft Systems to Measure Surface Flow Velocities Over Long River Reaches – An Emerging Tool for Rapid Response to an Inland Oil Spill	Brandon Forbes, USGS Geoffrey Debenedetto, USGS
1315-1340	Characterization of Smoke Plumes from Oil Spill ISB using UAS	Oscar Garcia, WaterMapping
1340-1405	Update on Polaris Pyxis	David Chenault, Polaris
1405-1415	<b>Break</b>	
1415-1440	Two Emerging Technologies to Help Operate Small UAS (sUAS) from Boats and an Announcement of NOAA's New Strategies for 'Uncrewed' Systems, Artificial Intelligence, and 'Omics'	Todd Jacobs, NOAA
1440-1505	Establishing sUAS in Alaskan Oil Spill Prevention and Response	Jessica Garron, U. of Alaska
1505-1530	Update on Chevron R&D and Field Trials of UAS Platforms and Sensors For Oil Spill Response	Christian Haselwimmer, Chevron
1530-1545	<b>End Day 2 + Preview Day 3</b>	

February 24, 2021

**Session 7 REMOTE SENSING, SAMPLING AND GIS: Data Collection, Management and Dissemination**

**Session Chair: Judd Muskat** Co-Hosts: Lindsey Saum, Jenna Driscoll (Presenters log in at 0805 PST)

Time (PST)	Topic	Presenter(s), Affiliation
0815-0830	Welcome and Agenda Review	OSPR
0830-0855	Updates on the Environmental Response Manager Application (ERMA)	Jay Coady, NOAA
0855-0920	Building a Situational Awareness Capability in your Response Teams	Liam Harrington-Missin, OSRL
0920-0945	Building Situational Awareness with the Common Operating Picture	Kenny Rhame, TRG
0945-1000	<b>Break</b>	
1000-1025	IPIECA - Rethinking Surveillance in Response	Maria Hartley, Chevron/IPIECA
1025-1055	OSPR Field Collection Tools	Guphy Gustafson, OSPR Diana Grosso, OSPR Jennie Hawkins, OWCN
1055-1105	<b>Break</b>	

**Session 8 MECHANICAL TECHNOLOGIES**

**Session Chair: Lindsey Saum** Co-Hosts: Jenna Driscoll, Maria Hartley (Presenters log in at 1055 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1105-1130	R&D of High-speed Oil Containment Booms	Scott Baker, NRC Canada
1130-1155	Improved Oil Recovery Sensor	Slawek Winecki, Battelle
1155-1220	Fate and Behaviour Evaluations of Selected Conventional and Non-conventional Oils	David Cooper, SL Ross
1220-1250	<b>Lunch Break</b>	
1250-1315	Active Skimmers for Challenging Response Situations	Vince Mitchell, Lamor
1315-1340	New Technologies for Floating and Non-floating Oils on Small Inland Waterways	Donny Beaver, HalenHardy
1340-1405	Elastec Spill Response Tools	Shon Mosier, Elastec
1405-1415	<b>Break</b>	
1415-1440	Skimmer System for High Recovery of Viscous Oils	Kevin Kennedy, PPR Alaska
1440-1505	Harbo/Lamor Strategic Cooperation – T6 Multiuse Boom – Rapid Response Package	Igor Kwiatkowski, Lamor
1505-1530	RBS TRITON™ 20 Portable Oil Skimming System	Nigel Bennett, Aqua-Guard
1530-1545	<b>End Day 3 + Preview Day 4</b>	

February 25, 2021

**Session 9 CHALLENGING RESPONSE CONDITIONS**

Session Chair: Maria Hartley Co-Hosts: Jenna Driscoll, Lindsey Saum (Presenters log in at 0805 PST)

Time (PST)	Topic	Presenter(s), Affiliation
0815-0830	Welcome and Agenda Review	OSPR
0830-0855	International Spill Response During the COVID-19 Pandemic	Alex Hunt, ITOFP
0855-0920	IPIECA - Oil Spill Response in a Pandemic	Maria Hartley, IPIECA/Chevron
0920-0945	Solve the Problem – Getting Cleanup Done Right in Challenging Settings	Greg McGowan, OSPR Tom Anderson, OSPR
0945-0955	<b>Break</b>	

**Session 10 IN-SITU BURN AND HERDERS**

Session Chair: Ellen Faurot-Daniels Co-Hosts: Lindsey Saum, Jenna Driscoll (Presenters log in at 0945 PST)

Time (PST)	Topic	Presenter(s), Affiliation
0955-1020	Direct Measurement of In-Situ Burn (ISB) Rate and Efficiency and Upcoming Colorado Mesoscale and Large-Scale Tests	Paul Panetta, ARA (R. Bryne and A. Podolski also available for Q&A)
1020-1045	Burning of Crude Oil with a Flame Refluxer™	Ali Rangwala, WPI
1045-1110	Development of a Practical-Scale Spray Burner for Emulsified Crude Oil Spill Remediation	Steven Tuttle, NRL
1110-1135	Viable Bench-Scale Experiments of In Situ Burning California Crude Oils	Christopher Pfutzner, NRL
1135-1200	Emissions from <i>In Situ</i> , At-Sea Oil Burns and Assessment of Combustion Efficiency	Brian Gullett, EPA Karen Stone (EPA) presenting
1200-1230	<b>Lunch Break</b>	
		Presenters log in at 1220 PST)
1230-1255	Wave Tank In Situ Burning of Oil with Innovative Fire Boom and Fuel Configurations to Optimize Burning Efficiencies	Nathan Lamie, ACOE (Kemal Arsava presenting)
1255-1320	AUV Deployable ISB Igniter	Daniel Pol, Phoenix Intl.
1320-1345	“Burning Tongue” – New Technology to Enable Offshore ISB	Tim Nedwed, ExxonMobil
1345-1410	Remotely Operated Surface Vessel for Oil Spill Response	Scott Pegau, PWS
1410-1435	Herder Effectiveness For 14 Crude Oils Over A Range of Temperatures	Richard Byrne, ITR (P.Panetta and A. Podolski also available during Q&A)
1435-1445	<b>Break</b>	

**Session 11 NON-FLOATING OILS**

Session Chair: Greg McGowan Co-Hosts: Jenna Driscoll, Lindsey Saum (Presenters log in at 1435 PST)

Time (PST)	Topic	Presenter(s), Affiliation
1445-1510	NFO Response Concepts and Approach	Jordan Stout, NOAA
1510-1535	A Response Guide for Detection and Recovery of Sunken Oil Mats (SOMs)	Jacqui Michel, RPI
1535-1600	Non-floating Oil Detection, Response Case Studies and Lessons Learned	Jim Elliott, T&T Salvage
1600-1625	Subsurface Oil Tracking with the Bayesian Model SOSim	Chao Ji, U. of Miami
1625-1640	<b>End Day 4 + Preview Day 5</b>	

February 26, 2021

**Session 12 DISPERSANT, SORBENTS, COATINGS, ETC.**

**Session Chair:** Ellen Faurot-Daniels

**Co-Hosts:** Lindsey Saum, Jenna Driscoll (Presenters log in at 0805 PST)

<b>Time (PST)</b>	<b>Topic</b>	<b>Presenter(s), Affiliation</b>
0815-0830	Welcome and Agenda Review	OSPR
0830-0855	Characterizing the Effects of Oil Viscosity and SARA on Dispersant Effectiveness	Alexandria Podolski, ARA (P. Panetta and R. Bryne also available during Q&A).
0855-0920	Rapid Field Test to Evaluate Slick Dispersibility	Victoria Broje, Shell
0920-0945	Sorbent Technologies Assessment	Amy McCleney, SRI
0945-0955	<b>Break</b>	
0955-1020	Electromagnetic Remediation of Oil and Chemical Spills	Arden Warner, Natural Sci. LLC
1020-1045	Oleophilic, Hydrophobic, and Magnetic (OHM) Sponge: A Versatile, Efficient, and Ecofriendly Oil Spill Remediation Platform	Vikas Nandwana, NW Univ.
1045-1110	Open-Cell Polyolefin Sorbent Foams and Applications, and Results of Tests Conducted at Ohmsett	Scott Smith, AquaPal
1110-1135	Oil Sorbent Made from Sulfur and Cooking Oil	Justin Chalker, Clean Earth
1135-1200	Contaminated Soil Containment – Spray-on Products for Odor, VOC, Dust and Stormwater Control	Andy Iturriria, Posi-Shell
1200-1230	<b>Workshop Wrap Up</b>	