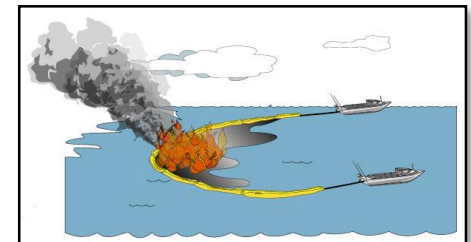
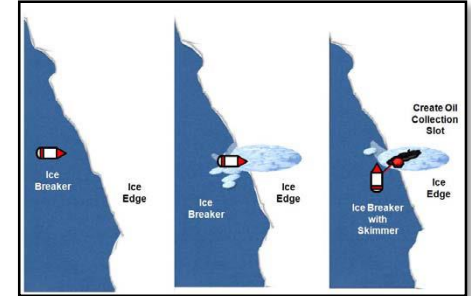




USCG D9 Updates GL NCOE / R & D / PFAS / ESA BE

RRT 5 SPRING MEETING – APRIL 2021





Center of Expertise for Great Lakes Oil Spill Preparedness & Response (GL NCOE)

Frank E. LoBiondo 2018 Coast Guard Authorization Act

- Directed establishment of GL NCOE
- Established GL NCOE functions & location criteria
- Provided initial funding
- Homeland Security Operations and Analysis Center (HSOAC) currently conducting GL NCOE establishment plan study
 - Anticipate completion of study in 2021
- General Dynamics Information Technology (GDIT) currently conducting Great Lakes/Freshwater Research & Development study
 - Anticipate completion of study late 2021

Sec. 807. Center of Expertise for Great Lakes Oil Spill Research and Response

SITING CONSTRAINTS

(b) LOCATION.—The Center of Expertise shall be located in close proximity to—

- (1) critical crude oil transportation infrastructure on and connecting the Great Lakes, such as submerged pipelines and high-traffic navigation locks; and
- (2) an institution of higher education with adequate aquatic research laboratory facilities and capabilities and expertise in Great Lakes aquatic ecology, environmental chemistry, fish and wildlife, and water resources.

FUNCTIONS

(c) FUNCTIONS.—The Center of Expertise shall—

- (1) monitor and assess, on an ongoing basis, the current state of knowledge regarding freshwater oil spill response technologies and the behavior and effects of oil spills in the Great Lakes;
- (2) identify any significant gaps in Great Lakes oil spill research, including an assessment of major scientific or technological deficiencies in responses to past spills in the Great Lakes and other freshwater bodies, and seek to fill those gaps;
- (3) conduct research, development, testing, and evaluation for freshwater oil spill response equipment, technologies, and techniques to mitigate and respond to oil spills in the Great Lakes
- (4) educate and train Federal, State, and local first responders located in Coast Guard District 9 in—
 - (A) the incident command system structure;
 - (B) Great Lakes oil spill response techniques and strategies; and
 - (C) public affairs; and
- (5) work with academic and private sector response training centers to develop and standardize maritime oil spill response training and techniques for use on the Great Lakes. (d)

(d) DEFINITION.—In this section, the term “Great Lakes” means Lake Superior, Lake Michigan, Lake Huron, Lake Erie, and Lake Ontario.



Center of Expertise for Great Lakes Oil Spill Preparedness & Response (GL NCOE)

GL NCOE-targeted functions & projects already in progress

- HSOAC NCOE establishment plan study
- GDIT Great Lakes/Freshwater Research & Development study
- Endangered Species Act Biological Evaluations for Response to Spills in Fresh Water
- Oil spill response equipment (CG-owned) for Great Lakes (boom, trailer, ROV, etc.)
- Updated Environmental Sensitivity Index data for N. Michigan & other Great Lakes locations
- Scoping for spill response training courses (available for interagency partners)
- Ongoing R & D and new R & D starts as identified by study

Behavior of Diluted Bitumen (Dilbit) in Fresh Water

4204

Mission Need: Enhanced decision-making for response to dilbit spills in the fresh water environment.

Objectives

- Provide the U.S. Coast Guard (CG) Federal On-Scene Coordinators with decision-making guidance as they relate to the fate and transport of dilbit in the freshwater environment.
- Study the behavior (density and weathering) and response tools of dilbit spills in the freshwater environment.

Notes

- Supported by Great Lakes Restoration Initiative and Oil Spill Liability Trust Fund resources.
- Leverage CG Research and Development Center Project 4705: Oil Sands Products Spill Response.
- Collaborate with the International Institute for Sustainable Development's Experimental Lakes Area and U.S. Department of Energy labs.

Sponsor: CG-MER, CG D9

Stakeholder(s): EPA Great Lakes Nat'l Program Office/Pollution Response Office, LANT-54, NOAA

RDC Research Lead:
Benedette Adewale, PhD

CG-926 Domain Lead:
Ms. Karin Messenger

Anticipated Transition: Knowledge Product
Influence Tactics, Techniques & Procedures



Project Timeline / Key Milestones

Project Start: 1 Oct 20

Literature Review Complete	Feb 21
Literature Review – Diluted Bitumen in the Fresh Water Environment (Report)	Mar 21 ★
Dilbit Test Plan Complete	Apr 21
CRREL Dilbit Weathering Warm Weather Test Complete	Jun 21
CRREL Dilbit Weathering Cold Weather Test Complete	Nov 21
Dilbit Oil Analysis Complete	Jan 22
Guidance Document - Behavior of Diluted Bitumen in the Fresh Water Environment (Report)	May 22 ★
Project Completion: May 22	



Acquisition Directorate
Research & Development Center



CG Research & Development Center
UNCLAS//Internet Release is Authorized

Indicates RDC Product ★

December 2020

Freshwater In-Situ Oil Burn Research

47041

Mission Need: Improve In-Situ Burn (ISB) knowledge base to supplement oil spill response options.

Objectives

- Evaluate best practices for operational use of ISB in multiple environments, including fresh water and areas with vegetation.
- Develop methods to conduct ISB smoke-plume monitoring that improve sampling accuracy and responder safety.
- Provide reference guidance for Federal On Scene Coordinator and Regional Response Team use.

Notes

- Multiple funding sources including Oil Spill Liability Trust Fund and Great Lakes Restoration Initiative.
- Partner with academia and national labs to ensure result visibility and access.



Project Timeline / Key Milestones

Project Start: 1 Oct 18	
Mesoscale Freshwater Burns Complete	19 Jul 19 ✓
Large-scale Freshwater Burns Complete	25 Oct 19 ✓
Freshwater In-Situ Oil Burning (Report)	Jan 21 ★
Remote Air Monitoring Market Research Complete	Jan 21
Remote Air Monitoring Process Framework Complete	Feb 21
Test Plan for Remote Air Monitoring Complete	Mar 21
Air Monitoring During ISB – Event 1 Complete	Apr 21
Air Monitoring During ISB – Event 2 Complete	Jul 21
Remote Air Monitoring Technology Evaluation (Report)	Feb 22 ★
Project Completion: Feb 22	

Sponsor: EPA Great Lakes
Nat'l Program Office, CG-MER

Stakeholder(s): CG-721, NSF, EPA, BSEE, D9,
RRT5

RDC Research Lead:
LT Liz Murphy

CG-926 Domain Lead:
Ms. Karin Messenger

Anticipated Transition: Knowledge Product
Influence Tactics, Techniques, & Procedures



Acquisition Directorate
Research & Development Center



CG Research & Development Center
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Indicates RDC Product ★

December 2020

PFAS UPDATE



March 15, 2021

Dear Members of the National Response Team (NRT):

The purpose of this letter is to express RRT 5's concerns regarding per- and polyfluoroalkyl substances (PFAS). There are thousands of PFAS compounds, but perfluorooctanoic acid (PFOA) and perfluorooctane sulfonate (PFOS) are the two most commonly addressed. Many states in Region 5 are developing regulations to address these compounds and we encourage the NRT to champion nationwide action toward these emerging threats.

This family of "forever chemicals" has been widely used in industrial and manufacturing processes for decades. As certain PFAS are regulated out of commerce, other formulations of PFAS replace them. These chemicals are largely unregulated regarding removal, disposal and remediation. Studies show that certain exposure levels to these substances are suspected to cause a range of significant, adverse health effects. Congressional debate and interest in regulating PFOA and PFOS continues.


In April of 2018, RRT 5 subject matter experts first presented to our membership the challenges these chemicals pose, as evidenced by the combined efforts of EPA Region 5 and the State of Michigan on the legacy Wolverine site. Since that time, various RRT 5 member agencies have encountered additional cases, ranging from industrial site and military facility remediation to concerns about drinking and other groundwater impacts in several areas. On their own initiative, our RRT 5 member agencies have developed novel methods for containing, removing, filtering and disposal of these contaminants. There are very few current disposal options for solid waste contaminated with PFAS. Even hazardous waste disposal facilities have declined to approve of disposal at their facilities due to the uncertainty of future PFAS regulation. This has dramatically increased disposal and transportation costs at several CERCLA cleanup sites in Region 5. Most recently, RRT 5 held a PFOA/PFOS-specific meeting last month that was widely attended and presented additional findings on this topic.

Regional efforts are only a start -- we encourage the NRT to work with member agencies to establish reportable hazardous substance quantities and recommended response practices for this family of chemicals. The RRT 5 membership stands ready to assist as needed.

Sincerely,

Digitally signed by JASON EL-
ZEIN
Date: 2021.03.15 10:18:15
-04'00'

JASON EL-ZEIN
Chief, Emergency Response Branch 1
Regional Response Team 5 Co-Chair
U. S. Environmental Protection Agency


JEROME A. POPIEL
Incident Management & Preparedness Advisor
Regional Response Team 5 Co-Chair
U. S. Coast Guard

- Spring RRT 5 PFAS-specific meeting
- RRT 5 letter to National Response Team on 15 March regarding concern for PFAS

Endangered Species Act (ESA) BE

EnviroScience Project No.: 13921
Monthly Progress Report

USCG: REGION 5 REGIONAL CONTINGENCY PLAN/AREA CONTINGENCY PLANS FOR THE
RESPONSE TO SPILLS OF OIL AND HAZARDOUS SUBSTANCES IN FRESH WATER

REPORT			
DATE	March 16, 2021	PREPARED BY	Becca Winterringer
STATUS SUMMARY/WORK COMPLETE TO DATE			
Work completed to date has been associated with data gathering and text development of the Draft BE. We have been working on the R5 species descriptions and developing the text body for the other Draft Document elements. Concurrently, we are working on mapping components, identifying missing resources, and compiling Framework document comments.			
TECHNICAL PROGRESS			
Progress since February has primarily been associated with species status descriptions, addressing comments received on the Framework Document, and Draft BE development. Internally, the current staff assisting on the BE have brief weekly meetings to discuss progress and identify problems or missing information.			
DELIVERABLE/TASK SCHEDULE			
Item	%Complete	Date Due	Notes
Kick-off Meeting	100	10/14/2020	Minutes Accepted/Final
Framework Document	100	11/20/2020	Submitted
Government review and comment period on Framework Document	100	12/4/2020	Issues resolved/ task complete
Draft BE	20%	6/3/2021	Mapping, text development
Government review and comment period on Draft BE		7/3/2021	
Final BE		9/1/2021	
BE Administrative Record		9/21/2021	

Questions?



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