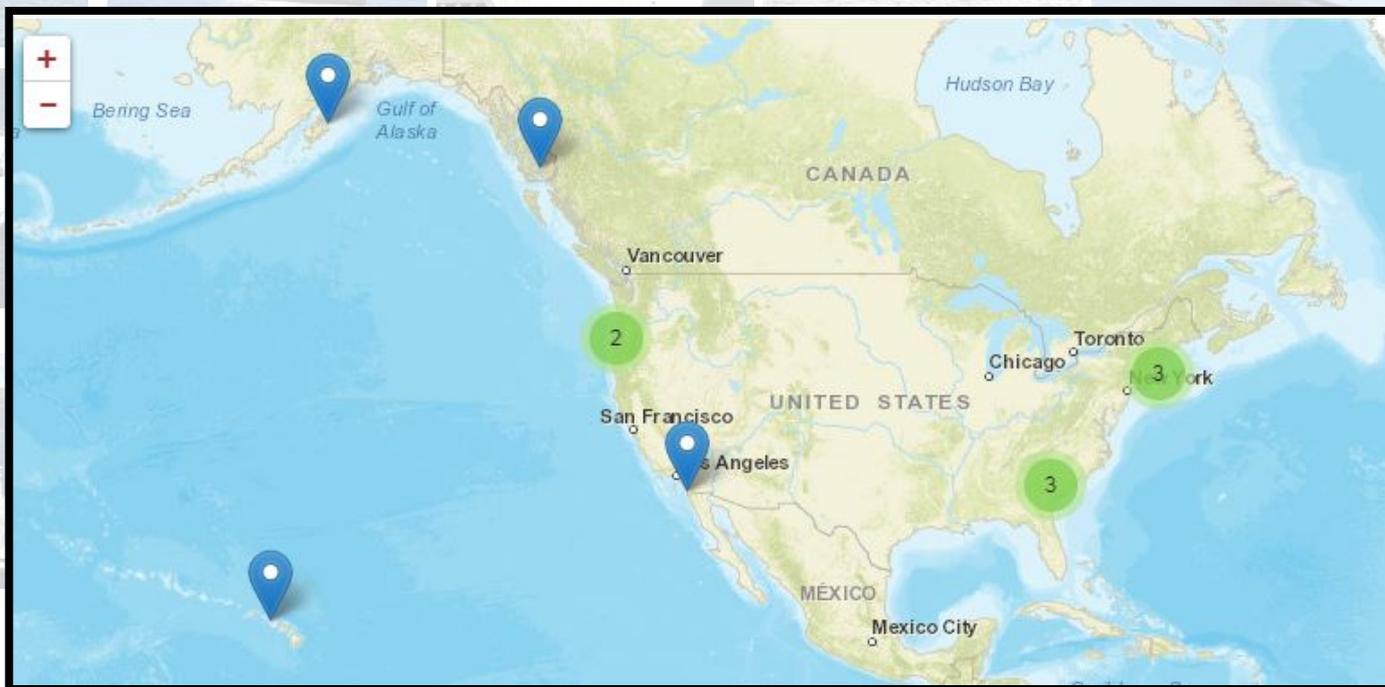




The Human Side of Enviro

Cultivating a culture of compliance and beyond

The challenge

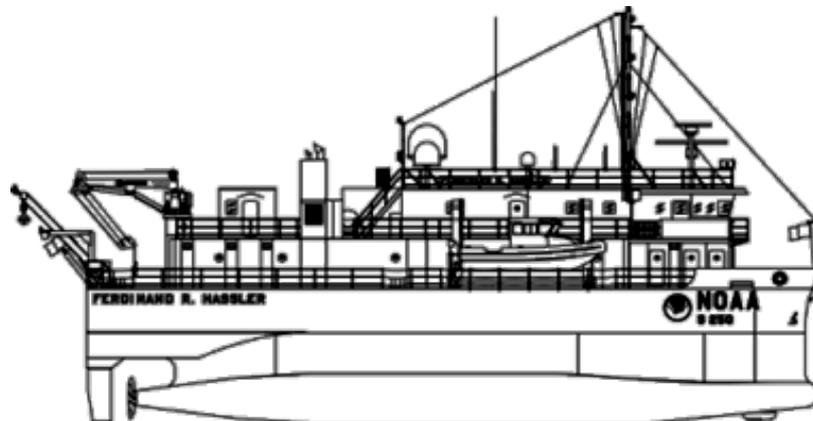


WHAT DO I ACTUALLY DO? HOW CAN I BE MOST EFFECTIVE?



Human Side of Enviro

1. Procedures are nice... but not enough
2. Training Your People
3. Supporting Your People
4. Going Beyond Compliance
5. Questions



Procedures alone don't work

ECO DUTIES 0701-XX

NPDES 0701-06

WASTE WATER 0701-18

BALLAST WATER 0701-02

OILY MATERIALS MNGT

FUEL OIL TRANSFER 0601-01

SOPEP 0701-03

HAZCOM 0701-04

HAZWASTE 0701-05

HAZMAT 0701-XX

MISSION HAZMAT 0701-22

SOLID WASTE 0701-19

AIR POLLUTION - ODS & Fueling

HEARING CONSERVATION 1701-04

Green Fleet Work

* LEDs * Energy Efficiency *



Hit the ground running

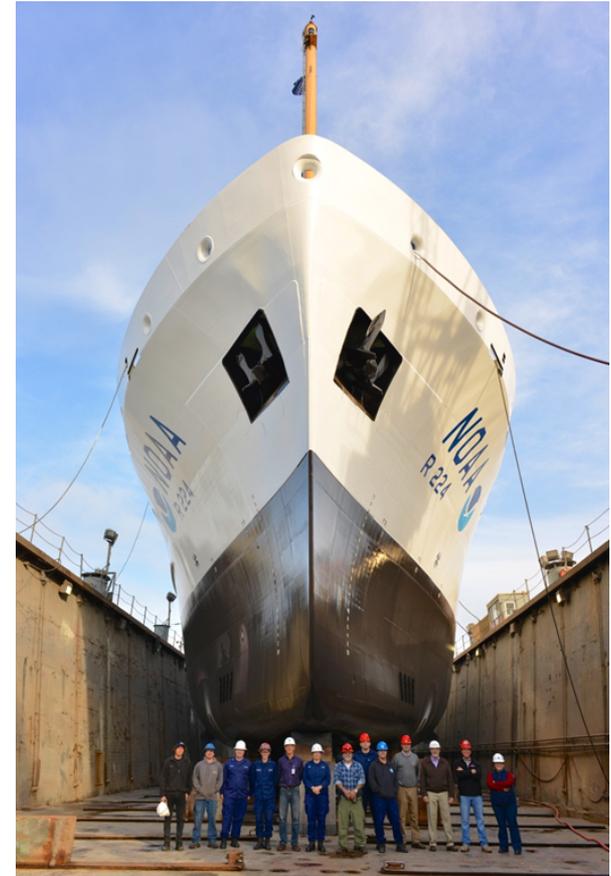
II. TRAINING YOUR PEOPLE



Enviro Training

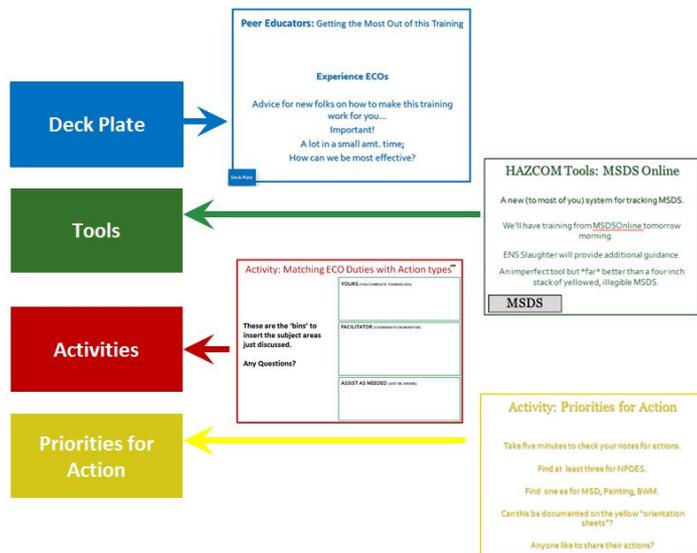
- **ECO Workshop**
 - **Five Day Crash course on ALL ENVIRO REGS**
- **Oil Record Book**
- **CO one-on-one (ship specific for new COs)**
- **NOAA-specific HAZWOPER**
- **And more**

But let's take a look at the elements that make these trainings work...



Why does our training work?

- Specific to the audience
- Not JUST webinars and slide clicking
- The audience members take the lead
- It comes with resources and tools to guide the individual AFTER training (more on that in a moment)



What do we teach at ECO Workshop?

CLARIFY ECO DUTY: WHAT IS REQUIRED; WHAT IS RECOMMENDED

*

KNOWLEDGE & INFO: STUFF YOU MUST KNOW; STUFF YOU MUST BE ABLE TO FIND

*

TOOLS: MAXIMIZE YOUR PRODUCTIVITY & ASSIST W/ ENGAGING OTHERS

*

IDENTIFY PRIORITIES: FOR YOUR SHIP & DOCUMENT IN ECO ACTION PLAN

*

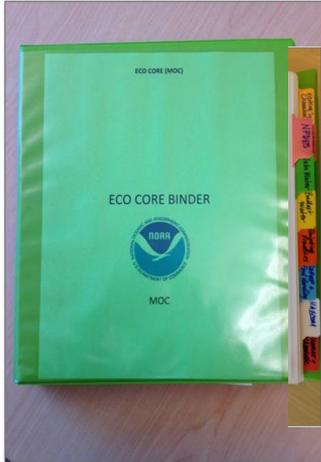
SHARE & LEARN: FROM ONE ANOTHER'S EXPERIENCES

Training is just the beginning

III. SUPPORTING YOUR PEOPLE



Resources & Tools



Objective	Action	Due Date	Status (Completed On Schedule, Delayed, Pending)
1. ADP&S	Check CO's annual training... Check CO's annual training... Review log of last year's per... Review log of last year's per...	08/31/20 09/30/20	
2. HAZMAT	Review HAZMAT Training... Review HAZMAT Training... Check HAZMAT Training... Check HAZMAT Training...	08/31/20 08/31/20	
3. SOPEP Plan & Ops Manual	Review SOPEP Plan... Review SOPEP Plan... Check SOPEP Plan... Check SOPEP Plan...	08/31/20	
4. NPDES	Review NPDES... Review NPDES... Check NPDES... Check NPDES...	08/31/20	
5. Green Fleet	Review Green Fleet... Review Green Fleet... Check Green Fleet... Check Green Fleet...	08/31/20	
6. Other	Review Other... Review Other... Check Other... Check Other...	08/31/20	
7. Take action when required	Review Take action... Review Take action... Check Take action... Check Take action...	08/31/20	

MEMORANDUM FOR: RANK, Port Liaison, Commanding Officer, NOAA Ship XXX

FROM: RANK, Port Liaison, Executive Officer, NOAA Ship XXX

SUBJECT: Environmental Compliance Officer ECO Action Plan

As the ECO of the NOAA Ship XXX, you are selecting the priority tasks for the ECO to complete by the end of the year. The attached document is a draft of the ECO Action Plan. The attached document is a draft of the ECO Action Plan. The attached document is a draft of the ECO Action Plan.

The higher priority items include:

- Objective 1
- Objective 2
- Objective 3
- Objective 4

Commanding Officer signature required for the ECO to complete the ECO Action Plan. Working Document has been reviewed.

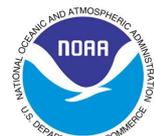
DISCHARGE RESTRICTIONS			
ALL DISCHARGES ARE PROHIBITED WITHOUT PERMISSION FROM BRIDGE			
DISCHARGE	DISTANCE FROM SHORE		
	< 3NM from land	3-12NM from land	> 12NM from land
BLACKWATER ¹	SECURE	SECURE	AUTHORIZED <small>(log status of discharge in deck log or other location)</small>
MSD ¹	MINIMIZE ² <small>(log status of MSD in deck log or other location)</small>	AUTHORIZED <small>(log status of MSD in deck log or other location)</small>	AUTHORIZED <small>(log status of MSD in deck log or other location)</small>
GRAYWATER	MINIMIZE ² <small>(log in GW log)</small>	AUTHORIZED	AUTHORIZED
WET GARBAGE	SECURE	MACERATED <small>(log in GRB)</small>	AUTHORIZED <small>(log in ORB)</small>
INCINERATOR	SECURE/ MINIMIZE ³ <small>(log in GRB; also log in ORB if waste stream contains sludge)</small>	MINIMIZE ³ <small>(log in GRB; also log in ORB if waste stream contains sludge)</small>	AUTHORIZED <small>(log in GRB; also log in ORB if waste stream contains sludge)</small>
OWS	SECURE/ MINIMIZE ² <small>(log in ORB)</small>	AUTHORIZED	AUTHORIZED <small>(log in ORB)</small>

¹ Blackwater & MSD discharge is prohibited in all No Discharge Zones (NDZ)

² Discharge may be permitted if operationally necessary; contact CO or ECO with questions

³ Incinerator operations are prohibited in ports, harbors, and estuaries and should be

2018 Environmental Compliance Officer Checklist NOAA Ship		
Weekly	Quarterly	Annual
Routine Visual Inspection- RVI required within 8 NM. MAKE AN ENTRY IF YOU ARE OUTSIDE OF 8 NM. If a week is left blank we will assume you didn't complete a required RVI and it will be reported as such in your AISR.	Spill Drill (Oil or HAZMAT) Q1_Q2_Q3_Q4__ Spill Equipment Inventory Q1_Q2_Q3_Q4__ Check GW, DM, and GRB logs Q1_Q2_Q3_Q4__	Create Ships ECO Action Plan (brief CO & submit) Discharge Matrix briefing to OODs & EOWs (incl logs) Spill Team Meeting Review SOPEP, send updated Att A to DMS/EMB Coord HAZWOPER (for you & the team) HAZMAT Inventory HAZCOM Training (Right to Know) Update MSDSOnline NPDES Annual Inspection and Report w/ records Review Fleet Inspection findings for enviro Review ODS Logs Introduce EMS & Safety/Enviro Policy to all hands Check season's working group for Special Areas
Semi-Annual ___ Check bunker reports for 5 content ___ Review ORB (at CO's discretion) ___ Check in w/ DH's on HAZwaste mgmt	Biennial ___ Sound Survey & briefing/memo of results to all hands ___ Passdown ___ New ECO Designation Memo ___ Review HAZCOM Plan ___ Review NPDES SSI, re-sign ___ Ballast Water Management Training ___ All hands NPDES Training ___ Check with Port Engr about EALs (at CO's discretion) ___ Check with CME about 608 certificates (for refers/ODS)	As Needed ___ Debrief Spills & Create Corrective Action Assm't ___ Work w/ Ops on Mission HAZ load/unload ___ New Crew Enviro Orientation ___ Enviro All Hands discussion/overview ___ Check in w/ DHS re RVIs (your findings, their guidance) ___ Determine your role in BWV, assist w/ training ___ Attend ORB training (at CO's discretion) ___ Read the Fueling DOI, learn the FO tank air vents, understand the high risk points



Customer Support

- **They've got training**
- **They've got resources and tools**
- **They also have us to help nearly 24/7**



Now you get even better

IV. GOING BEYOND COMPLIANCE



Green Fleet Projects

- Reusable shipboard mugs
- Onboard recycling
- EALs
- LED Lighting
- Vessel Fuel Management System



What is an EAL?

An environmentally acceptable lubricant (EAL) is a VGP compliant lubricant.

EALs are:

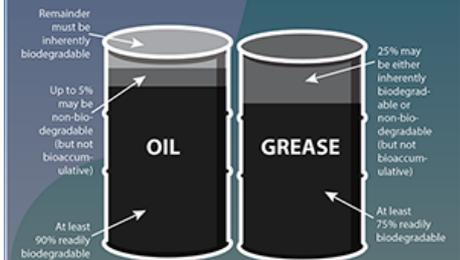
- biodegradable
- minimally toxic
- not bioaccumulative

... as defined in Appendix A of the 2013 VGP



EAL Base Oil Selections

- Soybean, canola, sunflower plus blends
- Other vegetable matter base stocks
- PAGs
- Synthetic esters



<https://www.lubricants.com/environmentally-acceptable-lubricants.html>

Analyzing our spills

- Okay we now know **WHAT** to report, **WHEN** to report, and **WHO** needs to know
- What can we do with that info? Maybe if we collect it and look deeper, we can see some common root causes and prevent some repeat spills...



Overall...

- Audience specific training to help people know what they know, and know what they don't know.
- If they don't know something, they know where to turn to for help. Either tool, resource, or us.
- This is increasing our compliance and shifting our overall culture from “ugh what a pain” to “yeah this is the thing we do.”

