From: "Kirk, Brian (ECY)" <bkir461@ecy.wa.gov>
Date: February 22, 2023 at 4:59:20 AM PST
To: Sandy Bendixen <sbendixen@pspilots.org>

Subject: Fwd: fuel rack stopper

Hi Sandy - here's what I got from Nate.

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From: Menefee, Nathan S CDR USCG D13 (USA) <Nathan.S.Menefee@uscg.mil>

Sent: Tuesday, February 14, 2023 1:24 PM

To: Kirk, Brian (ECY)

SEC PUGET SND (USA)

<patrick.m.hilbert@uscg.mil>; Moody, Kira M CDR USCG SEC PUGET SND (USA)

<Kira.M.Moody@uscg.mil>; Fu, Hsing-Yen J CIV USCG SEC PUGET SND (USA) <Hsing-Yen.J.Fu@uscg.mil>

Cc: Clements, Carlos (ECY) <cacl461@ECY.WA.GOV>; Burkett, Patrick C CAPT USCG D13 (USA)

<Patrick.C.Burkett@uscg.mil>; Bever, Jaimie (WSDOT) <BeverJ@wsdot.wa.gov>; Tonn, Sheri

<TonnS@wsdot.wa.gov>; Thompson, Sara (ECY) <STHO461@ECY.WA.GOV>; Irwin, Nhi (ECY)

<nhoa461@ECY.WA.GOV>; Velasco, John W (Keola) LCDR USCG D13 (USA) <John.K.Velasco@uscg.mil>;

Mostrom, Alexandra C LCDR USCG D13 (USA) <Alexandra.C.Mostrom@uscg.mil>

Subject: RE: fuel rack stopper

Brian – Thanks for sending this. Engine Power Limitation is a legitimate component to attaining energy savings to meet EEXI requirements. Sometimes this is via a mechanical limit set like the photo you sent, and sometimes this is electronically controlled via the propulsion controls. The vessel's Flag State/Recognized Organization and class society would be involved with setting and certifying the limit and updating maneuvering characteristics would be required. If the device or control has a bypass for emergencies, it would be necessary to have two maneuvering characteristics to account for this. Port State involvement would be limited to verifying certificates and expanding if there are discrepancies or observed problems. A lack of updated maneuvering characteristics would be an issue that Port State Control can and should intervene when discovered.

Regards, Nate Nate Menefee, CDR Chief, Inspections & Investigations Branch U.S. Coast Guard District 13 Office: 206.220.7224

From: Kirk, Brian (ECY)

Sent: Saturday, February 11, 2023 10:00 AM

(USA) < Hsing-Yen.J.Fu@uscg.mil>; Menefee, Nathan S CDR USCG D13 (USA)

<Nathan.S.Menefee@uscg.mil>

Cc: Clements, Carlos (ECY) <cacl461@ECY.WA.GOV>; Bever, Jaimie (WSDOT) <BeverJ@wsdot.wa.gov>; Tonn, Sheri <TonnS@wsdot.wa.gov>; Thompson, Sara (ECY) <STHO461@ECY.WA.GOV>; Irwin, Nhi (ECY) <nhoa461@ECY.WA.GOV>

Subject: [Non-DoD Source] FW: fuel rack stopper

Good morning – fyi, this week Ecology vessel inspectors saw two examples of devices installed on ships to limit their engine horsepower, in order to meet IMO Energy Efficiency Design Index (EEXI) requirement. Please see brief description below and attached pictures. The new IMO requirements took effect on January 1, so I expect to see more ships in our waters with these types of horsepower limiting devices. Any Coast Guard role with these changes, through PSC or flag state?

I shared this information with Sandy Bendixen on Friday, who happened to be on her way to pilot one of the ships we were onboard, the ASL URANUS, outbound from Tacoma. She did not receive information about the fuel rack stopper as part of the master-pilot exchange, and talking with her today, she doesn't believe documents like the maneuvering diagram and pilot card have been updated to show the performance of the ship with the stopper in place. A potential concern she identified was changes to performance when switching from ahead to astern. It also looks like these stoppers would limit the maximum speed of a vessel.

Cc'ing Jaimie and Sheri for info.

Brian Kirk

Prevention Section Manager | Spills Prevention, Preparedness, and Response Program Washington State Department of Ecology 425.395.5800 | brian.kirk@ecy.wa.gov | he/him/his



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From: Thompson, Sara (ECY) < STHO461@ECY.WA.GOV>

Sent: Friday, February 10, 2023 9:52 AM **To:** Kirk, Brian (ECY) < bkir461@ECY.WA.GOV>

Cc: Thompson, Sara (ECY) < STHO461@ECY.WA.GOV > Subject: fuel rack stopper

Hi Brian – Here is the information we were able to gather about these stoppers from yesterday's inspections.

Some older ships are installing a stopper on their fuel racks to meet their GHG goals. The fuel rack controls the amount of fuel being injected by each injector though a mechanical linkage. The stopper limits the rack travel. During recent inspections, we saw two different stoppers on ~20 year old vessels. The manufactured stopper was seen on a containership and the bolt with a hold drilled though it was seen on a bulker. We spoke with the Chief Engineer on the containership and learned that the stopper was provided to the ship after shipboard testing to determine the proper stopper height. The Chief Engineer confirmed that his vessel could answer all bells with the stopper in place. The Chief Engineer knew that he was authorized to unscrew the nut and remove the stopper in an emergency situation such as a man overboard so that the ship could use full power to address the emergency.

Sara Thompson

Vessel and Oil Transfer Unit Supervisor | Spills Prevention, Preparedness, and Response Program Washington State Department of Ecology 360.280.5128 | sara.thompson@ecy.wa.gov





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