Ship Report Transcript Friday, June 14, 2024 By Joanne Rideout All rights reserved. No use without permission. © 2024. Joanne Rideout/The Ship Report.

It's time for the ship report to show about all things maritime. I'm Joanne Rideout. It's Friday, June 14th, 2024.

Well, let's take a look at our marine weather forecast and we'll see what we have time for after that.

And then I want to talk with you about a listener question that I received about a ship that was just spewing what looked like a lot of smoke on there. I mean, a lot of smoke. I saw a video of it that they sent me and what that was all about. So it's an interesting question that allows me to talk about ship fuel and things like that. So it's a good opportunity to talk about some really interesting things with regard to ships.

But first, marine weather: we have high pressure lingering in our area. But a pattern change in the weather is expected early today as a very weak weather system moves across the region. However, a relatively more robust weather system, which means more storminess, will move across the region late tonight and into the weekend. That will bring us a slightly more active weather pattern. And rain is in the forecast for the weekend.

Today's marine weather forecast includes southwest winds 5 to 10 knots, seas 4 to 6 feet. Wave detail, wind waves from the southwest, two feet high at 4 seconds apart. West swells five feet high at 11 seconds apart. And from the southwest, two feet high at 15 seconds apart. Showers are likely mainly in the morning and showers with a slight chance of thunderstorms after midnight. A quick overview of our ship schedule. We have seven inbounders, we have six outbounders, and we have three in our Astoria Anchorages.

And the USS Montgomery: She's one of the Rose Festival ships that was up in Portland for the Rose Festival last week and came down river on Monday. She stopped at the Port of Astoria on her way out and has been there for the past few days. She's going to leave the Port of Astoria today around 2 p.m. and head out to sea. So one last look at her before she goes. If she can get there before about 2 p.m., we have a good chance of seeing her there at the Port of Astoria docks.

Well, today I'd like to respond to a listener question that I got this week, a really interesting one about something that someone noticed on the river that looked like it might be a sign of a ship emergency. This listener sent me a video of a ship passing by on the river. It was an MSC container ship. We see them quite a bit here. This one was spewing white smoke. I mean, a lot of it - far more than we usually see on passing ships.

When I first looked at the video, I wondered if it might be maybe a sign of a fire on board. But you can't assume these things. And I just want to say one thing about that. I've noticed over the years of seeing a lot of things happen on ships going by assuming that, you know, what's happening is usually a mistake. I mean, I've been doing this for a long time and I've learned just not to assume, because often I am wrong. And there's a lot of things that I have learned over the years that give me clues about what's happening. But it's always good to verify before you say, Oh my God, something's happening.

So I checked into this with the Columbia River Bar pilots and got an answer very quickly that references a very interesting subject, and that is ship fuel and how ships burn fuel in these current days of increased environmental regulation.

But first, to answer the question, that MSC container ship that was passing by was actually spewing steam from its scrubbers, which filter the smoke from burning fuel that without the scrubbers would violate international rules on ship emissions that went into effect in 2020.

These new rules were called IMO 2020. Now, IMO stands for the International Maritime Organization. It's the United Nations specialized agency that has responsibility for the safety and security of shipping and the prevention of marine and atmospheric pollution by ships. So they set the rules for ship emissions and they changed those rules to reduce a particular kind of pollutant in ship exhaust.

So here is a bit about IMO 2020 from an interview I did in 2019 just before these rules went into effect with retired Columbia River Bar Pilot Captain Robert Johnson. So here's Captain Johnson explaining a bit about IMO 2020 and what it does.

RJ: "IMO 2020 is going to put worldwide sulfur oxide limitations. So sulphur oxide is a harmful substance. It affects human health. It can cause respiratory symptoms, lung disease from the atmosphere, and it can lead to acid rain, which is harmful to our forests and aquatic species. In a study by nature last year found that ship emissions with current sulphur limits caused about 400,000 premature deaths from lung cancer and cardiovascular disease, as well as 14 million childhood asthma cases around the world every year. After these new regulations go into effect, those numbers are going to be approximately halved. So it will have a big influence on the health ramifications of the pollution that ships create."

So that was retired Columbia River Bar Pilot Captain Robert Johnson, from an interview that I did with him in 2019, just before 2020 kicked in.

And those IMO 2020 rules went into effect. What the rules say are that ships now have to burn a less polluting fuel. And so newer ships are designed to burn this less polluting fuel. Their engines are designed to handle that fuel. Older ships are used to burning a different kind of fuel that is more polluting and they just can't switch to the new fuel. It just doesn't work very well.

So what they do is they install scrubbers that scrub the exhaust as it comes out of the engine and filter out those pollutants so that they can comply with the new regulations. So what people saw on the river as that ship went by was an older ship manufactured to handle the older, more polluting fuel. And under the new regulations, they have to fit their ship with a scrubber or multiple scrubbers and not really sure how it works to filter the exhaust.

Now, the result is that white steam that folks saw - apparently MSC ships are known to emit a lot of the steam from those scrubbers, and that ship on that day was going against an ebb current on the river. So she had to use her throttle and burn more fuel to get up river against the down river tidal current, which can be quite strong. So that might be one reason why there was so much of that steam coming out of the scrubbers.

Now, apparently the scrubbers don't filter out everything, but they do filter out that sulfur particulate pollution, which is quite toxic and responsible for health issues worldwide. Newer ships designed to burn the low sulfur fuel don't need the scrubbers. So you don't see that white smoke. But when you do

see it, it's a sign that the ship is complying with current regulations and is emitting far less pollution than it would have, say, five years ago had it been on the river then before IMO 2020. So that is a significant improvement.

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