Exhibit H

Whole Farm > Weights and Measurements > Weights and Measurements

Natural Gas and Coal Measurements and Conversions

Natural gas measurements and conversions

File C6-89
Updated June, 2014

pdf format

1 cubic foot natural gas (NG) – wet = 1,109 Btu
1 cubic foot – dry = 1,027 Btu
1 cubic foot – dry = 1,087 kilojoules
1 cubic foot – compressed = 960 Btu
1 pound = 20,551 Btu
1 gallon – liquid = 90,800 Btu – HHV *
1 gallon – liquid = 87,600 Btu – LHV *
1 million cubic feet = 1,027 million Btu
1 metric ton liquefied natural gas (LNG) = 48,700 cubic feet of natural gas
1 billion cubic meters NG = 35.3 billion cubic feet NG
1 billion cubic meters NG = .90 million metric tons oil equivalent
1 billion cubic meters NG = .73 million metric tons LNG
1 billion cubic meters NG = 36 trillion Btus
1 billion cubic meters NG = 6.29 million barrels of oil equivalent
1 billion cubic feet NG = .028 billion cubic meters NG
1 billion cubic feet NG = .026 million metric tons oil equivalent
1 billion cubic feet NG = .021 million metric LNG
1 billion cubic feet NG = 1.03 trillion Btus
1 billion cubic feet NG = .18 million barrels oil equivalent
1 million metric tons LNG = 1.38 billion cubic meters NG
1 million metric tons LNG = 48.7 billion cubic feet NG
1 million metric tons LNG = 1.23 million metric tons oil equivalent
1 million metric tons LNG = 52 trillion Btus
1 million metric tons LNG = 8.68 million barrels oil equivalent
1 million metric tons oil equivalent = 1.111 billion cubic meters NG
1 million metric tons oil equivalent = 39.2 billion cubic feet NG
1 million metric tons oil equivalent = .805 million tons LNG
1 million metric tons oil equivalent = 40.4 trillion Btus
1 million metric tons oil equivalent = 7.33 million barrels oil equivalent
1 million barrels oil equivalent = .16 billion cubic meters NG
1 million barrels oil equivalent = 5.61 billion cubic feet NG
1 million barrels oil equivalent = .14 million tons oil equivalent
1 million barrels oil equivalent = .12 million metric tons of LNG
1 million barrels oil equivalent = 5.8 trillion Btus
1 trillion Btus = .028 billion cubic meters NG
1 trillion Btus = .98 billion cubic feet NG
1 trillion Btus = .025 million metric tons oil equivalent
1 trillion Btus = .02 million metric tons LNG
1 trillion Btus = .17 million barrels oil equivalent1 short ton = 53,682.56 cubic feet
1 long ton = 60,124.467 cubic feet
1 cubic foot = .028317 cubic meters
1 cubic meter – dry = 36,409 Btu

1 cubic meter – dry = 38.140 megajoules
1 cubic meter = 35.314 cubic feet

Coal measurements and conversions

1 pound = 10,377 Btu
1 pound of coal = 10.948 megajoules
1 short ton (2,000 lbs.) of coal = 20,754,000 Btu
1 short ton = 21,897 megajoules
1 short ton = .907 metric tons
1 metric ton = 22,877,388 Btu
1 metric ton = 24,137 megajoules
1 metric ton = 1.102 short tons
1 barrel oil equivalent = approximately .20 metric tons of hard coal
1 barrel oil equivalent = approximately .41 metric tons of lignite coal
1 metric ton oil equivalent = approximately 1.5
metric tons of hard coal
1 metric ton oil equivalent = approximately 3 metrics tons of lignite coal
1 metric ton hard coal = approximately 5 barrels oil equivalent
1 metric ton hard coal = approximately .67 metric tons of oil equivalent
1 metric ton lignite coal = approximately 2.5 barrels oil equivalent
1 metric ton lignite coal = approximately .33 metric tons of oil equivalent

* Energy contents are expressed as either High (gross) Heating Value (HHV) or Lower (net) Heating Value (LHV). LHV is closest to the actual energy yield in most cases. HHV (including condensation of combustion products) is greater by between 5% (in the case of coal) and 10% (for natural gas), depending mainly on the hydrogen content of the fuel. For most biomass feed-stocks this difference appears to be 6-7%. The appropriateness of using LHV or HHV when comparing fuels, calculating thermal efficiencies, etc. really depends upon the application. For stationary combustion where exhaust gases are cooled before discharging (e.g. power stations), HHV is more appropriate. Where no attempt is made to extract useful work from hot exhaust gases (e.g. motor vehicles), the LHV is more suitable. In practice, many European publications report LHV, whereas North American publications use HHV (Source: Bioenergy Feedstock Network -- https://bioenergy.ornl.gov/)

References

Bioenergy Feedstock Information Network: http://bioenergy.ornl.gov/
Biomass Energy Datebook, U.S. Department of Energy: http://cta.ornl.gov/bedb/appendix_a.shtml
BP Conversion Factors: http://www.bp.com/conversionfactors.jsp
ConvertIt: http://www.convertit.com/Go/ConvertIt/Measurement/Converter.ASP
Energy Information Administration: http://www.eia.doe.gov/
Energy Information Administration - Energy Kids Page: http://tonto.eia.doe.gov/kids/energy.cfm?page=about_energy_conversion_calculator-basics
Iowa Energy Center, Iowa State University: http://www.energy.iastate.edu/
Wikipedia: http://en.wikipedia.org/wiki/Conversion_of_units

Don Hofstrand, retired extension value added agriculture specialist, agdm@iastate.edu

Exhibit I

U.S. Department of Homeland Security

United States Coast Guard

Commanding Officer
United States Coast Guard
Sector Portland

6767 N. Basin Avenue
Portland, OR 97217
Phone: (503) 240-9307
Fax: (503) 240-9586

16611
July 1, 2008

Lauren O'Donnell
Director of Gas – Environmental & Engineering, PJ-11
Federal Energy Regulatory Commission
888 First Street, N.E., Room 62-45
Washington, DC 20426

WATERWAY SUITABILITY REPORT FOR THE JORDAN COVE ENERGY PROJECT

Dear Ms. O'Donnell:

This Waterway Suitability Report (WSR) fulfills the Coast Guard's commitment under the Interagency Agreement among the Federal Energy Regulatory Commission (FERC), the Research and Special Programs Administration (RSPA), and the Coast Guard for the Safety and Security Review of the Waterfront Import/Export Liquefied Natural Gas Facilities that was signed in February 2004. Under this agreement, our agencies work together to ensure that both land and maritime safety and security risks are addressed in a coordinated and comprehensive manner. In particular, the Coast Guard serves as a subject matter expert on maritime safety and security issues.

On June 11, 2008, the Coast Guard completed a review of the Waterway Suitability Assessment (WSA) for the Jordan Cove Energy Project (JCEP) that was submitted in September of 2007. This review was conducted following the guidance provided in Navigation and Vessel Inspection Circular (NVIC) 05-05 of June 14, 2005. The review focused on the navigation safety and maritime security risks posed by LNG marine traffic, and the measures needed to responsibly manage these risks. During the review, the Coast Guard consulted a variety of stakeholders including state and local emergency responders, marine pilots, towing industry representatives, members of the Ports and Waterways Safety Committee and the Area Maritime Security Committee.

Based upon this review, I have determined that Coos Bay is not currently suitable, but could be made suitable for the type and frequency of LNG marine traffic associated with this proposed project. Additional measures are necessary to responsibly manage the maritime safety and security risks. The specific measures, and the resources needed to implement them, where applicable, are described below and in a separate supplementary report which is being provided to you under the terms and conditions established for handling Sensitive Security Information (SSI). This supplemental report includes a copy of the Jordan Cove Waterway Suitability Assessment. This determination is preliminary as the NEPA analysis has not yet been completed.

The following is a list of specific risk mitigation measures that must be put into place to responsibly manage the safety and security risks of this project. Details of each measure, including adequate support infrastructure, will need further development in consultation with the Coast Guard and state and local agencies through the creation of an Emergency Response Plan as well as a Transit Management Plan that clearly spell out the roles, responsibilities, and specific procedures for the LNG vessel and all agencies responsible for security and safety during the operation.

Navigational Measures:

LNG Tanker Size Limitations: Based on the Ship Simulation Study conducted by Moffatt & Nichol on March 17-20, 2008, the maximum size LNG tanker permitted to transit through the Port of Coos Bay is a spherical containment LNG carrier with the physical dimensions of a 148,000 m^3 class vessel. The ship dimensions used in the study reflect a length overall of 950 feet, beam of 150 feet and a loaded draft of 40 feet. The channel must demonstrate sufficient adequacy to receive LNG carriers for any single dimension listed. Consequently, prior to approving the transit of an LNG ship larger than 148,000 m^3, or any increase in the physical dimensions cited, additional simulator studies must be conducted in order to assure the sufficiency of the channel.

- Safety/Security Zone: A moving safety/security zone shall be established around the LNG vessel extending 500-yards around the vessel but ending at the shoreline. No vessel may enter the safety/security zone without first obtaining permission from the Coast Guard Captain of the Port (COTP). The expectation is that the COTP's Representative will work with the Pilots and patrol assets to control traffic, and will allow vessels to transit the Safety/Security zone based on a case-by-case assessment conducted on scene. Escort resources will be used to contact and control vessel movements such that the LNG Carrier is protected.

  While the vessel is moored at the facility there shall be a 150 yard security zone around the vessel, to include the entire terminal slip. In addition, while there is no LNG vessel moored, the security zone shall cover the entire terminal slip and extend 25-yards into the waterway.

  Resource Gap: Resources required to enforce the safety/security zone are discussed under Security Measures in the supplemental report.

- Vessel Traffic Management: Due to a narrow shipping channel, navigational hazards, and the proximity to populated areas, LNG vessels will be required to meet the following additional traffic management measures:
  - A Transit Management Plan must be developed in coordination with the Coos Bay Pilot Association, Escort Tug Operators, Security Assets and the Coast Guard prior to the first transit.
  - This plan must be submitted to the COTP no less than 6 months to initial vessel arrival, and followed by an annual review to ensure that it reflects the most current conditions and procedures.
  - For at least the first six months, all transits will be daylight only, unless approved in advance by the COTP.
  - The LNG Vessel must board Pilots at least 5 miles outside the sea buoy.
    - Overtaking or crossing the LNG tanker within the security zone is prohibited for the entire transit from the Coos Bay Sea Buoy to mooring the vessel at the LNG terminal.
  - Vessel transits and bar crossings will be coordinated so as to minimize conflicts with other deep draft vessels, recreational boaters, seasonal fisheries, and other Marine Events.
  - 24 hours prior to arrival, the Coast Guard, FBI, Coos Bay Pilot Association, Escort Tug Masters, and other Escort assets will meet to coordinate inbound and outbound transit details.

Resource Gaps: The Vessel Transit Management Plan must be approved by the COTP at least 60 days prior to the first vessel arrival.

- Vessel Traffic Information System /Vessel Traffic System: The Port of Coos Bay does not have the capacity to receive Automatic Identification System (AIS) signals. AIS receiving capability must be established and must have the capacity to be used by appropriate agencies, port authorities and ship husbandry companies. Additionally, the Port does not have any means for continuous monitoring the navigable waterway. In order to ensure vessel safety and security, a robust camera system capable of monitoring the entire transit route must be established. Due to weather concerns, these cameras must be equipped with the means to adequately monitor vessel traffic in wind, rain and fog conditions.

  Resource Gaps: AIS receiver and camera systems including necessary hardware, software, staffing and training. Camera system must have complete coverage of the entire transit route, capable of detecting vessel traffic in wind, rain, fog, and dark conditions. Equipment and access to data feed of video imagery must be provided to state and local emergency operations centers impacted by the project.

- Tug Escort and Docking Assist: Due to the confined channel and high wind conditions, each LNG Carrier must be escorted by two tractor tugs, which will join the vessel as soon as safe to do so. The primary tug will be tethered at the direction of the pilot. A third tractor tug is required to assist with turning and mooring. Based on the Ship Simulation Study conducted by Moffatt & Nichol on March 17-20, 2008, vessels are limited to transiting during periods of high tide and 25 knot winds or less. While unloading, all three tugs will remain on standby to assist with emergency departure procedures.

  All three tractor tugs must be at least 80 Ton Astern Bollard Pull or larger and equipped with Class 1 Fire Fighting equipment.

  Resource Gaps: Three 80 Bollard Ton Tractor Tugs with Class 1 Fire Fighting capability.

- Navigational Aids:
  - Based on the Ship Simulation Study conducted by Moffatt & Nichol on March 17-20, 2008, four aids to navigation must be added and eight aids to navigation relocated on the waterway (pg. 12-17).

  - Physical Oceanographic Real-Time System (PORTS) must be contracted with NOAA to provide real time river level, current and weather data.

- LNG Carrier familiarization training for Pilots and Tug Operators: Prior to the arrival of the first vessel, simulator training must be provided for pilots and tug operators identified as having responsibility for LNG traffic.

Safety Measures:

Emergency Response Planning: Regional emergency response planning is limited in the region. Emergency response planning resources will need to be augmented to adequately develop

emergency response procedures and protocols as well as continuously update those plans as conditions change.

Resource Gap: To be determined in conjunction with local and regional response agencies through the Emergency Response Planning process.

- Vessel and Facility Inspections: LNG tankers and facilities are subject to (at a minimum) annual Coast Guard inspections to ensure compliance with federal and international safety, security and pollution regulations. In addition, LNG vessels and facilities are typically required to undergo a pre-arrival inspection, and transfer monitor.

  Resource Gap: Additional Coast Guard Facility and Vessel Inspectors.

- Shore-Side Fire-Fighting: Firefighting capability is limited in the area surrounding the proposed LNG terminal. Shore side firefighting resources and training will need to be augmented in order to provide basic protection services to the facility as well as the surrounding communities along the transit route.

  Resource Gap: To be determined in conjunction with local and regional response agencies through the Emergency Response Planning process.

- In-Transit Fire-Fighting: Firefighting capability is limited along the entire transit route for proposed LNG vessels.

  Resource Gap: A plan must be developed for managing underway firefighting, including provisions for command and control of tactical fire fighting decisions as well as financial arrangements for provision of mutual aid and identification of suitable locations for conducting fire fighting operations along the transit route. To be determined in conjunction with local and regional response agencies through the Emergency Response Planning process.

  Public Notification System and Procedures: Adequate means to notify the public along the transit route, including ongoing public education campaigns, emergency notification systems, and adequate drills and training are required. Education programs must be tailored to meet the various needs of all waterway users, including commercial and recreational boaters, local businesses, local residents, and tourists.

  Resource Gap: A comprehensive notification system, including the deployment of associate equipment and training, must be developed. To be determined in conjunction with local and regional response agencies through the Emergency Response Planning process.

- Gas Detection Capability: No gas detection capability exists at the Port of Coos Bay, along the transit route and at the site of the proposed facility. Emergency response personnel require appropriate gas detection equipment, maintenance, and training. Additionally, the use of fixed detection equipment will ensure accurate and expedited gas detection in the event of a large scale LNG release. The installation of these detectors at strategic points along the waterway must be developed.

Resource Gap: Gas Detectors, appropriate training, and maintenance infrastructure. To be determined in conjunction with local and regional response agencies through the Emergency Response Planning process.

Security Measures:

- Security Boardings, Waterway Monitoring, and Vessel Escorts: Extensive security measures will be required to provide adequate protection for LNG vessels in transit to and while moored at the facility. The details of these measures are SSI, and are outlined in a separate supplementary report.

- Facility Security Measures: LNG facilities are subject to the security regulations outlined in 33 CFR 105, and are required to submit a Facility Security Plan (FSP) for Coast Guard approval, and undergo (at a minimum) an annual Coast Guard security inspection. The facility shall also develop a plan to provide for appropriate security measures from the start of construction through implementation of the Coast Guard approved FSP.

- Sandia Study: The WSA proposes the potential to receive vessels with up to 217,000 m^3 cargo capacity. The Sandia Report is based on consequences of LNG breaches, spills and hazards associated with LNG vessels having a cargo capacity no greater than 148,000 m^3 and spill volumes of 12,500 m^3. There remains some question as to the size of hazard zones for accidental and intentional discharges and the potential increased risk to public safety from LNG spills on water for larger vessels. Based on these existing uncertainties, Jordan Cove must either complete a site-specific analysis for the largest sized LNG vessel or limit arrivals to vessels with a cargo capacity no greater than 148,000 m^3 until additional analysis addressing vessels with higher cargo capacities is completed. However, this requirement is contingent on the requirement for US Coast Guard approval to receive LNG tankers larger than 148,000 m^3.

In the absence of the measures described in this letter and the resources necessary to implement them or changes in Coast Guard policy upon which the resource decisions are based, Coos Bay would be considered unsuitable for the LNG marine traffic associated with the Jordan Cove LNG Terminal. The applicant shall be required to submit an annual update to the Waterway Suitability Assessment to the Coast Guard which shall be revalidated by the COTP and AMSC. For further information, please contact Mr. Russ Berg of Coast Guard Sector Portland at (503) 240-9374.

Sincerely,

F. G. Myer
Captain, U.S. Coast Guard
Captain of the Port
Federal Maritime Security Coordinator

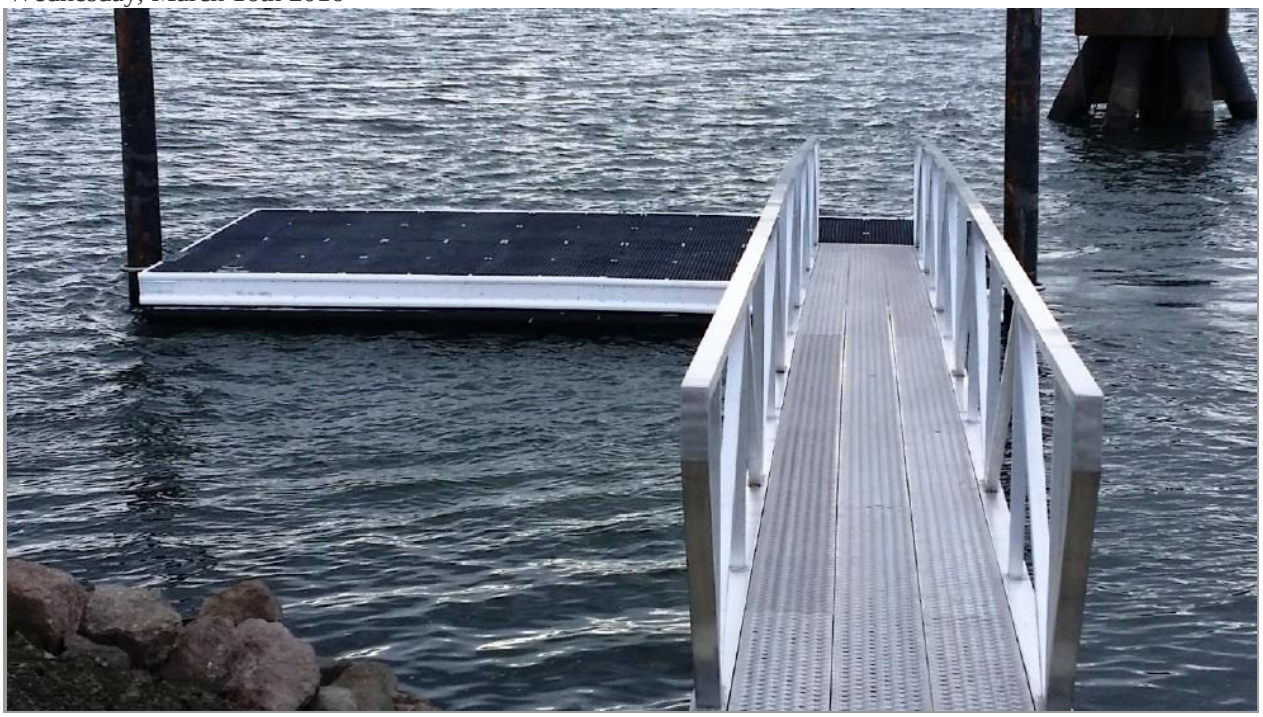
Copy: Thirteenth Coast Guard District (dp)
Coast Guard Pacific Area (Pp)
Commandant, Coast Guard Headquarter (CG-52), (CG-522), (CG-544)
Maintenance and Logistics Command Pacific (Sm)

Exhibit J

http://kcby.com/news/local/after-a-year-of-planning-coos-bay-has-new-marine-patrol-boat-dock

After a year of planning, Coos Bay has new marine patrol boat dock

By KCBY
Wednesday, March 16th 2016



The recently completed Coos County Marine Patrol dock near Roseburg's (formerly Roseburg Forest Products) Jordan Cove property. (March 8, 2016)

COOS BAY, Ore. -- After a year of planning the Coos County Sheriff's Office now has a marine patrol boat dock in Coos Bay.

Roseburg Forest Products helped with building and financing the new dock on the North Spit.

Sheriff's deputies now have better access to the lower bay, where water rescues happen every summer.

"For the Sheriff's marine division to have a presence out there, they would have to go all the way out to Coquille, get their boat, bring it all the way back out here to the North Spit, launch it and by the time they get ready to get on the water, it's usually too late," says Richard Dybevik with Roseburg Forest Products. "Now they'll have the ability to have a vessel on location in the lower bay. So it's more of a rescue rather than a collection."

Sheriff Craig Zanni says they also plan to use the dock for new kinds of training.

"We're going to be upgrading the training for all our deputies in boat handling. If LNG comes, there's going to be requirements for us to be able to respond in the bay and it requires better than just being a boat operator, but operating amongst other boats and doing some routine inspections and those types of things."

Dybevik says the lower bay is always crowded with boats during the summer.

He says he's as counted as many as 100 boats in that area at one time.

Exhibit K

http://www.dailymail.co.uk/sciencetech/article-1229857/How-16-ships-create-pollution-cars-world.html

How 16 ships create as much pollution as all the cars in the world

By Fred Pearce
21 November 2009

Last week it was revealed that 54 oil tankers are anchored off the coast of Britain, refusing to unload their fuel until prices have risen.

But that is not the only scandal in the shipping world. Today award-winning science writer Fred Pearce – environmental consultant to New Scientist and author of Confessions Of An Eco Sinner – reveals that the super-ships that keep the West in everything from Christmas gifts to computers pump out killer chemicals linked to thousands of deaths because of the filthy fuel they use.

We've all noticed it. The filthy black smoke kicked out by funnels on cross-Channel ferries, cruise liners, container ships, oil tankers and even tugboats.

It looks foul, and leaves a brown haze across ports and shipping lanes. But what hasn't been clear until now is that it is also a major killer, probably causing thousands of deaths in Britain alone.

As ships get bigger, the pollution is getting worse. The most staggering statistic of all is that just 16 of the world's largest ships can produce as much lung-clogging sulphur pollution as all the world's cars.

Because of their colossal engines, each as heavy as a small ship, these super-vessels use as much fuel as small power stations.

But, unlike power stations or cars, they can burn the cheapest, filthiest, high-sulphur fuel: the thick residues left behind in refineries after the lighter liquids have been taken. The stuff nobody on land is allowed to use.

Thanks to decisions taken in London by the body that polices world shipping, this pollution could kill as many as a million more people in the coming decade – even though a simple change in the rules could stop it.

There are now an estimated 100,000 ships on the seas, and the fleet is growing fast as goods are ferried in vast quantities from Asian industrial powerhouses to consumers in Europe and North America.

The recession has barely dented the trade. This Christmas, most of our presents will have come by super-ship from the Far East; ships such as the Emma Maersk and her seven sisters Evelyn, Eugen, Estelle, Ebba, Eleonora, Elly and Edith Maersk.

Each is a quarter of a mile long and can carry up to 14,000 full-size containers on their regular routes from China to Europe.

Waiting game: Tankers moored off Devon waiting for oil prices to rise even further

Emma – dubbed SS Santa by the media – brought Christmas presents to Europe in October and is now en route from Algeciras in Spain to Yantian in southern China, carrying containers full of our waste paper, plastic and electronics for recycling.

But it burns marine heavy fuel, or 'bunker fuel', which leaves behind a trail of potentially lethal chemicals: sulphur and smoke that have been linked to breathing problems, inflammation, cancer and heart disease.

James Corbett, of the University of Delaware, is an authority on ship emissions. He calculates a worldwide death toll of about 64,000 a year, of which 27,000 are in Europe. Britain is one of the worst-hit countries, with about 2,000 deaths from funnel fumes. Corbett predicts the global figure will rise to 87,000 deaths a year by 2012.

Part of the blame for this international scandal lies close to home.

In London, on the south bank of the Thames looking across at the Houses of Parliament, is the International Maritime Organisation, the UN body that polices the world's shipping.

For decades, the IMO has rebuffed calls to clean up ship pollution. As a result, while it has long since been illegal to belch black, sulphur-laden smoke from power-station chimneys or lorry exhausts, shipping has kept its licence to pollute.

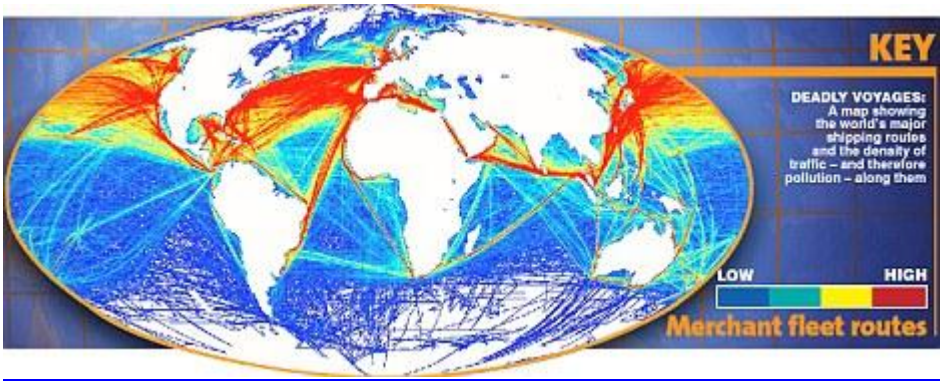
For 31 years, the IMO has operated a policy agreed by the 169 governments that make up the organisation which allows most ships to burn bunker fuel.

Christian Eyde Moller, boss of the DK shipping company in Rotterdam, recently described this as 'just waste oil, basically what is left over after all the cleaner fuels have been extracted from crude oil. It's tar, the same as asphalt. It's the cheapest and dirtiest fuel in the world'.

Bunker fuel is also thick with sulphur. IMO rules allow ships to burn fuel containing up to 4.5 per cent sulphur. That is 4,500 times more than is allowed in car fuel in the European Union. The sulphur comes out of ship funnels as tiny particles, and it is these that get deep into lungs.

Thanks to the IMO's rules, the largest ships can each emit as much as 5,000 tons of sulphur in a year – the same as 50million typical cars, each emitting an average of 100 grams of sulphur a year.

With an estimated 800million cars driving around the planet, that means 16 super-ships can emit as much sulphur as the world fleet of cars.



A year ago, the IMO belatedly decided to clean up its act. It said shipping fuel should not contain more than 3.5 per cent sulphur by 2012 and eventually must come down to 0.5 per cent. This lower figure could halve the deaths, says Corbett.

It should not be hard to do. There is no reason ship engines cannot run on clean fuel, like cars. But, away from a handful of low-sulphur zones, including the English Channel and North Sea, the IMO gave shipping lines a staggering 12 years to make the switch. And, even then, it will depend on a final 'feasibility review' in 2018.

In the meantime, according to Corbett's figures, nearly one million more people will die.

Smoke and sulphur are not the only threats from ships' funnels. Every year they are also belching out almost one billion tons of carbon dioxide. Ships are as big a contributor to global warming as aircraft – but have had much less attention from environmentalists.

Both international shipping and aviation are exempt from the Kyoto Protocol rules on cutting carbon emissions. But green pressure is having its effect on airlines. Ahead of next month's Copenhagen climate talks, airlines have promised to cut emissions by 50 per cent by 2050.

But shipping companies are keeping their heads down. A meeting of the IMO in July threw out proposals from the British Chamber of Shipping, among others, to set up a carbon-trading scheme to encourage emissions reductions.

Amazingly, they pleaded poverty. Two-thirds of the world's ships are registered in developing countries such as Panama. These are just flags of convenience, to evade tougher rules on safety and pay for sailors.

But at the IMO, governments successfully argued that ships from developing countries should not have to cut carbon emissions. IMO secretary-general Efthimios Mitropoulos insisted: 'We are heavily and consistently engaged in the fight to protect and preserve our environment.' Yet without limits, carbon emissions from shipping could triple by 2050.

The failure brought calls for the IMO to be stripped of its powers to control the world's ships. Colin Whybrow, of Greenwave, a British charity set up to campaign for cleaner shipping, says: 'The IMO is drinking in the last-chance saloon.'

Burning low-sulphur fuel won't cut carbon emissions from ships. But there are other ways. More efficient engines could reduce emissions by 30 per cent, according to British marine consultant Robin Meech.

Cutting speed could reduce emissions by as much again. And there are even wackier ways, such as putting up giant kites to harness the wind as in the days of sailing ships.

However you look at it, the super-ships are rogues on the high seas, operating under pollution standards long since banished on land; warming the planet and killing its inhabitants. Santa's sleigh, they are not.

- Robert Pedersen, of Maersk, said: 'The sulphur content varies according to where you get your fuel. Our average sulphur content is, I believe, 2.5 per cent. It's rather rare you get anything close to 4.5 per cent.' He added that 'the sulphur issue is one for the whole industry' and that there would be a 'huge cost implication' to switch to cleaner fuel.

###