The River Thames is an important transport route for the sustainable transport of goods into and from London and the South East, with over 53 million tonnes of cargo handled in 2018. The most recent UK emissions inventory indicates that coastal shipping contributes 4.5% to UK’s total SO2 emissions (NAEI, 2019). The Clean Maritime Plan has also been devised to reduce greenhouse gas emissions from shipping and to improve air quality around ports, waterways and shipping lanes. The PLA is committed to promoting a growing, greener port whilst improving its environment, by developing the air quality strategy, and is seeking to evaluate the use of Exhaust Gas Cleaning Systems (EGCs), also known as scrubbers, on the impact to air, water and sediment quality.

Legislation now requires that fuel used within Sulphur Emission Control Areas (SECAs) has a maximum sulphur content of 0.1% (1000ppm) on a mass basis, or that vessels use a technology that can reduce sulphur emissions to an equivalent level. Exhaust gas scrubbers, in combination with the use of heavy fuel oil (HFO), have been accepted as an alternative method to reaching the new sulphur cap in comparison to using a low sulphur fuel.

This survey aims to gather information on current scrubber installation, use on the Tidal Thames and the impact of wash water on the aquatic environment. Please provide as much information as possible as it intended to use the information gathered from this survey to develop a report.

Any comments you may have in response to this consultation exercise should be addressed, in writing, to the Environment Department, at the address below or by e-mail: EnvConsultation@pla.co.uk, to arrive by 19 July 2019.

|  |
| --- |
| 1. **Key**
 |
| Are you a vessel operator/ owner? | Yes [ ]  Go to **2**No [ ]  Go to **4** |

|  |
| --- |
| 1. **Fleet Operator Details**
 |
| 1. What type of vessels does your fleet use?
 |  [ ]  Container Ship[ ]  RoRo Cargo/ Vehicle[ ]  Passenger[ ]  Tug/ Supply [ ]  General Dry Cargo [ ]  Oil tanker[ ]  Chemical/ LNG/ LPG Tanker[ ]  Bulk Carrier[ ]  Cruise Ship[ ]  Non Merchant [ ]  Fishing [ ]  Reefer[ ]  Dredger [ ]  Other miscellaneous  |
| 1. Where on the river do you operate?
 | [ ]  Thames Upper[ ]  Thames Middle[ ]  Thames Lower [ ]  Thames Coastal North [ ]  Thames Coastal South[ ]  Essex [ ]  North Kent  |
| 1. How do you actively consider the environmental impacts of your day-to-day operations?
 |  |
| 1. Are you willing to be used as a named case study in PLA’s report on the Use of Scrubbers?
 | [ ]  Yes*Please provide details:*[ ]  No  |
| Please go to **3** |

|  |
| --- |
| 1. **Scrubber Installation and Use on the Thames within Fleet**
 |
| 1. What technologies or fuels (scrubbers/ LSF/ other) are you using to meet the IMO and EU sulphur limit of 0.1% in SECAs? Why has it been chosen?
 | [ ]  Scrubbers[ ] Low-sulphur fuel[ ] Other *Please specify:* **Why has it been chosen?** |
| 1. How many vessels are in your fleet?
 |  |
| 1. What proportion of the fleet use scrubbers to meet SECA requirements on the Thames?
 | *Please specify the type of scrubber:*[ ]  Open[ ]  Closed[ ]  Hybrid[ ]  Dry |
| 1. How quickly do you think scrubbers will be adopted in the medium- and long-term in your fleet? *If possible, please estimate uptake in % terms.*
 |  |
| 1. How efficiently does your scrubber remove SOX from your emissions to air *(In % terms*)?
 |  |
| 1. Is scrubber performance monitored over time in the fleet? If so, what have you found?
 |  |
| Please go to **4** |

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| --- |
| 1. **Impact of Washwater Discharge on Thames**
 |
| 1. On average, how much wash water will a vessel in the fleet produce from a scrubber when entering port?
 |   |
| 1. On average, how much wash water will a vessel in the fleet produce from a scrubber at berth?
 |  |
| 1. What are the components within the wash water?
 |  |
| 1. Do you regularly monitor the composition of the effluent washwater?
 |  |
| 1. Are you aware of any changes to sediment composition from scrubber use?
 | [ ]  Yes[ ]  No*Please outline reasoning.*  |
| 1. When is wash water (from open loop/ hybrid systems) being dispensed from vessels in the fleet using scrubbers?
 | [ ]  At berth[ ]  Entering Port[ ]  Leaving Port [ ]  Making way up river [ ]  Making way down river[ ]  Other *Please specify:*  |
| 1. Which water body on the Thames is wash water (from open loop/ hybrid systems) being dispensed from vessels in the fleet using scrubbers?
 | [ ]  Thames Upper[ ]  Thames Middle[ ]  Thames Lower [ ]  Thames Coastal North [ ]  Thames Coastal South[ ]  Essex [ ]  North Kent  |
| 1. How easy is it to store wash water on board whilst entering and leaving a port and whilst the ship is at berth? Would it be logistically possible to deliver this waste to a port reception facility?
 |  |
| Please go to **5** |

|  |
| --- |
| 1. **Future Use of Scrubbers on Thames**
 |
| 1. What are the main reasons fleet operators/ owners would choose installing a scrubber over using alternative fuels?
 |  |
| 1. To meet 2020 IMO Global regulations (requiring a maximum sulphur content of 0.5% by mass) and the current SECA fuel sulphur limits, do you think there will be an increase in the installation of scrubbers or an increase in use of LSF/ULSF? (Both in your company’s fleet and more widely)
 |   |
| 1. Would you consider switching to LSF/ ULSF instead of using/ installing scrubber technology to meet the new regulations?
 | [ ]  Yes[ ]  No*Please outline reasoning.* |
| Please go to **6** |

|  |
| --- |
| 1. **General**
 |
| 1. Are you willing for us to contact you for more information to help with this study?
 | [ ]  Yes*Please provide contact details:*[ ]  No |

Please return the completed survey to EnvConsultation@pla.co.uk by 19th July 2019.