**BULLETIN # 02/2020**

# Wastewaters (Grey and Black) Management during Lay-up

## Background:

Due to the current COVID-19 situation and all ships implementing "lay-up" plans with reduced crew onboard it is likely that the sewage treatement plants and especially the advanced wastewater treatment systems AWWTS (like Scanship and Marinfloc) may begin to have disruptions due to reduced load and low influent flow.

Related issues may even cause dry ups in pipes and components of such systems.

Proper work and treatment by such systems may be also a concern by local authorities in case of suspected COVID-19 cases onboard and related discharges including to shore facilities to reduce alleged potential virus contamination

# ACTIONS REQUIRED:

**Operate Advanced Wastewater Treatment Systems and as possible and applicable also normal Sewage Treatment Plants operations during lay-up as follows:**

1. **Chief Engineers - maintain (advanced) wastewater treatment systems operational for as long as possible taking into account the considerations below (apply as possible aslo to IMO Sewage Treatment Plants):**

a) It is better to keep running the system as much as possible in re-circulation mode, but no longer than 12 hrs without fresh infeed
b) refrain from stopping the complete system intermittently and only run it when you have something to feed - this kind of operation will unbalance the system
c) adjust feed flow to the system to the minimum possible, this may involve stopping filter/reactor units as applicable, reducing blowers and compressors without their complete stop (too much or too little air is not good for any treatment bacteria)
d) do not dry run UV units
e) lower levels in units to 50% as possible
f) adjust and reduce any treatment chemicals dosing (e.g. polymer and/or coagulant)
g) feed the system with food waste & galley gray water & black water as much as possible not to have the bacteria "hungry" – this may involve by-passing grease separators, not cleaning Grey/Black water tanks and low level stop settings of such tanks lowered as much as possible
h) if the lay-up period will be longer than 30 days and/or crew will be reduced to absolute minimum / skeleton staff the system may need to go to a full stop (check with manufacturer); then when need to restart bacteria seeding (min 7 days) period may be needed
i) whenever the above equipment, piping and/or compartments / tanks are stopped for more than 24 hrs – they must be emptied, cleaned and flushed with fresh water. This will avoid any problems with dry ups later on and easier starting as needed
j) log/record all changes in settings above

Suspend any scheduled environmental sampling including that of Grey and Black water during the period of lay-up

*Where possible seek specific advice from the AWWTS / sewage treatment plan manufacturer to ensure proper work and treatment of these systems.*

2. **Captains – implement the following Discharge Policy for Grey and Black water (sewage), unless any local more stringent regulations apply e.g. per SAF77 (Local env regs matrix)**

a) Grey water (when separated from black/sewage e.g. not mixed together):

i. For ships at anchorage – depart anchorage and discharge when more than 4 (four) nautical miles from baselines and with min speed of 6 (six) knots) –per CLIA policy
*OR*
*deliver to a barge -confirm such case individually with your VOTech/Fleet cell and Port Operations*

ii. For ships alongside – deliver to reception facilities ashore
*OR*
*proceed to sea to discharge as above and return -confirm such case individually with your VOTech/Fleet cell and Port Operations*

b) Black water (sewage) or black water mixed with grey water

*Endeavour to always properly treat sewage also due to COVID-19 concerns from discharges*

i. When treated by the ship's treatment system:

- For ships at anchorage – depart anchorage and discharge when more than 4 (four) nautical miles from baselines and with min speed of 6 (six) knots) – per CLIA policy

- For ships alongside – deliver to reception facilities ashore
*OR*
*proceed to sea to discharge as above and return -confirm such case individually with your VOTech/Fleet cell and Port Operations*

ii. If untreated (in case for some reason black water / sewage (or grey water mixed with it) cannot be treated/system stopped as above or in malfunction):

- For ships at anchorage – depart anchorage and discharge when more than 12 (twelve) nautical miles from baselines, with a min. discharge rate and min. speed as per the ship's Class Approved Maximum Rate of Discharge of Untreated Sewage Table and mechanically filter/pre-screen for plastics per VMS
*OR*
*deliver to a barge clearly stating in advance that this is UNTREATED sewage -confirm such case individually with your VOTech/Fleet cell and Port Operations*

- For ships alongside – deliver to reception facilities ashore clearly stating in advance that this is UNTREATED sewage
*OR*
*proceed to sea to discharge as above and return (confirm such case individually with your VOTech/Fleet cell and Port Operations)*

c) Duly log all discharges above in the Wastewater discharge log SAF32

Completed