

a high of USD 352 million in exports.

Floating houses, made of concrete, offer comfortable arrangements for fishermen based on site to manage and work the salmon fisheries. The houses include modern amenities along with water and wastewater systems to manage the potable water and grey/black wastewater treatment demands. A typical house has anywhere from 15 to 30 workers living on board at any given time.

In an effort to meet the Chilean government's regulatory requirements on sewage discharge from fisheries and their operational facilities, local fisheries selected the Mariner Omnipure® Series M55 from Severn Trent De Nora for use at more than ten Chilean salmon fisheries after evaluating a wide range of commercially available marine sewage treatment sys-

Using the same electrolytic disinfection technology as the Omnipure™ Series 55, the Mariner Omnipure system is provided as a lightweight, self-contained configuration that is easily wall-mounted into confined spaces found on board the floating accommodations. Utilising the natural seawater of the fishery itself, the Mariner Omnipure electrolytic treatment process effectively destroys the fecal coliform and pathogens in the wastewater collected on board the houses.

Treated effluent is then discharged into the surrounding water without any environmental impact or stress on the salmon themselves.

Platform for ship waste management

global

eached

SWANET | Ship Waste Agency, a French maritime e-service start-up founded in 2010, has launched what it calls a new and dynamic solution to ease and improve the ship waste management process directly from ship to shore.

It says its Internet-based platform Swanet® is a combination of two modules uniting the collaborative actions of all maritime actors, from the vessel that generates the waste to the centre that will treat it. This means that for the first time shipowners, agents, waste collectors and port authorities can be involved in a shared, secure connection having access to data that needs entering only once, in a declarative process providing full traceability of waste. They will also benefit from reports generated from data on the operations, saving time and money.

Onboard application

Swaboard® is the onboard application that allows ship masters to generate electronic copies of waste flow data from the vessel: waste generated, treated, rejected at sea, incinerated, or to be discharged at the next port of call.

The 60MB application includes several databases such as "World Ports & Terminals", "MARPOL Annex and Categories", and more than 20,000 waste components in order to accelerate completion by the shoreside platform of documents required for the new declarative waste process.

Swaboard® has been designed to record all onboard waste operations via the onboard waste management tool (OBWM). The OBWM allows operators to quickly and accurately describe any onboard waste operation by recording all elements: date, time, coordinates, speed, waste tank, waste type, process used, output location of potential residual process treatment in accordance with MARPOL.

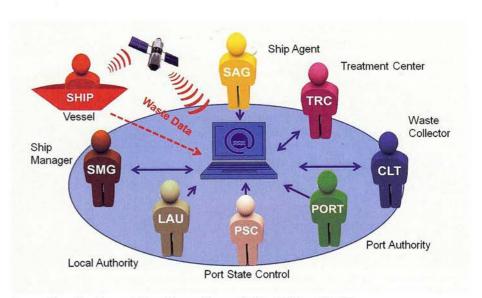
Data captured by Swaboard® will be sent to the shoreside platform, called Swashore®, through an Internet connection or SMTP. (via SMTP by enclosing the output data file to an e-mail). Files sent will not exceed 100KB to avoid excessive communication costs.

Solution for onshore users

Waste data arriving at the Swashore® platform can be accessed by authorised ship agents. It can be obtained in advance and the following documents can be issued at any stage of the process:

- The electronic advance notification form for waste delivery (e-ANF), a complete description of onboard waste for faxing, e-mailing or transferring automatically into the port's IT system.
- The electronic waste unloading request (e-WUR): a detailed e-document used to inform the selected waste collector of waste specifications to be unloaded. Data on vessel specifications will be included to optimise the unloading
- The electronic waste delivery receipt (e-WDR) that will be finalised by the selected waste collector and validated by local authorities.

Swanet® can be obtained by an annual subscription.



Swanet® unites the collaborative actions of all maritime players