

STAFF SUMMARY

Date: 12 May 2025

File# MO-2025-02



| TO: | | FOR: | | FROM: |
|-----|-----------------|------|-------------|--|
| X | General Manager | X | Vote | Dept.: Marine Operations |
| | | | | Author: Mark Amundsen |
| X | Board Members | | Information | Subject: <i>MV Island Home</i> Test Trial Period for Utilizing Renewable Diesel R99 replacing Ultra Low Sulfur Diesel Fuel from June 1 st – Sept 1 2025 |

PURPOSE:

To request a vote of the Board to authorize the General Manager to execute a purchase of RD99 Renewable Diesel Fuel from Diesel Direct for an approximate cost of \$62,400 upcharge for the *M/V Island Home* test / trial period from June 1 – Sept 1, 2025. The approximate cost of our contracted Ultra Low Sulfur Diesel fuel is \$2.40 per gallon resulting while the quoted price of RD99 from Diesel Direct is \$2.99 per gallon, inclusive of delivery charges.

BACKGROUND:

Renewable Diesel (RD 99), also known as Hydrotreated Vegetable Oil (HVO), is an alternative option to conventional diesel fuel used in power generation and main propulsion in our fleet and meets the ASTM D975 product category for diesel fuel. This product is now available on a full year basis supplied by Global GLO stored in Providence, Rhode Island (see attached renewable diesel sustainability information sheet). The delivery of the product will be performed by our fuel contractor Diesel Direct. It is our intent to conduct a test trial period on the *M/V Island Home* from June 1st through September 1st 2025 to evaluate future use in our fleet.

We have vetted the RD99 renewable diesel fuel with all of the engine manufacturers in our fleet including EMD, Caterpillar and John Deere on the *M/V Island Home*. All of the aforementioned engine manufactures endorse the use of renewable diesel RD99 in their engines. The Steamship Authority has also contacted a major US ferry operator who has just completed their own test trial period similar to this proposal. Following the successful trial, the ferry operator is converting all ten (10) of its ferries to RD99. The engines used for their auxiliary power and main propulsion are Caterpillar and EMD engines respectively.

A lifecycle analysis conducted by the U.S Environmental Protection Agency (EPA), it is a well to wheel analysis that includes feedstock production and transportation, fuel production and distribution and use of the of the finished fuel (tailpipe emissions including carbon dioxide, methane, and nitrous oxide, based on the estimated average emissions for the United States vehicle fleet) and co-products.

- Range: Per EPA analysis, minimum 50% reduction in lifecycle GHG (greenhouse gases) emissions up to 78% depending on feedstock inputs relative to baseline diesel (97 kg CO₂e/mmBtu).

Our fuel supplier Diesel Direct (under contract with the Authority) presented this option of supplying RD99 with an upcharge from conventional ULSD (Ultra Low Sulfur Diesel) pricing at \$0.60 cents per gallon. The \$0.60 cents per gallon will cover the segregation of the product from the rest of the fleet with dedicated fuel tanker trunks for product delivery to the M/V Island Home. It is anticipated that the fuel consumed during the test trial period will be approximately 104,000 gallons resulting in an approximate charge of \$62,400 increase in costs vs ULSD fuel.

The use of this fuel should significantly reduce the greenhouse gas emissions by the Authority fleet and will assist meeting the Governors 2030 greenhouse gas emissions reduction target by 50%

RECOMMENDATION:

To authorize the General Manager to execute a purchase of RD99 Renewable Diesel Fuel from Diesel Direct for an approximate cost of \$62,400 upcharge for the *M/V Island Home* test / trial period from June 1 – Sept 1, 2025.



Mark H. Amundsen
Chief Operating Officer



Robert B. Davis
General Manager

Attachments:

Diesel Direct Quote

Renewable Diesel Sustainability Information Sheet

AmSpec