

**City of Oak Harbor
City Council Agenda Bill**

Bill No. 7.a
Date: October 20, 2015
Subject: Resolution 15-33: Clean Water
Facility - Bio-solids Handling

FROM: Cathy Rosen, Public Works Director and Joe Stowell, City Engineer

INITIALED AS APPROVED FOR SUBMITTAL TO THE COUNCIL BY:

- Scott Dudley, Mayor
- Doug Merriman, City Administrator/Finance Director
- Nikki Esparza, City Attorney, as to form

RECOMMENDED ACTION

It is recommended that the City Council adopt Resolution 15-33 Adopting a Bio-solids Dryer Option for Construction of the Clean Water Facility.

BACKGROUND / SUMMARY INFORMATION

The City of Oak Harbor is actively pursuing the replacement of two aging wastewater treatment plants with a new, state of the art, membrane bioreactor treatment plant. After an extensive site selection process, City Council selected the Windjammer Vicinity on August 14, 2012 by Resolution 12-17.

Selecting the Windjammer Vicinity requires attention to appearance and aesthetics. In addressing the plant operation, the solid waste from the facility has potential public impacts.

As part of the treatment process, the new treatment plant will generate a solid waste called bio-solids. State and federal law require stabilization and beneficial reuse of this material. Many options exist to meet the regulations, but based upon Oak Harbor's specific requirements the options were limited to landfilling, lime stabilization and a biosolids dryer. These options were evaluated in light of capital and operating cost, aesthetics, suitability of the option in Windjammer Park, and practical beneficial reuse on Whidbey Island. Exhibit 1 provides a comparison/evaluation of the options.

The landfilling option cannot be considered a viable long term solution due to state regulations. In comparing the lime stabilization system with the bio-solids dryer, the dryer is the recommended option. The bio-solids dryer is a more expensive option but the additional cost is offset by:

1. Reduced truck traffic through the city
2. The dryer operations lessen impacts on Windjammer Park
3. Decreased amounts and handling of the material
4. Reduced trucking costs
5. Avoidance of handling lime
6. Suitability of bio-solids for beneficial reuse on Whidbey Island

The attached Resolution 15-33 selects a biosolids dryer and authorizes the project team to proceed with final design, permitting and procurement.

FISCAL IMPACT

Funds Required: \$0

Appropriation Source: Wastewater Fund

PREVIOUS COUNCIL / BOARD / CITIZEN INPUT
CITY COUNCIL WORKSHOP

This item was discussed at the September 30, 2015 City Council Special Workshop.

CITY COUNCIL PREVIOUS ACTIONS

While there have been many previous council actions on the Clean Water Facility, no formal action has been taken by City Council on this particular topic.

ATTACHMENTS

1. [Resolution 15-33 - Adopting a Bio-solids Dryer Option for construction of the Clean Water Facility](#)
2. [Exhibit 1 - Summary of Bio-solids Alternatives](#)

CITY OF OAK HARBOR
RESOLUTION NO. 15-33

**A RESOLUTION ADOPTING A BIO-SOLIDS DRYER OPTION FOR CONSTRUCTION OF
THE CLEAN WATER FACILITY**

WHEREAS, the City of Oak Harbor is constructing a wastewater treatment plant called the Clean Water Facility; and

WHEREAS, as result of a public selection process the City of Oak Harbor will locate the Clean Water Facility in Windjammer Park; and

WHEREAS, the Windjammer Park location requires attention to the appearance and aesthetics of the Clean Water Facility; and

WHEREAS, the Clean Water Facility requires treatment and disposal of solid waste called bio-solids in accordance with state and federal regulations; and

WHEREAS, several potential biosolids options were evaluated in light of regulatory acceptance, aesthetics, impact to the City's road system, capital and operational costs, beneficial/sustainable biosolids disposal on Whidbey Island, and suitability within the Windjammer Park location;

NOW, THEREFORE BE IT RESOLVED by the City Council of the City of Oak Harbor that:

1. Select a biosolids dryer as the preferred bio-solids alternative for the facility
2. Use a bio-solids dryer as the basis for any regulatory permits associated with the project.
3. Incorporate a bio-solids dryer into the final contract documents for the Clean Water Facility.

PASSED by the City Council and approved by its Mayor this 20st day of October, 2015.

CITY OF OAK HARBOR

SCOTT DUDLEY, MAYOR

Attest:

Approved as to form:

Anna Thompson, City Clerk

Nikki Esparza, City Attorney

Summary of Solids Alternatives

| | "Base Case" – Class A | | Alt 1 – Class B | | Alt 2 – Landfill | |
|--------------------------------|-----------------------|----------------|---------------------|-----------------|------------------|--------------------|
| Estimated Capital Cost | \$14.5 M | | \$12.2 M - \$13.2 M | | \$9.4 M | |
| Estimated Annual O&M Cost | \$500,000 | | \$672,000 M | | \$440,000 M | |
| 10-Yr Annualized Cost | \$2.2 M | | \$2.1 M - \$2.2 M | | \$1.5 M | |
| Meets Ecology Regs | ✓ | Yes | ✓ | Yes | ✗ | Requires Exemption |
| Permanent Solution | ✓ | Yes | ✓ | Yes | ✗ | Interim Only |
| Beneficial Reuse | ✓ | Yes | ✓ | Yes | ✗ | No |
| Flexibility for Reuse/Disposal | ✓ | Multiple Sites | ✗ | Eastern WA Only | ✗ | Landfill Only |
| O&M Complexity | ✗ | More Complex | ✗ | More Complex | ✓ | Dewatering Only |
| Trucks/Week Leaving WWTP | 6 / 8 (1) | | 7 / 9 (1) | | 2 / 3 (2) | |

(1) Startup / Year 2030 conditions. Assumes 10 cy covered dump truck leaving the WWTP site.

(2) Startup / Year 2030 conditions. Assumes tractor trailer pulling a 25 ton lined container leaving the WWTP site.