

**ATTACHMENT D TO WDL
DEP Form: Food Processing**



Form DEPLW1999-19
Revised: February 21, 2018

Maine Department of Environmental Protection
Waste Discharge Permit Application

Food Processing Facilities

This form must be attached to the General Application for a Waste Discharge License/MEPDES Permit
(Form DEPLW0105-B2003)

Please answer all questions completely, using additional pages as necessary with responses clearly identified by item number on this form.

1. Facility Name: Whole Oceans, LLC NPDES # ME _____

2. Attach a drawing showing the water flow through the facility. Please include the sources and volumes of intake water, operations contributing to wastewater discharges, treatment units and outfalls with numbers corresponding to those in the general application.

(See Attach. A)

3. Is chlorine used in the process or is the intake water chlorinated? No If so, what is the concentration of chlorine in the final effluent(s)? _____

4. List chemicals used for sanitation or disinfection during production or clean-up operations, and maximum discharge concentrations.

Sodium hypochlorite (bleach): Active ingredient: 8% sodium hypochlorite in concentrated form. Typically used at 100-1000 ppm for general cleaning/disinfection. Approximate annual use: 250 gallons of 1:100 diluted form.

5. List chemicals used in products or processing, and maximum discharge concentrations.

(See Attach. B)

6. If boiler blowdown or non-contact cooling water is discharged, please complete EPA form 2E.
N/A

7. How are sanitary wastes disposed of?

Whole Ocean's sanitary wastes will be disposed of at the Town of Bucksport's publicly-owned treatment works.

8. Please complete the attached table of products and productions rates.
Complete a separate block for each product or type of production.

Product Name: Atlantic salmon filets (head-on, gutted)

Pounds per day processed		Total pounds per year processed	Processing period(s) each year		Daily effluent flows	
Average	Maximum		Total weeks per year	During the months of	Average	Maximum
25 MT	25 MT	11,023,100	50	Jan.-Dec.	9,200 gal/day	10,000 gal/day
Describe processing operation						
Processing of salmon will be referred to as a "head on gutted" product. Fish are stun killed, gutted, and put on ice.						
Type of wastewater treatment						
The fish processing wastewater is collected in sealed tanks and is then pumped to the municipal sanitary sewer.						

Product Name: _____

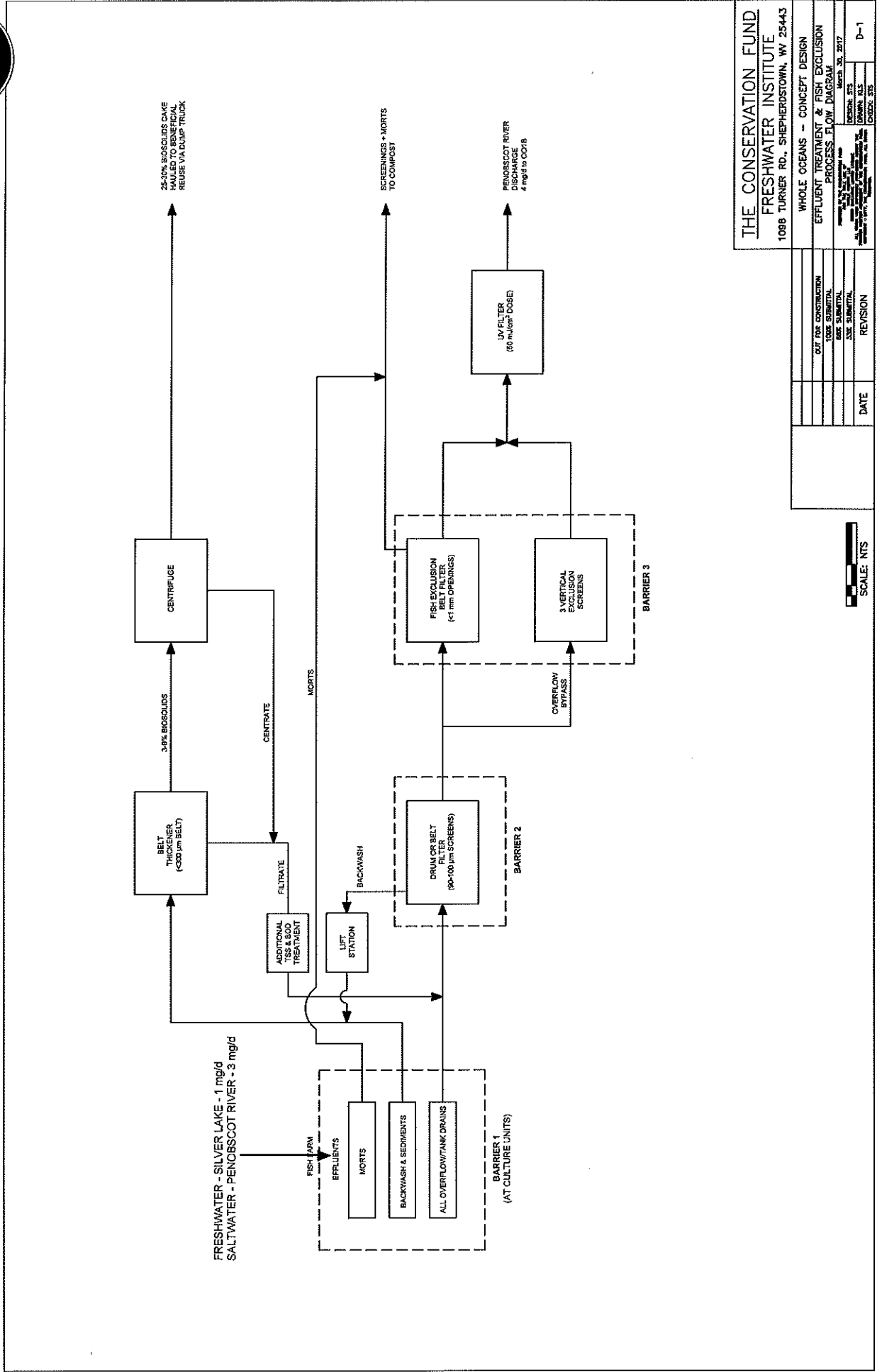
Pounds per day processed		Total pounds per year processed	Processing period(s) each year		Daily effluent flows	
Average	Maximum		Total weeks per year	During the months of	Average	Maximum
Describe processing operation						
Type of wastewater treatment						

Product Name: _____

Pounds per day processed		Total pounds per year processed	Processing period(s) each year		Daily effluent flows	
Average	Maximum		Total weeks per year	During the months of	Average	Maximum
Describe processing operation						
Type of wastewater treatment						

WATER FLOW SCHEMATIC AND CONTAINMENT MANAGEMENT

Attachment A to Question 2
Food Processing Facilities Form



THE CONSERVATION FUND
FRESHWATER INSTITUTE
1088 TURNER RD., SHEPHERDSTOWN, WV, 25443

WHOLE OCEANS - CONCEPT DESIGN

EFFLUENT TREATMENT & FISH EXCLUSION
PROCESS FLOW DIAGRAM

DATE: 08/23/2017
DRAWN BY: JAMES, SJS
CHECKED BY: JAMES, SJS
SCALE: NTS
D-1



Whole Oceans Estimated Potential Chemical Annual Usage

Fungicides, Topical Bactericides, Parasiticides:

- Povidone iodine (iodophor): Active ingredient 10% polyvinylpyrrolidinone. Typical dose range for egg disinfection 50-100 ppm. Approximate annual use: 100 liters/yr.
- Formalin (Parasite-S): Active ingredient 37% formaldehyde (considered as 100% saturated solution). Used for control of fungus on eggs and fish, certain protozoan parasites (e.g., Ichthyobodo, Epistylis, Trichodina, etc.) or monogenean trematodes (Gyrodactylus). Typical dose range from 25 to 1000 ppm depending on use. Approximate annual use: 50 liters/yr.
- Hydrogen peroxide (35% Perox-Aid): Active ingredient 35% hydrogen peroxide. Used for control of fungus on eggs/fish and potentially for bacterial gill disease on fish. Typical dose range between 100-1000 ppm depending on use. Approximate annual use: 425 liters/year.
- Chloramine-T (Halamid): Active ingredients N-chloro, p-toluenesulfonamide and sodium salt trihydrate. Used for control of bacterial gill disease. Typical dose range 12-20 ppm. Approximate annual use: 100 kg/yr.
- Praziquantel (trematodes): Considered as 100% active. Used for control of trematode/cestode infections. Typical dose range from 5-200 ppm depending on length of standing bath treatment. Approximate annual use: 1 kg/yr.
- Potassium permanganate: Considered as 97% active. Used for control of certain parasites and fungal infections in younger fish life-stages. Typical dose range 1.5-2.5 ppm. Approximate annual use: 1 kg/yr.

Antibiotics:

- Terramycin® 200 (oxytetracycline dehydrate, 44% active): Used in accordance with label for a maximum of 3.75 g active oxytetracycline/100 lb fish/day as an in-feed treatment for susceptible bacterial infections. Potential annual use: 4,125 kg active oxytetracycline dihydrate/yr.
- Aquaflor® (florfenicol; 50% active): Used in accordance with label with maximum of 15 mg/kg fish/day as an in-feed treatment for susceptible bacterial infections. Potential annual use: 7,500 kg active florfenicol.
- Romet® 30/Romet® TC (sulfadimethoxine/ormetoprim, 30% active or 20% active, respectively): In accordance with label, 50 mg/kg fish as an in-feed treatment for susceptible bacterial infections. Potential annual use: 1,125 kg active sulfadimethoxine/ormetoprim/yr.

Other Therapeutants:

- Sodium chloride: Discharge of up to 35 kg NaCl/day for periodic treatment of fish in nursery units, and discharge of up to 42,350 kg/day for maintaining salinity in growout systems.
- Calcium chloride [amount TBD]