

Whole Oceans Estimated Chemical Annual Usage (Discharged to Outfall 003)

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.
- 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.

Disinfectants:

- 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.

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]