

Feb. 3, 2022

DRI #212-M Island Grown Farm Master Plan Phase 1

Wastewater: Staff review

The project is in the Lagoon Pond watershed, and will include an enhanced denitrifying septic system, this enhanced system will be guaranteed to have an effluent concentration of 8 mg/l.

Water resource planner has met with Chris Alley of Schofield, Barbini and Hoehn and we agree that the calculated nitrogen load of the proposal including wastewater, runoff, and landscape maintenance (no landscape maintenance is proposed) would generate 19.6 kg/year. The allowable load for the property is 12.08 kg/yr. The proposal will generate 7.52 kg/yr (62%) over the allowed load.

To mitigate the overage, the applicant has proposed installing two residential NitROE Innovative/Alternative (I/A) systems elsewhere in the Lagoon Pond watershed and plans to work with the Tisbury Board of Health and the MVC to identify locations. These systems should be placed in the Mud Creek area or other areas that have high nutrient enrichment. Operations and Maintenance for these two systems should be maintained by IGI for a period of 3 years.

The farm currently has three 1,000-gallon above-ground liquid petroleum (LP) storage tanks, including two within a protected concrete enclosure. The third tank, which is unprotected, will be relocated to within the enclosure with the other two. The farm also has a 165-gallon above-ground diesel tank in a protected enclosure, and two 120-gallon above-ground LP tanks near an existing hoop house that are unprotected. The hoop house and 120-gallon tanks will be relocated to the western side of the greenhouse. The proposed storage tanks meet with fire and containment standards.

The farm does not have a USDA farm plan. Applicant has stated that IGI although not organic certified is committed to employing the best recommended practices at the farm for protecting water quality, and that they follow the "UMASS Extension Nutrient Management Guide for NE Vegetable Production." Staff has determined that this meets the requirements of section 3.5B of the MVC Water Quality Management Policy.

A list of fertilizers, biocides, and other substances that may be used at the site has been provided.

Compost piles are to be lined with a 12" bed of woodchips beneath, and covered with tarps to eliminate nitrogen leaching. The piles must be protected from rain and snow, and at night, to eliminate runoff.