## MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

## NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM DESIGNATION FORM

DATE: December 27, 2017

APPLICATION SUBMITTAL DATE(S): July 31, 2017, November 10, 2017

**SYSTEM MANUFACTURER:** E-Z Treat

SYSTEM NAME(S): Model 600 and 1200

**DESIGNATED TREATMENT LEVEL**<sup>1</sup>: Level 2 (Can use 24 mg/L for effluent total nitrogen concentration in nitrate sensitivity analysis for residential strength wastewater.)

## **CONDITIONS:**

- A. Due to start-up time lag associated with all biologically mediated nutrient reduction systems, the E-Z Treat system may not be suitable for commercial-type systems (for example, campgrounds, RV parks, etc) that are designed to be used seasonally. The applicability of these systems for nutrient reduction purposes at seasonal commercial-type systems should be based on a case-by-case analysis.
- B. This approval is valid for systems that pressure dose, siphon dose, or use gravity distribution to the final disposal location from the dosing tank.
- C. This approval is valid only for systems that use the cross valve shown in diagram attached to this approval in the recirculation tank. The cross valve is necessary to meet the hydraulic barrier requirements in ARM 17.30.718(9).
- D. Approval is valid for residential and non-residential facilities with residential strength wastewater as defined in section 1.2.72 of DEQ 4 2013 edition). For systems accepting high strength wastes (as defined in section 1.2.39 of DEQ 4 2013 edition) the level 2 designation is valid with proper pre-treatment in compliance with all applicable rules, design standards and as approved by the Department. There is no limit on design flows if system design is same as those systems approved, and if all other applicable laws, rules and design circulars are met. If a multi-family or public system is proposed that is not required to obtain a ground-water discharge permit pursuant to ARM 17.30.1022, the Department may require monthly monitoring of the discharge for the first year of system operation to verify that the proper nitrogen reduction to below 24 mg/L is achieved. Monitoring would be for the same parameters as required in ARM 17.30.718(8).

**APPROVED BY:** Eric Regensburger

## NOTES:

1 The definitions of level 1a, level 1b, and level 2 are in ARM 17.30.702(9), (10) and (11), respectively.

