MONTANA DEPARTMENT OF ENVIRONMENTAL QUALITY

NUTRIENT-REDUCING WASTEWATER TREATMENT SYSTEM DESIGNATION FORM

DATE: September 24, 2019

APPLICATION SUBMITTAL DATE(S): May 23, 2019

SYSTEM MANUFACTURER: Delta Treatment Systems

SYSTEM NAME(S): ECOPOD-N Series; E50-N (500 gpd), E60-N (600 gpd), E75-N (750 gpd), E100-N (1000 gpd), and E150-N (1500 gpd).

DESIGNATED TREATMENT LEVEL[1]: Level 2 (Can use 24 mg/L for effluent nitrate (as N) concentration in nitrate sensitivity analysis)

CONDITIONS:

A. Approval of ECOPOD-N fixed film wastewater treatment systems is based on NSF/ANSI Standard 245 Nitrogen Reduction certification obtained in February 2010. The system also achieved NSF/ ANSI Standard 40 Class I system certification for BOD and TSS reduction in January 2008. The remaining ECOPOD-N models received scaleup approval in December 2010 in accordance with ANSI/NSF 40-2009, Section 1.4.

B. To achieve adequate nitrogen removal to meet Level 2 requirements, the external compressor must be run continuously on all ECOPOD-N systems. The compressor must be wired to the dose pump, so that if compressor operation fails, the dose pump no longer operates.

C. Additional primary treatment volume (i.e. septic tank volume) is required upgradient of the ECOPOD-N pretreatment tank, which does not contain adequate volume in the settling zone to meet Circular DEQ-4 Section 5.1.6.

D. The ECOPOD-N treatment systems require a dose tank/pump prior to discharging to the absorption system, which provides a physical barrier to discharge under hydraulic failure as required in ARM 17.30.718(9).

E. Approval is valid for residential and non-residential facilities (with residential strength wastewater). Design flows are limited to the rating of each unit and must also meet all other applicable laws, rules and design circulars.

APPROVED BY: Jeremy Perlinski, PE

NOTES:

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