ATTACHMENT E

NUTRIENT MANAGEMENT PLANS (NMP)

A. NMP Elements

All operations covered under this permit must have a current NMP, if manure is applied to land. The NMP must be adequate for the existing number of animals.

1. The NMP must conform to the United States Department of Agriculture Natural Resources Conservation Service (NRCS) Field Office Technical Guide (FOTG) or equivalent best management practices (BMPs). Equivalent best management practices may be used by the CAFO if the CAFO shows the practice would result in equal better protection of surface and ground water quality

2. *Requirements to develop a NMP.* At a minimum, a NMP must include best management practices and procedures necessary to implement applicable effluent limitations and standards. The NMP must, to the extent applicable:

    a. Ensure adequate storage of manure, litter, and process wastewater, including procedures to ensure proper operation and maintenance of the storage facilities;

    b. Ensure proper management of mortalities (i.e., dead animals) to ensure that they are not disposed of in a liquid manure, storm water, or process wastewater storage or treatment system that is not specifically designed to treat animal mortalities;

    c. Ensure that clean water is diverted, as appropriate, from the production area;

    d. Prevent direct contact of confined animals with surface waters of the state;

    e. Ensure that chemicals and other contaminants handled on-site are not disposed of in any manure, litter, process wastewater, or storm water storage or treatment system unless specifically designed to treat such chemicals and other contaminants;

    f. Identify appropriate site specific conservation practices to be implemented, including as appropriate buffers or equivalent

    g. Identify protocols for appropriate testing of manure, litter, process wastewater, and soil;

    h. Establish protocols to land apply manure, litter or process wastewater in accordance with site specific nutrient management practices that ensure appropriate agricultural utilization of the nutrients in the manure, litter or process wastewater;

3. All CAFOs that land apply manure, litter, or process wastewater, must do so in accordance with the following practices.

    a. *Determination of application rates.* Application rates for manure, litter, and other process wastewater applied to land under the ownership or operational control of the CAFO must minimize phosphorus and nitrogen transport from the field to surface waters.

        i. The NMP must include field-specific assessment of the potential for nitrogen and phosphorus transport from the field to surface waters; and address the

form, source, amount, timing, and method of application of nutrients on each field to achieve realistic production goals,while minimizing nitrogen and phosphorus movement to surface and ground waters.

ii. The facility has the flexibility to implement nutrient management practices to comply with the technical standards, including consideration of multi-year phosphorus application on fields that do not have a high potential for phosphorus runoff to surface water, phased implementation of phosphorus-based nutrient management, and other components.

b. *Manure and soil sampling.* Manure must be analyzed a minimum of once annually for nitrogen and phosphorus content. Soil must be analyzed a minimum of once every five years for phosphorus content. The results of these analyses are to be used in determining application rates for manure, litter, and other process wastewater.

c. *Inspect land application equipment for leaks.* The operator must periodically inspect equipment used for land application of manure, litter, or process wastewater.

d. *Setback requirements.* Unless the CAFO exercises one of the compliance alternatives provided for in (d)(i) or (d)(ii) of this section, manure, litter, and process wastewater may not be applied closer than 100 feet to any down-gradient surface waters, open tile line intake structures, sinkholes, agricultural well heads, or other conduits to surface waters.

i. Vegetated buffer compliance alternative. As a compliance alternative, the CAFO may substitute the 100-foot setback with a 35-foot wide vegetated buffer where applications of manure, litter, or process wastewater are prohibited.

ii. Alternative practices compliance alternative. As a compliance alternative, the CAFO may demonstrate that a setback or buffer is not necessary because implementation of alternative conservation practices or field-specific conditions will provide pollutant reductions equivalent or better than the reductions that would be achieved by the 100-foot setback.

4. Dairies that are CAFOs must also meet the minimum elements for nutrient management planning established by the Washington Conservation Commission under RCW 90.64.026(2) or other agency designated by the legislature.

B. NMP Approval and Implementation Revised to be consistent with new application process of the 2nd Circuit Court decision

C. *NMP Compliance*

Upon approval and certification of a NMP, any operation covered by the NPDES permit must, at all times, comply with all the terms and conditions of the NMP. The land application and/or discharge of any process wastewater more frequently than, at a concentration in excess of, or at times not specified in the NMP shall constitute a violation of the terms and conditions of this permit.

D. *NMP Updates*

The CAFO must develop and implement an updated "NMP if:

1. Facility expansions or modifications, production increases, or process modifications, pursuant to Condition 86 of this permit, will (1) result in new or increased generation of animal wastes beyond the scope of the current NMP, or (2) violate the terms and conditions of this permit; the CAFO reduces or changes the field areas specified in the NMP used for land application;

E. *NMP Availability*

CAFOs must keep a copy of their NMP on-site. NMPs must be submitted to the Regional Board with the permit application. All updates to the NMP must be submitted to the Regional Board.