STATEMENT OF WORK

COMPREHENSIVE NUTRIENT MANAGEMENT PLAN

These deliverables apply to this individual plan. For other planned practice deliverables refer to those specific Statements of Work.

PLANNING

NOTE: A Comprehensive Nutrient Management Plan (CNMP) should address all land units that the animal feeding operation (AFO) owner and/or operator owns or has decision-making authority over and on which manure and organic by-products are generated, handled, stored or applied.

NOTE: NRCS policy requires that technical assistance provided for conservation planning follow the guidance and processes in the NRCS National Planning Procedures Handbook (NPPH). For the purposes of providing conservation planning technical assistance for a CNMP, planners shall complete the actions required in the first seven Steps of the NPPH planning process. For specific planning requirements and links to Standards, Specifications, Job Sheets, forms and worksheets, refer to the CNMP Workbook Outline located in Section I of the Colorado Field Office Technical Guide.

Deliverables:

1. Conduct an on-site visit with the client to identify existing, potential and perceived resource issues in the planning area and schedule manure, wastewater, organic by-product, irrigation water and soil sampling and analysis activities, as applicable.
2. Provide compliance documentation for applicable Federal, Tribal, State and local permits and regulations.
3. Complete planning requirements for all applicable CNMP Element Criteria listed below.
   A. Manure and Wastewater Handling and Storage - Required
      i. Complete a Data for Planning Livestock Waste Management Systems Worksheet (CO-ENG-651)
      ii. Complete a Solid and Liquid Manure and Wastewater Nutrient Production Calculations Worksheet.
      iii. Complete a Waste Storage Facility Volume Approximation Worksheet, as applicable.
      iv. Plan Manure and Wastewater Handling and Storage Practices, as applicable.
      v. Identify Operation and Maintenance Requirements for each planned and existing Manure and Wastewater Handling and Storage practice.
   B. Land Treatment - Required for land application of manure, wastewater or organic by-products
      i. Complete Excel WEQ and Rusle 2 erosion prediction calculations for each field. Planning to the soil loss tolerance “T” is required to meet Quality Criteria for soil erosion. If wind and or water erosion are not resource concerns for a specific site, document the crop rotation, tillage system and applicable soil and climate factors in the CPA-52.
      ii. Complete an Irrigation Water Management Plan consistent with the Colorado 449 Standard for each irrigated field where manure, wastewater or organic by-products are applied.
      iii. Plan additional Land Treatment practices, as applicable, to meet State permit requirements and Colorado NRCS Quality Criteria for Wind and Water Erosion and Nutrients in Surface and Groundwater.
      iv. Identify Operation and Maintenance requirements for all planned and existing Land Treatment Practices.

C. Nutrient Management - Required for land application of manure, wastewater or organic by-products

i. Soil sample each field included in the land base where manure, wastewater or organic by-products are applied. Analyze each sample for N, P, K, organic mater, pH, electrical conductivity and all other nutrients included in the Nutrient Management Plan. After initial plan development, soil sampling and analysis frequency shall not exceed 5 years.

ii. Sample each existing manure, wastewater and organic by-product containment structure and at a minimum, analyze for Total Nitrogen including NH4 and NO3, P, K, pH and electrical conductivity. Annual manure, wastewater and organic by-product sampling and analysis are required.

iii. Complete a Nutrient Management Plan consistent with the Colorado 590 standard including risk assessments for nitrogen leaching and phosphorus runoff for each field included in the land base where manure, wastewater or organic by-products are applied. All fields included in the Land Base must score a low or medium risk for nitrogen leaching and phosphorus runoff to meet Quality Criteria for nutrients and organics in surface and groundwater.

iv. Complete Land Base Requirement calculations using actual manure, wastewater and organic by-product analysis and production estimates.

v. Identify all applicable Operation and Maintenance requirements for Nutrient Management.

D. Record Keeping - Required

i. Refer to the Colorado CNMP Workbook for specific Record Keeping requirements.

E. Feed Management - Optional

i. Complete self-assessments for Beef, Dairy or Pig feed management, as applicable.

ii. Plan and implement Feed Management, Code 592, as applicable.

iii. List all applicable Operation and Maintenance requirements for Feed Management.

F. Other Utilization Activities - Optional

iv. This element is applicable when the end use of the manure, wastewater or organic by-product is not land application, i.e. off-farm compost sales or pelletization and re-feeding.

4. Complete a Cultural Resources Site Review and Documentation Form (CO-SSC-01), and New Site Report Form (CO-SSC-2), as applicable. Refer to the Colorado CNMP Workbook for copies of forms CO-SSC-1 and CO-SSC-2.

5. Complete an Environmental Evaluation Worksheet (CO-NRCS-CPA-52) to identify and document Resource Concerns and the effects of conservation practices and systems. Refer to the Colorado CNMP Workbook for a copy of the CPA-52.

6. Complete a Record of Cooperators Decisions and Progress in Application (CPA-68). Refer to the Colorado CNMP Workbook for a copy of the CPA-68.

7. Complete an Emergency Action Plan to address spills and catastrophic events. Refer to the Colorado CNMP Workbook for specific requirements. The plan may need revision if the operation adds new components to incorporate specific instructions related to the new components.

8. Obtain Plan Development Approval Signatures for the overall CNMP, and Manure and Wastewater Handling and Storage and Nutrient Management Elements in accordance with the NRCS General Manual policy for planning certification. Refer to the Colorado CNMP Workbook for a copy of the plan development approval signatures form.

9. Assemble the plan in a three-ring notebook or binder with tabs to separate applicable CNMP Elements. Include and Introduction section at the beginning of the plan that includes the following information. Refer to the Colorado CNMP Workbook Outline for blank forms.
   A. Producer, Operator and Planner contact information
   B. Plan Development Approval Signatures
   C. Record of Cooperators Decisions and Progress in Application
   D. Documentation of compliance with applicable Federal, Tribal, State and local permits and regulations
   E. Cultural Resources Forms CO-SSC-1 and CO-SSC-2, as applicable
   F. Environmental Evaluation Worksheet, CO-CPA-52
   G. Emergency Action Plan

REFERENCES

Field Office Technical Guide, Section I, Colorado CNMP Workbook, 2005, USDA, NRCS, Lakewood, CO

National Planning Procedures Handbook, Part 600.5, Comprehensive Nutrient Management Planning Technical Guidance, 2003, USDA, NRCS, Washington, D.C.

Cultural Resources Handbook, 2003, USDA, NRCS, Washington, D.C.

Environmental Compliance Handbook, 2003, USDA, NRCS, Washington, D.C.

National Agronomy Manual, 2002, USDA, NRCS, Washington, D.C.

Nutrient Management Policy and Technical Guidance, 1999. USDA, NRCS, Washington, D.C.

Agricultural Waste Management Field Handbook, 1992, USDA, SCS, Washington, D.C.