

Comprehensive Air Quality Management Plan Criteria Practice/Activity Code (126) (No.)

1. Definition

Comprehensive Air Quality Management Plans (CAQMPs) can be part of conservation plans applicable to many agricultural operations. These plans assess practices and strategies adopted by agricultural operations to address environmental concerns directly related to air quality and atmospheric change. Management options and structural alternatives are also recommended to address resource concerns identified during the assessment.

A Comprehensive Air Quality Management Plan (CAQMP):

- a. Meets NRCS quality criteria or a measureable improvement for air quality and other identified resource concerns;
- b. Complies with federal, state, tribal, and local laws, regulations and permit requirements;
- c. Addresses the operator's objectives.

2. CAQMP Criteria

This section establishes the minimum criteria to be addressed in the development of CAQMP.

A. General Criteria

The CAQMP shall be developed by certified Technical Service Providers (TSPs). In accordance with Section 1240 (A), the Environmental Quality Incentive Program (EQIP) program provides funding support through contracts with eligible producers to obtain services of certified TSPs for development of CAQMP. The specific TSP criteria required for CAQMP development is located on the TSP registry (TechReg) web site at: <http://techreg.usda.gov/>

- B. The planner shall address the following elements during the CAQMP development process:
- Background and Site Information;
 - Documentation of the CAQMP Emissions of Concern;
 - Documentation of the CAQMP components;
 - References
- C. CAQMP specific element criteria will offer conservation treatment practices related to the following air quality and atmospheric change resource concerns:
- Particulate Matter,
 - Ozone Precursors,
 - Odors (where appropriate), and
 - Greenhouse Gases

Each of the CAQMP elements will address specific criteria. The degree to which these elements are addressed in the development and implementation of a site-specific CAQMP is determined by the specific criteria provided for each element of the CAQMP below.

- D. Background and Site Information. This element provides a brief description of:
- Name of owner/operator;
 - Facility location(s) and mailing address;
 - Type and size of the operation;
 - Air Quality resource concerns
- E. Documentation of the CAQMP Emissions of Concern. This element documents the owner's/operator's consideration of the CAQMP emissions of concern. It is recognized that a CAQMP may not address all of these emissions; however each emission of concern needs to be considered by the planner and owner/operator during the development of the CAQMP, and the owner's/operator's decisions regarding each must be documented. The following eight emissions contribute to the NRCS air quality and atmospheric change resource concerns (the applicable concern(s) are included in parentheses after the emission). Examples of practices and activities that can be used to address each emission are included below the emission.
- 1) Direct Particulate Matter Emissions (Particulate Matter)
 - Paving or gravel application
 - Dust suppressant application
 - Mulch application

- Speed or traffic reduction
 - Residue management
 - Wind management (e.g., vegetative barriers; wind breaks)
 - Irrigation management
 - Range management
 - Animal incineration
 - Manure/waste management and utilization (e.g., manure removal, manure scraping, and covered storage)
 - Sprinkler irrigation
 - Engine emissions management (e.g., engine replacement, filters, etc.)
- 2) Ammonia (Particulate Matter, Odors)
- Manure/waste management and utilization
 - Incorporating/injecting manure
 - Fertilizer management
 - Feed management
 - Biofilter/scrubber installation
- 3) Volatile Organic Compounds/VOCs (Particulate Matter, Ozone Precursors, Odors)
- Manure/waste management and utilization
 - Incorporating/injecting manure
 - Biofilter/scrubber installation
 - Feed management
 - Non-burning alternatives to prescribed burning of crop residue/waste
 - Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
 - Pesticide management
 - Non-burning alternatives to open burning
 - Prescribed burning
- 4) Oxides of Nitrogen/NO_x (Particulate Matter, Ozone Precursors)
- Manure/waste management and utilization
 - Incorporating/injecting manure

- Fertilizer management
 - Feed management
 - Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
 - Non-burning alternatives to open burning
 - Prescribed burning
 - Soil management
- 5) Odorous sulfur compounds (Odors)
- Manure/waste management
 - Feed management
 - Incorporating/injecting manure
 - Biofilter/scrubber installation
- 6) Carbon Dioxide/CO₂ (Greenhouse Gases)
- Residue management
 - Carbon sequestration to offset CO₂ emissions
 - Soil management
 - Utilization of agricultural residues/wastes as renewable fuel feedstock
 - Engine emissions management (e.g., engine replacement, engine retrofit, etc.)
 - Non-burning alternatives to open burning
 - Prescribed burning
- 7) Methane/CH₄ (Greenhouse Gases)
- Anaerobic digester power generation with animal waste feedstock
 - Manure/waste management and utilization
 - Feed management (e.g., amendments)
- 8) Nitrous Oxide/N₂O (Greenhouse Gases)
- Manure/waste management and utilization
 - Incorporating/injecting manure
 - Fertilizer management
 - Feed management

- Soil management

F. Documentation of the CAQMP Components. The CAQMP shall address the resource concerns identified. This element documents the owner's/operator's decisions as to what NRCS conservation practices are planned. Typical NRCS Conservation Practice Standards are included in the components below. It is recognized that a CAQMP may not contain all of these components; however each component needs to be considered by the planner and owner/operator during the development of the CAQMP, and the owner's/operator's decisions regarding each must be documented. CAQMP Components:

- 1) Land Treatment Practices for erosion control and air emissions management which could include irrigation, unpaved road and surface treatment, barriers and windbreaks, fertilizer management, incorporating/injecting manure, etc.
- 2) Land Treatment Practices for carbon sequestration which could include nutrient, fertilizer and pest management
- 3) Crop Residue Management for erosion control or to minimize emissions from prescribed burning which could include no-tilling, mulch till, chipping and mulching of orchard prunings, utilization of agricultural residues/wastes as renewable fuel feedstock, etc.
- 4) Manure Management Systems for odor and other air emissions management which could include manure and wastewater handling and storage practices such as the use of lagoon covers, solid-liquid separation, biofilters/scrubbers, anaerobic digesters, etc.
- 5) Livestock Feeding to manage nutrient content in feed to reduce emissions from animal agriculture that impact air quality
- 6) Livestock Housing and Feedlots to address dust, odors, and other air emissions from the confinement of animals which could include biofilters/scrubbers, cleaning up spilled materials, manure removal, irrigation sprays, etc.
- 7) Other Utilization Activities

G. References Element. This element lists the technical documentation sources used for the CAQMP and may include the actual documents or web sites that contain the technical documentation useful for the producer.

1. Deliverables for the Client – a hardcopy of the plan that includes:

- Cover page – name, address, phone of client and TSP; Total Acres of the Plan, signature blocks for the TSP, producer, and a signature block for the NRCS acceptance.
- Soils map and appropriate soil descriptions

- Resource assessment results (wind and water erosion, water availability, soil fertility, and others that may be needed)
- For management practices. The planned practices and the site specific specifications on how each practice will be applied; when the practice will be applied, and the extent (acres or number) that will be applied.
- For engineering/structural practices. The planned practice when it will be applied and extent, and located on the conservation plan map.

2. Deliverables for NRCS Field Office:

- Complete Hardcopy and Electronic copy of the client's plan (MsWord copy).
Optional: If a Conservation Plug-in version is provided to NRCS a Hardcopy of the plan, conservation plan map and soils map is not required.
- Digital Conservation Plan Map with fields, features, and structural practices located.
- Digital Soils Map.