

Arizona Planning Guide for Natural Resource Concerns

Air Quality Impacts – Emissions of Particulate Matter (PM) and PM Precursors

Resource Concern Description – Direct emissions of particulate matter such as dust and smoke, as well as the formation of fine particulate matter in the atmosphere from other agricultural emissions - ammonia, NOx, and VOCs - cause multiple environmental impacts, including but not limited to:

- The unintended movement of particulate matter - typically dust or smoke - results in safety or nuisance visibility restriction.
- The unintended movement of particulate matter and/or chemical droplets results in unwanted deposits on surfaces.
- Increased atmospheric concentrations of particulate matter can impact human and animal health and degrade regional visibility.

Planning Criteria –PM and PM Precursor emissions are managed to meet client objectives.

Methods for evaluating resource condition

- Visual Assessment
- Client Interview
- EPA Air Quality Guidelines
- State and County Air Quality Guidelines
- NRCS Agricultural Air Quality Conservation Measures Guide
- Emissions Calculator
- RUSLE2
- WEPS
- Manure Management Planner (MMP)
- Nutrient Budget
- Pesticide planning and mitigation worksheet

Conservation Practices that may be needed as part of a Conservation Management System to achieve Planning

Criteria for this resource concern include those listed here.

- 309 Agrichemical Handling Facility
- 371 Air Filtration and Scrubbing
- 591 Amendments for Treatment of Agricultural Waste
- 366 Anaerobic Digester
- 372 Combustion System Improvement
- 328 Conservation Crop Rotation
- 340 Cover Crop
- 375 Dust Control from Animal Activity on Open Lot Surfaces
- 373 Dust Control on Unpaved Roads and Surfaces
- 512 Forage and Biomass Planting
- 595 Integrated Pest Management
- 441 Irrigation System, Microirrigation
- 443 Irrigation System, Surface and Subsurface
- 449 Irrigation Water Management
- 590 Nutrient Management
- 338 Prescribed Burning
- 329 Residue and Tillage Management, No Till
- 345 Residue and Tillage Management, Reduced Till
- 442 Sprinkler System
- 633 Waste Recycling
- 632 Waste Separation Facility
- 313 Waste Storage Facility
- 634 Waste Transfer
- 629 Waste Treatment
- 359 Waste Treatment Lagoon