Initial Setting: Dust emissions from animal activity in feedlots, corrals, and other pen surfaces are causing air quality issues

1. More frequent manure harvesting to remove dry, loose manure layer.

Conduct manure harvesting to remove accumulated manure

D.4 (+) Manure accumulation

2. Increase stocking density to supply additional moisture from animal urine and feces

D.2 (+) Operation and maintenance costs

3. Mobile water application to increase moisture content of the pen surface.

D.6 (+) Water use

C.4 (-) Regional water availability

D.5 (+) Infrastructure costs

I.4 (-) Water quantity

C.3 (+/-) Net farm income

I.1 (+) Animal health and productivity from improved air quality in feedlots, corrals, and other pen surfaces

C.2 (+) Local/regional air quality improvement

I.2 (-) Cost of compliance with regulatory requirements, if applicable

C.1 (-) Ambient particulate matter/dust concentrations

D.1 (-) Direct emissions of particulate matter/dust

D.3 (+) Solid manure to be managed/stored

I.3 (+) Potential farm income

C.3 (-) Ambient particulate matter/dust concentrations

D.1 (-) Direct emissions of particulate matter/dust

D.3 (+) Solid manure to be managed/stored

Waste Transfer (634)

Sprinkler System (442) Critical Area Planting (342) Heavy Use Area Protection (561) Mulching (484) Dust Control on Unpaved Roads and Surfaces (373) Windbreak/Shelterbelt Establishment (380)