

Effects of NRCS Conservation Practices - National

Waste Treatment

The mechanical, chemical or biological treatment of agricultural waste.

Code: 629

Units: no

Typical Landuse:

AL-Aso Land
O-Other
W-Water
D-Developed
FS-Farmstead
PI-Protected
P-Pasture
R-Range
F-Forest
C-Crop
FS

<u>Soil Erosion</u>	<u>Effect</u>	<u>Rationale</u>
Soil Erosion - Sheet and Rill Erosion	0	Not Applicable
Soil Erosion - Wind Erosion	0	Not Applicable
Soil Erosion - Ephemeral Gully Erosion	0	Not Applicable
Soil Erosion - Classic Gully Erosion	0	Not Applicable
Soil Erosion - Streambank, Shoreline, Water Conveyance C	0	Not Applicable
<u>Soil Quality Degradation</u>		
Organic Matter Depletion	1	Using amendments and separation could create high organic residues that when land applied could increase soil organic matter in excess of the application of untreated manure
Compaction	1	If the treatment process includes a storage component, it will allow better management of waste as to rate and timing of application, which allows application when compaction is least likely.
Subsidence	0	Not Applicable
Concentration of Salts or Other Chemicals	0	Could be slight worsening to slight improvement depending on whether salts are concentrated or removed from the land applied waste stream
<u>Excess Water</u>		
Excess Water - Seeps	0	Not Applicable
Excess Water - Runoff, Flooding, or Ponding	0	Not Applicable
Excess Water - Seasonal High Water Table	0	Treatment with some amendments such as PAM could alter the intake rates of soils receiving an altered waste stream,
Excess Water - Drifted Snow	0	Not Applicable
<u>Insufficient Water</u>		
Insufficient Water - Inefficient Use of Irrigation Water	1	Altered waste stream with minimum solids will be compatible with irrigation needs
Insufficient Water - Inefficient Moisture Management	0	Not Applicable
<u>Water Quality Degradation</u>		
Pesticides in Surface Water	0	Not Applicable
Pesticides in Groundwater	0	Not Applicable
Nutrients in Surface water	2	Amendments and other treatment options are often used to remove nutrients and organics from the waste stream
Nutrients in Groundwater	2	Amendments and other treatment options are often used to remove nutrients and organics from the waste stream
Salts in Surface Water	2	Treatment options such as amendments can be used to alter the waste stream to remove salts, metals, and some pathogens.
Salts in Groundwater	2	Amendments and other treatment options can be used to alter the waste stream to remove salts, metals, and some pathogens.
Excess Pathogens and Chemicals from Manure, Bio-solic	2	Treatment options such as amendments can be used to alter the waste stream to remove salts, metals, and some pathogens.
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Excessive Sediment in Surface Water	0	Not Applicable
Elevated Water Temperature	0	Not Applicable
Petroleum, Heavy Metals and Other Pollutants Transport	2	Treatment options such as amendments can be used to alter the waste stream to remove salts, metals, and some pathogens.
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<u>Air Quality Impacts</u>		
Emissions of Particulate Matter (PM) and PM Precursors	1	Some treatment options may result in less particulate matter and ammonia emissions.
Emissions of Ozone Precursors	1	Some treatment options may result in less VOC emissions.
Emissions of Greenhouse Gases (GHGs)	1	Some treatment options may result in less methane or nitrous oxide emissions.
Objectionable Odors	4	A number of treatment options are very successful in reducing odor emissions from manure
<u>Degraded Plant Condition</u>		
Undesirable Plant Productivity and Health	2	Treatment can alter the waste stream to better meet the needs of the plant
Inadequate Structure and Composition	0	Not Applicable
Excessive Plant Pest Pressure	0	Not Applicable
Wildfire Hazard, Excessive Biomass Accumulation	0	Not Applicable
<u>Fish and Wildlife - Inadequate Habitat</u>		
Inadequate Habitat - Food	0	Not Applicable
Inadequate Habitat - Cover/Shelter	0	Not Applicable
Inadequate Habitat - Water	0	Not Applicable
Inadequate Habitat - Habitat Continuity (Space)	0	Not Applicable
<u>Livestock Production Limitation</u>		
Inadequate Feed and Forage	0	Treatment could favorably alter the waste stream to better provide the needs of growing feed and forage, but this would be minor impact
Inadequate Shelter	0	Not Applicable
Inadequate Water	1	Some alternatives are used to treat the waste stream to the point water can be reused by livestock
<u>Inefficient Energy Use</u>		
Equipment and Facilities	0	Not Applicable
Farming/Ranching Practices and Field Operations	0	Not Applicable

CPPE Practice Effects:	<i>0 No Effect</i>
<i>5 Substantial Improvement</i>	<i>-1 Slight Worsening</i>
<i>4 Moderate to Substantial Improvement</i>	<i>-2 Slight to Moderate Worsening</i>
<i>3 Moderate Improvement</i>	<i>-3 Moderate Worsening</i>
<i>2 Slight to Moderate Improvement</i>	<i>-4 Moderate to Substantial Worsening</i>
<i>1 Slight Improvement</i>	<i>-5 Substantial Worsening</i>