### Waste Treatment

The mechanical, chemical or biological treatment of agricultural waste.

#### Soil Erosion

<table>
<thead>
<tr>
<th>Effect</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
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<td>0</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### Soil Quality Degradation

<table>
<thead>
<tr>
<th>Effect</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>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</td>
</tr>
<tr>
<td>1</td>
<td>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.</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>0</td>
<td>Could be slight worsening to slight improvement depending on whether salts are concentrated or removed from the land applied waste stream</td>
</tr>
</tbody>
</table>

#### Excess Water

<table>
<thead>
<tr>
<th>Effect</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>0</td>
<td>Treatment with some amendments such as PAM could alter the intake rates of soils receiving an altered waste stream,</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### Insufficient Water

<table>
<thead>
<tr>
<th>Effect</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Altered waste stream with minimum solids will be compatible with irrigation needs</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
</tbody>
</table>

#### Water Quality Degradation

<table>
<thead>
<tr>
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<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>0</td>
<td>Not Applicable</td>
</tr>
<tr>
<td>2</td>
<td>Amendments and other treatment options are often used to remove nutrients and organics from the waste stream</td>
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<td>2</td>
<td>Treatment options such as amendments can be used to alter the waste stream to remove salts, metals, and some pathogens.</td>
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</tr>
<tr>
<td>Issue</td>
<td>Impact</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>--------</td>
</tr>
<tr>
<td>Excessive Sediment in Surface Water</td>
<td>0</td>
</tr>
<tr>
<td>Elevated Water Temperature</td>
<td>0</td>
</tr>
<tr>
<td>Petroleum, Heavy Metals and Other Pollutants Transport</td>
<td>2</td>
</tr>
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<td>2</td>
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<tr>
<td>Air Quality Impacts</td>
<td></td>
</tr>
<tr>
<td>Emissions of Particulate Matter (PM) and PM Precursors</td>
<td>1</td>
</tr>
<tr>
<td>Emissions of Ozone Precursors</td>
<td>1</td>
</tr>
<tr>
<td>Emissions of Greenhouse Gases (GHGs)</td>
<td>1</td>
</tr>
<tr>
<td>Objectionable Odors</td>
<td>4</td>
</tr>
<tr>
<td>Degraded Plant Condition</td>
<td></td>
</tr>
<tr>
<td>Undesirable Plant Productivity and Health</td>
<td>2</td>
</tr>
<tr>
<td>Inadequate Structure and Composition</td>
<td>0</td>
</tr>
<tr>
<td>Excessive Plant Pest Pressure</td>
<td>0</td>
</tr>
<tr>
<td>Wildfire Hazard, Excessive Biomass Accumulation</td>
<td>0</td>
</tr>
<tr>
<td>Fish and Wildlife - Inadequate Habitat</td>
<td></td>
</tr>
<tr>
<td>Inadequate Habitat - Food</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate Habitat - Cover/Shelter</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate Habitat - Water</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate Habitat - Habitat Continuity (Space)</td>
<td>0</td>
</tr>
<tr>
<td>Livestock Production Limitation</td>
<td></td>
</tr>
<tr>
<td>Inadequate Feed and Forage</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate Shelter</td>
<td>0</td>
</tr>
<tr>
<td>Inadequate Water</td>
<td>1</td>
</tr>
<tr>
<td>Inefficient Energy Use</td>
<td></td>
</tr>
<tr>
<td>Equipment and Facilities</td>
<td>0</td>
</tr>
<tr>
<td>Farming/Ranching Practices and Field Operations</td>
<td>0</td>
</tr>
</tbody>
</table>

**CPPE Practice Effects:**

| 5 Substantial Improvement | -5 Substantial Worsening |
| 4 Moderate to Substantial Improvement | -4 Moderate to Substantial Worsening |
| 3 Moderate Improvement | -3 Moderate Worsening |
| 2 Slight to Moderate Improvement | -2 Slight to Moderate Worsening |
| 1 Slight Improvement | -1 Slight Worsening |
| 0 No Effect | 0 No Effect |