AGITATION TIPS

- Stored liquid manure should be agitated before emptying the storage to reduce the sludge left in the storage and to make nutrient applications more uniform.¹

- Agitation is the most critical operation in maintaining available storage in liquid manure systems. Failure to properly agitate will likely result in a continued buildup of settled solids that are not removed. Allowing this to occur can result in less available storage. Agitation of manure re-suspends settled solids and ensures most or all of the manure will flow to the inlet of the pump or removal device. Additionally, agitation homogenizes the manure mixture and provides a more consistent nutrient analysis as the manure is being removed.²

- It is recommended that manure be agitated for at least 30 minutes prior to pumping. Agitation should continue throughout the pumping process or until the manure in the structure is adequately mixed.

- Sufficient agitation should cause the lagoon or pit to “swirl” and carry suspended solids to the chopper pump. The effectiveness of the agitator in suspending solids can sometimes be judged by the appearance of the slurry. A dark or black slurry indicates a high degree of solids suspension, while a lighter color indicates fewer suspended solids.³

TEST YOUR MANURE
Collecting manure samples for nutrient analysis should be considered the foundation of your nutrient management plan to ensure that overapplication of nutrients is not occurring and at the same time you are not underapplying a given nutrient if samples are lower than anticipated. Manure sample analysis should be taken just prior to application for the most accurate analysis to give you the ability to adjust application rates accordingly to meet your nutrient plans.

NUTRIENT ANALYSIS
At a minimum, analyze all manure samples for total nitrogen (N), total phosphorus (P), total potassium (K) and moisture content (or dry matter). It’s recommended that samples are analyzed for ammonium N, as well nitrate N. Nitrate nitrogen is the form most susceptible to loss through leaching or denitrification.

BEST MANAGEMENT PRACTICES FOR STABILIZED MANURE
Best management practices include a wide range of proven methods for getting the most from your livestock manure, such as:
• Setting realistic yield goals for each field
• Using soil tests to develop a balanced fertilizer program
• Selecting proper hybrids and plant populations to attain the established yield goals
• Developing an N fertilizer program to fit hybrid and yield goals
• Using Instinct® nitrogen stabilizer to protect N below ground

INSTINCT® NITROGEN STABILIZER WITH MANURE RECOMMENDED USE RATES PER ACRE

<table>
<thead>
<tr>
<th></th>
<th>Instinct® II</th>
<th>Instinct® HL</th>
</tr>
</thead>
<tbody>
<tr>
<td>When applied before Oct. 1 and/or soil temperature above 60 F.</td>
<td>74 oz./A</td>
<td>48 oz./A</td>
</tr>
<tr>
<td>When applied before Nov. 1 and/or soil temperature above 50 F to 60 F.</td>
<td>56 oz./A</td>
<td>36 oz./A</td>
</tr>
<tr>
<td>When applied after Nov. 1 and/or soil temperature below 50 F, and spring applications.</td>
<td>37 oz./A</td>
<td>24 oz./A</td>
</tr>
</tbody>
</table>

BEST PRACTICES FOR THE BLENDING OF INSTINCT IN PITS AND LAGOONS*
• Calculate the number of acres the manure pit/lagoon could potentially treat to ensure you are blending the correct amount of Instinct on a per-acre basis to incorporate into the deep pit/lagoon. Remember, the slurry remaining in the bottom needs to be included in the calculation for potential acres.

RATE CALCULATION FOR LIQUID MANURE

\[
\text{Number of gallons in deep pit/lagoon} \div \text{Number of gallons of manure applied per acre} \times \text{Use rate of Instinct®} \div 128 = \text{Gallons of Instinct required}
\]

• The level of agitation for an even distribution of Instinct is no more than needed to get the outdoor pit/lagoon thoroughly mixed for a normal application.
• Once Instinct has been added to the manure pit/lagoon and agitated for application, it is recommended that applications begin as soon as possible.
• If applications are delayed for more than seven days, re-agitation is recommended to ensure uniformity of Instinct throughout the outdoor manure pit/lagoon.

*As always when agitating manure pits, follow the recommended safety steps to protect yourself and your animals from manure components that might be emitted upon agitation.

UNIFORMITY OF INSTINCT IN PITS
Dow AgroSciences trials show that Instinct® nitrogen stabilizer is successfully distributed throughout the pit with relatively even distribution when agitated under common agitation procedures.

RECOMMENDED APPLICATION AREAS
Instinct should ONLY be poured outside of the building into the pump-outs where allowed. Pour Instinct into multiple pump-out locations around the building or lagoon to help aid in distributing Instinct throughout the slurry. Instinct should not be poured through the slats or flooring inside the building.