

ARM Worksheet

It is recommended that you fill out this form no more than 24 hours prior to a manure application event, particularly from October through February. You can group similar fields together into one field unit. For questions related to filling out any of the fields below, click on the provided hyperlinks for more information.

Farm Name

Van Berkum and Sons Dairy

County Name

Whatcom (WA)

Application Date

Date you want to apply: You must do this evaluation no more than 24 hours prior to application.

3/22/2023

Field Name or Unit

Do a separate evaluation for each field or management unit. A "management unit" is a group of fields with similar soil, crop type, and management conditions.

Bottom field

24 hour Precipitation (inches)

Link to MSA precipitation (<https://sites.google.com/site/wadairyplan/manure-spreading-advisory>)

0.26

Risk Rating: Med-High

Caution: More than 0.25 inches of rain can cause a runoff event on saturated soils. Pay extreme caution and/or limit manure application rate.

72 hour Precipitation (inches)

Link to MSA precipitation (<https://sites.google.com/site/wadairyplan/manure-spreading-advisory>)

0.27

Risk Rating: Medium

Caution: More than 0.25 inches of rain can cause a runoff event on saturated soils. Pay extreme caution and/or limit manure application rate.

Soil Type

Enter the general soil type you want to apply to. If you dont know your soil type, make your selection under "Don't know". Soil type can be found on your farm plan map.

- ☐ Sandy/Gravelly (Course Textured Soil - A)
☒ Silt (Medium Textured Soil - B)
☐ Clay (Fine Textured Soil - C/D)
☐ Peat/Muck (Organic Soil)
☐ Don't know

Soil Moisture

Select your soil moisture range. For guidance on how to determine soil moisture here (<http://www.wadairyplan.org/ARM/soil-moisture-determination>)

- ☐ 90-100% (If your boots squish in the field, you are at saturation)
☐ 80-90% (In this range you would not comfortably drive a tractor into the field and are worried about potential soil compaction due to field wetness)
☒ 60-80% (In this range you could comfortably drive a tractor out into the field without worrying about ruts or field compaction)
☐ < 60% (In this range your soil is firm and starting to dry out)

Risk Rating: Low-Med

Your soils are in a good range for application.

Water Table Depth (inches)

Water table can be determined by nearby ditches, or by digging a hole in your field. For more on how to determine water table depth, click [HERE](http://www.wadairyplan.org/ARM/water-table-depth-determination) (<http://www.wadairyplan.org/ARM/water-table-depth-determination>).

24-48 inches

Risk Rating: Medium

Be cautious of a rising watertable during high rainfall periods. Watch for ponding in low spots, running tiles, and soil saturation. Consider restricting application rate volume.

Forage Density (%)

Click link for guidance on how to determine forage density here (<http://www.wadairyplan.org/ARM/forage-density-determination>)

- ☐ 90-100%
☒ 70-90%
☐ 50-70%
☐ < 50%
☐ Other: Annual/Fallow/Row Crop Field (eg, new seeding, corn, berry, bare soil, etc.)

Risk Rating: Medium

Your surface cover is adequate..

Forage Height (inches)

Forage/cover height is the average height of forage or cover in your field. If you are not evaluating a forage field, select "Not forage crop".

3-6 inches

Risk Rating: Low-Med

Your forage/cover is in good condition.

Field Surface Condition

Check all that apply to your current field conditions.

- ☐ Ponding
☐ Flooding current or potential in 15 days
☐ Frozen (more than 1 inch) or snow covered
☐ Tiles present in field
☒ None of the above

field surface condition is required

Risk Rating: Medium

Manure Application Equipment

Check equipment/method of application.

- ☐ Below surface applicator (eg, injector, incorporaion within 24 hours)
☒ Surface application (eg, splash plate, tank, aerator)

- ☐ Irrigation sprinkler (eg, Big Gun)
- ☐ Grazing
- ☐ Solid Manure Application

Risk Rating: Low-Med

Be cautious of turnaround areas and low spots. Watch for compaction on your field if applying to wet soils. Follow current manure setback distances. Use of an aerator is a good method when applying to grass in a higher risk time.

Waterbody or Critical Area

Do you have a waterbody (i.e., ditch, stream, river, etc.) or identified critical area (i.e., swale, wetland, etc) adjacent to your field?

- ☒ Yes (answer next two questions)
- ☐ No (click submit)

Manure Setback Distance

Manure setbacks must be a minimum of 10 feet from May 1 to August 31 (40 for Big Gun use). 40 feet from September 1 to May. and 80 feet from October 1 to February 28. For more information on seasonal manure application setback distance, click here (<http://www.wadairyplan.org/setbacks>)

40

Stop: Your setback is not wide enough for current conditions. Manure setbacks must be a minimum of 10 feet from May 1 to August 31 (40 ft for Big Gun use). 40 feet from September 1 to May. And 80 feet from October 1 to February 28. Be more cautious then less during high rainfall periods.

manure setback distance is required and cannot be empty

Buffer

Do you have a dedicated vegetative buffer next to the waterbody? [If you are applying to a grass field, your grass acts as a "vegetative buffer" as long as it is dense and greater than three inches in height.]

- ☐ No
- ☐ Yes, it is less than 35 feet
- ☒ Yes, it is greater than 35 feet

Risk Rating: Low-Med

Application Risk Analysis for Surface Runoff

Apply manure with caution. Follow all guidelines and recommendations in your Plan for proper application.

MEDIUM RISK