

We made three small, but important, modifications to the rules for 4-H and FFA Soil Judging over the summer. I apologize for not reaching out with these changes. AY 362W currently includes these modifications. Many coaches were unaware and proceeded with the earlier rules. We plan to use the older rules this year but plan to implement the changes listed below next year so that there is a better understanding of soils. All contest officials have been informed of this concern and we are asking them to avoid situations where a student might be penalized one way or the other by avoiding these limited but important situations.

Here is a summary of the changes and the reasoning behind them.

Old rule of Eolian Sand as a parent material:

Eolian sand (pages 9 -10) – has all of these characteristics:

- **Sandy texture with no gravel or pebbles**
- **Sand grains are mainly 0.1 to 0.5 mm in diameter (between 150-grit and 40-grit sandpaper)**
- **Not stratified, but may have lamellae that are sandy or moderately sandy**

New rule for Eolian sand as a parent material:

Eolian sand (pages 9 -10) – has all of these characteristics:

- **Sandy or moderately sandy texture at the surface**
- **No gravel or pebbles present in the profile**
- **Sand grains are mainly fine and medium sand, 0.1 to 0.5 mm in diameter (between 150-grit and 40-grit sandpaper)**
- **Not stratified, but may have lamellae that are sandy or moderately sandy in the subsoil. Some soils formed in eolian sand may have moderately clayey subsoil texture**

Reasoning: The first rule is too narrow for the sites that were observed. This allows us to make better use of eolian sand with finer textures that occur along the Wabash River without having to adjust the answer or further confuse by saying a soil that does not meet the definition they have studied is eolian sand.

Old rule for High Risk for Cave In:

High risk for cave-in during construction? (page 36). Mark “YES” for soils that have one or both properties:

- **Subsoil texture is sandy and/or**
- **Coarse sand & gravel limiting layer**

New rule for High Risk for Cave In:

High risk for cave-in during construction? (page 36). Mark “YES” for soils that have one or both properties:

- **Landform is Dune, Outwash/Lacustrine, or Floodplain, and/or**
- **Any Poorly Drained soil, regardless of landform**

Reasoning: Many soils we looked into have high risk of cave in and more people need to be aware of the danger. The old rule describes high risk soils but there are many others that should cause thoughtful caution. Any excavation can be dangerous and we felt an expansion was needed.

Old rule for Drip Distribution

Drip distribution system and secondary treatment (page 42). Mark “YES” if soil has all these properties:

- **No bedrock limiting layer < 20” from soil surface**
- **Well-drained**
- **≤ 25% slope**

New rule for Drip distribution

Drip distribution system and secondary treatment (page 42). Mark “YES” if soil has all these properties:

- **No bedrock limiting layer < 20” from soil surface**
- **WD or MWD if perimeter drainage is installed**
- **≤ 25% slope**

Reasoning: This closes a “hole” in our onsite evaluation. We tried to close it without resorting to find another site. This has some difficulties but is perhaps the best compromise we could find. We are draining a moderately well drained soil to lower the water table to allow the drip distribution system to function properly. This may not always work, but for our judging purposes, we will assume that it will. At this point I need to explain the difference between a foundation drain around a building and a perimeter drain around a soil absorption field. They are completely different. The foundation drain keeps water away from the foundation of a building. It is normally installed during construction of the building. A perimeter drain is an attempt to lower the water table in a soil absorption field. It is installed around the perimeter of an adsorption field at the same time the absorption field is being constructed. It is never preexisting and has no connection whatever to the foundation drain. It is the same approach that is used with the elevated sand mound for somewhat poorly and poorly drained home sites. The perimeter drain must be part of the design and construction of the onsite system. There are standards for setbacks and other issues that installers must follow but these are beyond the scope of our contest.

I hope this will clarify the changes and why they were needed. Be assured that we are aware of the problem and will do everything we can to avoid any penalty to a student regardless of which version they were taught. Next year we will utilize these improvements to increase understanding of soil and how to best maintain the resource. Please call if you have questions or need clarification.

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