

CAFO Applications and Phosphorus-based Nutrient Management Plans

NOTE: This document generally explains some of the requirements of s. NR 243.14, Wis. Adm. Code, and is for informational purposes only. Please review your WPDES permit and s. NR 243.14 for all applicable requirements.

Controlling Phosphorus Delivery

NR 243 and WPDES permits issued to CAFOs include a number of requirements to minimize phosphorus (P) delivery to surface waters [see NR 243.14(5)]. Controlling P delivery is based on NRCS Standard 590 and, in most cases, allows operations to use either the Soil Test Phosphorus Strategy or the PI Strategy on a field-by-field basis.

There are areas where WPDES permits require additional practices to minimize P delivery that are more stringent than NRCS Standard 590, primarily by using the P-Index. Whereas NRCS Standard 590 allows operations to not use the P-Index if they plan to only use the Soil Test Phosphorus Strategy, CAFOs are required to use the P-Index in the following circumstances:

- For fields with soil test P levels less than 50 ppm and not at optimum P levels for the highest P demanding crop (according to A2809) that are adjacent to or that the Department determines have a high potential to deliver phosphorus to impaired, outstanding or exceptional resources waters, CAFOs may not increase soil test phosphorus levels over a rotation without Department approval. The Department may approve increases in soil P levels over a rotation up to optimum levels in these fields, if the operation can demonstrate that phosphorus deliverability will not increase due to a rise in soil phosphorus levels. It is assumed that this demonstration will be made via the P-Index.
- For fields with soil test P levels between 100 and 200 ppm, manure and process wastewater applications are limited to 50% of the cumulative annual crop P-need over the rotation or next four years, whichever is less. In addition, the applications may not result in a P-Index value over 6 averaged over the rotation or next four years, whichever is less.
- For fields with soil test P levels of 200 ppm or more, the permittee may not apply manure or process wastewater to these fields without prior

Department approval. The Department may only approve applications on these fields if:

1. Manure and process wastewater applications are limited to 50% of the cumulative annual crop P-need over the rotation or next four years, whichever is less,
2. The applications do not result in a P-Index value over 6 averaged over the rotation or next four years, whichever is less, and
3. The P-index increases by less than 1 or applications to the field result in overall decreases in P deliverability to area wetlands or surface waters by reducing applications to fields with higher deliverability.

How does this impact my Nutrient Management Plan?

Nutrient Management Plans (NMP) must outline on a field-by-field basis, the Phosphorus Strategy that the operation is using as well as any relevant calculations where use of the P-Index is required or chosen.