1. When determining fertilizer application rates, use the known or guaranteed analysis that’s available for all phosphorus sources, including manure.

2. Base application rates on realistic yields, standard soil tests and recognized science-based recommendations.

3. For rate recommendations using an expected yield calculation approach, use an average of the last 4-6 years of production levels plus regional trend line yield projections.

4. Apply phosphorus at replacement rates only on soils with test levels above optimum.

5. For manure, base application rates on the P-Index.

6. Do not apply phosphorus on frozen or snow-covered ground.

7. Do not apply phosphorus without incorporation when rainfall resulting in runoff is predicted within 48 hours.

8. Incorporate, band or inject phosphorus fertilizers and manure.

9. Do not apply fertilizer or manure to grassed waterways or concentrated flow channels.

10. Implement soil retention practices such as reduced tillage and cover crops to reduce the loss of phosphorus.

Sources:

International Plant Nutrient Institute: 4R Phosphorus Management Practices
Iowa State University: Phosphorus in Crop Production and Reducing Nutrient Loss