



Guidance Documentation Required for 4R Certification

4R Nutrient Stewardship Certification Standard Version 6

F = Full Service Provider; R = Recommendation only Provider; A = Application only Provider

Requirement No.	Requirement	Audit Year	Grower Customer Category	Evidence
1	Nutrient Service Providers' sales, and application staff have undergone training and staff are able to demonstrate knowledge about 4R Nutrient Stewardship and the 4R Certification Program.	1	F R A	Ohio Agricultural Fertilizer Certification Training and Indiana Category 14 License meets this requirement. For those who do not fall under the Ohio Agricultural Fertilizer Certification Training and Indiana Category 14 License requirements, an approved three [3] hour training session should be attended; see the 4R Program Education Guidelines at https://4rcertified.org/resources . For re-certification, attend two hours of training every three years. Certification documentation or attendance proof used for evidence.
2	Certified professionals must have current certification in good standing.	1	F R	Print-off of current credentials and/or certification which include: Certified Crop Adviser (CCA), USDA-NRCS Comprehensive Nutrient Management Plan (CNMP) Specialist (or TSP), Certified Professional Agronomist (CPAg), or other relevant accreditation from the American Society of Agronomy or National Alliance of Independent Crop Consultants.

3	Nutrient Service Provider keeps onsite list and/or copies (either electronic or hard-copy) of relevant national, state, or local laws related to nutrient recommendations and application.	1	F R A	Review of records on file, can be hard copy or electronic. Information on 4Rcertified.org will relate to national and state laws. NSPs are required to follow all local laws. For NSPs servicing acres in Ohio, Ohio Senate Bills 1 and 150 should be printed out. Indiana and Michigan NSPs (only servicing acres in Indiana and Michigan) exempt from printing out Ohio Law. However, if those states have similar laws, they should be printed out.
4	Nutrient Service Providers will record a list of grower customers and number of acres in the following categories: full service, recommendation only, and application only. The list should include columns designating the individual making the nutrient recommendations for the customer and a designation if the customer utilizes manure-based nutrients (manure/litter, biosolids, compost).	1	F R A	Review of records on file, can be hard copy or electronic. The nutrient service provider will record and submit a list of <u>all</u> grower customers and acres per each that fall into these categories: full service, recommendation only, and application only. Each grower customer listed should have the individual making the nutrient recommendations noted and a designation if the grower customer utilizes manure-based nutrients. The nutrient service provider will provide the grower customer list to the auditor two weeks prior to the audit. Sample selections will be delivered by the auditor to the nutrient service provider 48 hours prior to the audit. This will provide adequate time for the nutrient service provider to gather records. During the audit procedures, the auditor will select, at a minimum, two [2] additional random selections onsite.

5	Soil tests are conducted at least once every four [4] years from an area no larger than 25 acres.	1	F R	Review of records on file, can be hard copy or electronic. All soil test results must be newer than four [4] years old and represent an area of 25 acres or less. For training and soil sampling procedures, training record and process documentation on file. For recommendations for soil sampling best management practice, visit 4rcertified.org/resources .
6	All personnel taking soil samples must undergo initial training to provide consistent procedures of taking representative and accurate soil samples.	1	F R	An initial training for <u>all</u> staff taking soil samples, this includes any seasonal staff taking soil samples. Training records and training process documentation on file. For recommended best management practices for soil sampling procedures, visit 4rcertified.org/resources .
7	Soil tests include, at minimum: organic matter, Phosphorus, Potassium, pH, and cation exchange capacity.	1	F R	Review of soil testing records on file, can be hard copy or electronic. Review of records on file, can be hard copy or electronic.

8	<p>Crop yield goals are discussed with the grower and are based on previous crop yield history, which include one or more of the following: farmer relayed information, yield maps, soil potential, plot data, county averages, Farm Service Agency, crop insurance, etc.</p>	1	F R	<p>Review of records on file, can be hard copy or electronic. Proof of level of crop management may be records of previous yield history (as provided by the grower), –which include: farmer relayed information, yield maps, or crop yield by soil potential, plot data, county averages, Farm Service Agency records, crop insurance records etc. plot yield data, or local adaptive management research. Documentation or records of process used to establish yield goals must be provided.</p>
9	<p>Records of individual fields include, and reviewed with grower customer are at minimum:</p> <ul style="list-style-type: none"> • field boundary, • current soil test results, • crop yield goals, • nutrient recommendations, • rates of nutrients applied to field, • scale tickets or work orders, • billing for the field and/or as applied maps. 	1	F R	<p>Review of records on file, can be hard copy or electronic. Scale tickets, work order or billing statement reviewed with the customer.</p>

<p>10</p>	<p>Nutrient recommendations are based on the soil test history of the field, and yield goals.</p>	<p>1</p>	<p>F R</p>	<p>Review of records on file, can be hard copy or electronic. Soil test results must be equal to or less than 4 years old. May also use Adaptive Management data to generate nutrient recommendation. If it is a new field without a current soil test, recommendations for P and K are limited to crop removal rates until a soil test is taken. County average yields or previous year actual yields may be used for yield goals.</p>
<p>11</p>	<p>All sources of nutrients are accounted for in the nutrient management recommendation, including but not limited to commercial fertilizers (including starter fertilizers), manure/litter, biosolids, compost and the previous crop.</p>	<p>1</p>	<p>F R</p>	<p>Nutrient recommendations indicate all sources of nutrients in the recommendation records. Credits are given to all sources of nutrients applied with the appropriate reduction in commercial fertilizer recommended. Auditors will choose at least one [1] manure-based grower customer from the grower customer list, when applicable. See Requirement 4 for grower customer list procedures.</p>

<p>12</p>	<p>If manure was applied and a current manure analysis is not available, then no phosphorous (except for starter) may be recommended or applied by NSP until new soil test is taken (minimum of six [6] months after application). Nitrogen recommendation for the following corn crop cannot exceed MRTN, in-season nitrogen decision tool or other similar technologies' rates.</p>	<p>1</p>	<p>FR</p>	<p>Manure nutrient analysis records (hard copy or electronic) will be reviewed if manure is applied on fields where recommendations are made or fertilizer applied. Requirement subject to change based on state regulations.</p>
<p>13</p>	<p>Phosphorus is neither applied nor recommended to be applied at rates that exceed the Tri-State Fertilizer Recommendations for corn, soybeans, alfalfa and wheat and land-grant university recommendations for specialty crops and the total application does not exceed the quantity needed for the next two (2) years of planned crops.</p>	<p>1</p>	<p>F R A</p>	<p>Records of individual field soil tests will be compared to Tri-State Fertilizer Guide, or new land grant university recommendations that may supersede older recommendations. Variable Rate application recommendations should be validated that the software is following the Tri-State Guidelines or results of adaptive management. For rates greater than Tri-State adaptive management evidence must be presented justifying the recommendation (see Adaptive Management Document).</p>

<p>14</p>	<p>Recommended nutrient application levels for nitrogen and potassium are at or below limits specified by nutrient application recommendations recognized by a land-grant university, allowing for adaptive management based on documented on-farm data showing reasonable expectation of improved crop yield without increased risk of harm to water quality.</p>	<p>1</p>	<p>F R</p>	<p>Records will be compared to Tri-State Fertilizer Guide, and/or new land grant university recommendations that may supersede older recommendations for potassium and nitrogen. MRTN, in-season nitrogen decision tool or other similar technologies will be recommended for nitrogen first. On nitrogen, a twenty percent (20%) rate variance above MRTN will be allowed for price of nitrogen and corn. For K, if above Tri-State levels, a twenty percent (20%) variance will be allowed for three (3) years to allow nutrient service provider to gather evidence for a "revised K rate". At least three types of evidence can be used for adaptive management and must be presented justifying the revised recommendation without increased risk of harm to water quality (see Adaptive Management Document). Software tools for variable rate application recommendations should validate that the software is following the Tri-State Guidelines or results of adaptive management.</p>
<p>15</p>	<p>Nutrients are applied according to a written nutrient recommendation that has been prepared within the prior two [2] years as verified via check of records as specified in Requirement 9.</p>	<p>1</p>	<p>F A</p>	<p>Records of application will be compared to the recommendations on file. Only applicable to the full service customers.</p>

16	Broadcast applications of phosphates without immediate incorporation are neither made nor recommended unless the NOAA forecast indicates less than a 50% chance of a rainfall event involving more than an inch of rain beginning in the next 12 hours.	1	F R A	For full service and/or application only NSPs, a NOAA forecast (hourly weather forecast graph) for the nearest town available to the fields is printed as a record within 12 hours of application. If the chance of precipitation exceeds 50%, the forecast total amount must be less than one inch. For recommendation only NSPs, a statement on the importance of broadcast timing and the weather forecast should be given, mailed, and/or included on grower signature sheets indicating understanding.
17	Phosphorus injection, subsurface banding, or broadcasting with immediate incorporation is recommended to customers as preferred placement methods <i>unless</i> a) the field has been in continuous no-till for at least three years [3], or b) has a cover crop or growing crop, or c) the risk for phosphorus loss to surface waters has been demonstrated to be low, according to a NRCS-approved phosphorus index risk assessment procedure.	1	F R A	Statement on phosphorus placement given, mailed, included on cover sheet to grower customer or grower customer signature indicating understanding.
18	Phosphorus <u>and nitrogen</u> applications on frozen or snow covered ground are neither made by nutrient service provider nor recommended to be made by customers.	1	F R A	Application records indicate there is no frozen ground or snow present. Frozen ground is defined: when soil conditions are such that tillage or nutrient incorporation and/or injection after application are not possible at the time of nutrient application, and will not be possible within the next 48 hours as a result of frozen conditions. Snow-covered ground is defined: when soil cannot be seen because of snow cover. Signature sheet or direct education mailing of this information to customers is also acceptable - see Requirement 21 .

19	Fall application of Nitrogen fertilizer above 50 pounds per acre is not recommended or applied by nutrient service provider for spring planted crops.	1	F A	Verified via record check.
20	Nutrient recommendations have been reviewed and acknowledged in writing by the grower/customer.	1	F R	Signatures of grower customers on file either on a signature sheet, nutrient management plan or equivalent document.
21	Nutrient recommendations for each grower have been approved and signed by a Certified Professional.	1	F R	Signatures of Certified Professional for each grower customer is on file, certifying that they approve the nutrient recommendation, either on signature sheet or equivalent document.
22	All nutrient application equipment must be calibrated, at least annually.	1	F A	Calibration (i.e., maintenance) records indicating equipment service date and any maintenance/service required.

<p>23</p>	<p>Nutrient Service Provider has sponsored or directly provided a training session on 4R Nutrient Stewardship that is available for all grower customers and has conveyed by mail or electronic distribution information on 4R nutrient stewardship <u>annually to all customers.</u></p>	<p>2</p>	<p>F R A</p>	<p>Agenda of the company-sponsored educational event shows training on 4R Nutrient Stewardship approved by the Program Administrator for at least a half hour agenda item. For list of relevant, Program Administrator approved training topics, see the "4R Program - Education Guidelines" document at www.4Rcertified.org/resources.</p>
<p>24</p>	<p>Records of nutrient application include at minimum:</p> <ul style="list-style-type: none"> • method of application; • time of application; • field map showing locations of application; • weather (temperature and precipitation) conditions at the time of application; and • weather forecast for the following 12 hours after application. 	<p>2</p>	<p>F A</p>	<p>Review of records on file, can be hard copy or electronic. Recommend records of the 24-hour forecast to ensure weather during day of application. If the chance of precipitation exceeds 50%, the forecast total amount must be less than one inch.</p>

25	Environmentally sensitive areas (such as tile inlets, well heads, areas of concentrated flow, gullies, and water bodies where nutrient application may occur) are documented and discussed with the grower customer.	2	F R A	Convey the process conducted to identify sensitive areas, show examples on field maps of identified sensitive areas.
26	Discussion or education with grower customers on nitrogen management include options of split application, nitrification inhibitors, slow release technologies and MRTN, in-season nitrogen decision tool or other similar technologies.	2	F R A	Signatures of grower customers on file or direct education mailings to all customers.
27	Soil test management sampling zones are included on field maps using Geographic Information Systems (GIS).	3	F R	Review of records on file, hard copy or electronic. Grid, zone, yield or other management zone type soil test maps must be provided. 35% of the full service and applied acreage fields over 20 acres must meet this requirement.
28	Nutrient Service Provider maintains records related to soil test records for all growers over two cycles (minimum of two [2] soil test records maintained over eight [8] year period).	3	F R A	Review of records on file, can be hard copy or electronic.

29	Digital field map data layers must be able to be generated that can be combined in an analysis to better target nutrients in the fields. Possible data layers <u>may</u> include: sensitive areas, yield data, soil test data, soil type, HUC watershed codes, tile or topographic maps, digital/sensor imagery, EC data, N modeling, etc.	3	F R A	This information can be in any usable/readable electronic format. Maps may be provided. 35% of the acres must meet this requirement. This data may be in a digital format and generated on site at time of audit. As applied maps must show sensitive areas that were protected during application. If yield data is not available, county yield averages must be incorporated into data layers.
30	Variable Rate Technology is used to apply nutrients.	3	F A	Review of records on file, can be hard copy or electronic. Maps must be provided. Note: if VRT is not recommended because there is lack of variability in nutrient needs of the soil - make note of this lack of need for VRT. 35% of the full service and applied acres are evaluated, consideration is targeted towards fields that are 20 acres or larger. As applied maps must be able to be generated for at least 35% of the customer base.
31	<u>ALL sales and fertilizer applicator staff</u> employed for more than a year are certified under, Indiana Category 14, Ohio Agricultural Fertilizer Certification Training.	3	F R A	Review of records on file, can be hard copy or electronic. CCAs are exempt from this requirement.