

Guidance Documentation Required for 4R Certification

4R Nutrient Stewardship Certification Standard Version 2.9

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

* and **BOLD text** indicate a requirement that must be fully met in order to have a desk audit in years 2 and 3 (year 3 in cycle 1, years 2 and 3 in subsequent cycles).

Req.	Requirement	Audit Year	Grower Customer Category	Evidence
1.1.1 *	Nutrient Service Providers, sales, and application staff have undergone an initial training and staff are able to demonstrate knowledge about 4R Nutrient Stewardship and the 4R Certification Program.	1	FRA	Meeting agendas, education log, or materials indicating 4R concepts and topics (Right Rate, Time, Place and Source) were covered, roster of those in attendance. Can be an interview with various staff. Educational information and sample presentations available at 4rcertified.org/resources.
1.2.1	Certified professionals must have current certification in good standing.	1	FR	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.
2.1.1	Nutrient Service Providers will record a list of grower customers and number of acres in the following categories: full service, recommendation only, application only, and an estimate of all other acres.	1		Review of records on file, can be hard copy or electronic. The NSP will record and submit a list of grower customers and acres per each in the following categories: full service, recommendation only, application only, and an estimate of all other acres.
3.1.1 *	Nutrient Service Provider maintains records related to all growers' nutrient recommendations/applications.	1	FRA	Review of records on file, can be hard copy or electronic. Fertilizer recommendations and applied scale ticket or as- applied map.
3.1.2	Records related to grower customers are kept confidential by the Nutrient Service Provider and are made available for review during an audit.	1	FRA	Confidentiality statement with NSP and auditor signatures. Records are kept confidential by NSP as demonstrated with computer codes, file cabinets, or "safe" rooms or confidentiality agreement with the grower customer.

3.1.3	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	FRA	Review of records on file, can be hard copy or electronic. Information on 4Rcertified.org will relate to national and state laws. Any local laws will not be updated regularly on the 4Rcertified.org site. Ohio Senate Bill 1 of the 131st General Assembly effective July 3, 2015, affecting Ohio WLEB NSPs - See Requirements 3.1.6 and 3.5.7.
3.1.4	Records are reviewed with and available for grower/customer and include the following, as applicable: soil test results, field boundary, nutrient recommendations, and rates applied to each field.	1	FRA	Review of records on file, can be hard copy or electronic. May review grower signature sheet.
3.1.5	Records of individual fields include, at minimum: • field boundary, • current soil test results, and • crop yield goals used for making recommendations.	1	FR	Review of records on file, can be hard copy or electronic. If 3.1.4 is met, only the evidence of the yield goals used in making the fertility recommendation needs to be evaluated.
3.1.7	Application records shall not exceed recommendations for custom applied acres.	1	FΑ	Review of records on file, can be hard copy or electronic. Fertilizer recommendations and applied scale ticket or asapplied map.
3.3.1 *	Soil tests are conducted which include, at minimum: organic matter, Phosphorus, Potassium, pH, and cation exchange capacity.	1	FR	Review of soil testing records on file, can be hard copy or electronic. All 4 items must be indicated on the records.
3.3.2	Soil tests are conducted at least once every 4 years.	1	FR	Review of records on file, can be hard copy or electronic. No soil test result may be older than 4 years old.

3.4.1	Crop yield goals are discussed with the grower and are based on previous crop yield history, and soil potential.	1	F R	Review of records on file, can be hard copy or electronic. Proof of level of crop management may be previous yield history, county averages, or local adaptive management research. Discussion about the process and some documentation or records of process.
3.5.1	Nutrient recommendations are based on the soil test history of the field, including results from the most recent soil test.	1	FR	Review of records on file, can be hard copy or electronic. Soil test results must be equal to or less than 4 years old. If it is a new field, county averages, drainage, and soil type may be used.
3.5.2 *	Recommended nutrient application levels 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.	1	FR	Records will be compared to Tri-State Fertilizer Recommendations first. If above these levels, data from adaptive management research must be presented justifying the different recommendation. Field averages will be used to evaluate this criteria. Records will be compared to Tri-State Fertilizer Guide, bulletin E-2567, land grant university recommendations (i.e, K and N) or equivalent tool. Software tools for variable rate application recommendations should validate that the software is following the Tri-State Guidelines or results of adaptive management.
3.5.3	All sources of nutrients are accounted for in the nutrient management recommendation, including but not limited to commercial fertilizers, manure/litter, biosolids, cover crops, and the previous crop.	1	FR	Nutrient recommendations indicate all sources of nutrients in the recommendation records. Credits are given to all sources of fertilizer applied and there is a reduction in commercial fertilizer recommended.
3.5.4	If manure is applied, manure analyses must follow land-grant university guidance regarding required analyses and/or include, at minimum: total nitrogen (N), ammonium N, total phosphorus (P) or P ₂ O ₅ , total potassium (K) or K ₂ O, and percent solids. The manure analyses of applied material report is dated less than 24 months before the manure application.	1	FR	Manure nutrient analysis records (hard copy or electronic) will be reviewed if manure is applied on fields where recommendations are made or fertilizer applied. If an analysis is not available, book values from the Department of Agriculture or NRCS will be accepted.
3.5.5	Phosphorus injection, subsurface banding, or broadcasting with immediate incorporation is recommended as preferred placement methods unless conditions exist in requirement 3.5.6.	1	FRA	Recommendation records indicate the preferred placement. Statement on phosphorus placement given/mailed to grower customers or grower customer signature indicating understanding. If incorporation should not occur due to sensitive area (e.g., slope, stream) or cannot occur (e.g., growing crop) due to existing conditions in requirement 3.5.6.

3.5.6 *	Broadcast phosphorus applications without incorporation within one week are not recommended unless: a) the field has been in continuous no-till for at least three years, 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	FR	Recommendation records indicate the preferred placement. Statement on phosphorus placement given, mailed, included on cover sheet to grower customer or grower customer signature indicating understanding. MI:http://www.nrcs.usda.gov/wps/portal/nrcs/detail/mi/te chnical/?cid=nrcs141p2_024562 OH:http://efotg.sc.egov.usda.gov/references/public/OH/Nit rogen_and_Phosphorous_Risk_Assessment_Procedures.pdf
3.5.8 *	Phosphorus <u>and nitrogen</u> applications are neither made nor recommended to be made on frozen or snow covered ground.	1	FRA	Recommendation records indicate the preferred timing. 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.
3.5.9 *	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 to exceed the quantity needed for the next two (2) years of planned crops.	1	FRA	Records will be compared to Tri-State Fertilizer Guide. Field averages will be used to evaluate this criteria. Records of individual soil test will be compared to Tri-State Fertilizer Guide or equivalent tool. Variable Rate application recommendations should be validated that the software is following the Tri-State Guidelines or results of adaptive management.
3.5.10	Nutrients are applied according to a written nutrient recommendation that has been prepared within the prior two (2) years.	1	FΑ	Records of application will be compared to the recommendations on file. Only applicable to the full service customers.
3.5.11	For spring-planted crops, right time for nitrogen to be applied is normally just before, at or after planting. When fall applications of nitrogen [including phosphate sources containing nitrogen] are made or recommended, growers are informed about the risk, amount, and fate of nitrogen losses associated with the application. With this in mind, fall application of Nitrogen fertilizer above 50 pounds per acre* is not recommended for spring planted crops.	1		*Rate is based on typical rates as applied with fall application of typical phosphate sources; research will be reviewed and conducted to determine if this amount needs to be revised. Records of application will be compared to the recommendations on file. Only applicable to the full service customers.

3.5.12	If urea is broadcast and not incorporated within 24 hours, it is recommended to be applied with a urease inhibitor.	1	FRA	Records of application recommendations and/or spreading tickets. Signatures of grower customers on file.
	Nutrient recommendations and/or application adhere to minimum setbacks from all sensitive areas, such as tile inlets, well heads, gullies, and water bodies specified in applicable national, state, or local laws.	1	FRA	Records of application recommendations and actual applied maps or spreading tickets. Information on 4Rcertified.org will relate to national and state laws. Any local laws will not be updated regularly on the 4Rcertified.org site.
3.6.2	For all nutrient recommendations and/or application, the inclusion of a minimum setback distance (e.g., 35-100 ft.) near sensitive areas, such as tile inlets, well heads, gullies, and water bodies is documented and discussed with the grower customer.	1	FRA	Setbacks discussed in meetings in year one (1), in subsequent years signatures of grower customers will be on file, or included on customer's application/recommendation cover sheet or maps.
	Nutrient recommendations have been reviewed and acknowledged in writing by the grower/customer.	1	FR	Signatures of grower customers on file.
3.7.2	Nutrient recommendations for each grower have been approved and signed by a Certified Professional.	1	FR	Signatures of Certified Professional for each grower customer is on file, certifying that they approve the nutrient recommendation.
3.8.1	All nutrient application equipment must be calibrated, at least annually.	1	FΑ	Calibration (i.e., maintenance) records indicating equipment service date and any maintenance/service required.
1.2.2	Nutrient Service Providers (i.e., nutrient recommendation) staff attend a training, at least once every two (2) years on the practices and principles of 4R Nutrient Stewardship, soil sampling and testing techniques, and/or nutrient water interaction. This is demonstrated through a minimum of 5 (five) approved CEUs of relevant training.	2	FR	If the staff person is a CCA, then proof of active status is sufficient. If not a CCA, but still a certified professional, printoff of classes taken is needed. If not explicit, include agendas of meetings attended. As stated in Requirement 1.2.1, certified professionals 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.

1.2.3	Nutrient Service Providers sales, and application staff attend a training at least once every two (2) years on 4R Nutrient Stewardship. This is demonstrated through a minimum of two (2) hours of relevant training approved by the program administrator.	2	FRA	Program Administrator must review training offered, it may be through the agri-business itself or through a third-party. Agenda and attendance is required. For list of relevant, Program Administrator approved training topics, see the "4R Program - Education Guidelines - Requirements 1.2.3 and 1.3.2" document at www.4Rcertified.org/resources.
1.2.4	At least one (1) Nutrient Service Provider staff member and/or contract position, has been trained in writing nutrient management plans or have a list of trained contractors on file to be provided to grower customers.	2	FR	Attendance, certification, and/or evaluation through a USDA-NRCS (590), land grant-approved training or Department of Agriculture training. Certification is not necessary. To view the list of technical service providers trained in writing nutrient management plans, visit https://techreg.sc.egov.usda.gov/CustLocateTSP.aspx.
1.3.1	Nutrient Service Provider has conveyed informational materials on 4R Nutrient Stewardship to all grower customers.	2	FRA	Signature by grower, OR proof of attendance at a company sponsored 4R Nutrient Stewardship educational event, OR proof of distribution of materials via mailing list.
1.3.2	Nutrient Service Provider has sponsored or directly provided a training session on 4R Nutrient Stewardship that is available for all grower customers.	2	FRA	Agenda of the company-sponsored educational event shows training on 4R Nutrient Stewardship approved by the Program Administrator for at least 0.5 CEU. For list of relevant, Program Administrator approved training topics, see the "4R Program - Education Guidelines - Requirements 1.2.3 and 1.3.2" document at www.4Rcertified.org/resources.
3.1.6	Records of nutrient application include at minimum: 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.	2	FΑ	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. 80% of the acres must meet this criteria, 100% of the acres must meet this criteria for NSPs in the Ohio WLEB region under Ohio Senate Bill 1 of the 131st General Assembly effective July 3, 2015. Review the NOAA forecast.
3.2.1	Field maps must include information about yield goals, soil type delineation, setbacks, and soil test results.	2	FRA	Review of records on file, can be hard copy or electronic. There may be multiple field maps to ensure all the information is outlined.

3.2.2	Field map boundaries are in a digital form such as Geographic Information Systems (GIS) shape files.	2		This information can be in any usable/readable electronic format. Maps must be provided. 50% of the acres must meet this criteria.
3.2.4	A defined process for identification of sensitive areas (e.g. surface water, inlets, wells, areas of concentrated flow, etc.) is in place and being implemented.	2	FRA	Defined process for identification to be communicated or provided through documentation to the auditor.
3.3.3	Soil tests are taken from relatively uniform areas no larger than 25 acres.	2		Review of records on file, can be hard copy or electronic. Maps indicating acres represented in sample must be provided. All areas sampled must be smaller than 25 acres.
3.5.13	Discussion with grower customers on nitrogen management include options of split application, nitrification inhibitors, and slow release technologies.	2	FRA	Signatures of grower customers on file.
2.1.2	Field records related to monitoring of 4R implementation must include the watershed or watersheds where the farms are located.	3	FRA	Identify by watershed name or supply GIS data layer and/or hard copy map with 8-digit HUC labeled watersheds in the WLEB - St. Joseph, St. Mary's, Tiffin, Blanchard, Portage, Upper/Lower Maumee, Raisin, Sandusky, Ottawa-Stoney and/or other HUC watersheds (outside WLEB). HUC codes can be found at Map Waters Mapper: https://map24.epa.gov/mwm/mwm.html
2.1.3	Nutrient Service Provider maintains a grower customers signature that confirms their support of 4R Nutrient Stewardship.	3	FRA	Signatures of grower customers on file. The grower signatures must represent at least 70% of the acres, as outlined in the grower customer list.
3.2.3	Data layers (e.g., sensitive areas, yield data or goals, soil test data, soil type) of digital field maps are combined in an analysis to better target nutrients in the fields.	3		This information can be in any usable/readable electronic format. Maps must be provided. 35% of the acres must meet this criteria.

3.3.4	Soil test management sampling zones are included on field maps using Geographic Information Systems (GIS).	3	FR	Review of records on file, hard copy or electronic. Maps must be provided. 35% of the full service and applied fields over 20 acres must meet this criteria.
3.5.7 *	Broadcast applications of phosphate 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.	3	FRA	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. 80% of the acres must meet this criteria, 100% of the acres must meet this criteria for NSPs in the Ohio WLEB region under Ohio Senate Bill 1 of the 131st General Assembly effective July 3, 2015.
3.8.2	Variable Rate Technology is used to apply nutrients.	3	FΑ	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.