Alberta Institute of Agrologists Training Program Rules 2022

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Training Program Rules

Authority

The AIA council is mandated to make Training Program Rules for agrologists in training (AITs) and agrology technologists in training (ATTs): *Agrology Profession Regulation*, section 15(1).

The rules must set out the competencies to be acquired; the structure, duration and organization of the Training Programs; evaluation mechanisms, processes and requirements for successful completion; and any other matter directly related to the Training Programs.

To be registered on the training register as AIT or ATT, an applicant must have the requisite education from a post-secondary institution recognized by the council with credit in all of the courses related to the practice of agrology required by the council, be qualified to work in Canada, be possessed of good character and reputation, and have entered into a Training Agreement accepted by the registration committee: *Agrology Profession Regulation*, sections 5, 6, 11, and 12.

Each applicant for registration on the general register as a professional agrologist (PAg) or registered technologist in agrology (RTAg) must have successfully completed the Training Program and the registration examination required by the council, be qualified to work in Canada, and be possessed of good character and reputation: *Agrology Profession Regulation*, sections 3, 4, 11, and 12.

Purpose

The Training Program Rules lay the foundation for public trust in the profession of agrology. The rules are organized around the three essential aspects of professional practice that are foundational to public trust: education, work experience, and professional conduct.

The public is defined as those persons who engage the services of a professional, and those who rely upon the professional to provide public good services such as food security and safety, natural resource health, and environmental quality.

The public is entitled to assume that a professional has specialized education directly related to the provision of services within a professional scope of practice, sufficient quantity and quality of work experience that facilitates development of critical skill sets, and deeply-rooted ethical convictions that govern professional conduct.

Training Program

Structure

The Training Program structure is the same for each Agrologist in Training (AIT) and Agrology Technologist in Training (ATT).

To prepare for the Training Program, each Training Member must select at least one but no more than two practice areas, relevant to the member's employment, in which to become qualified to provide professional services without supervision.

The Registration Committee determines the member's Training Program by comparing that member's post-secondary education and work experience to the requirements of the member's selected practice areas.

Each member must sign and fulfill a Training Agreement that sets out the member's Training Program, including individual obligations to

- acquire the education required to meet the minimum number of Core Knowledge Areas, Activities, or Policy Tasks in each practice area selected,
- obtain the years of supervised work experience required by each practice area, added together if the member has selected two practice areas, and
- complete the AIA law and ethics course within 12 months of signing the Training Agreement.

Before applying to be registered as a professional agrologist (PAg) or registered technologist in agrology [RT(Ag)], each Training Member must have fulfilled the terms of the Training Agreement.

Duration

The duration of the Training Program is called the Training Period.

The Training Period varies depending on the Training Member's unique requirements for education and work experience.

However, the Training Period should normally take five years at most.

The member must fulfill the terms of the Training Agreement within the Training Period established in it.

Training Members are expected to complete the program expeditiously with the goal of successful completion as soon as possible.

Competencies to be acquired during the Training Program Education

Practice Areas

There are 19 practice areas within agrology. Fourteen have detailed practice standards.

A practice area is a functional area of expertise with the agrology profession that requires specialized knowledge, experience, and skills.

For most practice areas, the Alberta Institute of Agrology has developed detailed <u>Practice Standards</u> to define the education, supervised work experience, and skills required by the practice area.

Practice areas that do not yet have an associated Practice Standard are based on the Core Knowledge Table.

These Training Program Rules chart the educational requirements of each practice area: the minimum number of Core Knowledge Areas, Activities, or Policy Tasks an individual must meet to be considered qualified to practice without supervision in the practice area.

Choosing one practice area

The Training Member must select at least one practice area in which to become qualified to provide professional services without supervision.

The practice area must be relevant to the Training Member's current employment.

Choosing two practice areas

The Training Member may select no more than two practice areas, if the activities the member performs at work relate to two practice areas.

Changing practice areas

The Training Member may change practice areas if the member begins to perform different activities at work, such as by changing jobs or employers.

Changes could entail amendments to the Training Member's Training Program and thus affect the Training Period.

Amendments will be made in writing, signed by the Training Member and the AIA, attached to the Training Agreement, and listed in the Agreement in *Appendix C: Amendment Chart*.

Becoming qualified to provide professional services in a practice area without supervision in at least one practice area

Training members who have educational deficiencies related to the requirements of a chosen practice area must address the deficiencies through their Training Program.

Coursework

Addressing educational deficiencies in each practice area

The Registration Committee will compare the member's post-secondary transcript with the Required Education Tables below.

In the Training Agreement, the Registration Committee will list the coursework the Training Member requires to be considered professionally qualified in a practice area.

Throughout the Training Program, the Training Member will complete and pass the courses required to address the educational deficiencies.

Required Education Tables

These tables use the following acronyms:

- PA = Practice Area (a unique functional area of professional practice)
- PS = Practice Standard (a document that outlines the requirements and expectations for professional practice within a PA)
- CKA = Core Knowledge Area (an area of knowledge consisting of one or more specialized subject matter areas that is required for practice within a PA)

EDUCATION TABLE 1 -

The number of CKAs to be met to be considered qualified to provide professional services without supervision within the listed practice areas

To become qualified to provide professional services without supervision in any PA with a PS based on CKAs, a member must meet more than 50% of the CKAs required, as set out in the following chart.

Even as a professional agrologist (PAg) or registered technologist in agrology (RTAg), the member must practice under supervision to perform work related to any CKAs for which the member is not qualified to provide professional services.

Practice Area with a Practice Standard based on CKAs	Total CKAs in the PA	CKAs required
Agricultural and Natural Resource Economics	8	5
Agricultural Marketing and Sales	4	3
Biophysical Classification and Evaluation (Practice Standard in draft)	7	4
Crop Production	6	4 At least two CKAs must include <i>Crops, Soils</i> , or <i>Pests</i> CKAs.
Environmental Impact Assessment and Mitigation (Practice Standard in draft)	5	3
Environmental Monitoring	7	4
Greenhouse Gas Management (Agricultural)	6	4
Land Conservation and Management	6	4
Land Reclamation	4	3 Of the three CKAs, two must be the <i>Soils</i> and <i>Vegetation</i> CKAs.
Livestock Production	8	5
Rangeland and Pasture Management	7	4
Rural Development and Support	5	3
Water Resources Planning and Management	8	5

EDUCATION TABLE 2 –

Assessment, Remediation, and Management of Contaminated Land

Required education to be considered qualified to provide professional services without supervision within the practice area

To become qualified to provide professional services without supervision under the *Assessment, Remediation, and Management of Contaminated Land Practice Standard*, a member must fulfill the requirements of at least two Activities.

To fulfill the requirements of an Activity, the member must meet all CKAs for that Activity.

Even as a professional agrologist (PAg) or registered technologist in agrology (RTAg), the member must practice under supervision to perform work related to any Activities for which the member is not qualified to provide professional services.

In addition, Government of Alberta policy requires a member to obtain at least five years' of direct work experience in Assessment, Remediation, and Management of Contaminated Land before being able to authenticate (sign off) regulatory documents related to contaminated site management.

Practice Area with a Practice Standard based on Activities	Activity	Total CKAs in the Activity	CKAs required
Assessment, Remediation and Management of	Understanding Drivers and Planning	3	3
Contaminated Land (ARMCL)	Phase I ESAs	1	1
	Phase II ESAs	4	4
	Remediation	3	3
	Risk Assessment	7	7
	Exposure Control	3	3
	Validation and Closure	6	6

EDUCATION TABLE 3 –

Wetlands and Riparian Areas

Required education to be considered qualified qualified to provide professional services without supervision within the practice area

To be qualified to provide professional services without supervision under the Wetlands and Riparian Areas Practice Standard, a member must fulfill the requirements of at least two Policy Tasks.

To fulfill the requirements of a Policy Task, the member must meet all CKAs for that Policy Task.

Even as a professional agrologist (PAg) or registered technologist in agrology (RTAg), the member must practice under supervision to perform work related to any Policy Tasks for which the member is not qualified to provide professional services.

In addition, government policy specifies that a professional may authenticate (sign off) regulatory documents only if the professional has been registered with one of the PRO10 (Professional Regulatory Organizations) for at least five years, and attained a minimum of three years' direct work experience in wetlands.

Practice Area with a Practice Standard based on Policy Tasks	Policy Task	Total CKAs in the Policy Task	CKAs required
Wetlands and Riparian Areas (WRA)	Identification and Delineation	4	4
	Classification	4	4
	Permanence Assessment	2	2
	Wetland Assessment and Impact Reporting	5	5
	Wetland Design, Restoration and Enhancement	7 CKAs include Civil Engineering and Environmental Design associated with the professions of Engineering and Landscape Architecture, respectively. These CKAs are not relevant to Agrologists; however, Agrologists may work with a P.Eng qualified in Civil Engineering or a Landscape Architect qualified in the Environmental Design CKA.	5
	Monitoring	6 CKAs include Civil Engineering associated with the profession of Engineering. This CKA is not relevant to Agrologists; however, Agrologists may work with a P.Eng qualified to work in the Civil Engineering CKA.	5

EDUCATION TABLE 4 – Core Knowledge Table

Required education to be considered qualified to provide professional services without supervision within a specific practice area in which no Practice Standard currently exists

The practice areas in this table do not yet have an associated Practice Standard.

To become qualified to provide professional services without supervision in any practice area without a Practice Standard, the member must meet 4 of 6 CKAs.

Even as a professional agrologist (PAg) or registered technologist in agrology (RTAg), the member must practice under supervision to perform work related to any CKAs for which the member is not qualified to provide professional services.

Practice Area	Core Knowledge Areas (meet 4 of 6)					
Biosystems, Biosolids, Compost and Manure Management	Compost Development and Management OR Digestion Systems OR Energy and Biogas Production	Residuals (Waste) Management OR Materials Handling and Processing OR Odour Control	Land Application OR Livestock System OR Cropping System	Biochemistry OR Organic Chemistry OR Inorganic Chemistry	Soil Chemistry OR Soil Fertility OR Soil Physics	Microbiology OR Plant/Soil Relations OR Contaminant Fate and Behaviour
Food Development and Processing	Food Processing Technologies OR Food Product Development	Food Policy OR Food Legislation	Food Nutrition OR Food Biochemistry	Food Microbiology	Quality Assurance OR Food Safety Systems	Food Chemistry
Regulatory Support and Consultation	Agricultural, Environmental and Food Legislation OR Policy	Stakeholder Communications OR Stakeholder consultation and mediation	Resource management OR Environmental Protection OR Impact Assessment	Crop Production OR Animal Production OR Wildlife Management OR Food Production	Conservation Planning OR Reclamation Planning OR Systems Planning	Regulatory Compliance Reporting



NO EDUCATION TABLE AVAILABLE - Management

Required education to be considered qualified to provide professional services without supervision within the practice area

To become qualified to provide professional services without supervision under the Management Practice Standard, a member must have at least three years' relevant work experience, have completed Continuing Competence Program activities relevant to the management type within which the member works, and demonstrate a Continuing Competence Program plan to enrich management expertise.

Agrologists generally transition into management after working within a technical role in their career. They do not tend to have management degrees or business degrees. The recommended knowledge and training in the Management Practice Standard is intended to advance members' qualifications within the management type in which they work.

Work experience

Work experience relevant to practice areas

Becoming qualified to provide professional services without supervision

Obtaining the necessary work experience is fundamental to becoming qualified to provide professional services without supervision in a practice area.

Amount of work experience required

"Practice-area-specific work experience" is work experience related to the Training Member's selected practice area(s) that is conducted under the supervision of a qualified individual who agrees to take responsibility for the Training Member's work.

Work Experience Tables

The following tables set out the practice-area-specific work experience required before a Training Member may apply for the RTAg or PAg title.

WORK EXPERIENCE TABLE 1 REQUIREMENTS FOR PRACTICE AREAS HAVING A PRACTICE STANDARD (ATT to RTAg AND AIT to PAg)		
Practice Area	Years of supervised practice-area-specific work experience required (Section 4 of the Practice Standard except where otherwise noted)	
Agricultural Marketing and Sales	3 years	
Agricultural and Natural Resource Economics	5 years	
Assessment, Remediation, and Management of Contaminated Land	5 years	
Biophysical Classification and Evaluation	5 years	

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Crop Production	3 years
Environmental Impact Assessment	5 years
Environmental Monitoring	5 years
Greenhouse Gas Assessment and Mitigation (Agricultural)	5 years (Section 6 of the Practice Standard)
Land Reclamation	5 years
Land Conservation and Management	5 years
Livestock Production	3 years
Management	3 years
Rangeland and Pasture Management	3 years
Rural Development and Support	3 years
Water Resources Planning and Management	3 years
Wetlands and Riparian Areas	5 years of registration with a Professional Regulatory Organization, including 3 years of supervised practice-area-specific work experience

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WORK EXPERIENCE TABLE 2 REQUIREMENTS FOR PRACTICE AREAS NOT HAVING A PRACTICE STANDARD (ATT to RTAg AND AIT to PAg)		
Practice Area	Years of supervised practice-area-specific work experience required	
Biosystems, Biosolids, Compost and Manure Management	3 years	
Food Development and Processing	3 years	
Regulatory Support and Consultation	3 years	

Professionalism

Annual Report

Within 6 months of signing the Training Agreement, the Training Member must study the most recent Annual Report.

Law and Ethics Course

Within 12 months of signing the Training Agreement, the Training Member must complete and pass the AIA ethics course, currently *LEDM 552* : *Ethics & Decision-making in Complex Situations* delivered in conjunction with Athabasca University and Ametros Learning Inc.

Evaluation mechanisms for the Training Program

Evaluating education

A Training Member's education will be evaluated upon registration and throughout the Training Program:

- **Upon registration**, the Registration Committee Chair will evaluate the Training Member's educational credentials, produce a report by practice area, and attach it to the Training Agreement at *Appendix B: Educational Evaluation*. The report will inform the Training Member's required coursework throughout the Training Program.
- Throughout the Training Program, to both evaluate education and prepare the Training Member to report Continuing Competence Program activities when the member becomes registered on the general register as a PAg or RTAg, the member must complete at least 15 hours of education each year per practice area during the Training Period. The Training Member must submit a report about the year's education to the AIA at a time set out in the Training Agreement. The AIA will provide the report format.

Evaluating work experience

Each year at a time set out in the Training Agreement, the Training Member must submit information to the AIA about the year's supervised work experience at a time set out in the Training Agreement.

The Training Member will use the AIA's resume template to provide the information.

Evaluating professionalism

Professionalism will be evaluated through *LEDM 552 : Ethics & Decision-making in Complex Situations* delivered in conjunction with Athabasca University and Ametros Learning Inc.

Processes for completing the Training Program

How long a member can remain in training

A Training Member will remain in training until completing the requirements of the Training Agreement, as amended from time to time.

Failure to obtain required education, work experience, or professional conduct training

If the Training Member does not fulfill the Agreement, including the Training Program, within the Training Period, but the parties have not signed a written amendment in accordance with this Agreement, the AIA may end the Training Agreement and pursue all remedies available under this Agreement and at law, or not end the Training Agreement and instead extend the Training Period or impose conditions on, suspend, cancel, or refuse to issue the Training Member's practice permit, and pursue all remedies available under this Agreement and at law.

Requirements for completing the Training Program

Registration examination

If the Training Member has chosen a practice area supported by a professional practice examination, the member must pass the examination as a condition of the member's Training Program. A professional practice examination currently exists for the following practice areas: (i) Assessment, Remediation, and Management of Contaminated Land, (ii) Crop Production.