

## **Standards for Professionals in Soil Science**

(updated April 2017)



	ection 1. Professional Practice: must satisfy 7 of 10 competencies listed below
1.1	PROFESSIONAL RESPONSIBILITY (minimum 2 of 4 competencies)
1.1.1	Prepares and provides a demonstrably significant contribution to papers given at national conferences, published in soil journals, or publicly available technical reports of a similar standard.
1.1.2	Provides sound recommendations and management of social, ethical and environmental considerations in soil science.
1.1.3	Provides management and application of regulations and legal requirements relating to individuals and industries operating in soil science.
1.1.4	Initiates and formally contributes to discussions affecting the soil science profession through participation in, and committee membership of, professional and/or industry groups or associations.
1.2	PROJECT MANAGEMENT (minimum 1 of 3 competencies)
1.2.1	Manages a soil work program with responsibility for effective and efficient performance of the soils team, and/or manages financial and resource plans for soils programs and projects ensuring satisfactory progress.
1.2.2	Develops and implements effective quality assurance procedures and systems for soil programs.
1.2.3	Supervises and/or manages the planning, implementation, reporting and evaluation of soil projects using recognised scientific principles.
1.3 I	PROFESSIONAL DEVELOPMENT (minimum 1 of 3 competencies)
1.3.1	Expands knowledge and skills via higher level continuing professional development activities and contributes to the provision of professional development activities in the practice of soil science.
1.3.2	Maintains and applies up-to-date knowledge of relevant specialised research findings.
1.3.3	Maintains a network of experienced soil scientists and provides mentoring to less experienced soil scientists.
	tion 2. Practice of Soil Science: must satisfy 10 of 13 competencies listed below
2.1	SOIL SCIENCE KNOWLEDGE AND TECHNOLOGY (minimum 3 of 4 competencies)
2.1.1	Interprets, applies and contributes to developing soil science knowledge.
2.1.2	Develops sound proposals for determining needs and priorities in soil monitoring and scientific work.
2.1.3	Manages the acquisition and implementation of new soil science techniques (including modelling) and improvements to established protocols, methods and practices, exercising innovation and judgment.
2.1.4	Develops and manages the commissioning and delivery of research and/or development of commercial soil science products or services.
2.2	SOIL MONITORING, ANALYSIS AND INVESTIGATION (minimum 4 of 6 competencies)
2.2.1	Investigates and analyses soil science-based problems and opportunities, and prepares relevant reports, documents and papers containing justifiable, rational conclusions.
2.2.2	Supervises and/or manages the collection and preparation of soil data, analyses soil data, and makes sound recommendations on soil function and management.
2.2.3	Implements procedures for the safe and effective use of soil laboratory or field instruments/equipment (e.g. Safe Work Method Statements)
2.2.4	Conducts and manages complex analyses of soil chemical, physical and/or biological properties.
2.2.5	Investigates and models scientific processes involving soils with one or more of water, plants, animals and the environment.
2.2.6	Selects and manages appropriate techniques to maintain or improve soil function.
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2.3	SOIL ADVISORY, TRAINING, EDUCATION SERVICES (minimum 1 of 3 competencies)
2.3.1	Provides authoritative soil advice to improve soil and/or land management decisions of stakeholders.
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