MSS024011 Navigate in urban, regional and remote areas

Release: 1

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Modification History

Release 1. Supersedes and is equivalent to MSS024011A Navigate in urban, regional and remote areas

Application

This unit of competency covers the ability to read and interpret maps, plans and photos to locate position and navigate safe and efficient routes to urban and regional/remote destinations. This unit does not cover conducting field work in remote locations.

This unit of competency is applicable to environmental technicians working in all industry sectors as well as a wide range of other technicians, paraprofessionals, operators and drivers.

While no specific licensing or certification requirements apply to this unit at the time of publication, environmental monitoring and management activities are governed by relevant legislation, regulations and/or external accreditation requirements. Local requirements should be checked.

Pre-requisite Unit

Nil

Competency Field

Data

Unit Sector

Environmental

Elements and Performance Criteria

Elements describe the essential outcomes.	Performance criteria describe the performance needed to demonstrate achievement of the element.	
1 **Navigate in urban areas**	1.1	Access relevant street directories and road maps.
	1.2	Recognise and interpret map symbols.
	1.3	Use the directory index to locate departure and destination points on map.

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		1.4	Trace the pre-determined or most efficient route on map and estimate distance and duration of journey.
		1.5	Identify significant intersections/landmarks along route to assist with navigation.
		1.6	Identify alternate routes in case of emergencies or significant traffic delays.
		1.7	Follow selected route correctly.
2	**Plan routes in regional/remote areas**	2.1	Locate and review relevant legislative/regulatory, workplace requirements and background information for site/project.
		2.2	Select suitable maps, aerial photos, guides and/or charts and check their currency and accuracy.
		2.3	Select navigational equipment, check that it is fit for purpose and service or replace, as necessary.
		2.4	Interpret map symbols and navigation data to identify departure/destination points, potential hazards and select an appropriate traverse route.
		2.5	Estimate distance and duration of journey using map scale and available information about the terrain and vehicle.
3	**Navigate in regional/remote areas**	3.1	Correctly orientate map with surroundings.
		3.2	Identify field position and destination on map using landforms, landmarks and/or navigation equipment.
		3.3	Correctly use navigation aids, equipment and maps to follow planned route and schedule.
		3.4	Use alternate routes to avoid hazards, safely bypass obstacles or improve efficiency of route.
		3.5	Maintain communication in accordance with workplace procedures.

Foundation Skills

This section describes those required skills (language, literacy and numeracy) that are essential to performance.

Foundation skills essential to performance are explicit in the performance criteria of this unit of competency.

Range of Conditions

This field allows for different work environments and conditions that may affect performance. Essential operating conditions that may be present (depending on the work situation, needs of the candidate, accessibility of the item, and local industry and regional contexts) are included.

Legislation, regulations, standards, codes, workplace procedures and requirements include the latest version of one or more of:	• federal legislation, such as Environment Protection and Biodiversity Conservation Act, Australian Heritage Council Act, Native Title Act and National Environmental Protection Measures • state/territory government legislation and local government by-laws, policies, regulations and plans dealing with land use, acquisition and planning; environmental protection; cultural/heritage sites; vegetation management; nature conservation and wildlife/plant protection; water and water management; soil conservation; pollution and contaminated sites; fisheries, forestry and mining operations • legislation, standards and codes of practice for work health and safety (WHS) and handling of dangerous goods • Australian and international standards covering environmental management such as AS/NZS ISO 14000 Basic Set:2007 Environmental Management Basic Set • registration/licensing and/or accreditation requirements • workplace documents, such as standard operating procedures (SOPs), work schedules, recording and reporting procedures, vehicle and equipment manuals and warranties; safety data sheets (SDS) and safety procedures.
Background information includes one or more of:	• site or project history, and project reports • client history • records of consultations with stakeholders and current issues • details of local inhabitants and landowners • site access protocols and permits • site access and exit routes • maps, guide books and aerial photos • information about terrain, significant features, natural protection or shelter, and cultural heritage sites • existing databases (e.g. vegetation, topography, soils and regional ecosystem maps) • safe work procedures • communication protocols when working in remote/regional areas • emergency plan and response procedures.

Maps include one or more of:	• cadastral maps showing land tenure/ownership • topographical maps • charts and guidebooks • aerial photos, sketch maps and diagrams • web-based maps and directories • street directories.
Navigational equipment and aids include one or more of:	• global positioning system (GPS) units • compass • track and survey markers, cairns, signs and arrows • navigation beacons.
Map symbols and navigation data include one or more of:	• map legend and scale • entry and exit routes • distances and estimated travel times • grid lines and numbers, and grid reference points • contour lines, gradient and altitude gain/loss • magnetic variation/declination, grid and magnetic bearings • identifiable features (natural and built) • navigation/survey markers, beacons and water depth.
Surroundings include one or more of:	• terrain, such as hills, mountains, ridges and valleys • natural landforms/landmarks, such as caves, observation towers, trig stations, bridges, buildings, and track and creek junctions/crossings • water bodies, such as creeks, rivers, dams and lakes.
Hazards and obstacles include one or more of:	• extreme weather, such as wind, rain, fog and snow • damage to roads and tracks • thick/impenetrable vegetation • unsafe gradients • marshes, soft sand or bogs • impassable water crossings.
WHS requirements include:	• compliance with relevant federal/state/territory WHS legislation at all times • assuming that samples are potentially hazardous and applying standard precautions

- accessing and applying current industry understanding of infection control issued by the National Health and Medical Research Council (NHMRC) and state/territory Departments of Health, where relevant.

Unit Mapping Information

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Links

MSA Training Package Implementation Guides - http://mskills.org.au/training-packages/info/