



## Assessor Assessment Guide Unit Standard 3311

### Exercise initial command and control at hazardous substance emergencies (Level 5, Credit 6, Version 3)

In order to achieve competency in this unit standard a candidate must display an understanding of the knowledge components by completing an oral or written assessment and practically demonstrate the performances required to exercise initial command and control at hazardous substance emergencies

This assessment may take place at a real non fire hazardous substance incident or at a simulated practical event.

The assessor may elect to question candidates during completion of the practical assessment to ensure theoretical knowledge can be applied during practice. This technique also provides the assessor with reinforcement that knowledge has been retained.

Where a candidate is being assessed on the basis of a RCC process, evidence must be produced that indicates a candidate has successfully directed operations at a non fire hazardous substance incident in a safe manner without causing avoidable environmental or equipment damage.

**Assessors may use this guide to record evidence of a candidates overall performance but should be aware that this may not, on its own be an adequate record for moderation purposes without appropriate notes or appendices. Notes should include a summary of the process used and a statement about the quality of the candidate's performance.**

**ASSESSORS SHOULD ALWAYS REVIEW THE REQUIREMENTS CONTAINED IN THE UNIT STANDARD DOCUMENT PRIOR TO CONDUCTING ASSESSMENTS**

For this unit the following resources are available from FRSITO to assist Learners, Instructors and Assessors:

- Assessor Assessment Guide
- Learner Assessment Guide

Assessors: General Notes:

Prerequisites: Unit 3312, *Carry out decontamination procedures*, and Unit 3315, *Carry out Incident Ground Safety Officer duties*, or demonstrate equivalent knowledge and skills.

Legislation applying to this unit standard includes:

Fire Service Act 1975,

Resource Management Act 1991, and

Hazardous Substances and New Organisms Act 1996, and subsequent amendments.

Assessors Name	_____	Assessor No.	_____
Candidate Name	_____	NZQA No.	_____
Date of Assessment	_____	Final Result	_____

**Level Descriptor**

Level	Process	Employing	Responsibility
5	<b>Carrying out processes that:</b> <ul style="list-style-type: none"> <li>Require a wide range of specialised technical or scholastic skills</li> <li>Involve a wide choice of standard and non-standard procedures</li> <li>Are employed in a variety of routine and non-routine contexts</li> </ul>	<b>Employing:</b> <ul style="list-style-type: none"> <li>A broad knowledge base with substantial depth in some areas</li> <li>Analytical interpretation of a wide range of data</li> <li>The determination of appropriate methods and procedures in response to a range of concrete problems with some theoretical elements</li> </ul>	<b>Applied:</b> <ul style="list-style-type: none"> <li>In self-directed and sometimes directed activity</li> <li>with broad general guidelines or functions</li> <li>With full responsibility for the nature, quantity and quality of outcomes</li> <li>With possible responsibility for the achievement of group outcome</li> </ul>

	Information or actions that may provide support for competency	
General	<b>Has the candidate:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Satisfactorily completed Unit 3312 Carry out decontamination procedures, and Unit 3315, Carry out Incident Ground Safety Officer duties or demonstrated equivalent knowledge and skills?</li> <li><input type="checkbox"/> Satisfactorily completed a pre course self test?</li> <li><input type="checkbox"/> Satisfactorily completed an oral or written on course or post knowledge assessment?</li> <li><input type="checkbox"/> Satisfactorily completed simulation exercises?</li> <li><input type="checkbox"/> Attend a course covering the Unit Standard subject matter?</li> <li><input type="checkbox"/> Provided proof of experience through records?</li> <li><input type="checkbox"/> Practically demonstrated in a practical scenario?</li> <li><input type="checkbox"/> Other (please list)?</li> </ul> <hr/> <hr/>	Assessor Notes:

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
1.	<b>Demonstrate knowledge of the initial incident controller's obligations to health and safety at hazardous substance incidents.</b>		
1.1	Candidates must explain the limits of risk as communicated by the Safe Person Concept.  <b>Did the candidate:</b> <ul style="list-style-type: none"> <li><input type="checkbox"/> Explain the limits of risk as communicated by the Safe Person Concept?</li> </ul> <b>Assessor notes:</b>	<b>Safe Person Concept is understood</b>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
1.2	<p>Candidates must explain the rationale used to allocate tasks. Explanations must include but are not limited to considerations of:</p> <ul style="list-style-type: none"> <li>• Organisational role</li> <li>• Other organisations in attendance</li> <li>• The availability of expert advice</li> <li>• The probability of deliberate/malicious act               <ul style="list-style-type: none"> <li>○ Criminal investigation</li> </ul> </li> <li>• Information received</li> <li>• Legal authority and responsibility               <ul style="list-style-type: none"> <li>○ Heads of agreement</li> </ul> </li> <li>• Situation on arrival               <ul style="list-style-type: none"> <li>○ Incendiary devices</li> <li>○ Booby traps</li> </ul> </li> <li>• Personnel training</li> <li>• Equipment availability and suitability</li> <li>• Availability of assistance</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Explain the rationale used to allocate tasks?</p> <p><b>Assessor notes:</b></p>	<p><b>Tasks are allocated in consideration with safety, capability and organisational responsibility</b></p>	
1.3	<p>Candidates must explain the actual or potential hazards for any 5 of the following scenarios and detail the actions they would take to manage them:</p> <ul style="list-style-type: none"> <li>• Yellow gas found escaping from a public swimming pool pump shed</li> <li>• Concentrated Nitric Acid found spilled in a railway wagon</li> <li>• Unidentified white powder discovered escaping from a parcel at the mail centre</li> <li>• Weeping ammonium nitrate brought to the fire station in the boot of a car by a man wanting help to dispose of it</li> <li>• A cocktail of agricultural chemicals broken apart and spilled as a result of a truck accident</li> <li>• Ammonia escaping from pipes around the cool stores in a freezing works complex</li> <li>• A gas cloud seen around a bulk LPG tank at a petrol station</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Explain the actual or potential hazards for 5 of the scenarios posed?</p> <p><input type="checkbox"/> Detail the actions they would take to manage the hazards?</p> <p><b>Assessor notes:</b></p>	<p><b>Actual or potential hazards are identified and the actions taken to mitigate them are explained.</b></p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
<b>2</b>	<b>Demonstrate knowledge required to render hazardous substance emergencies safe.</b>		
2.1	<p>Candidates must explain the powers and duties delegated to the New Zealand Fire Service by legislation relating to non fire hazardous materials incidents.</p> <p><b>Consider the following:</b> Candidates must detail the powers of an enforcement officer under the Hazardous Substance and New Organisms Act 1996</p> <p><b>Reference:</b> Fire Service Act 1975 Sections 17N; 21; 28; 28A; 29; 47C; Hazardous Substance and New Organisms Act 1996 Part 3 and Part 7</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Explain the powers and duties delegated to the New Zealand Fire Service by legislation relating to non-fire hazardous materials incidents?</li> <li><input type="checkbox"/> Detail the powers of an enforcement officer under the Hazardous Substance and New Organisms Act 1996?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>Powers and duties of the Fire Service at non fire hazardous substance incidents are explained</b></p> <p><b>Powers of an enforcement officer are detailed.</b></p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
2.2	<p>Candidates must describe the incident ground management roles that are required to be filled in accordance with SOP's when managing a hazardous substance incident.</p> <p>These may include:</p> <ul style="list-style-type: none"> <li>• Decontamination Officer</li> <li>• Safety Officer</li> <li>• Operations Manager</li> <li>• Sector Commander</li> <li>• Incident Controller</li> <li>• Enforcement Officer</li> <li>• Expert Advisor</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Describe the incident ground management roles required to be filled when managing a hazardous substance incident?</p> <p><b>Assessor notes:</b></p>	<p><b>Roles required to be established to manage a hazardous substance emergency are described</b></p>	
2.3	<p>Candidates must describe the content of, and explain the purpose for:</p> <p><b>Range:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Class labels (Diamond Labels)</li> <li><input type="checkbox"/> Kempler Codes</li> <li><input type="checkbox"/> UN Numbers and Classes</li> <li><input type="checkbox"/> Chemical name</li> <li><input type="checkbox"/> Trade Name</li> <li><input type="checkbox"/> NFPA Labels</li> <li><input type="checkbox"/> Hazchem Codes</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Describe the content of the various labels?</p> <p><input type="checkbox"/> Explain the purpose of the various labels?</p> <p><b>Assessor notes:</b></p>	<p><b>Common hazardous substance labelling systems are described</b></p> <p><b>The purpose of each of the different hazardous substance labels is explained</b></p>	

<b>Element and PC</b>	<b>Evidence Typical answer/product/performance expected from the learner/candidate(s)</b>	<b>Judgement Statement (A statement that defines the standard to be achieved)</b>	<b>Result C/NYC</b>
2.4	<p>Candidates must explain where they can get detailed information from relating to hazardous materials.</p> <p>Candidates must explain the process of getting detailed information for dealing with hazardous substances.</p> <p>Sources must include but are not limited to:</p> <ul style="list-style-type: none"> <li>• National Poisons Centre</li> <li>• Chemdata</li> <li>• National Radiation Laboratory</li> <li>• The manufacturer</li> <li>• Hazardous Substance Emergency Response Guidebook</li> <li>• Material Safety Data Sheet (on site)</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Explain where they can get information for dealing with hazardous substances?</p> <p><input type="checkbox"/> Explain the process of getting information for dealing with hazardous substances?</p> <p><b>Assessor notes:</b></p>	<p><b>Sources of resource information for hazardous substances are known and can be contacted.</b></p>	
2.5	<p>Candidates must detail the minimum PPE requirements for personnel working in a non fire Hot Zone for an uncontrolled release of each of the following hazardous substances.</p> <p><b>Consider the following:</b></p> <ul style="list-style-type: none"> <li>• Solid Red label Class 3 liquid spill</li> <li>• Black &amp; White label Class 8 liquid spill</li> <li>• Green label Class 2 leak</li> <li>• Red label Class 2 leak</li> <li>• White label Class 2 leak</li> <li>• Class 5 granule spill</li> <li>• Yellow &amp; White label Class 7 emission</li> <li>• Blue label Class 4 spill</li> <li>• Class 1 weeping</li> <li>• Class 6 powder spill</li> <li>• Class 9.3. liquid spill</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Detail the minimum PPE requirements for personnel working in a non fire Hot Zone for each class of hazardous substance?</p> <p><b>Assessor notes:</b></p>	<p><b>Minimum PPE requirements for each and all classes of hazardous substances are detailed.</b></p>	





<b>Element and PC</b>	<b>Evidence Typical answer/product/performance expected from the learner/candidate(s)</b>	<b>Judgement Statement (A statement that defines the standard to be achieved)</b>	<b>Result C/NYC</b>
	<p>Actions to contain, actions to neutralise, actions to dilute actions to absorb, actions to ventilate</p> <p>Establishment of standard decontamination procedure Establishment of mass decontamination procedure</p> <p>An Incident Action Plan must be developed in concert with the strategy and tactics.</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Decide an appropriate strategy?</li> <li><input type="checkbox"/> Employ suitable tactics?</li> <li><input type="checkbox"/> Develop an Action Plan?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>An Action Plan is developed</b></p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
3.3	<p>Candidates must select the appropriate number and type of resources required to implement their strategy and tactics. These must be ordered in a timely fashion and may include:</p> <p><b>Range:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Specialist equipment</li> <li><input type="checkbox"/> Water</li> <li><input type="checkbox"/> Other supporting agencies</li> <li><input type="checkbox"/> Neutralising agents</li> <li><input type="checkbox"/> Personal protective equipment</li> <li><input type="checkbox"/> Greater alarm</li> </ul> <p><b>Consider the following:</b></p> <ul style="list-style-type: none"> <li>• Make up or greater alarm for: <ul style="list-style-type: none"> <li>○ Personnel</li> <li>○ Specialist appliances <ul style="list-style-type: none"> <li>➢ Decontamination</li> <li>➢ BA</li> <li>➢ Communications</li> </ul> </li> <li>○ Breathing Apparatus</li> <li>○ PPE</li> <li>○ Firefighting/decontamination equipment</li> </ul> </li> <li>• Attendance of supporting agencies <ul style="list-style-type: none"> <li>○ Ambulance</li> <li>○ Police</li> <li>○ Expert advisors (may include) <ul style="list-style-type: none"> <li>➢ HSTLC</li> <li>➢ Regional Council</li> <li>➢ OSH</li> <li>➢ Enforcement officers</li> <li>➢ Certified handlers</li> <li>➢ Local Territorial Authority</li> </ul> </li> </ul> </li> <li>• Water supplies <ul style="list-style-type: none"> <li>○ Water relay</li> <li>○ Supplementary supply</li> <li>○ Alternative source</li> </ul> </li> <li>• Specialist materials <ul style="list-style-type: none"> <li>○ Neutralising agents</li> <li>○ Absorption agents</li> <li>○ Recovery drums</li> <li>○ Recovery bags</li> </ul> </li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Select the appropriate number and type of resources required to implement their strategy and tactics?</p> <p><b>Assessor notes:</b></p>	<p><b>Appropriate resources are selected and ordered to implement the strategy and tactics adopted</b></p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
4	<b>Manage incident action plan at hazardous substance emergencies.</b>		
4.1	<p>For this element, a non fire hazardous substance incident, (or simulated incident), must be in progress to assess the candidates competency</p> <p>Candidates must ensure that areas of the incident ground are identified, established and controlled in accordance with SOP's. These areas may include:</p> <ul style="list-style-type: none"> <li>• Incident ground parameters/ cold zone</li> </ul> <p>Decontamination zones, - dirty areas, clean areas.</p> <ul style="list-style-type: none"> <li>• Entry Point</li> <li>• Hot Zone</li> <li>• Warm Zone</li> <li>• Incident Control Point</li> <li>• Equipment staging areas</li> <li>• Appliance staging area</li> </ul> <p>Candidates must ensure that all persons on the incident ground understand where the demarcations are and what access restrictions or conditions apply.</p> <p>The parameter of the incident ground should be drawn on the Action Plan and (where possible) physically delineated with tape, barriers and/or security personnel.</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Ensure that areas of the incident ground were identified and controlled in accordance with SOP's?</li> <li><input type="checkbox"/> Ensure that all persons on the incident ground understood where the demarcations were and what access restrictions or conditions apply?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>Incident ground facilities and parameters are established, controlled and communicated in accordance with SOP's.</b></p>	

<b>Element and PC</b>	<b>Evidence Typical answer/product/performance expected from the learner/candidate(s)</b>	<b>Judgement Statement (A statement that defines the standard to be achieved)</b>	<b>Result C/NYC</b>
4.2	<p>Candidates must demonstrate Hazard Management in accordance with SOP's. Consider the following:</p> <ul style="list-style-type: none"> <li>• Allocation of tasks in accordance with training and equipment</li> <li>• Adopting recognised and safe tactics for the incident</li> <li>• All crews under the direction and supervision of an OIC</li> <li>• Incident ground management structure put in place</li> <li>• The appointment of a designated safety officer[s]</li> <li>• Developing a formal hazard identification and management strategy</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Demonstrate Hazard Management in accordance with SOP's?</p> <p><b>Assessor notes:</b></p>	<b>Hazards are managed in accordance with SOP's</b>	
4.3	<p>Candidates must communicate the action plan to key personnel. Consider the following:</p> <ul style="list-style-type: none"> <li>• Organising regular briefings involving key incident management personnel such as: <ul style="list-style-type: none"> <li>○ Operations Manager</li> <li>○ Logistics Manager</li> <li>○ Intelligence Officer</li> <li>○ Safety Officer[s]</li> <li>○ Heads of supporting agencies</li> <li>○ Sector Commanders</li> </ul> </li> <li>• Having the Action Plan up to date and available</li> </ul> <p><b>Did the candidate:</b></p> <p><input type="checkbox"/> Communicate the action plan to key personnel?</p> <p><b>Assessor notes:</b></p>	<b>Action Plan is communicated in a timely fashion to all key personnel</b>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
4.4	<p>Candidates must regularly measure the effect of their strategy and tactics and alter these where necessary in response to incident variables.</p> <p>If the situation demands a change in strategy or tactics, the Action Plan must be amended and communicated accordingly.</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Regularly review their strategy and tactics in response to incident variables?</li> <li><input type="checkbox"/> Communicate any changes to their strategy and tactics?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>Strategy and tactics are regularly reviewed and changed where necessary.</b></p> <p><b>Changes to strategy and tactics are communicated.</b></p>	

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4.5	<p>Candidates must demonstrate the incident is stabilised or the responsibility is handed over.</p> <p><b>Range:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Secure the scene</li> <li><input type="checkbox"/> Scene handover</li> <li><input type="checkbox"/> Re-commissioning of equipment and appliance/s</li> </ul> <p>The process of handover should include a one on one briefing with the new Incident Controller or responsible person to discuss relevant issues such as:</p> <ul style="list-style-type: none"> <li>o Current state of the emergency</li> <li>o Current resource deployment</li> <li>o Resource reserve</li> <li>o Tactics and strategy employed</li> <li>o Action Plan</li> <li>o Safety matters</li> <li>o Release of information</li> </ul> <p>The process of handover may involve taking actions to manage:</p> <ul style="list-style-type: none"> <li>• Scene security, to protect evidence or scene integrity for later investigation and/or to protect against looting or intrusion</li> <li>• Appliance and equipment recommissioning</li> <li>• Crew refreshments and welfare</li> <li>• Drafting and publishing information for Media release</li> </ul> <p>When handover is complete, candidates must transmit a radio message to state that now holds responsibility for the incident/building.</p> <p>Note: <i>Handover to the building owner or their representative must not occur if there is any actual or potential risk to life.</i></p> <p><i>When the emergency is deemed to be over, the Incident Controller must inform the building owner that Fire Service attendance will be on a contractual basis and indemnity forms must be signed off before clean up actions can commence.</i></p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Hand the incident over in accordance with SOP's?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>Handover is completed in accordance with SOP's.</b></p>	

Element and PC	Evidence Typical answer/product/performance expected from the learner/candidate(s)	Judgement Statement (A statement that defines the standard to be achieved)	Result C/NYC
4.6	<p>Candidates must take action to secure the scene and preserve it for investigation and to ensure possible items of evidence remain undisturbed.</p> <p>Actions may include:</p> <ul style="list-style-type: none"> <li>• Restricting/prohibiting entry to all or parts of the incident ground</li> <li>• Taking photographs/video</li> <li>• Requesting Police to establish scene guard</li> </ul> <p>Note: If a scene guard is to be established, candidates must work through Police. They should not call security companies, (the Police may), or use standby fire service crews for this purpose.</p> <p>Candidates must explain the requirements of maintaining a chain of evidence.</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Take appropriate action to secure the scene and preserve it for investigation?</li> <li><input type="checkbox"/> Explain the requirements of maintaining a chain of evidence?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>The scene and possible evidence are protected against unnecessary disturbance and/or further damage</b></p>	
4.7	<p>Candidates must gather and collate all of the data required to complete reporting requirements and must complete the reports.</p> <p><b>Did the candidate:</b></p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Gather all of the data required to complete the required reporting?</li> <li><input type="checkbox"/> Complete the required reports?</li> </ul> <p><b>Assessor notes:</b></p>	<p><b>Reporting requirements are met in accordance with SOP's</b></p>	