



Fire & Rescue Services ITO

Assessor Assessment Guide Unit Standard 3287 Suppress vegetation fires with water and with water with additives (Level 3, Credit 2 ,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 use of a range of hose and waterway equipment, application of additives, safety precautions when using these, application of water and additives during mop-up on fires, relocation of hose lines, recommissioning of equipment after use, and maintenance of personal safety throughout all phases of fire suppression.

This assessment may take place at a real fire where water and additives are being used, or at a simulated practical event. This assessment may create opportunities to gather evidence for practical performance criteria from other unit standards such as 3270 and pump operator units.

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 operated hose lines using additives, and mopped-up at vegetation fires in a safe manner without endangering the candidate or other crew members, or damaging the environment.

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:

Check practice notes to ensure any additional criteria are considered.

http://www.frsito.org.nz/assessors/resources/Practice_notes.html

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

Level Descriptor

Level	Process	Employing	Responsibility
3	Carrying out processes that: <ul style="list-style-type: none"> Require a range of well developed skills Offer a significant choice of procedures Are employed within a range of familiar contexts 	Employing: <ul style="list-style-type: none"> Some relevant theoretical knowledge Interpretation of available information Discretion and judgement A range of known responses to familiar problems 	Applied: <ul style="list-style-type: none"> In directed activity with some autonomy Under general supervision and quality checking With significant responsibility for the quantity and quality of output With possible responsibility for the output of others

	Information or actions that may provide support for competency	
General	Has the candidate: <ul style="list-style-type: none"> <input type="checkbox"/> Satisfactorily completed a pre-course self-test? <input type="checkbox"/> Satisfactorily completed an oral or written on-course or post-course knowledge assessment? <input type="checkbox"/> Satisfactorily completed simulation exercises? <input type="checkbox"/> Attend a course covering the Unit Standard subject matter? <input type="checkbox"/> Provided proof of experience through records? <input type="checkbox"/> Practically demonstrated in a scenario or real fire? <input type="checkbox"/> Other (please list)? <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	Demonstrate knowledge of the types and use of waterway equipment to fight vegetation fires.		
1.1	Candidates must list and describe commonly used types of hose and waterway equipment used for fighting vegetation fires. Consider the following: May be a written assessment or done orally with actual equipment presented. Did the candidate: <ul style="list-style-type: none"> <input type="checkbox"/> Identify types of hose and waterway equipment? <input type="checkbox"/> Describe their use? Assessor notes:	Hose types and waterway items identified and use described.	

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 describe other considerations that must be taken into account when working with waterway equipment.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> care of (rolled, hose packs) <input type="checkbox"/> packing methods (rolled, hose packs) <input type="checkbox"/> safe practices (correct pressure, directing nozzle, opening / shutting breeching or nozzle too quickly, back-up person, watching for fire spread behind, communications) <input type="checkbox"/> conserving water (use of jet/spray, nozzle pressure, apply water to fire edge, shut down when not in use) <input type="checkbox"/> preservation of the environment (physical erosion, chemical contamination). <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Describe all items listed? <p>Assessor notes:</p>	All items described correctly.	
1.3	<p>Candidate ensures procedures for the use of additives are described in accordance with the primary reference.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> additives applied <input type="checkbox"/> personal safety requirements <input type="checkbox"/> preservation of the environment <p>Consider the following:</p> <ul style="list-style-type: none"> • different additives (soap / foam) and their application • personal safety requirements (washing off splashes, eye protection when cleaning gear, slippery ground) • preservation of environment (run-off, waterways, environmentally sensitive areas, collecting empty containers/rubbish) <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Describe all items listed? <p>Assessor notes:</p>	All items described correctly.	

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
1.4	<p>Candidate ensures mop up procedures are described in accordance with the primary reference.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> use of additives <input type="checkbox"/> effectiveness of additives used <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Describe use of additives and effectiveness of additives during mop-up? <p>Assessor notes:</p>	<p>Use of additives described.</p> <p>Effectiveness of additives described.</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	Demonstrate operation of a fire hose in a vegetation fire setting.		
2.1	<p>Candidate must demonstrate the use of fire hoses in accordance with the primary reference.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> flaked hose <input type="checkbox"/> rolled hose, and <input type="checkbox"/> hose rolled on the bight <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate all types? <input type="checkbox"/> Candidate made up and stowed hose after use? <p>Assessor notes:</p>	<p>Use of all types demonstrated.</p>	
2.2	<p>Candidate must demonstrate applying water and additives using nozzles on:</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> jet and spray for different purposes (knocking down flames, extinguishing edge, penetrating duff, reaching up trees, protection from radiant heat) <input type="checkbox"/> use of foam nozzles <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Demonstrate all items in range statement? <p>Assessor notes:</p>	<p>Application of water and additives demonstrated.</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
2.3	<p>Candidate must demonstrate the hand signals for use on hose lays during all practical demonstrations.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Use hand signals correctly throughout activities? <input type="checkbox"/> Water on? <input type="checkbox"/> Water off? <input type="checkbox"/> Increase pressure? <input type="checkbox"/> Decrease pressure? <input type="checkbox"/> Knock off, make up? <p>Assessor notes:</p>	Signals used correctly.	
2.4	<p>Candidate must demonstrate the identification and replacement of a simulated damaged length of hose and tie a knot in one end of damaged length.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Replace and identify damaged hose? <p>Assessor notes:</p>	Hose replaced and identified.	

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3	Relocate hose line.		
3.1	<p>Candidate must demonstrate working as part of a crew to relocate a charged hose to a new nozzle position.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Help relocate charged hose? <p>Assessor notes:</p>	Charged hose relocated.	

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
3.2	<p>Candidate must demonstrate the relocation of uncharged hose using:</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> shouldering <input type="checkbox"/> pineapple methods <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Relocate uncharged hose using both methods? <p>Assessor notes:</p>	Hose relocated. Both methods demonstrated.	
3.3	<p>Candidate must demonstrate that the safety of the nozzle operator is maintained during relocation of the hose.</p> <p>Consider the following: Candidate advises that water is going off, moving back away from fire edge, having help to move charged hose, care with footing during relocation, use of hand signals.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Maintain safe practices during relocation? <p>Assessor notes:</p>	Safe actions demonstrated.	

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4	<p>Demonstrate safe mopping up of vegetation fires.</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> with water and/or <input type="checkbox"/> water with additives 		
4.1	<p>Candidate must demonstrate that mopping up is carried out using water and/or water with additives.</p> <p>Did the candidate:</p> <ul style="list-style-type: none"> <input type="checkbox"/> Carry out mop-up? <p>Assessor notes:</p>	Mop-up carried out.	

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
4.2	<p>Candidate must demonstrate that they monitor effectiveness of water and additives and communicate with the pump operator.</p> <p>Consider the following:</p> <ul style="list-style-type: none"> • This includes increasing or decreasing pressure as required • calling for additives or having these stopped when necessary • changing ratio of foam mix if necessary <p>Did the candidate:</p> <p><input type="checkbox"/> Monitor effectiveness and make adjustments?</p> <p>Assessor notes:</p>	<p>Effectiveness monitored and changes communicated to pump operator.</p>	
4.3	<p>Candidate must demonstrate methods of dealing with burning and smouldering material and hot spots for different fuel layers:</p> <p>Range:</p> <ul style="list-style-type: none"> <input type="checkbox"/> deep seated <input type="checkbox"/> surface <input type="checkbox"/> overhead fires <p>Consider the following:</p> <ul style="list-style-type: none"> • Candidate must demonstrate this by turning over and wetting • digging out and mixing embers and water, • duff probe • jet, spray <p>Did the candidate:</p> <p><input type="checkbox"/> Demonstrate wet techniques for mop-up and meet range statement?</p> <p>Assessor notes:</p>	<p>Techniques demonstrated.</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
4.4	<p>Candidate must demonstrate that equipment used is recovered and re-commissioned when mopping up operations are completed.</p> <p>Did the candidate:</p> <p><input type="checkbox"/> Help make up and re-commission equipment?</p> <p>Assessor notes:</p>	Make-up and recommissioning completed.	
4.5	<p>Candidate must demonstrate that safety is maintained throughout mop-up stage (PPE, safe practices).</p> <p>Consider the following Candidate must identify hazards and take appropriate action to make safe.</p> <p>Did the candidate:</p> <p><input type="checkbox"/> Maintain safe practices?</p> <p>Assessor notes:</p>	Safety maintained.	