

# Model Answers

**Domain** Forestry > Forest Operations

**Unit** 24579 v4 Demonstrate knowledge of incident response in plantation forests Level 3 Credits 5

## Entry information

There are no pre-requisite requirements for this unit.

# Assessment instructions

## You will need to be able to show you can:

- Demonstrate knowledge of incident response and reporting in plantation forests.
- Demonstrate knowledge of response to unauthorised activities in plantation forests.

## Important information

- Carefully read through the rest of this Assessment so you know exactly what is expected.
- All evidence you provide for this assessment must be your own work.
- Clearly name and label all attached evidence.

## What you need to do



**Question Set 1 – Planning**



**Question Set 2 – Incident/Emergency Response**



**Question Set 3 – Responding to Unauthorised Activities**

You can also attach additional evidence which shows you have the required skills and knowledge, e.g. photos, worksite documents, checklists, work samples, videos.

# Unit standard information

## Definitions

- *Accepted industry practice* – approved codes of practice and standardised procedures accepted by the wider forestry industry as examples of best practice.
- *Forestry operations* - include forest establishment, silviculture, harvesting, forest inventory, and forest and crew management.
- *Incident* – an unintended event resulting in personal injury, property damage, or damage to the environment.
- *Worksite procedures* refer to documented procedures used by the organisation carrying out the work and applicable to the tasks being carried out. They may include but are not limited to – standard operating procedures, site safety procedures, equipment operating procedures, quality assurance procedures, housekeeping standards, procedures to comply with legislative and local body requirements.

# Unit standard evidence map

| Unit 24579 v4   |   | Demonstrate knowledge of incident response in plantation forests | Level 3    | Credits 5 |
|---|---|--|------------|-----------|
| Outcomes and Performance Criteria   |   | Evidence   | No.        |           |
| <b>Outcome 1:</b> Demonstrate knowledge of incident response and reporting in plantation forests. |   |  |            |           |
| 1.1   | Types of incidents are explained in terms of their trigger points.<br>Range: environmental, fire, personal injury, security, business loss.   | Question Set 2   | 5          |           |
| 1.2   | Incident or emergency plan is located, update intervals identified, and individual responsibilities described.  | Question Set 1   | 1,2,3,4    |           |
| 1.3   | Steps to be taken on discovery of an incident are described in accordance with worksite procedures.<br>Range: evidence of fire and two other different types of incident.   | Question Set 2<br>Questions Set 3                                | 6,7,8<br>3 |           |
| 1.4   | Factors to consider when deciding on the response to an incident are explained in accordance with worksite procedures.<br>Range: personnel, resources, communications, location, type of incident.  | Question Set 1   | 6          |           |
| 1.5   | Requirements to notify an incident to relevant authorities are described in accordance with worksite procedures.<br>Range: may include but is not limited to – Police, local council, Ministry for Primary Industries, owner of equipment, forest owner, neighbours, WorkSafe, insurer, lawyer. | Question Set 2   | 1          |           |
| 1.6   | Components of an incident response plan are described in accordance with worksite procedures.<br>Range: may include but is not limited to – communications, co-operation with authorities, personnel, resources, media liaison, health and safety.  | Question Set 1   | 5          |           |
| 1.7   | The requirement to protect the scene of an incident is explained in accordance with worksite procedures and accepted industry practice.<br>Range: evidence, damage to people, damage to property, further incidents   | Question Set 2   | 2a – 2c    |           |


|  |  |                |     |
|--|--|----------------|-----|
| 1.8  | Importance of incident debriefing is explained in terms of reviewing response and communication procedures and allocation of responsibilities during the incident. | Question Set 2 | 3,4 |
| <p><b>Outcome 2:</b> Demonstrate knowledge of response to unauthorised activities in plantation forests.</p> <p>Range: may include but is not limited to – theft, vandalism, loitering, marijuana, poaching, dumping rubbish, recreational activities.</p> |  |                |     |
| 2.1  | Information that should be recorded when unauthorised activities are observed, is described in accordance with worksite procedures.                                | Question Set 3 | 1,3 |
| 2.2  | Personnel that should be notified when unauthorised activities are observed are identified in accordance with worksite procedures.                                 | Question Set 3 | 2   |



## Question Set 1 – Planning

These questions are about your worksite/s emergency or incident plan.

Use your own words. Your assessor may ask you more questions to check your understanding.

1. Where is your worksite's plan kept? 

### Assessor


This question supports PC 1.2.

### Judgement statement

- The candidate accurately describes the location of the incident or emergency plan on their worksite.

### Example answer

The full plan is in the foreman's cabinet in the container. There is also key information about the plan up on signs and written on the whiteboard.

2. What are **four** key responsibilities that the Officer has according to your worksite plan? 

### Assessor

This question supports PC 1.2.


### Judgement statement

- The candidate correctly describes **four** key responsibilities that the Officer has listed on the plan.
- Answer is in accordance with the incident or emergency response plan.

### Example answers

- To ensure emergency procedures are in place.
- To ensure the emergency procedures include location, communications, transport, an evacuation process and emergency equipment.
- To ensure that everyone on site understands the procedures.
- To investigate all incidents, including accidents, harm and near misses.
- To report any incidents resulting in serious harm to Worksafe.
- To determine the need for extra help or resources e.g. ambulance or helicopter, as required.
- To make sure the details of all incidents are recorded properly.

- To ensure disturbance at the scene of any incident is minimised.

3. What are **four** key responsibilities that the workers have according to your worksite plan? 

### Assessor


This question supports PC 1.2.

### Judgement statement

- The candidate accurately identifies **four** key responsibilities that workers have listed on the plan.
- Answer is in accordance with the incident or emergency response plan.

### Example answers

- To be aware of and follow established emergency procedures.
- To ensure the safety of myself and others when responding to an incident.
- To communicate the emergency to others on site if first on the scene.
- To communicate the emergency by calling 111 if in cell phone contact or use the R/T to contact Base.
- To provide first aid to any injured people.
- To determine the need for extra help or resources e.g. ambulance or helicopter, as required.
- To minimise disturbance to the scene of the incident.
- To report all incidents to relevant parties.
- To record details of the incident.
- To assist in incident investigations.

4. What are **four** situations that could result in the plan being updated or reviewed? 

### Assessor


This question supports PC 1.2.

### Judgement statement

- Candidate accurately describes **four** situations that could result in the plan being updated or reviewed.

### Example answers

- At least annually.
- New machinery or equipment on site.
- When there is a change in work practices.
- Whenever there are changes in the legislation.
- When there are recommendations made after incident investigations.
- When there are recommendations made after an audit.

5. Listed below are **five** key parts of an effective incident response plan. 

For each component, give **three** examples of requirements that must be met on your worksite.

### Assessor

This question supports PC 1.6.

### Judgement statement

- The candidate correctly describes the listed components of their worksite's incident response plan.
- Three** examples of requirements included in the worksite's plan are provided for each component.
- Answers are in accordance with the candidate's worksite procedures.

### Example answers

| Component      | Examples  |
|----------------|---|
| Communications | <ul style="list-style-type: none"><li>• All crew members must have the equipment and training to be able to communicate an emergency, both on site and to external authorities.</li><li>• Trained or experienced crew members must be able to assess the scene to accurately provide essential information to emergency services.</li></ul> |

|                              |  |
|------------------------------|--|
|                              | <ul style="list-style-type: none"> <li>• All communications equipment to be checked regularly to ensure it is in good working order.</li> <li>• All crew members need to know who to contact in different types of emergency, and how to reach them.</li> <li>• Crew to remain in contact with emergency services throughout the emergency.</li> <li>• Crew to remain discreet and not name any injured persons when communicating an emergency.</li> </ul>  |
| Personnel                    | <ul style="list-style-type: none"> <li>• Tasks to be allocated to personnel according to their abilities and skill levels.</li> <li>• Officer to assess the incident and coordinate personnel to keep the incident under control.</li> <li>• All crew to undertake training in emergency response.</li> <li>• At least two people holding first aid certificates must be on site at all times.</li> </ul>  |
| Resources                    | <ul style="list-style-type: none"> <li>• All the equipment needed to manage all likely incidents is on site and compliant.</li> <li>• The site must have the following equipment on site – first aid kits in the container and every vehicle, extinguishers in the container, and every vehicle and machine, additional fire-fighting PPE and equipment in the container, and a spill kit.</li> <li>• Emergency response equipment, including fire extinguishers and first aid kits are regularly checked to make sure they are up to date and compliant.</li> <li>• The crew foreman is responsible for determining the resources required to respond to an incident.</li> <li>• Vehicles must be ready for use in the event of an emergency at all times.</li> </ul> |
| Cooperation with authorities | <ul style="list-style-type: none"> <li>• All incidents must be reported to the relevant authorities.</li> <li>• Incident scenes must be protected to allow investigations by authorities to take place unhindered.</li> </ul>  |



|                              |   |
|------------------------------|---|
|                              | <ul style="list-style-type: none"> <li>• All crew to cooperate through open communication and by providing any information requested by the authority.</li> <li>• With the exception of initial contact with emergency services, all contact with external authorities is to be conducted by the Officer.</li> </ul>  |
| Health and Safety Management | <ul style="list-style-type: none"> <li>• All incidents to be investigated as part of the health and safety management plan.</li> <li>• Debriefings are to be held after every incident with all involved personnel.</li> <li>• Emergency response procedures are to be communicated to all crew through the use of clear signage on site.</li> <li>• The Health and Safety Representative (HSR) will write up the incident report and be in charge of the investigation.</li> <li>• All crew to consider the safety of themselves and others when responding to an incident.</li> </ul> |
| Media liaison                | <ul style="list-style-type: none"> <li>• Media inquiries shall be handled by referring them to the company owners.</li> <li>• Keep media away from the incident to protect them from health and safety issues, prevent them from hampering incident response work, and ensure respect for the privacy of crew members involved.</li> <li>• No employees to speak to the media without prior authorisation from the forest company.</li> </ul>   |

6. Listed below are **five** factors that are important to consider when deciding how to respond to an incident.

For each factor, give **three** specific examples of what must be considered.

### Assessor

This question supports PC 1.4.

### Judgement statement

- The candidate correctly explains the factors that must be considered when deciding on an appropriate response to an incident.
- Three** examples of what must be considered for each factor are provided.
- Answers are in accordance with worksite procedures.

## Example answer

| Factor           | What must be considered   |
|------------------|---|
| Personnel        | <ul style="list-style-type: none"> <li>• The skills and experience crew have in incident response and using incident response equipment.</li> <li>• Location of crew.</li> <li>• Availability of qualified crew to provide first aid or drive a vehicle.</li> <li>• Which crew were injured or directly involved in the incident.</li> </ul>  |
| Resources        | <ul style="list-style-type: none"> <li>• The availability of equipment, vehicles and / or first aid kits.</li> <li>• The location of equipment, vehicles and / or first aid kits.</li> <li>• The suitability of the available fire-fighting equipment for the fire type.</li> <li>• The availability of machinery and location.</li> </ul>  |
| Communications   | <ul style="list-style-type: none"> <li>• Who the best person is to stay in communication with emergency service or forest base.</li> <li>• Availability of radio and/or cell phone coverage.</li> <li>• Who the appropriate personnel and/or authorities to contact are.</li> <li>• Information relay between crew members for any changes to weather, environment or patient.</li> </ul> |
| Location         | <ul style="list-style-type: none"> <li>• Access to the site e.g. road condition or room for a helicopter to land.</li> <li>• Availability of a good source of water in the case of a fire.</li> <li>• Distance from local emergency services.</li> <li>• Road condition, room for helicopter to land or if a winch required.</li> </ul>   |
| Type of incident | <ul style="list-style-type: none"> <li>• The immediate seriousness of the incident.</li> <li>• Whether the incident has resulted in harm.</li> <li>• The likelihood of the incident escalating and causing further harm or damage.</li> </ul>   |

|  |  |
|--|--|
|  | <ul style="list-style-type: none"><li>• Who the appropriate personnel and/or authorities to contact are.</li><li>• Whether the incident is the result of illegal activity.</li></ul> |
|--|--|

**Assessor** – record key points from candidate’s verbal answers as accurately and fully as possible.

**These answers were written by:**

Candidate

Assessor



## Question Set 2 – Incident / Emergency Response

These questions are about identifying incidents, who to notify about an incident, how to protect an incident scene and the importance of debriefing.

Use your own words. Your assessor may ask you more questions to check your understanding.

### Judgement statement

- Answers are in accordance with accepted industry practice and the candidate's worksite procedures.

### Example answers

1. For each type of incident listed below, identify the authorities and/or people that must be notified.

### Assessor

This question supports PC 1.5.

### Judgement statement

- The candidate accurately describes the requirements to notify relevant authorities for each listed type of incident.

### Example answers

| Incident                  | Authorities that need to be notified                         |
|---------------------------|--|
| Fire                      | PCBU, NZ (Rural) Fire Service, neighbours.                   |
| Harm injury               | Worksafe NZ, St Johns, PCBU.                                 |
| Chemical spill            | NZ (Rural Fire) Service, Regional Council, PCBU.             |
| Machine fire              | NZ (Rural) Fire Service, Machine Owner, PCBU.                |
| Damage to fences          | PCBU, neighbours, Regional Council, Insurer.                 |
| Contamination of waterway | PCBU, Regional Council, neighbours, Lawyer.                  |
| Vehicle accident          | Police, St Johns, Vehicle Owner, Insurer, Worksafe and PCBU. |

2. Answer questions 2a – 2c about protecting the scene of an incident.



### Assessor

This question supports PC 1.7.

### Judgement statement

- The candidate correctly explains the requirements to protect each of the following at the scene of an incident: evidence, people, property.
- The candidate correctly describes **two** ways an incident scene can be effectively protected and/or preserved.
- The candidate explains how protecting the scene can contribute to the prevention of further incidents.

### Example answers

- a. Listed below are **three** key things that must be protected at the scene of an incident.

For each, explain why it is important that it is protected.

| What is protected | Why it must be protected   |
|-------------------|--|
| Evidence          | Evidence at the scene will provide details of what happened and why. Essential for effective incident investigation.                                     |
| People            | To ensure no person is harmed, whether directly involved in the incident or not.   |
| Property          | Damage to equipment or machinery can be costly and slow down production, so at risk equipment, machinery or property must be protected if safe to do so. |

- b. What are **two** ways an incident scene can be protected or preserved?


For each, explain why it is important that it is protected.

- Cordon off the area with 'danger' tape.
- Mark around the area with paint.
- Post someone at the scene to keep people away.

- c. How can protecting the scene of an incident help to prevent further incidents?

Protecting the scene helps investigators to build a clear picture of what happened and why. If the reasons for an incident are known, then controls can be put in place to prevent incidents of a similar

nature occurring again, both at the worksite, and even in the wider industry.

3. Listed below are **three** issues that should be discussed and reviewed in an incident debrief. 

For each issue, give **two** examples of what should be discussed and/or reviewed.

**Assessor**

This question supports PC 1.8.

**Judgement statement**

- The candidate correctly explains incident debriefings in terms of reviewing the response and communication procedures that were followed and the allocation of responsibilities during an incident.
- Two** examples of what should be reviewed is provided for each.

**Example answers**

| Issues   | Examples   |
|--|--|
| The <b>response procedures</b> that were followed.       | <ul style="list-style-type: none"> <li>• Were the response procedures followed correctly by everyone?</li> <li>• Were they effective?</li> <li>• Was the response quick enough?</li> <li>• Was the crew fully prepared?</li> <li>• Did the crew have the equipment they needed close to hand and in good working order?</li> </ul> |
| The <b>communications procedures</b> that were followed. | <ul style="list-style-type: none"> <li>• Did everyone communicate effectively within the crew?</li> <li>• Were the correct authorities notified?</li> <li>• Was the communications equipment in good working order?</li> <li>• Did everyone know how to communicate and respond to the emergency signals?</li> </ul>               |
| How <b>responsibilities</b> were allocated to the crew.  | <ul style="list-style-type: none"> <li>• Who did what tasks?</li> <li>• Was everyone clear on what their responsibilities were at the time of the incident?</li> <li>• Was everyone trained and capable of doing the tasks they were allocated?</li> </ul>   |

4. Why is it important to have a thorough debrief following an incident?



Give **two** reasons.

### Assessor

This question supports PC 1.8.

### Judgement statement

The candidate correctly explains the importance of incident briefings. **Two** clear reasons are provided.

### Example answers

- It allows everyone involved to comment and reflect on the effectiveness of the response and see what improvements are needed.
- Any changes needed in the incident response plan can be identified and the plan updated.
- It can provide feedback to the crew on what they did right and what they need to do better or differently if there is another similar incident.

5. Give at least **three** examples for each incident type.



### Assessor

This question supports PC 1.1.


### Judgement statement

The candidate correctly explains what could cause each incident type.

### Example answers

| Incident type   | Example  |
|-----------------|--|
| Environmental   | <ul style="list-style-type: none"><li>• Soil erosion.</li><li>• Water contamination.</li><li>• Chemical or fuel spill.</li><li>• Waste management.</li></ul> |
| Fire            | <ul style="list-style-type: none"><li>• Petrol fire.</li><li>• Vehicle electrical fire.</li><li>• Forest fire.</li><li>• Severe weather events.</li></ul>    |
| Personal injury | <ul style="list-style-type: none"><li>• Hearing loss.</li><li>• Sunburn.</li></ul>   |

|               |  |
|---------------|--|
|               | <ul style="list-style-type: none"> <li>• Chainsaw injuries.</li> <li>• Cuts.</li> <li>• Slips and trips.</li> <li>• Vehicle accident.</li> </ul>   |
| Security      | <ul style="list-style-type: none"> <li>• Vandalism.</li> <li>• Theft.</li> <li>• Poaching.</li> <li>• Trespassing</li> </ul>   |
| Business loss | <ul style="list-style-type: none"> <li>• Global pandemic,</li> <li>• Insured or ill staff.</li> <li>• Equipment or property loss.</li> <li>• Loss of contract.</li> <li>• Prosecution</li> </ul> |

6. Describe **four** key steps you need to take when you discover a fire. 

#### Assessor


This question supports PC 1.3.

#### Judgement statement

- The candidate correctly describes **four** key steps to be taken when a fire is discovered.

#### Example answers

1. Assess the scene. Am I safe and is it safe for me to put fire out. Or move to safe area.
2. Communicate and ensure safety of others.
3. Report the fire by calling 111 or radioing the forest base.
4. Evacuate to emergency site or leave forest if necessary.

7. Describe the key steps you need to take when you discover an environmental incident. 

#### Assessor

This question supports PC 1.3.

#### Judgement statement

- The candidate correctly describes the key steps to be taken when an environmental incident is discovered.



### Example answers

- Assess the scene. Ensure safety of self and others.
- Take immediate, safe action to limit any damage.
- Communicate site location to crew and others in area.
- Report incident to PCBU and appropriate authority.
- Follow up actions required to secure and make site safe.
- Record incident details.

8. Describe the key steps you need to take when you discover a personal injury incident.



### Assessor

This question supports PC 1.3.

### Judgement statement

- The candidate correctly describes the key steps to be taken when a personal injury occurs.

### Example answers

- Assess the scene. Own safety.
- Communicate and check safety of others.
- Take safe action. Start first aid if safe or move people to safe place first before administering first aid.
- Report the incident by calling appropriate authority or radioing foret base for help.

**Assessor** – record key points from candidate's verbal answers as accurately and fully as possible.

**These answers were written by:**

Candidate

Assessor



## Question Set 3 – Responding to Unauthorised Activities

These questions are about how to respond to unauthorised activities.

Use your own words. Your assessor may ask you more questions to check your understanding.

### Judgement statement

- Answers are in accordance with the candidate's worksite procedures.

### Example answers

1. Give **five** examples of unauthorised activities that you must report. 

### Assessor

This question supports PC 2.1.


### Judgement statement

- The candidate correctly identifies **five** examples of unauthorised activity.

### Example answers

Answers may include but are not limited to:

- Theft.
- Vandalism.
- Trespassing.
- Marijuana.
- Poaching.
- Dumping rubbish.
- Recreational activities.

2. Who should be notified about any unauthorised activities happening on your worksite? 

**Assessor**

This question supports PC 2.2.


**Judgement statement**

- The candidate correctly identifies personnel that must be notified when unauthorised activities are observed on their worksite.

**Example answers**

Answers may include but are not limited to:

- My foreman or supervisor.
- The contractor.
- Company owner.
- Forest and/or company owner.
- Police.
- Security.

3. What key information must you record if you see signs of unauthorised activities on your forest worksite? 

Give at least **three** things that should be recorded.

**Assessor**

This question supports PC 1.3 and 2.1.

**Judgement statement**

- The candidate correctly describes the information that must be recorded if they observe unauthorised activities on their forest worksite.
- Three** things that should be recorded are provided.

**Example answer**

Answers may include but are not limited to:

- The type of activity e.g. poaching.
- Date, time and location.
- The number of people involved and what they look like.
- Vehicle details e.g. make, model, colour, licence plate.
- How they entered and left the forest if I can tell.
- Firearms.

**Assessor** – record key points from candidate’s verbal answers as accurately and fully as possible.

**These answers were written by:**

Candidate

Assessor