Example 1: How to apply the CRWM guideline - Transfer station only using skip bins to store CRWM



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Guideline

A transfer station only using skip bins to store combustible recyclable and waste materials

This example aims to help you apply the fire risk management principles outlined in <u>Management and</u> <u>storage of combustible recyclable and waste materials – guideline</u> (publication 1667) (the guideline) to a transfer station which is only using skip bins to store combustible recyclable and waste materials (CRWM).

We have developed this example to help you, as a waste and resource recovery facility manager, better understand how to manage the fire risk associated with combustible recyclable and waste materials, and to comply with the new <u>Victorian environment protection laws</u>.

This example:

- is intended for use as a guide only. Your own risk assessment and risk management process may require considerably more detail. Where appropriate, you may also need to obtain legal advice or consult with a fire safety specialist
- demonstrates how to follow four basic steps to assess and control the main fire risks present at facilities of varying size and type
- includes some measures you could introduce to eliminate or reduce the risk of fire so far as
 reasonably practicable, especially where the example shares things in common with your own site
 and operations
- includes a site map that illustrates the controls discussed within the text. The site map does not represent site layout plans for emergency management purposes
- focuses on critical risks and controls. It does not provide an exhaustive list of risks and controls for
 every situation. You may need to seek additional or more tailored advice from a <u>suitably qualified</u>
 <u>person</u> or other trusted source if your activities are not covered, or are not adequately addressed, in
 this example.

About the site

Elissa runs a council transfer station in regional Victoria and holds an EPA registration:

- Comingled recycling materials consisting of cardboard, glass, paper and plastic are accepted at the facility.
- Most of the CRWM Elissa receives is stored in three separate skip bins. Each skip bin stores six cubic metres of material.
- The skip bins are located within the fenced boundary of the property, which is locked outside of operating hours.
- The skip bins are stored on a concrete slab.
- There is an unsealed access road six metres wide around the concreted drop-off area.
- The surrounding area consists of soil with weeds and grasses growing inside and along the fence line.
- There is no mains water onsite.
- In most circumstances, there is only one staff member present at the facility.





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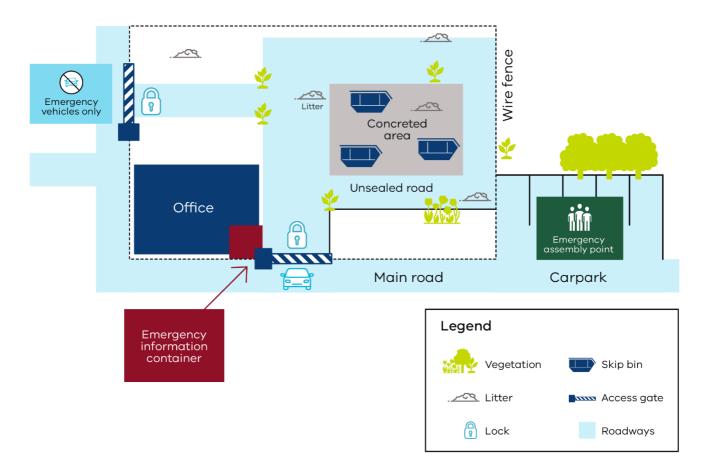


Figure 1: Elissa's transfer station *before* completing her fire risk assessment. Note the figure is not drawn to scale.

Using the guideline to minimise risk and comply with the Victorian environment protection laws

To comply with the Victorian environment protection laws, Elissa must:

- understand the fire hazards associated with her facility's activities
- conduct and document a fire risk assessment
- take all reasonably practicable steps to store and manage CRWM in a manner that minimises the risk of harm to human health and the environment
- prepare an emergency management plan
- comply with <u>conditions</u> stipulated in her registration.

Example 1:

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Four-step process to manage risks to human health and the environment

There are four continuous steps Elissa needs to follow to manage her risks. They form the fire risk assessment process.



Definitions

Hazard: Something that has the potential to cause harm through, for example, the air, water or soil.

Risk: The threat that a hazard poses to human health or the environment.

Control: Prevents harmful events from happening in the first place (preventative control) or limits the consequence or damage from a harmful event (mitigating control). The hierarchy of controls (Figure 8 in the guideline) can be used to support the identification and selection of controls by providing a prioritisation framework.

Elissa follows the four steps and takes these actions:

Step	Action	What Elissa does
1	Identify hazards – what hazards are present that might cause harm?	Elissa identifies hazards including vegetation in and around the drop-off area and litter that has escaped from the bins during drop-offs. She currently locks the gates after hours but thinks vandals may still present a hazard. Vandals could damage her boundary fence to gain access to her bins or throw burning materials over the fence. In the event of a fire, Elissa notes that she does not have any firefighting infrastructure or mains water for use onsite.
2	Assess risks – what is the risk, based on the likelihood of the hazard occurring and causing harm, and the consequence of that harm (i.e. the impact)?	For each hazard Elissa has identified, Elissa considers the likelihood and consequence associated with that hazard. Elissa captures this information in the site risk register as documentation of this risk assessment process. She assesses that surrounding vegetation and escaped litter impedes access to the drop-off area and could contribute to a fire spreading. She believes that vandalism and arson are possible, as other regional transfer stations have had similar issues with arson after hours.



Step	Action	What Elissa does
		Elissa assesses that if a fire is started by vandals, it will spread beyond her site and burn across local farming land.
3	Implement controls – what controls are suitable and available to the business to eliminate or reduce a risk so far as reasonably practicable?	Elissa implements a regular housekeeping schedule to remove litter, grass or weeds within the drop-off area and from the surrounding fence line. She makes the removal of litter and materials around the skip bins part of her daily shut-down procedure.
		To minimise the risk of vandals accessing her CRWM, Elissa closes and locks the lids of the skip bins and the facility gates at the end of the day. She also maintains the site fencing and gates to make sure they are secure.
		She is greatly reducing the risk of harm from any fire that could occur in her skip bins by maintaining the bin lids and making sure they can close properly. Elissa stores her bins on a hard surface, and routinely clears litter and hazards in the open space surrounding her site.
		Elissa's CRWM storage is well below the maximum thresholds for waste and resource recovery facilities holding a registration permission. She only stores 18 m³ of CRWM on her site at any time.
		Emergency management plan
		Elissa contacts her local fire brigade to discuss her fire management options. They advise that fire extinguishers should be installed as a control measure for the low volume of CRWM onsite. They also advise that a fire in her drop-off area can be managed by emergency vehicles. She incorporates this information into her emergency management plan.
		If there is a fire during operating hours, staff will evacuate and use the carpark next to her site as the emergency assembly point. She ensures that emergency information is stored in the re-located Emergency Information Container in front of the boom at the front gate. She also displays the evacuation procedure and assembly point on the outside wall of the site office for staff and visitors to clearly see.
		Maintaining access on all sides of the drop-off area enables safe evacuation of the area. This helps emergency services deal with fires in an effective and timely manner.
		She ensures that the flow of traffic around her site for the public and contractors is clearly indicated so that the site can be effectively evacuated and makes sure the evacuation process (including directing any members of the public onsite at the time) is communicated to her staff and contractors.
		Elissa sets up an emergency planning committee with her staff to maintain the emergency management plan, response procedures and related training.
4	Check controls – review controls to ensure they are effective.	Elissa has recorded her site hazards, risks and controls. She includes how controls will be checked for effectiveness in the risk register. This becomes documented evidence of her risk assessment.
		She has also updated her emergency management plan to include credible fire scenarios and how they will be addressed.
		Elissa already holds weekly toolbox meetings for herself and her two staff. They will now use these meetings to sign off on routine housekeeping, identify any areas



Step Action	What Elissa does
	where site policies are not being followed and discuss other hazards or risks that may arise.
	Finally, she conducts a fire drill at least once a year to make sure that her staff are aware of their roles during a fire and are following evacuation procedures.

Documenting the four-step risk management process

See Table 11 in <u>the guideline</u> for an example of how Elissa might document the hazards, potential causes and impacts at her transfer station, and how she will effectively manage them.



Elissa will review and update the hazard and risk register as part of her fire risk assessment actions. She ensures that her implementation of controls is proportionate to the risks that her business activities pose.

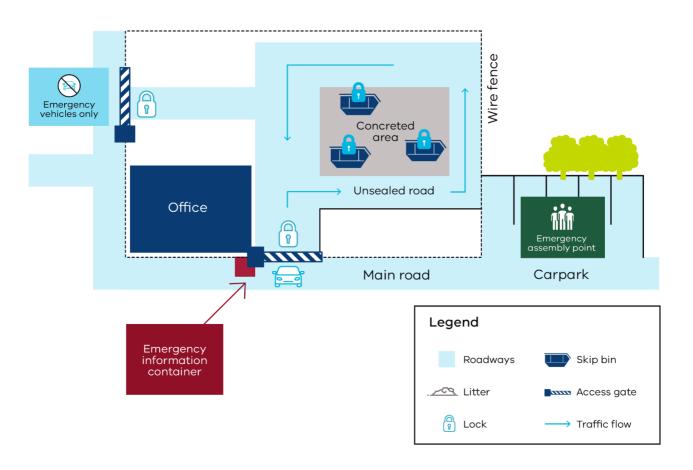


Figure 2: Elissa's transfer station *after* controls have been implemented.

Note the figure is not drawn to scale.

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Meeting the performance objectives and expected outcomes

Elissa demonstrates how she has taken reasonable steps to comply with the Victorian environment protection laws by meeting these performance objectives and expected outcomes in the guideline:

- Assessing the risk from fire see Chapter 3.
- Controlling your fire hazards and risk see Chapter 4.
- Effective storage management controls see Chapter 5.

More information

- Assessing and controlling risk: a guide for business (publication 1695)
- Combustible recyclable and waste materials
- <u>Management and storage of combustible recyclable and waste materials guideline</u> (publication 1667)
- Fire prevention: combustible recyclable and waste materials factsheet (publication 1759)
- Industry guidance: supporting you to comply with the general environmental duty (publication 1741.1)
- Reasonably practicable (publication 1856)
- Permissions scheme policy (publication 1799.2)
- Summary of waste framework (publication 1756.2)
- Management and storage of combustible recyclable and waste materials <u>- indoor storage guideline</u>

This publication is for general guidance only. You should obtain professional advice if you have any specific concern. EPA Victoria has made every reasonable effort to ensure accuracy at the time of publication.

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As Victoria's environmental regulator, we pay respect to how Country has been protected and cared for by Aboriginal people over many tens of thousands of years.

We acknowledge the unique spiritual and cultural significance of land, water and all that is in the environment to Traditional Owners, and recognise their continuing connection to, and aspirations for Country.