



Priority Learning Moment

Industry-Submitted Incident Notification

IN-031-2026 | Vehicle Fire Risk from Vegetation Build-Up

This Priority Learning Moment has been submitted to Energy Safety Canada by a company wishing to share a safety lesson.

Incident Summary

Dry vegetation packing into the hot underside of a vehicle has started two fires and come close twice more. The most recent involved a fleet truck that caught fire at a field location. No one was hurt. This alert explains how this hazard works and why it is so hard to spot.

The Hazard

When driving into standing crop, stubble or tall grass to reach a well, plant material packs into the tight spaces around the exhaust, frame, transmission and radiator. Those surfaces are hot enough to ignite dry material. This has occurred four times in four years, at four different locations.

Why You Will Not See It Coming

- **Green crop still packs and still burns.** Material that looks green going in dries out fast against a hot exhaust. A crop assessment made from the cab cannot tell you what is building up underneath.
- **It is invisible while you drive.** It accumulates out of sight — under the vehicle, behind the radiator louvres, up inside the frame. In one case it took a dealer teardown to clear it.
- **Ignition is delayed.** In both fires the vehicle left the field before anything showed. One ignited once back on the highway. Leaving a lease without noticing anything is normal and is not a sign the vehicle is clear.
- **Vehicle design can trap material.** The exhaust can run close to a frame cross member, forming a pocket where crop collects. Side steps and low clearance can make it hard to see or reach underneath, and radiator louvres can block access. That is how the equipment is built, not a reflection of anyone's diligence.



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- **Speed matters.** Driving quickly through standing crop cuts and draws material up into the vehicle. Slower travel tends to lay it over instead.

Four Events, Four Locations, Four People

Two of these events were caught and reported before anything burned. Four people, doing the job the way it was set up, encountered the same hazard. This indicates a predictable outcome of how the work is designed, rather than a people problem.

When	Where	What Happened
Oct 2022	Field location 1	After driving through free-standing crop, a truck radiator packed with straw. It was difficult to clean behind the louvres, and the truck went to the dealer to be taken apart. <i>Hazard ID</i>
Jul 2023	Field location 2	Crop packed into the exhaust at the frame and transmission while accessing a plunger well. The truck caught fire once back on the highway. Extinguishers were used and the fire department attended. <i>Incident</i>
Aug 2023	Field location 3	An operator checked underneath after driving in and out of a well and found canola wedged into the rear differential seal. <i>Hazard ID</i>
Aug 2026	Field location 4	A fleet truck caught fire at a field location, with flames in the engine bay and burning beneath the driver and passenger seats. <i>Incident</i>

What It Looks Like Afterward

The truck below was operating at a field location when fire took hold in the engine bay and beneath the cab seats. This is the outcome we are working to prevent.



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Photographs taken on scene following the vehicle fire.

What Worked Well

During the most recent event, several parts of the response worked well:

- **The operator stopped at the first sign of smoke**, put the vehicle in park and shut it off immediately.
- **Two extinguishers were deployed** by the operator and a second worker who was within earshot at a nearby location.
- **The battery was disconnected.** With the battery live, a burned-through fuel line can allow the fuel pump to keep feeding a fire. A previous vehicle fire kept reigniting for this reason. The battery should only be disconnected if it is safe to do so.
- **911 was called** rather than contacting a local department directly. The dispatcher understood the LSD.
- **The crew withdrew to the 100 m distance** directed by the fire department and staged there.
- **The emergency response plan was activated within six minutes** of the first phone call, with a wash trailer and bulk water trailer staged to protect the surrounding field.
- **Communication was handled by a second person** so the operator could focus on the fire, and the landowner was spoken to on scene.



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Know What an Extinguisher Can and Cannot Do

Hand extinguishers knocked the flames down repeatedly, but the fire kept returning because the heat and burning material underneath could not be reached. A local volunteer firefighter advised that putting out a vehicle fire typically takes one to three cubic metres of water. Two hand units cannot do that. Once a vehicle fire is established, the objective is to protect people and stop it from spreading, not to save the vehicle.

Before Driving into Crop

Do not drive into standing crop, stubble or tall grass unless it is absolutely necessary, and not without appropriate approval. If the task can wait, be done on foot or be reached another way, that is the expected choice. Where entry is genuinely required, get approval first, travel slowly so material is laid over rather than cut and drawn up, and plan to check and clear the vehicle afterward.

This should be a decision the organization makes with the worker, not one they are left to make alone at the field edge.

Clearing Build-Up Is Itself a Hazardous Task

Getting under a vehicle to remove packed vegetation introduces additional hazards. Before clearing anything:

- **Treat components as hot.** Exhaust, driveline and brakes stay hot enough to burn long after shutdown and may be hot enough to re-ignite material. Let them cool and wear appropriate gloves and eye protection.
- **Put the vehicle in a zero-energy state.** Turn the engine off, remove the key, place the transmission in park and set the park brake. Consider disconnecting the battery where the work warrants it.
- **Prevent the vehicle from rolling.** Park on level ground and chock the wheels. Never rely on the transmission alone.
- **Never get under an unsupported vehicle.** Do not jack a vehicle without proper stands and do not put yourself anywhere a shift in the vehicle could trap you.



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- **Manage traffic.** Pull well clear of the roadway or lease road, use hazard lights and set out cones or signage. Do not perform this work on a shoulder or active access road with traffic moving past you.
- **Use tools, not hands.** A blower, compressed air or a hook can reach into places your arm should not go. If material cannot be safely cleared from outside the vehicle, report it and have it handled at an appropriate maintenance location.
- **Work with someone where you can** and tell someone where you are if you cannot.

What We Are Doing

The fixes for this belong to the organization, not to individual drivers. Following the *After-Action Review*, actions include:

- **A crop-entry approval expectation** to make entry into standing crop a planned, approved decision rather than an individual judgment made under time pressure.
- **Building clean-out into the work** through scheduled checks and cleaning of the undercarriage, exhaust area and radiator during crop season, with time allowed for the work and safe means to do it.
- **A seasonal reminder** to raise this hazard at operations and safety meetings ahead of each crop season.
- **Extinguisher guidance and checks**, including physically checking water units for correct fill and charge.
- **Reviewing vegetation control and potential equipment changes**, such as shielding or exhaust wrap, while recognizing that added shielding can trap more material and make inspection harder.

What You Can Do

- **Talk about this hazard** at your next tailgate, particularly with anyone new to field work and with contractors and vendors who drive the same fields.
- **Get approval before entering crop**, and travel slowly if you do.
- **Check underneath after crop-season entries**, following the precautions above, and report what you find.



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- **Check your extinguishers physically**, not just that they are present. One water unit on scene held water but had lost its pressure.
- **Do not rush the response**. Driving fast to reach an incident adds a second emergency. Getting there safely is getting there.
- **Keep reporting and identify what gets in the way**. If checking or cleaning is impractical, slow, or the vehicle makes it difficult, that information is important.

Consistent with Human and Organizational Performance principles, the focus is on the conditions that made these outcomes likely, not on the people who encountered them. As was said in the After-Action Review, “there could be many other operators driving around who are carrying build-up right now”. That is a system to fix, not a person to correct. Error is normal; blame teaches us nothing and costs us the reporting we depend on.

Learning Together

Energy Safety Canada (ESC) facilitates the sharing of safety knowledge to support industry-wide learning and continuous improvement. By making lessons learned and leading practices accessible, ESC helps organizations of all sizes learn from one another and strengthen safe work performance.

This resource is intended to support learning and informed decision-making. Every organization is responsible for determining how the information applies to its own operations. For the full legal disclaimer, visit energysafetycanada.com/legal.

Share a Priority Learning Moment

Every lesson shared has the potential to prevent an incident. If your organization has a Priority Learning Moment, [we'd like to hear from you](#).