In-Station Training

TM 25-32a Fuel Spill

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Purpose

Fuel spills often involve a small volume of gasoline or diesel spilled in a roadway, parking lot, or service station. While responders must recognize and address the hazards presented by flammable liquids in this type of incident, control and mitigation is generally straightforward. Fewer fuel spills involve larger volumes and present significant fire and/or environmental hazards.

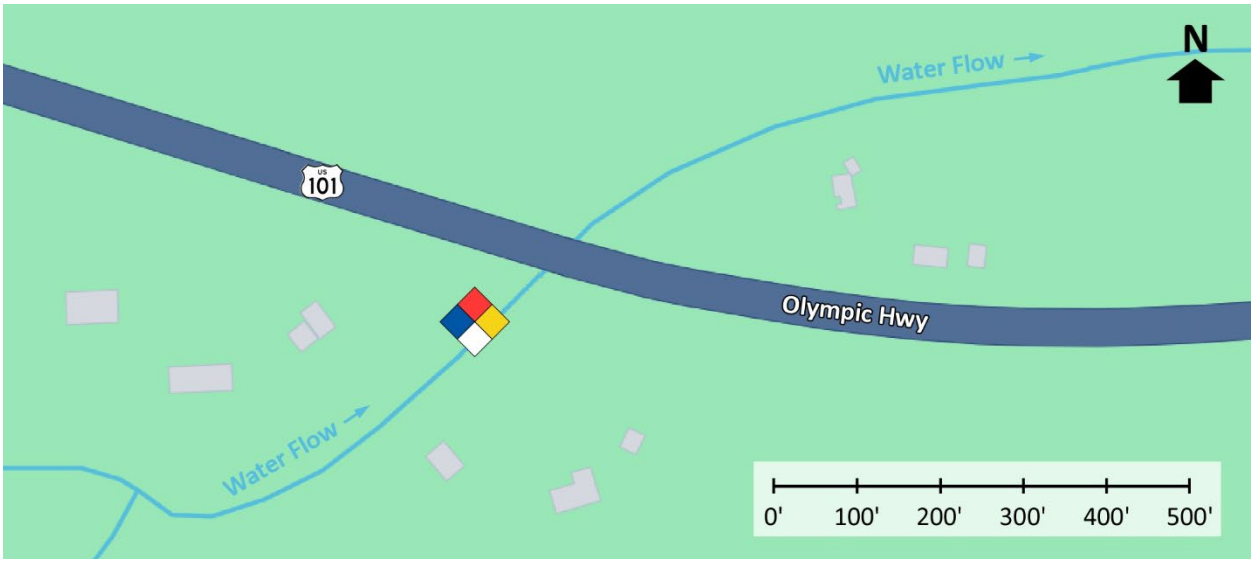
Learning Outcomes

Command officers perform effective ongoing size-up; select an appropriate strategy, and implement tactics based on the strategic decision-making model.

Conducting the Drill

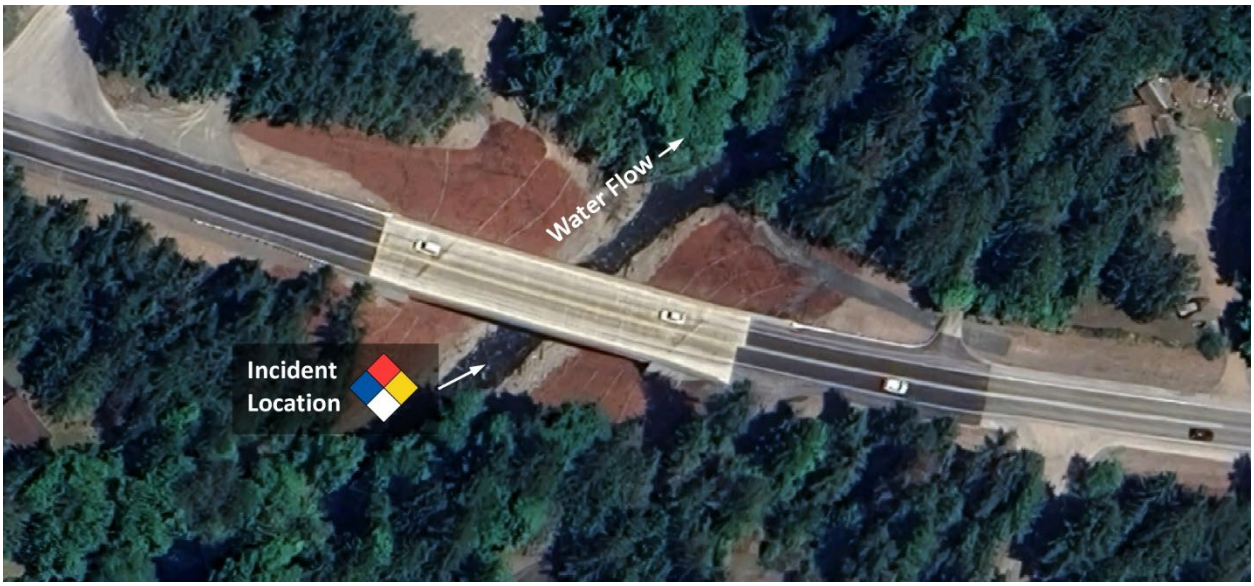
This incident involved rollover accident and major fuel spill on Highway 101 at Indian Creek, Clallam County, Washington on Thursday, July 17, 2025, at 10:08 (Wixey, 2025; Dallas, 2025; Swanson & Breda, 2025; & WA DOE, 2025). Review the map and photos (Figures 1-4) to gain an understanding of the area involved.

Figure 1. Map of the Incident Area



Note: Adapted from Google. (2025a). [Map, Highway 101 at Indian Creek, Clallam County, WA]. https://bit.ly/3Hd0aCS.

Figure 2. Aerial View



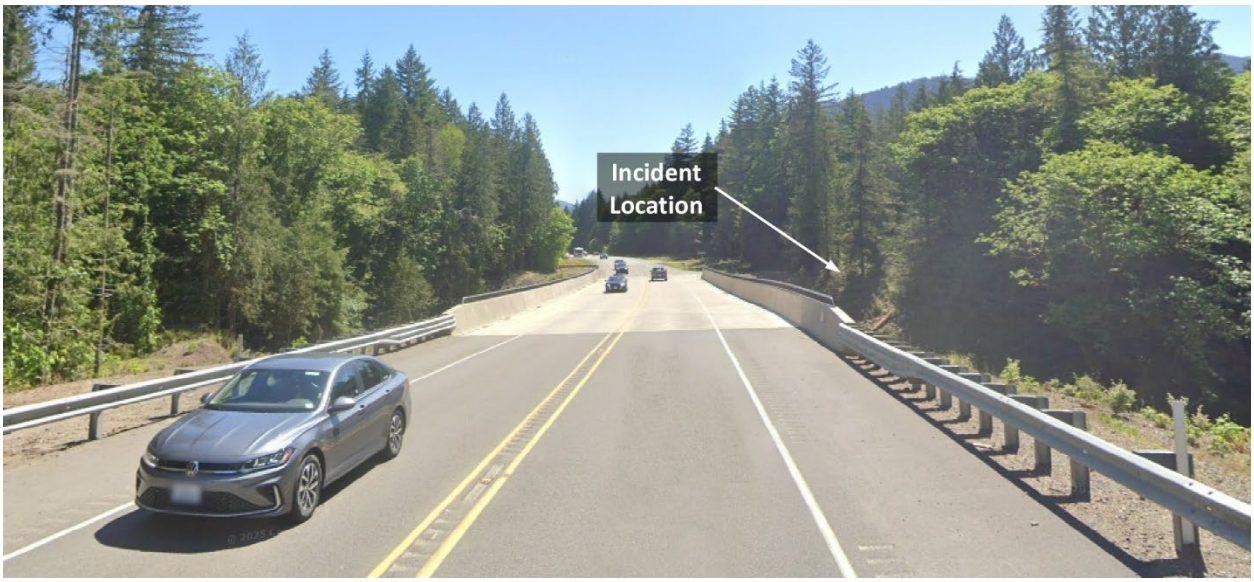
Note: Adapted from Google. (2025b). [Aerial view Highway 101 at Indian Creek, Clallam County, WA]. https://bit.ly/3U7f9kJ.

The closest water tender fill point is a hydrant located on South Dry Creek Road at Highway 101, approximately 5.5 miles to the east of the incident location.

Figure 3. Westbound on Highway 101 (Olympic Highway)

Note: Adapted from Google. (2025c). [Street view Highway 101 at Indian Creek, Clallam County, WA]. https://bit.ly/4fgBC8q.

Figure 4. Eastbound on Highway 101 (Olympic Highway)



Note: Adapted from Google. (2025d). [Street view Highway 101 at Indian Creek, Clallam County, WA]. https://bit.ly/3IRoavU.

The temperature is currently 57° F with wind from the south southwest at 7 mph, and no precipitation forecast (Weather Underground, 2025). You are the first due command officer. It is Thursday, July 17th, and you are dispatched along with three engines, a ladder company, and a medic unit to 238416 Highway 101 at Indian Creek for a rollover accident involving a fuel truck and trailer. The engines and ladders have four-person staffing[1].

Time starts now! Answer the next six questions within 10 minutes. After answering question one, decide and put your answers in the form of communication you would have with the companies assigned to this incident. Save discussion for after answering the first six questions.

1. What critical factors would you consider when dispatched and during response?

You hear three engines, a ladder company, and an advanced life support ambulance, go en route. The first engine will arrive from the east on Highway 101. The ladder company and second engine will arrive from the east four minutes after the first engine. **You will arrive shortly after the second engine and ladder company.** All other units dispatched on the first alarm will arrive after you.

[1] If your first alarm deployment is different, use your own resource assignment and staffing with the first and second arriving resources typical for your agency (e.g., two engines vs. engine and ladder).

While responding, dispatch provides an update that a caller reports that a tandem fuel truck and trailer has gone off the highway and rolled over into Indian Creek. The driver is still in the truck and his or her condition is unknown.

Engine 1 arrives and provides the following initial radio report.

> *On-scene of a tandem DOT 406 tank truck and trailer off the south side of Highway 101 just west of 238416, the truck is on its side, and the trailer is wheels up in Indian Creek, possible fuel spill in the creek, investigating in the offensive strategy, Engine 1 is Indian Command.*

Indian Command provides the following follow-up report:

> *No 360 due to access, the driver is still in the truck, conscious and disoriented, the truck is placarded flammable with UN ID 1993, the trailer is placarded flammable with UN ID 1203, fuel is spilling into the creek from the truck and trailer, Engine 1 is accountability on Highway 101.*

Ladder 1 arrives and reports that they are Level 1 to the east on Highway 101. Indian Command provides the following tactical assignment:

> *Position in the driveway to 238416 Highway 101 and recon to identify if you can gain access for extrication from uphill, up wind and upstream.*

Engine 2 arrives and reports that they are Level 1 on east of the incident on Highway 101. Indian Command provides the following tactical assignment.

> *Park out of the way to the east of the incident, recon to identify access for deployment of absorbent booms downstream from the bridge.*

Examine Figures 5 and 6 illustrating conditions on your arrival.

Figure 5. Conditions on Arrival from the East

Adapted from Washington Department of Transportation (WA DOT). (2025) PetroCard Indian Creek Fuel Spill 2025 [Facebook post]. https://bit.ly/40JTR0g.

Figure 6. Conditions on Arrival

Note: Adapted from Washington Department of Ecology (WA DOE). (2025b) PetroCard Indian Creek Fuel Spill 2025 [photo album]. https://bit.ly/4lTcUO5.

2. What actions will you take prior to contacting IC #1 (Engine 1) to begin command transfer?

3. State your command transfer communication after IC #1 acknowledges your radio contact (exactly as you would transmit it).

Following your confirmation of the location and assignment of Engine 1, Ladder 1, and Engine 2 and request for conditions, actions, and needs (CAN) report, IC #1 provides the following CAN:

> *Fuel capacity of the tank truck is 4,000 gallons and the capacity of the trailer is 6000 gallons. Both are DOT 406 cargo tanks. It appears that there is minor leakage from the tank truck and a larger amount of leakage form the tank trailer. Face to face with Ladder 1 indicates they will be able to access from river right for extrication.*

4. State the communication you would have with IC #1 and dispatch to complete the command transfer exactly as you would transmit it.

5. What action would you take based on the CAN from Engine 1 (IC #1)? State the communications you would have with the operating companies exactly as you would transmit them.

Engine 2 provides a CAN that they have accessed the north side of the bridge for placement of absorbent booms and that there may be additional access through the Washington Department of Transportation facility east of the incident for additional downstream boom placement.

6. Engine 3 arrives and tells you that they are Level 1 east of the incident at the WA DOT facility on Highway 101.

Reflect on your strategic decision-making and responses to questions one through six before answering the next several questions. Think about what cues, patterns, or anomalies (differences from conditions that you would anticipate) inform your answers.

If needed, you may use the *Emergency Response Guidebook* (US DOT, 2024), *Pocket Guide to Hazardous Chemical Hazards* and *CAMEO Chemicals* (NOAA, 2024) to inform your strategic and tactical decision-making.

7. What was the problem?

8. What was getting in the way of achieving your tactical priorities?

9. Was there anything in this incident that could have hurt or killed you (right now)?

10. Accessing the cab of the truck from uphill, upstream, and upwind to extricate the driver is consistent with an offensive strategy. Given the hazards presented by leaking gasoline and diesel fuel, what actions did you take to ensure the safety of the driver and crew(s) engaged in the extrication?

11. What DOT ERG Guide Page(s) did you use and how did the information provided influence your decision making?

12. Did you upgrade the resource determination (beyond the three engines, ladder, and medic unit)? If so, what additional resources did you request and what was your anticipated incident action plan?

13. Did you assume companies operating at this incident were using atmospheric monitoring instruments or did you task them with doing so? If so, what percentage of the lower explosive limit would impact on your strategy or tactical assignments?

14. How did the flammability, health, and physical characteristics of gasoline and diesel fuel influence your choice of tactical assignment?

This incident presented numerous challenges during and beyond the initial response. Indian Creek is a tributary of the Elwha River which is one of several rivers in the Pacific Northwest that hosts all five species of native Pacific salmon (chinook, coho, chum, sockeye, and pink salmon), plus four anadromous trout species (steelhead, coastal cutthroat trout, bull trout, and Dolly Varden char) (Wikipedia, 2025)

A Unified Command[2] was established, including the Environmental Protection Agency, Lower Elwha Klallam Tribe, Washington Department of Ecology, Clallam County Sheriff's Office, and PetroCard. Other responding agencies and contractors include, Washington Department of Fish and Wildlife, Clallam 2 Fire-Rescue, Focus Wildlife, and Republic Services (WA DOE, 2025a).

This incident released an estimated 2,798 gallons of gasoline and 172 gallons of diesel, 1.2 miles downstream from the incident location to the Elwha River and resulting in a fish kill of approximately 2130. On Sunday morning, July 20, a "Do Not Drink" tap water order was issued to all City of Port Angeles water utility customers (which was lifted at 17:15 on Sunday July 20 following water testing (WA DOE, 2025a).

15. Unified command is not generally used in Type V and IV incidents such as structure fires, vehicle accidents, and small scale hazmat responses. This type of command is more common in larger, more complex Type III, II, or I incidents where there is overlapping jurisdiction and interests. What challenges would you anticipate transitioning from single command (with a fire and rescue chief officer as the IC) to a unified command such as was used in this incident?

[2] In Washington State the Washington State Patrol (WSP) is designated as the lead agency for hazardous materials (hazmat) incident command on state and interstate highways. The Department of Ecology has overall responsibility for environmental pollution prevention, preparedness, and response.

Additional Learning: Initial operations at an incident with overlapping jurisdictional responsibilities and the potential to extend beyond a single operational period generally start with a single incident commander. In some cases, such as a major motor vehicle accident with fatalities, there is overlapping jurisdiction between the responding fire and rescue and law enforcement agencies, but this generally does not require unified command. The fire and rescue agency takes command and addresses the immediate hazards and patient care needs and then command is transferred to law enforcement for the ongoing investigation. In incidents such as the fuel spill into the Indian Creek, there are more complex overlapping jurisdictions between fire, law enforcement, environmental agencies (state and federal), fish and wildlife agencies, tribal authorities, the spiller, and the spiller's cleanup contractor. These incidents extend well beyond a single operational period (often lasting weeks or months). This necessitates use of unified command with multiple agencies participating as part of the unified command team).

It is important to recognize the differences between the fast paced command operations at typical Type V and IV incidents such as a structure fire and the extended incident action planning process used in campaign incidents that extend over multiple operational periods. Watch *FEMA Planning P NEW 4 of 11 - 4 Initial Unified Command Meeting* (Popoff, 2020) for a quick look at how members of a unified command team address agency jurisdictional responsibilities and interests and establish incident objectives.

Consider attending the Blue Card Expanded Command class! This class addresses escalating command from the arrival of IC #1 all the way through building a full command team and working with the EOC. Blue Card integrates and seamlessly flows and builds out from initial command operations to large campaign incidents that may span several days and involve many agencies including state and federal assets.

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