

# Rapid Lesson Sharing

**Event Type:** Faulty Engine Battery Creates Medical Incident

**Date:** March 23, 2026

**Location:** West Virginia

## When Something Seems Out of the Ordinary – Don't Minimize It

On March 21, the Module Leader, who was driving the engine, smelled an odor in the engine cab. *"Something stinks,"* he said to the other crew members riding in the engine—who could also smell this faint odor.

This crew was comprised of U.S. Forest Service employees from the Siuslaw National Forest and Job Corps students from the Angell Job Corps Center in Region 6 now assigned to Region 9.

This engine had not been in daily use and was assigned to the module when they arrived on the Forest.

The next day, the crew was working on a prescribed burn. Once again, crew members smelled the odor. They said it smelled like a dead animal. This smell was faint and inconsistent throughout the day. Crew members checked the engine compartment and all cargo compartments on the engine—nothing obvious or out of the ordinary was detected.

Later that evening, after the burn, crew members were experiencing scratchy throats and nose bleeds.

The next day, March 23, the crew was enroute to prep a prescribed burn unit. The smell was now stronger than on previous days and was more consistent throughout the day.

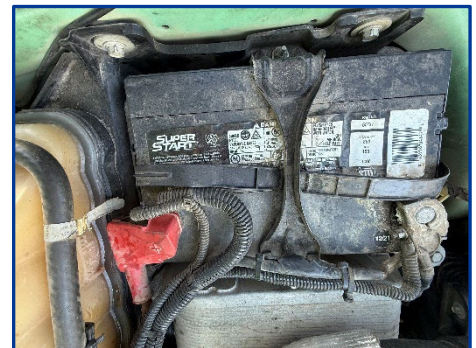
The driver said the smell seemed to be coming through the driver-side vent. At one time, crew members saw what they thought was a small puff of smoke. Because it had been raining, they decided that this was just some steam coming off the exhaust.

As they were returning to town, they saw smoke from the engine compartment. They pulled to the side of the road and stopped. When they opened the hood, smoke was coming out of the engine area. The crew member who opened the hood said the smoke *"hit me in the face."*

Once the smoke dissipated, they looked over the engine compartment in an attempt to diagnose the problem. They did not have cell coverage. Once the smoke stopped, they decided to drive the engine into town and parked it at the hotel where they were staying.

### Crew Members Transported to the Hospital

They contacted the Forest Duty Officer (FDO) and notified them of the situation with the engine. After arriving back



**Top Photo – Engine compartment showing no visual signs of damage or anything being wrong.**

**Bottom Photo – Close up image of the engine's battery—similarly showing no visual signs of damage or anything being wrong.**

at the hotel, crew members started to experience headaches, felt disoriented, and had a “sandpaper” feeling in their throats.

They notified the FDO, who went to the hotel. After speaking with the Module Leader, the decision was made to transport all eight crew members to the local hospital. Six crew members were evaluated at the hospital. (For two of the crew members, treatment wasn’t necessary. They had spent very little time in the engine and were mainly traveling in the other vehicle assigned to the crew. They had no adverse symptoms.) The FDO called the local Dispatch to order a Hospital Liaison. However, none were available locally.

Notifications were made to the local unit Forest Supervisor, Forest Safety Officer and Forest Fire Management Officer, as well as the crew’s home unit and the Region 9 Duty Officer.

A Care Team was established consisting of the Region 9 Casualty Assistance Program Coordinator, the U.S. Forest Service Washington Office on-call Duty Officer, and Job Corp Risk Management.

### **Medical Diagnosis: Sulfuric Acid Fumes and Carbon Monoxide Exposure**

After an examination by doctors in the hospital’s emergency department, the diagnosis was exposure to sulfuric acid fumes and carbon monoxide coming from the engine compartment into the cab through the vents.

All crew members were treated and released from the hospital that night with no work restrictions.

The next morning, the FDO met with the crew at the hotel. Crew members were still experiencing symptoms, including coughing and lightheadedness. The decision was made to keep the crew at the hotel for the day to rest and complete paperwork. The following day, the crew leader spoke to the FDO and informed them that the crew was ready to return to work. For the next few days, crew members continued to experience headaches and some fatigue.

The FDO placed the engine out of service. Arrangements were made for the engine to be towed to the dealership for repairs.

The engine was serviced at the dealer and was determined to have a faulty battery cell. The mechanic’s invoice stated: *“Left side of the battery tested, bad, 10% and 10V. Likely a shorted cell which will cause a severe sulfur smell when vehicle is running.”*

Everyone involved in this incident appreciated the immense support from the local Region 9 unit, as well as the crew’s home unit in Region 6 and the Job Corp National Office.

## **Lessons**

When something seems out of the ordinary, don’t minimize it. If ignored, small things can become big issues.

Even though daily engine checks were conducted and the crew investigated the smell, the engine should have been taken in for professional service. Once the smoke was detected, the engine should have been parked and a tow requested.

The individual crew members were initially hesitant to speak up about their adverse health symptoms. They didn’t believe that there was a need to seek medical evaluation. However, once crew members started talking and communicating with each other, it became known that multiple folks were experiencing these similar symptoms—and medical care was then sought.

The focus and priority should always be on patient safety and getting prompt treatment. Don’t delay treatment to complete paperwork.

This engine was not in daily use. It is a “holdover” engine that is not staffed daily. It is staffed with off-Forest resources ordered under Support or Severity assignments when they are on the Forest.

If vehicles have not been operated for long durations, ensure that thorough checks are done and consider taking them in for service.

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**This RLS was submitted by:**  
**Incident Overhead**

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