

Rapid Lesson Sharing

Event Type: Potential Hazardous Chemical Exposure

Date: December 17, 2017

Location: Thomas Fire, Ventura Zone
California

After a full discussion as well as consultation with subject matter experts, due to potential hazardous chemical exposure, the Task Force declines this mission and presents an alternative solution to mitigate the problem.

NARRATIVE

An engine task force assigned to the Ojai/Oakview Division on the Thomas Fire was requested to apply large amounts of water and high concentrations of Class A foam to a known smoldering crude oil seep fire.

The area of concern would have required an extensive hose lay through partially burned ground cover and a heavy over-story of green oak trees. This created difficult access and egress from noxious smoke emitting from burning oil.

After a two-hour discussion with Division, the Safety Officer and a technical specialist from Ventura County Fire, Arizona Task Force #324 declined to attempt this mission due to the unknown nature of the smoke content as well as a phone conversation with [CHEMTREC](#) who advised full vapor barrier PPE with SCBA (self-contained breathing apparatus) usage. (CHEMTREC ["Chemical Shipping Regulation and Incident Support"] is a leading source of information and emergency incident support for shippers of hazardous materials that was developed by the chemical industry in 1971 as a 24-hour public service hotline for emergency first responders to obtain information and assistance for emergency incidents involving chemicals.)

Options were presented to IMT members to utilize organic vapor masks and to set up a sprinkler system to minimize exposure. Proper PPE was unavailable for the mission.

IMT members accepted the mission turn down and agreed to investigate the purchase of more suitable airway protection.



Units applying heavy foam concentrations to burning oil seep fire. Improper foam type was unable to penetrate soil or form a blanketing film.

Later, the same units were asked to apply water with foam to a roadside oil seep fire and attempt to remain clear of noxious smoke. Due to swirling winds, heavy smoke and lack of required PPE, units applied all available water in the engines and retreated from the area.

LESSONS

Successes

1. There was a decrease in the operational tempo to allow discussion of hazards associated with non-standard smoke products.
 - ❖ Smoke hazard was a known issue for several days prior to the Task Force's assignment.
 - ❖ A two-hour discussion with Division and the local hazmat liaison resulted in the eventual turn down of this assignment.
 - ❖ The IMT had placed an order for a proper foam agent to better smother and cool the burning oil that was to be delivered in 4-5 days.
2. Utilize off-site subject matter experts to help identify possible hazards and the proper approach to PPE and fire suppression activities.
 - ❖ In this case, CHEMTREC was utilized to aid in the discussion. CHEMTREC advised SCBA and full structure turn-out gear as proper PPE. This information was relayed to IMT representatives.
3. Utilize risk benefit analysis to guide deployment of proper resources to mitigate hazard.
 - ❖ Units were not equipped with proper extinguishing agents to suppress a crude oil fire and would not have affected the outcome of smoke production or overall hazard.
4. The Task Force assigned to this task was partially comprised of municipal firefighters, a majority of whom were trained to the hazmat-operations level. This level of education allowed a more thorough hazard assessment to be performed.
5. The successful utilization of turn down policy from page 19 of the IRPG. Arizona Task Force #324 declined the mission and presented an alternative solution to mitigate the problem. The IMT representatives were appreciative of the Task Force's concerns and—after some initial push back—accepted the turn down.



Class A foam began to discolor around hot areas.

CHALLENGES

1. The IMT was receiving multiple calls from surrounding communities regarding noxious smoke, especially during the evening inversion layer. Heavy political pressure to resolve this hazard was present. While the citizens were

informed of minimal risk, they were also advised to remain out of the area in the evening due to the inversion layer trapping. Due to this conflicting information, fire crews were confused about the actual risk level.

2. Despite the fire's large urban-interface area, no hazmat team was present in area. Local SME had a five gas portable air sampling monitor which was inadequate for VOC (Volatile Organic Compounds) level detection.

3. The Division assigned to the area had no previous knowledge or experience with hazmat issues. The Division was well aware of his lack of experience but did not have resources to remedy the hazard or identify proper response.

4. Jurisdictional Issues: Who is responsible for long-term issues related to the fire activity but not suppression related damage or impacts? Does the delegation of authority cover these issues?

This RLS was submitted by:

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