

## Message from Operations

As we move into Q4, winter is just around the corner (burr!). At the high alpine Leviathan and Rico RM sites, October is winter prep time. Here are some tips from our team members that apply to safe work for all:

- **Flu shots** are most effective when administered by mid-October, so remind your teams to get vaccinated and mitigate the flu bug hazard!
- **Shorter/colder days.** Adjust field work times for colder days and less daylight, and travel times to daylight hours; there is greater possibility of an accident while driving at night, especially in bad weather (being from WY I know driving at night in a white out has to be among the most hazardous conditions ever).
- **Vehicle maintenance.** Tires, lights, battery, fluids, windshield wipers, heat/vent need to be checked for the upcoming season (even in California – it can rain, a bunch). And pack a winter driving emergency kit too!
- **Gear up for winter** & dress to avoid injury and illness. Synthetic materials are best in rain and sleet (CA/WA). Down is great in dry, bitter cold (MT/AK).
- **Slip, trip and fall** is always a hazard so be particularly alert for potential slips. Wet and icy conditions are coming soon, most likely for all in late October and November. – Tony Brown, BP RM PM

## FROM THE FIELD . . .

Hydraulic fluid leaks continue to be one of the most common “material releases” and leaks BP RM regularly faces. From drill rigs to trucks to remediation systems to heavy equipment, hydraulic fluid is commonly used, and when fittings fail or pin holes develop, the leaks range from tiny to great. A few RM sites proactively deal with this issue by conducting more frequent inspections and by sticking buckets underneath fittings “just in case.” One contractor utilizes plastic sheeting as secondary containment underneath the rig, so as not to miss any potential leaks hidden from view. However, also available for consideration is eco-friendly hydraulic fluid. Using natural or synthetic esters, or vegetable oils high in oleic acid, eco-friendly fluids are intended to break down more quickly with a lower environmental impact than their petroleum-based counterparts. With staggering statistics as to the amount and long term effects of petroleum-based fluids leaking into the environment, a movement towards eco-friendly fluids began several years ago in Europe. The US currently requires eco-friendly fluids for jobs in certain environmental conditions. Pricing is still considerably high. *For additional reading, see the SOCs Resource site (login info below).*

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Control panel built to eliminate need to disconnect or reconfigure hoses to change from injecting to mixing.

disconnect hoses of contaminated groundwater and vegetable oil. This significantly reduced the



OLD - injection setup for pilot test; hoses had to be disconnected and reconfigured in order to mix or inject.

risk of spills and splashes during the work.

Discussion of the work during the TSEA, analyzing the processes to be used, planning the work, and understanding the risks involved with the work, led to the implementation of this engineering control to better manage the risk of spills and splashes. Consider and share with your team! – Special thanks to Parsons PM George Hermance and BP PM Bill Barber

## Consider This . . .

September – February is deer season across North America, which means more activity for drivers to beware!

- Deer are most active at dawn and dusk
- **Never swerve to avoid a deer** – brake firmly

and stay your course. Insurance adjusters claim that more damage and injury is caused when drivers swerve to miss a deer and instead hit something else or roll.

- **Deer habitat** is typically nature or water-lands bordering suburban areas
- **Deer travel in herds**, so slow down if you see one (more may be present)
- **Deer are unpredictable** in their movement and easily confused by headlights – another reason not to swerve (you might still hit them).
- As always, **WEAR YOUR SEATBELT!**

## Additional Resources

[BP RM HSE Site](https://wss2.bp.com/remediationmanagement/HSE/default.aspx) <https://wss2.bp.com/remediationmanagement/HSE/default.aspx>

[SOCs Minute Resource Site](http://socs.dataaccel.com/) <http://socs.dataaccel.com/> (user ID: socs, Password: safety)

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## Contractor's

At the BP Ekonol site in New York, the Parsons field team saw an opportunity to improve an injection system, by enhancing the engineering controls to reduce the risk of spills and splashes. The team was preparing to inject a mixture of groundwater and emulsified vegetable oil into fractured bedrock as part of an in situ bioremediation project. During review and discussion of the daily TSEA, they observed that by adding a few extra components to the system, they could modify it in such a way that they would be able to add a control panel to the system, eliminating the need for disconnecting or reconfiguring hoses while switching from injection to mixing. The control panel was built as a series of valves that could be opened and closed without having to connect or

## @Traction

In August, RM had 5 occupational injury/illness cases (2 finger abrasions, 2 stings, 1 electric shock), 3 incidents or near misses involving unidentified underground utilities, and 9 material releases (6 related to defective equipment). Our hazard analyses (WRAT/TSEA/SOP/SPP) were also not always effective to identify appropriate gloves, poisonous spiders, site arrival process, recognition of tasks outside the TSEA, need for site walk around, confirmation that everyone understands BP RM safety process, energy isolation communication, (lack of) SPP, (inappropriate) tool identified in WRAT, and inadequate TSEA.