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October 2006 Newsletter

From the President

During September Eric Chase, John Shaal, Manouchehr Salehi, Jim Twiford, Jeff Heglie and I attended the 2 day ExxonMobil Consultants Day meeting in Long Beach. ExxonMobil Senior Management including Steve Polkey, John DiTulio and Kurt Fischer communicated their expectations and vision for Global Remediation in 2007 and beyond. Both Retail and Major Projects Project Managers presented information on OIMS, Waste Tracking, LPS and RTN activities. New

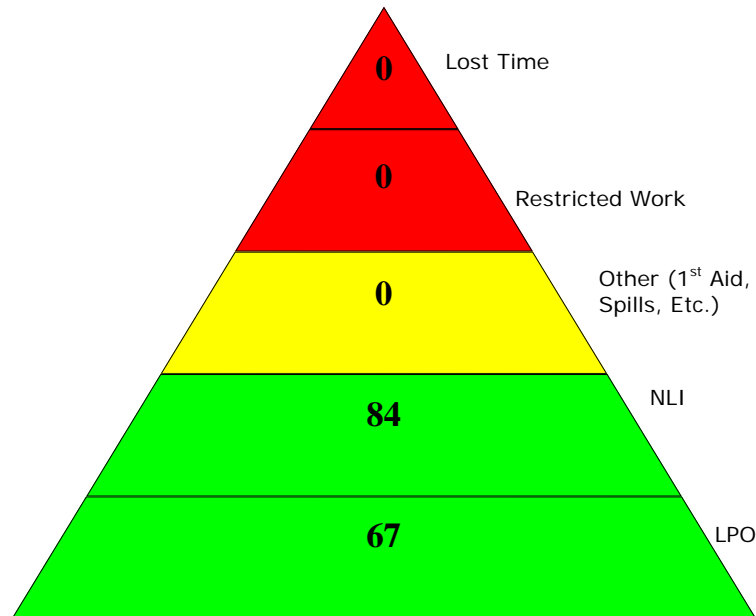
database programs were rolled out for LPS (LI/NLI and LPO), OIMS and Waste tracking. If you have any questions on implementing the new programs or ExxonMobil expectations for project execution ask one of these Project Managers or me.

Congratulations to all AME for continuing our No One Gets Hurt performance in September and throughout 2006 so far. Keep your focus on safety and we can realize that vision for all of 2006.

Safety Matters

2006 YTD (through September)

AME Total ExxonMobil Hours Worked YTD (2006): 12,630.5



September Health & Safety Summary

By Michael Redfern: September was yet another month AME can proudly say, "NO ONE GOT HURT." In 483 hours of field work for ExxonMobil, including 39 subcontractor hours, we produced nine Near-Loss

Incident (NLI) reports and 10 Loss Prevention Observation (LPO) reports. This resulted in a ratio of one LPO report for every 52 field hours worked. Keep up the good work and thank you all for the sustained effort in driving the LPS program. It truly reflects the

established commitment of AME personnel to health and safety at all levels in our company.

Driving Safety

By Michael Redfern: The weather will soon be changing in all parts of the country. This means that we will be driving in the rain and other inclement

weather conditions. Please take the time necessary to arrive at your destination safely. Also, ensure that company vehicles have been prepared for the weather. This includes changing the wiper blades, checking tread depth on tires, and having the coolant levels checked (especially important if going to Montana). Please continue to be safe on the roads.

Trends Analysis

Production of Near Loss Incident Reports and Loss Prevention Observations is as follows:

Month	NLI's Produced*	LPO's Produced*	Field Hours Worked*	Field Hours per LPO*
August	13	6	377	62.8
September	9	10	522	52.2

*Major Projects plus Retail combined

The following table presents the distribution of root causes identified in LPOs.

LPO Root Causes Identified	August	September
1. Lack of Skill or Knowledge	1	0
2. Takes More Time or Effort	4	11
3. Short-cutting tolerated	0	0
4. Procedure Not Followed/No Incident	3	4
5. Lack of or Inadequate Procedure	2	3
6. Inadequate Communication	0	0
7. Inadequate Tools/Equipment	0	0
8. External Factors	0	0

The following table presents the root cause distribution for NLIs.

NLI Root Causes Identified	August	September
1. Lack of Skill or Knowledge	2	1
2. Takes More Time or Effort	6	10
3. Short-cutting tolerated	0	0
4. Procedure Not Followed/No Incident	1	1
5. Lack of or Inadequate Procedure	1	13
6. Inadequate Communication	0	0
7. Inadequate Tools/Equipment	2	0
8. External Factors	0	0

As can be seen for August and September these root cause distributions are similar, and they are similar to the distributions for the first two quarters of 2006, with higher numbers in the personal factors group (1-4) and lower numbers in the job factors group (5-7). We continue to see no root cause 3 incidents or root cause 6 incidents.

LPIS Program Implementation Update

Michael Redfern is currently inputting Loss Prevention Observatgion Reports (LPOs), Near Loss Investigations

(NLIs), Loss Investigations (LIs), and Job Safety Analyses (JSAs) from 2006 into the new system. This will be completed by December 31, 2006. The program roll out will take place in 2007.



Tape or Paste – But Never Both

By Dan Lafontaine: As a reminder for construction projects, do not forget that proper thread sealant should be used on all piping joints. Questions should be asked prior to selecting a joint sealant. Is the piping joint diameter less than $\frac{3}{4}$ "? If the answer is yes then tape should be applied. Paste can loosen and become lodged in the small diameter of the pipe causing a blockage of flow. Will instrumentation be installed close to the joint? If the answer is yes then tape should be applied. Paste can loosen and enter into the instrumentation causing moving or sensitive parts to seize which will significantly shorten the life span of the instrumentation. This also applies to temperature and pressure gauges, which contain moving needles. If the answer to both of these questions is no then paste sealant is your best option as long as the chemicals are compatible.

When one is applying tape proper installation procedures need to be followed. Always cover the end of the fitting at the start to prevent thread seizing prior to proper joint makeup. Wrap tape in the direction of threads (clockwise for right handed threads). When applying tape do not stretch the tape excessively (threads will show through on tape). When tightening joints hand tighten plus one and a half to two turns with a wrench, over tightening can break down tape and compromise the seal. Avoid "backing up" the wrenching assembly as tape will bunch and cause leaks.

If pressure is going to be applied to the piping project make sure to leak test all piping joints. This can be accomplished by isolating the new piping and "bubble testing" all joints. Megabubble[®] works best to identify leaks, but soap and water will do the trick. Apply Megabubble[®] or soap and water to all joints under pressure. Pressure should remain constant with no bubbles should appearing on any joints for at least 30 minutes. Happy plumbing!

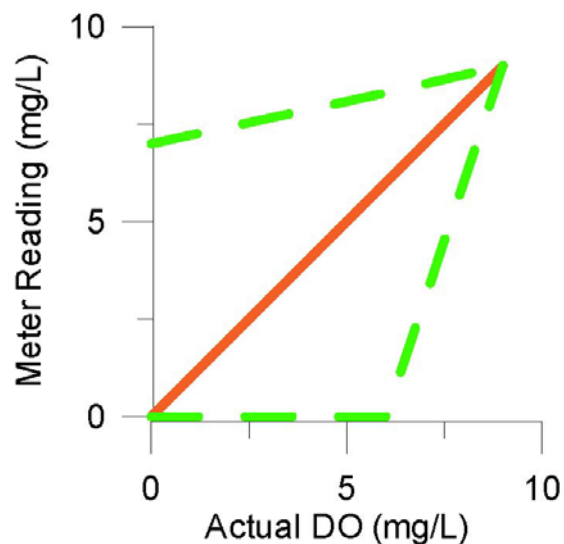
Calibration and Use of Field Meters

By Jeff Heglie: Of late I have been spooked by field projects haunted by the specter of strange field parameter measurements. I will dwell on dissolved oxygen (DO), since it is gravely important to many monitored natural attenuation (MNA) sites and proves to be frighteningly problematic, though many of the points apply to measurement of other parameters in water or air.

Ghost In the Machine Who has not received a rental meter that exhibits unnatural behavior, or is simply dead on arrival? If one absolutely cannot spirit away a unit from the AME equipment pool, make sure one has a chance to complete a check and calibration a day before the rental is needed.

The Meter is Not Magic. Instruction tomes conceal the answer to many mysteries, like checking that no caps are lurking on the sensors, and that the sensors are filled with the requisite fluid. While riding in your truck or flying (on your broomstick?) to the site, put aside the latest Steven King for a few minutes and read the instructions (passengers only!). Manuals are available online at the manufacturers' web sites.

Fair is Foul, and Foul is Fair. A single-point calibration, which is what the autocalibration mode typically renders for DO, is no crystal ball (see below). Ideally, the instrument response follows the orange line. The single-point calibration will only check the point at saturation, which is about 9.0 mg/L at 19 degrees C. Thus, either of the two dashed green curves would match this single point calibration, even though the readings are otherworldly. **A second calibration point, which is a zero for DO, is needed to conjure the correct line.**



Let the departed rest in peace, including any old DO zero calibration solution that may be lying about. A fresh batch should be brewed each time. Dispose of yesterday's solution and any older potions of unknown ancestry. Also, calibration solutions in general should not be re-used or returned to the bottle; otherwise, your calibration curve will look like the upper dashed line in the above illustration!

Are We Lost? Oxygen saturation at zero percent salinity ranges from about 10.4 mg/L at 12 degrees C (that's colder than a sepulcher) to about 9.0 mg/L at 19 degrees C. It also varies with salinity. Of course, DO in ground water approaches saturation less than once in a blue moon, and DO at impacted sites is usually closer to zero. High DO readings are not evidence of the paranormal; instead, check the meter. Past readings can be useful omens.

Other Voices. At many MNA sites, oxidation-reduction potential (Eh) readings are also obtained. These are a talisman against baneful DO readings (e.g., expect negative Eh when DO is near zero). Also, at MNA sites, a colorimetric kit (e.g. Chemets) should be used to verify DO readings at least once for every five wells.

When the moon rises and work is done for the day at MNA sites, a calibration check should be made. Simply record the actual instrument readings versus the expected readings from the calibration solutions. Also, recalibrate each morning.

Learn a New Trick Every Day Department. Dan Lafontane was looking into in-situ measurement of DO at Oakland, and informed me that most DO sensors require a minimal amount of flow to provide accurate readings. This includes moving the probe up and down when performing a zero calibration.

Happy Halloween!!!

Alarm System (El Dorado Hills Office)

By Ellen Frosch:

This is to remind people about the proper sequence of steps for when the alarm is accidentally engaged.

- Once the alarm horn sounds, an alarm signal is dispatched immediately. There is no way to cancel the alarm from AMEs office. (Entering your pass code will stop the horn from blaring; but the alarm signal is already dispatched to the monitoring station. Every signal is assumed to be a true alarm.)
- If you accidentally set off the alarm, CALL THE CENTRAL DISPATCH OFFICE. This is the 800 telephone number on your yellow alarm code reference card. You will need to identify yourself by name and your 3-digit pass code. This tells Central Dispatch that you are authorized for building access. It also halts the alarm process.
- If you have lost your yellow alarm code reference card, let me know and I will issue another for you.

S.T.R. for Stroke

**STROKE: Remember The 1st Three Letters...
S.T.R**

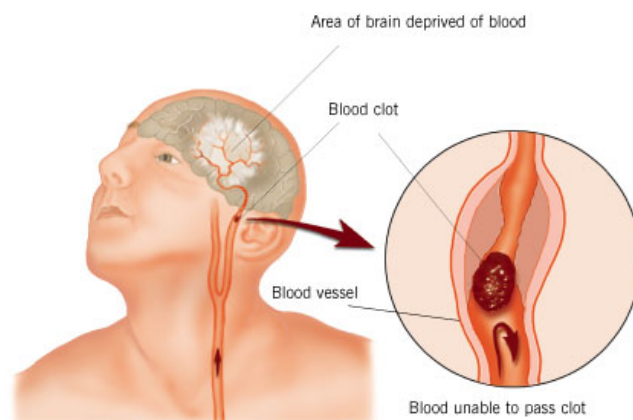
STROKE IDENTIFICATION:

During a BBQ, a woman stumbled and took a little fall - she assured everyone that she was fine (they offered to call paramedics) and just tripped over a brick because of her new shoes. They got her cleaned up and got her a new plate of food - while she appeared a

bit shaken up, she went about enjoying herself the rest of the evening.

Her husband called later telling everyone that his wife had been taken to the hospital - (at 6:00 pm, she passed away.) She had suffered a stroke at the BBQ. Had they known how to identify the signs of a stroke, perhaps Ingrid would be with us today. Some don't die. They end up in a helpless, hopeless condition instead. It only takes a minute to read this...

A neurologist says that if he can get to a stroke victim within 3 hours he can totally reverse the effects of a stroke...totally. He said the trick was getting a stroke recognized, diagnosed, and then getting the patient medically cared for within 3 hours, which is tough.



RECOGNIZING A STROKE

Read and Learn about the "3" steps, STR!

Sometimes symptoms of a stroke are difficult to identify. Unfortunately, the lack of awareness spells disaster. The stroke victim may suffer severe brain damage when people nearby fail to recognize the symptoms of a stroke.

Now doctors say a bystander can recognize a stroke by asking three simple questions:

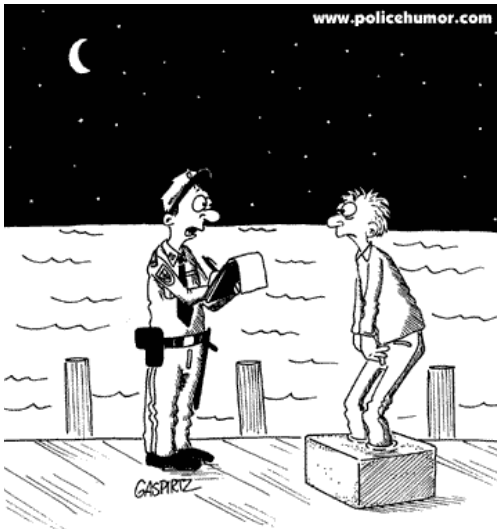
- S *** Ask the individual to **SMILE**.
- T *** Ask the person to **TALK to SPEAK A SIMPLE SENTENCE** (Coherently) (i.e. It is sunny out today)
- R *** Ask him or her to **RAISE BOTH ARMS**.

NOTE: Another 'sign' of a stroke is this: Ask the person to 'stick' out their tongue. If the tongue is 'crooked', if it goes to one side or the other, that is also an indication of a stroke. If he or she has trouble with **ANY ONE** of these tasks, call 911 immediately and describe the symptoms to the dispatcher.

Humor

Smelly Things in the Refrigerator

Please remember to clean out the refrigerator in the office. The other day there was a foul odor coming from the refrigerator in the kitchen. We had to call in two experts to come find the culprit and get it out.



What exactly is it that makes you think your life is in danger?

