E.H. & S. Challenges – Partnering with Operators to Ensure Government Compliance and Employee & Public Safety
Hallen Background

• NYC Metro area based utility contractor.
• In business since 1927.
• Privately held, union shop.
• Primarily servicing the two largest gas/electric utilities in the NYC area.
• 90% of the work is gas distribution. 10% is gas and electric transmission.
• 220-300 employees.
• 12 month construction season, with a traditional winter slowdown.
Hiring Process

• Employee comes from union hall or company contact.
• All employees subject to operator-mandated background checks & PHMSA pre-employment drug testing.
• Upon screening clearance, employee offered conditional position.
• Reports for duty, training begins.
New Employee Orientation

• Covered points
  – Review of Hallen Code Of Conduct
  – Hallen Orientation DVD
    • P.P.E.
    • Trenching & Excavation
    • Work Zone Setup & Housekeeping
    • Safe Work Rules
  – Review of Hallen Alcohol/Substance Abuse Policies & Related Employee Assistance Programs
New Employee Orientation (cont’d)

- Fleet Safety Policy & Matrix
- Fire Prevention
- Hazard Communication Training (incl. Asbestos Awareness and Coal Tar Removal)
- Review Sexual Harassment Policy
- Review Employee “Time Out” Policy
- Distribute List of Area Hospitals
- Explanation of Operator Qualification Procedures & Related Training

*All training & related materials available in Spanish
Operator Qualification

• Obligated by the terms & conditions of our contracts to comply with our customers Operator Qualifications Plans.

• Two major customers - both members of NGA. They adopt NGA Operator Qualification Compliance Program Written Plan Revision F.

• Training & participation diverge from here.
Operator Qualification (cont’d)

• Customer 1 – “Operator Qualification of contractor workforce will be conducted and/or supervised by Customer 1’s Gas School.”
  – Hallen has very little administrative involvement or control. It has its positive and negative aspects.
  – Results are not placed in any kind of shared database.
  – Hallen invoiced by Customer 1 for Gas School-provided OQ.
  – Limited recognition of OQ from NGA. Exception – Covered Task 71.
Operator Qualification (cont’d)

• Customer 2 – Moving away from training contractors employees.
  – All exams (except welding) are provided and proctored by NGA.
  – Training to be provided in-house or through third-party administrator.
  – Hallen responsible for scheduling & tracking of OQ.
  – Results placed in NGA database by Hallen, Customer or NGA.
  – Hallen invoiced by both Customer, NGA, Third-Party Administrator.
  – Operator and Hallen monitor compliance. Continual dialogue regarding employees’ status.
**Additional Training**

- **Daily Job Briefings**

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**Gas Job Brief and Excavation Log**

<table>
<thead>
<tr>
<th>Location Type</th>
<th>Location Description</th>
<th>Date PX</th>
<th>Time PX</th>
<th>Notes PX</th>
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<tbody>
<tr>
<td>Road</td>
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<tr>
<td>Valet</td>
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<tr>
<td>Other</td>
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</tr>
</tbody>
</table>

**Special Precautions**

- Energy Cause Protection
- Decrease Gas Pressure
- Line Gas Cuts
- Trenching
- Compressor Check
- Daily
- Weekly

**Hallen Construction**

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**Job Brief Log**

**Excavation Log**

**Notes**

- All tasks to be classified as Type C (Un-Reserved need to be classified as appropriate).

**Excavation Depth**

<table>
<thead>
<tr>
<th>Feet</th>
<th>Inches</th>
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<tbody>
<tr>
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</table>

**Excavation Length**

<table>
<thead>
<tr>
<th>Feet</th>
<th>Inches</th>
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<tbody>
<tr>
<td></td>
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</table>

**Protective Systems Required**

<table>
<thead>
<tr>
<th>Yes</th>
<th>Location</th>
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</tbody>
</table>

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**Additional**

- Supervisors notified
- Trench Box (Section)
- Timber Shoring
- Sloping / Shoring
- Other
• Daily Job Briefings (cont’d)
  – Template provided by operators
  – Hallen able to modify templates to satisfy multiple customers.
  – Job briefing forms are currently of primary focus to Hallen and all the operators it works for. Often first item checked during audits.
Additional Training

• Tool Box Talks/O.J.T.
• Tool Box Talks/O.J.T. (cont’d)
  – Subject matter often provided by operators
    • Updated work procedures
    • New standard rollouts
    • Audit findings
    • Incident reviews
Additional Training

• Foremen/ Lead Personnel Safety Meetings
• Foremen/Lead Personnel Safety Meetings (cont’d)
  – Often attended by and subject matter driven by operator input.
  – Excellent forum to share high priority targets and/or new policies or procedures.
Additional Training

• Supervisors’ Safety Meetings

<table>
<thead>
<tr>
<th>DATE:</th>
<th>ISSUE(S) DISCUSSED:</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCATION:</td>
<td>YEAR-END REPORT CARDS</td>
</tr>
<tr>
<td>JOB:</td>
<td>ALL CONTRACTS</td>
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<tr>
<td>INSTRUCTOR(S):</td>
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</tr>
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</table>

## Participants

<table>
<thead>
<tr>
<th>NAME &amp; SOCIAL SECURITY</th>
<th>SIGNATURE</th>
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<tbody>
<tr>
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</tr>
</tbody>
</table>
Additional Training

• Recurring “In House” Training
  – Annual OSHA Regulatory Training (all employees)
  – Competent Person for Excavation & Trenching
  – 40 Hr Hazwoper Training & Related Annual 8 Hr Refreshers
  – Major Incident Reviews (Started at the request of an operator)
Additional Training

• Provided through Company, Union Halls, Utilities, and Private Vendors.
  – First Aid/ CPR/ AED
  – Defensive Driving
  – Fire Watch
  – Confined Space
  – Flagging & MPT
  – OSHA 10 and 30 Hour Competent Person in Construction
  – Fusion, Welding, & Live Gas Training
  – Contractor Regulatory Compliance Training
Training Database(s)  
(P.Q.S., Energy World Net, ISNetworld, Veriforce)

P.Q.S. (Personnel Qualification System)

- Hallen’s proprietary training database. Proceeded all others.
- Tracks all employee “in house”, utility, union and private vendor training.
- Produces status, expiration and renewal reports.
- Produces e-mail reminders to field supervision.
Training Database(s) (cont’d)
(P.Q.S., EWN, ISNetworld, Veriforce)

Energy World Net

-- New Player

– Tracks NGA OQ and Customer 2 provided training.
– Hallen allowed access under NGA agreement, no subscription costs.
– Some control of data input. Previous set-up had led to inconsistencies. We’ll see moving forward.
– Customer 1 does not participate.
ISNetworld
- “The Beast”
- Full-time job.
- Tracks everything. Pre-Qualification etc.
- More and more customers are joining.

Veriforce
- Another player – bigger in the liquid pipeline side of the business.
Training Topic Development

- Utility Input
- Safety Committee
- Employee Input
- Insurance Carriers/ Brokers
- Trade Associations & Publications
Utility Input

Safety Alert

Dangerous Occurrence at a Pipeline

Date: November 19, 2010
From: Believe in Zero
Attn: All Employees

High Potential Incident

Exposures for Delivery
This Safety Alert is issued to inform employees about a serious incident that could have been much worse. Review the content of this Safety Alert with your teams as soon as possible and post the document for other shifts and off-duty workers for their attention when they are performing an air pressure test on a gas service line.

Background Information
On November 19, 2010 an air pressure test was being performed on a 1 inch plastic service. The mechanic performing the test asked the foreman if the line was ready for air. A miscommunication between the mechanic and the foreman resulted in the air test failing and air pressure being introduced into the house piping at the residence. A plumber was called to check the house piping and the regulations to the appliance in the house.

Investigation/Preliminary Findings
The contract crew was performing disconnects and re-connects. Prior to this incident, the crew had successfully completed approximately 14 reconnects and the associated air pressure tests. While the crew was working on four services which were in different stages of the task, the homeowner came out to the street and informed the foreman that he was leaving but would be back shortly. At this point, no member of the crew had previously spoken to the homeowner and, therefore, had not gained access to the basement to shut the service cock and disconnect the meter. The mechanic was set up to do the air pressure test at approximately noon. He did not seek access into the basement to confirm that the service cock was shut off and the meter disconnected, although he was knowledgeable that this condition is required before air is introduced into the service. He relied on the verbal communication he had with the foreman of the crew. The mechanic thought he heard the foreman say it was ready for air when he asked if the line was ready. The foreman on the other hand remembers saying something to the effect that there was nothing shut off and it was not ready for air.

The procedure for performing an air pressure test was not followed by the crew. The mechanic performing the air test did not verify that the service cock was shut and the meter was disconnected. He did not, nor did any other crew member, seek access into the basement to shut the valve and disconnect the meter. The test was carried out and air introduced into the service based on verbal communication alone, which was flawed.

It is likely that the homeowner’s piping and possibly his regulators on his appliances were damaged. The meter was blown apart; if anyone had been near the equipment, they could have been seriously injured due to the force and amount of energy released from the pressurized air.
Safety Committee

• Equal representation of both Labor & Management.
• Meets on a quarterly basis or more frequently if the need arises.
• Reviews all Injuries, Incidents, Property Damages and Close Calls.
• Forum to review new work methodologies and employee suggestions.
• Establishes follow-up actions, protocols and communication.
Employee Input

• A Close Call is an act or condition where no physical injury or property damage has occurred, but had the potential to result in an injury or property damage.

• Employees who report Close Calls will never be disciplined. Employees have the ability to report close calls anonymously through Hallen’s website or drop boxes located in yards.
Close Call Program

Hallen makes safety a priority for all employees. Occasionally, however, safety is compromised when a mistake is made, either in judgment or in following procedure.

To ensure that we all make safety a priority, Hallen has instituted its Employee Close Call Program. This program will allow employees to use a web-based form to anonymously report unsafe situations or "close calls" that could result in injuries.

Please commit to making safety a priority. Use the Employee Close Call Program when you note that safety has taken a back seat to other concerns. It's anonymous, and it could prevent injury in the future.

Report your close call here:
RISK CONTROL

Insurance Carriers/Brokers

All of us want to be liked. There’s no doubt about that. But it’s sometimes difficult to be a good guy when it comes to protecting kids from the hazards of a construction site. Many kids see a construction site as an adventure playground, piles of dirt for digging in and climbing, scaffolds to climb, holes to crawl in and hide, and tools to play with. The list of possibilities is only limited by the imagination of a kid.

DRAW: KIDS LIKE A MAGNET

A construction site draws kids like a magnet. Most of them have played with toy trucks or bulldozers. And, suddenly, there in front of them is the real thing. Many kids are mechanically inclined. I heard of one case where a mechanic tried for hours to get a piece of heavy equipment started, with no success. Then that night a bunch of kids visited the site. They not only got the equipment started, but smashed it into another piece. Fortunately, no one was hurt.

VANDALISM

Another danger of kids hanging around is that some of them engage in vandalism. And often as they size up our operation, they’re scheming about what they can do when no one’s around. Like smashing windows or pouring sand into gas tanks.

ATTRACTION RISQUES

In many states property owners and contractors can be held liable for injuries to children who were hurt when they trespassed onto a construction site and became injured. Courts have held that an owner/contractor has an obligation to protect kids from these dangers. The owner/contractor knew the danger existed but did not take care to eliminate the danger or otherwise protect the children.

BE FIRM BUT DIPLOMATIC

So, when it comes to kids and construction sites, we sometimes may have to appear like the bad guy. This is not only for our own protection, but for that of the kids as well. When dealing with kids, remember: if you give them an inch, they’ll take a mile. So forget about saying: “Maybe” or “OK, but be careful.” Let your “no” mean “no.” But don’t go overboard. Don’t be so rough with the kids that they’ll come back and get even.

No construction sites aren’t playgrounds. And the day may come when you’ll point this out to local youngsters. Do it diplomatically, but firmly.

Note: A Toolbox Talk Record Form can be found on the last page.
Trade Associations & Publications

Welcome to Toolbox Talks

Each "Toolbox Talk" offers tips and insights into creating and maintaining a safe working environment. Each is offered in PDF format for ease of use. Check back often for new "talks!

January 2011 Toolbox Talks:
- Grounding Electric Tools
- Guards Protect You
- Handling Hand Tools
- The Care of Hand Tools
- Avoiding Hand Tool Injuries
- Handling Power Tools Safety
- Electric Portable Tools
- Safety Rules for Power Tools
- Safe Use of Hand Tools
- Torsion Tools

December 2010 Toolbox Talks:
- The Positive Approach
- Scaffolds
- Special Hazards
- Scaffolds
- Scaffolds Are For Safety
- Rolling Scaffold Safety Rules
- Steel Scaffolding Safety Rules
- General Safety Rules - Screeders & Sams
- Steel Construction
- Safe Practices for Structural Iron Worker

If you need Acrobat software, go [here](#) to download it for free.
Training Hurdles

• INCONSISTENT WORKLOADS
  – STAFFING LEVELS FLUCTUATE (50 CREWS IN JULY, 8 CREWS IN JANUARY).
  – LOSE FULLY TRAINED WORKERS TO OTHER CONTRACTORS.
  – EMPLOYEES FALL THROUGH THE CRACKS.
  – LAG PERIODS TO GET TRAINING SCHEDULED/COMPLETED.
Training Hurdles (cont’d)

• ACCEPTANCE OF OTHER CUSTOMERS/ENTITIES TRAINING
  – CUSTOMERS DO NOT ALWAYS RECOGNIZE/ACCEPT OTHERS PROGRAMS. GETTING BETTER.
  – UNIONS STARTING TO DO THE SAME. (HAZ MAT REFRESHERS, ETC...)
Training Hurdles (cont’d)

• COST AND TIME
  – A REAL FACTOR.
  – NOT ALWAYS TAKEN INTO CONSIDERATION WHEN WORK IS BID/AWARDED.
  – CUSTOMERS, IN SOME CASES, SEEKING MORE TRAINING, CONTROL AND OVERSIGHT. OFTEN REPETITIVE.
Audits, Incident Prevention/Investigation, & Communication
Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Audits
  – “In house”
    • Conducted by EH&S Department and Project Leadership
    • Results shared with crews, ownership, senior & middle management
    • Often the basis for positive employee recognition (i.e. Crew of the Month) or discipline
Audits, Incident Prevention/Investigation, & Communication (cont’d)

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<td>VESTS</td>
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<td>EYE PROTECTION</td>
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<td>EAR PROTECTION</td>
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<td>HEAVY WORK SHOES</td>
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<td>GLOVES CLOTHING</td>
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<td>WORK AREAS BARRICADED/CONED</td>
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<td>CURBSIDE STORAGE BARRICADED</td>
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<tr>
<td>SIDEWALK/CROSSINGS CLEAR</td>
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<tr>
<td>SIGNS/PERMIT PRESENT</td>
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<tr>
<td>TRENCHES PLATED/SPiked</td>
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<tr>
<td>WATERWAYS OPENED B IN PLACE</td>
</tr>
<tr>
<td>FLAGMAN PRESENT IF NEEDED</td>
</tr>
<tr>
<td>BACK UP ALARMS</td>
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<tr>
<td>STREET SIGNS IN PLACE/SUPPORTED</td>
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<th>HOUSEKEEPING MATERIAL/EQUIPMENT HANDLING</th>
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<td>MATERIALS/DEBRIS STACKED AND PROT</td>
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<tr>
<td>PROPER SAFETY PRESENT ON EQUIP</td>
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<tr>
<td>EQUIPMENT PLACED PROPERLY</td>
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<tr>
<td>FIRE EXTINGUISHERS AVAIL</td>
</tr>
<tr>
<td>1ST AID KITS</td>
</tr>
<tr>
<td>SPILL KITS AVAILABLE</td>
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<tr>
<td>SHORING INSTALLED</td>
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<tr>
<td>SPOIL BANK CORRECT DISTANCE FROM TRENCH</td>
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<tr>
<td>LADDER(S) PRESENT, IF NEEDED</td>
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<td>SLINGS IN GOOD CONDITION</td>
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<tr>
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Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Audits (cont’d)
  – Operators
    • Conducted by EH&S Departments, contractor compliance groups, job site inspectors, & QA/QC Departments
    • Results disseminated at various levels depending on the auditor and operator.
    • Results always shared with field supervision and personnel.
    • Often the basis for positive employee recognition.
Audits, Incident Prevention/Investigation, & Communication (cont’d)

<table>
<thead>
<tr>
<th>US Gas Distribution: Construct and Maintain Form (Version 3)</th>
<th>Page 4 of 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Maintenance Technical Compliance</td>
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</tr>
<tr>
<td>4.1 Leak Investigation</td>
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</tr>
<tr>
<td>- Was the leak classified correctly?</td>
<td>Yes</td>
</tr>
<tr>
<td>- Were required premises in the vicinity checked for gas leaks?</td>
<td>Yes</td>
</tr>
<tr>
<td>- Was the hole procedure followed?</td>
<td>Yes</td>
</tr>
<tr>
<td>- Was leak investigation information properly recorded?</td>
<td>Yes</td>
</tr>
<tr>
<td>- Have gas readings been properly recorded?</td>
<td>Yes</td>
</tr>
<tr>
<td>4.2 Leak Repair</td>
<td></td>
</tr>
<tr>
<td>- Was the leak repaired properly?</td>
<td>Yes</td>
</tr>
<tr>
<td>5. Low Dig Operations</td>
<td></td>
</tr>
<tr>
<td>- Are all foreign underground facilities within the path of bore pipe being verified? (Yes/No)</td>
<td>Yes</td>
</tr>
<tr>
<td>- Are HDD operations conducted in accordance with National Grid procedures? (Yes/No)</td>
<td>Yes</td>
</tr>
<tr>
<td>- Are keyhole/coring operations being conducted in accordance with National Grid procedures? (Yes/No)</td>
<td>Yes</td>
</tr>
<tr>
<td>- Was pavement condition properly maintained?</td>
<td>Yes</td>
</tr>
</tbody>
</table>

Other comments

Your comments here.

Corrective action

Your corrective action here.

Instructor's Date/Time: 2/14/05

All OK!

Date: 2/10/05

Signature: [Sign]

[Form Image]
Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Audits (cont’d)
  – Insurance Carriers/Brokers
    • OCIP Programs - Both carrier and brokers provide audits and feedback. Often coordinate visits with Hallen EH&S Department.
    • Non-OCIP Programs – Carrier provides Loss Control services as part of a premium payment. Results of audits shared with all levels of Hallen Construction.
Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Incident Prevention/Investigation
  – Starts with training and education
    • Operators Damage Prevention teams
    • One Call Center Damage Prevention committees and their In-house trainers
    • True cost of incidents
  – Pre-Job Planning
    • Code 753
    • Complete job folders
Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Incident Prevention/Investigation (cont’d)
  – Technology/Methodology
    • CAT tool and other locating devices
    • Operator SOP’s and “In-house” policies
  – Post-Job Prevention
    • Job Satisfaction Surveys
    • Post-job inspections
    • Paving coordination
  – Investigations
    • “In-house” root cause analysis of all incidents
    • I.A.’s, Safety Stand-downs, and Action Lines
Audits, Incident Prevention/Investigation, & Communication (cont’d)

• Communication
  – Operator-Issued “Report Cards”
  – Contractor Quarterly Safety Meetings
  – Participation in Contractor and Operator Trade Associations
    • AGA
    • NGA
    • DCA
• BOTTOM LINE

– CONTRACTORS ARE A LARGE PIECE OF THE PUZZLE.

– WE SHARE MUTUAL GOALS.

– THESE GOALS ARE ACHIEVEABLE WITH GOOD COMMUNICATION, SHARED RESOURCES, AND RESPECT FOR EACH OTHER’S INPUT.