2015 Pipeline Safety Operator Training
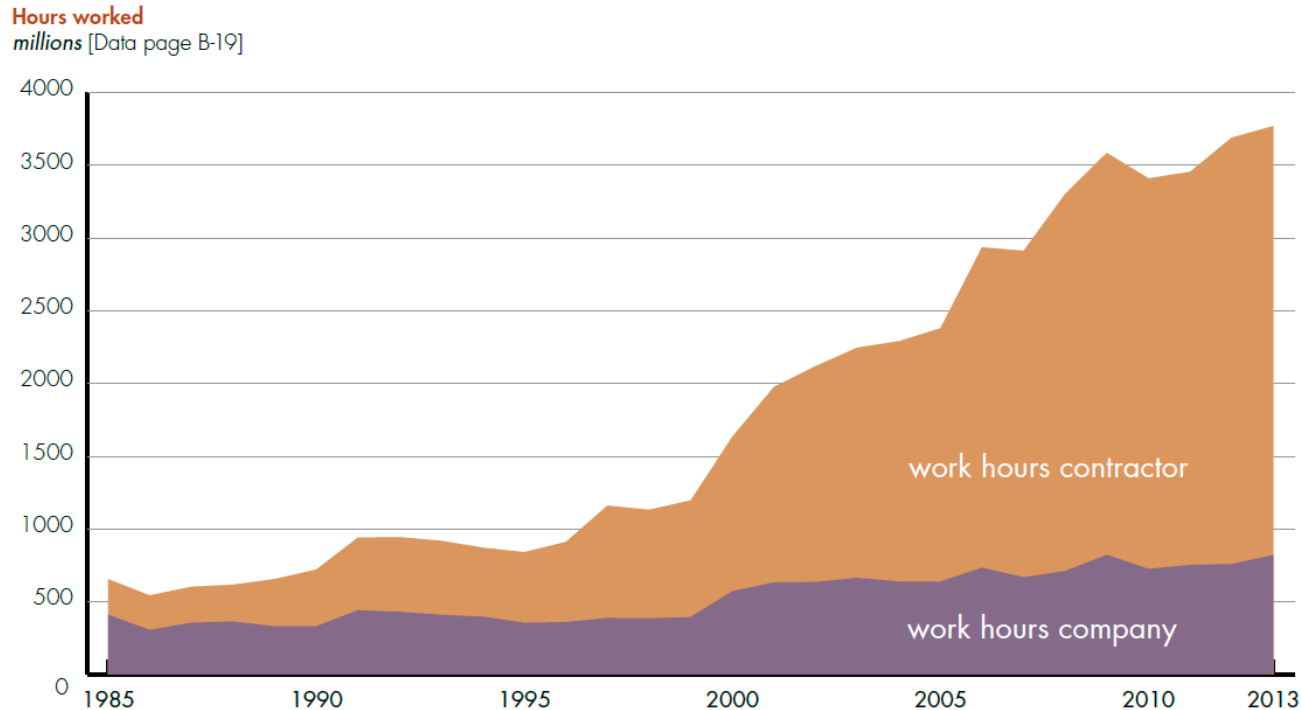## ISN

April 15, 2015

Agenda

I.   Contractor Management Trends

II.   ISN Process

III. Operator Qualifications (OQ) in ISNetworld

IV.   Quick Facts

V.   ISN Events

VI.   Contact Information

Contractor Management Industry Trends

A Growing Industry Trend

- Global outsourcing of non-core business activities [1]

Hours worked
millions [Data page B-19]

- 60% - 70% of total work hours completed by contractors

- Contractors / subcontractors have higher incident rates

(1) International Association of Oil and Gas Producers http://www.ogp.org.uk/pubs/2013s.pdf

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- Increasing contractor management leads to positive trends for safety

  – Better specialization, skill and equipment

  – Enables safe and sustainable operations

- Prime duty for safe operations and environmental stewardship lies with the owner organization

  – Robust strategy needed
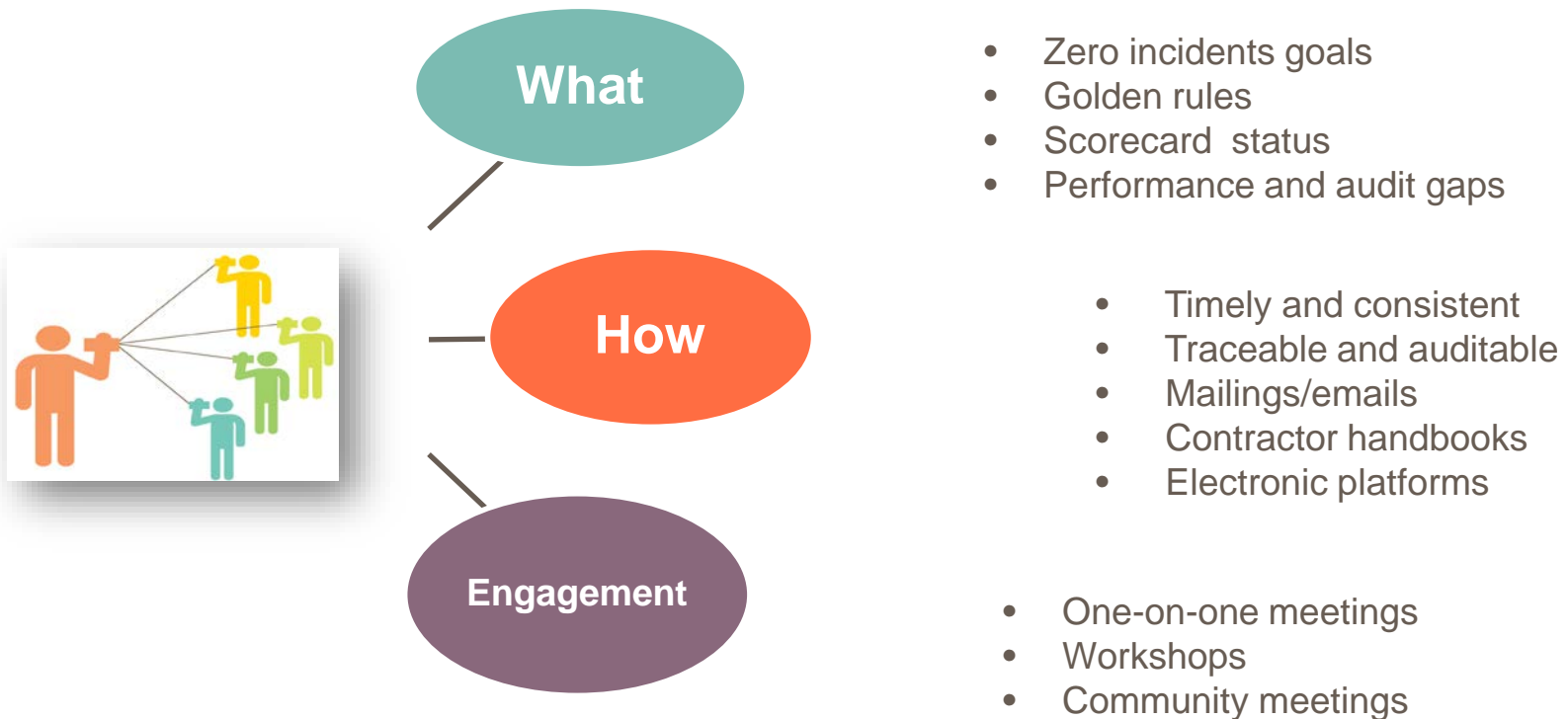
  – Better risk mitigation

10 Strategic Elements

1. Establish a clear communication strategy

2. Designed to measure performance

3. Incorporate a risk-ranking process

4. Follow a three-step due-diligence process

5. Maintain a qualified contractor list

6. Establish consequences and an exit strategy

7. Address subcontractor management

8. Follow standardized and transparent guidelines

9. Are integrated with internal business processes

10. Leverage technology

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1. Establish a Clear Communication Strategy

- A well thought out plan for both **internal** and **external** communication
  - 99%: U.S. enterprises in the Construction Industry with fewer than 100 employees. <u>US Census</u>

What

- Zero incidents goals
- Golden rules
- Scorecard status
- Performance and audit gaps

How

- Timely and consistent
- Traceable and auditable
- Mailings/emails
- Contractor handbooks
- Electronic platforms

Engagement

- One-on-one meetings
- Workshops
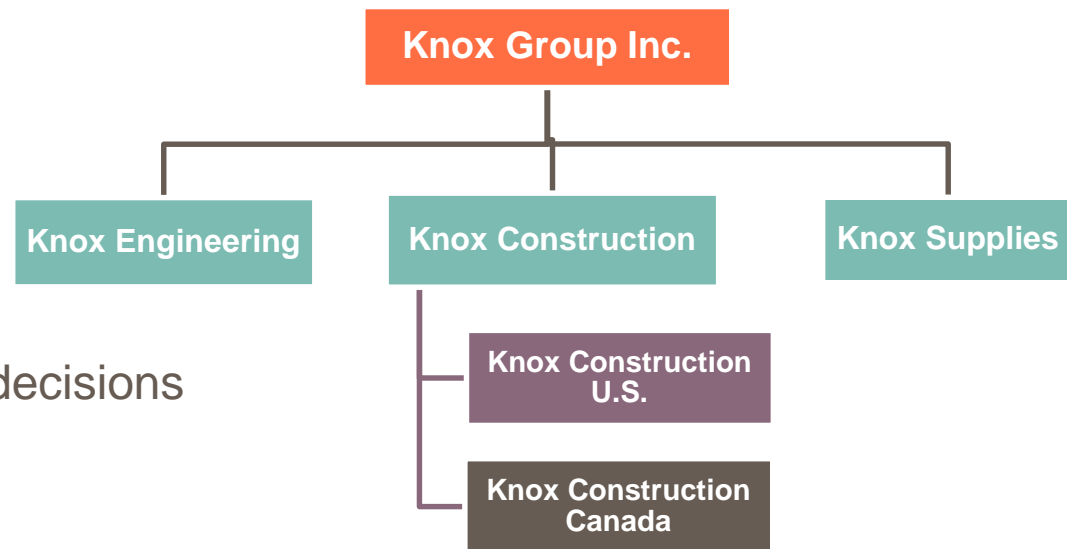- Community meetings

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- If it **matters**, **measure** it

- Use both lagging and leading metrics

- Examples of relevant performance data

  - Contractor work hours

  - Quarterly and annual incident rates

  - Post job evaluation feedback

  - Audit and Inspection action items

  - Status of certificates of insurance

A. Visibility

- Match KPIs with specific contracting company entities

B. Timeliness

- Obsession for data driven decisions

- Electronic vs. paper

Knox Group Inc.

Knox Engineering   **Knox Construction**   **Knox Supplies**

Knox Construction U.S.

Knox Construction Canada

3. Incorporate a Risk-Ranking Process

- Contractors come in various sizes, capabilities, risk profiles

- Classify risks according to pre-set criteria and matrix

  - Potential adverse consequences

  - Frequency, duration and / or scope of work

  - High, Medium, Low

- Re-evaluate / adjust contractor risk periodically

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Risk Screening Matrix

JOB FUNCTION	Green – Job function/work location criteria DO NOT FALL into Contractor Management System (CMS) Blue – Job function/work location criteria DO FALL into CMS			
rep. (Inspector, Consultant, etc)	Blue	Green	Blue	Blue
Manual labor	Green	Blue	Blue	Blue
Technician/ Supervisor	Green	Green	Blue	Blue
Clerical/ Administrative	Green	Green	Green	Blue
Office cleaning, delivery person, vending machine, etc	Green	Green	Green	Green
WORK LOCATION	Offsite, Contractor Shop	Office	Construction, Manufacturing, Storage	Drilling, Production, Plant, Compressor, Pipeline, Seismic

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4. Utilize a Three-Step Due-Diligence Process

Self-Reported Information

Review & Verification

Office/Field Audit

1 Management System Questionnaire (MSQ), Insurance, Certificates/Letters, Training

2 Desktop HSE program review, Statistical verification, Insurance screening, Certificate validation, Citation/Prosecutions, Training documentation verification

**3** 3rd Party and Owner/Operator Audits shared by Owner companies

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5. Maintain a Qualified Contractor List

- Proactive, structured process for finding, qualifying, onboarding, monitoring, and terminating contractors

- Enhances procurement integrity

- Builds stronger and lasting partnerships with contractors

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6. Establish Consequences and an Exit Strategy

- Establish, communicate and enforce consequences for non-compliant contractors

- Develop contracts and agreements carefully

- Eliminate time / effort required to manage bottom performers

- Fewer, better service providers

7. Address Subcontractor Management

- Contractors with logos you don't recognize on your jobsite?

- Subcontractors have a higher likelihood of incidents

- Best practice approaches:

    1. Subs qualified / monitored to same
       standards as general contractor

    2. General contractor required to
   same level of rigor for qualifying subs

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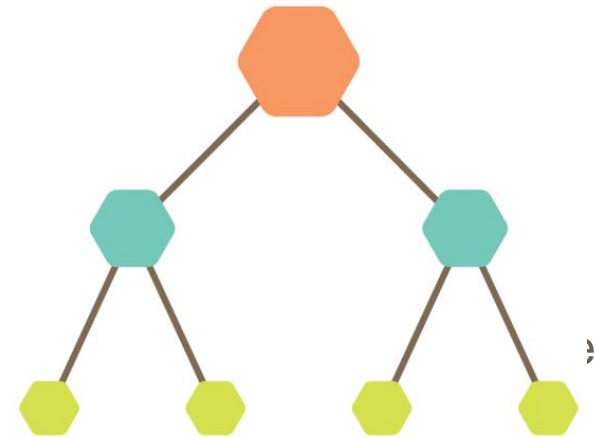
8. Follow Standardized and Transparent Guidelines

- Consistency and transparency is a common challenge

- Utilize a single, well organized database

- Improves procurement transparency

- Minimize duplication and inefficiencies

- Contractor management as an integral part of the complete business processes

- Goal: to drive end-to-end risk management

- Examples of contractor Key Performance integration:

  - Purchase orders issued only to qualified contractors

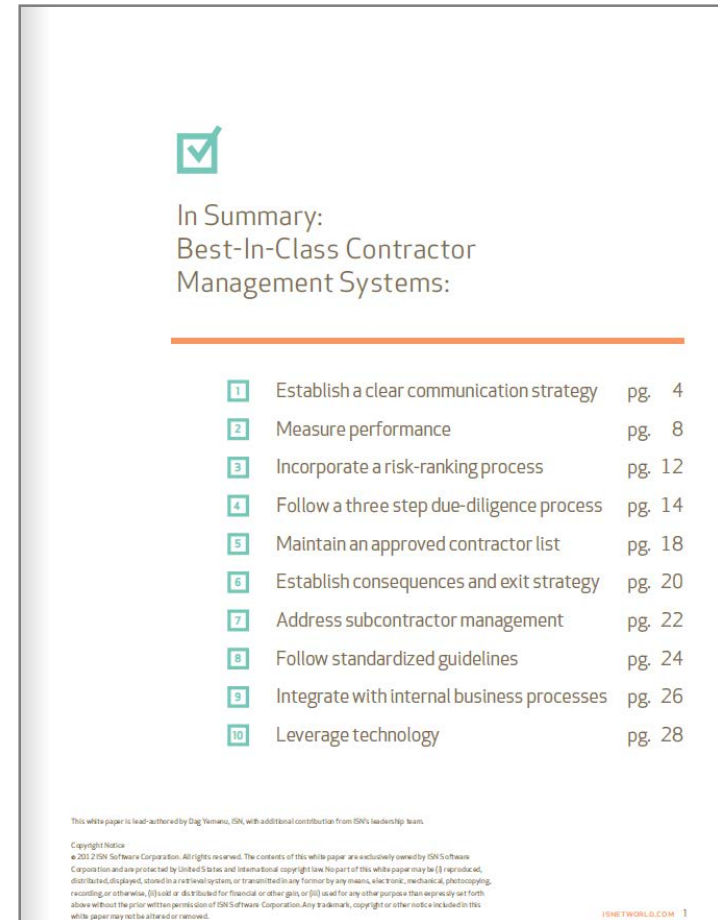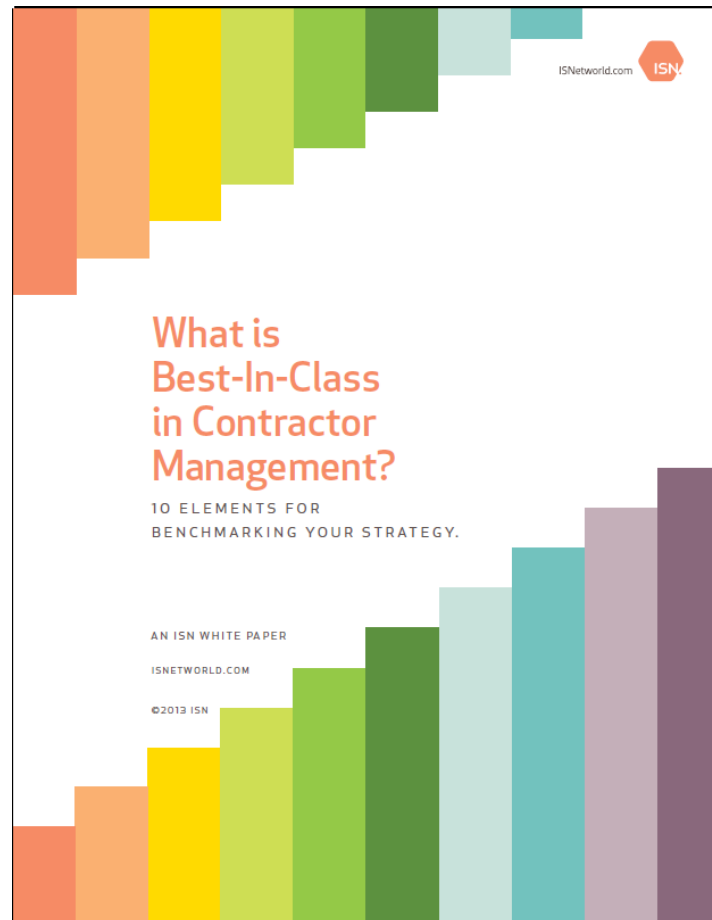 - Site entry ID badges tied to contractor approval status

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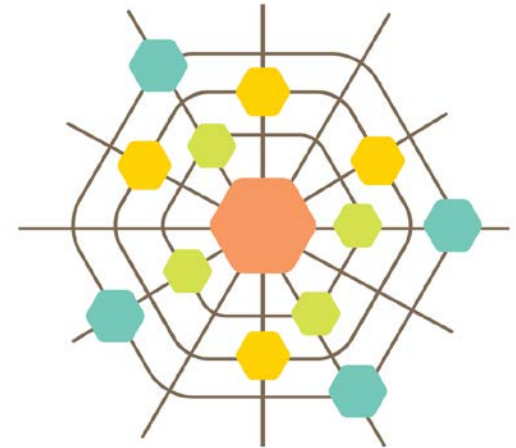
10. Leverage Technology

- Without technology / automation, contractor management can become laborious, inefficient and disorganized

- 59% of best-in-class organisations use technology to enhance HSE performance[2]

- Use of Internet and specialized management tools

  - Collect and share information in a secure and efficient environment

  - Reduce duplication and administrative cost

(2) http://www.aberdeen.com/Aberdeen-Library/6991/RA-envinronment-health-safety.aspx

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What is Best-In-Class in Contractor Management?

10 ELEMENTS FOR BENCHMARKING YOUR STRATEGY.

AN ISN WHITE PAPER

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In Summary:
Best-In-Class Contractor Management Systems:

1	Establish a clear communication strategy	pg.	4
2	Measure performance	pg.	8
3	Incorporate a risk-ranking process	pg.	12
4	Follow a three step due-diligence process	pg.	14
5	Maintain an approved contractor list	pg.	18
6	Establish consequences and exit strategy	pg.	20
7	Address subcontractor management	pg.	22
8	Follow standardized guidelines	pg.	24
9	Integrate with internal business processes	pg.	26
10	Leverage technology	pg.	28

This white paper is lead-authored by Dag Yemenu, ISN, with additional contribution from ISN's leadership team.

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Request Whitepaper at : http://www.isnetworld.com/ContractorManagement

ISNetworld Process – Collect. Verify. Connect.

1. Self-Reported Information

BAKER HUGHES

CINTAS THE SERVICE PROFESSIONALS

KSi Precision At Work

Joe's
WELDING

Levels of Information
- Company
- Project
- Individual

+

2. Verified Information

ISN Review & Verification Services (RAVS)
- Written Programs
- Injury & Illness Records
- EMR
- Citation/Prosecution Search
- Training
- Insurance
- Workers' Comp Clearance & Rates

ISNetworld RAVS

Hiring Client
- Post Job Evaluation
- Field Feedback
- Working Relationship
- Competency Assessments
- Contracts/Agreements

3rd Party (Data Providers)
- On-Site Inspections
- D&A & Background Checks
- Operator Qualifications (OQ)
- Training

=

3. Configurable Hiring Client Grading

Chevron
Status: A

Weyerhaeuser
Status: B

encana
Status: B

Bristol-Myers Squibb
Status: A

USS United States Steel Corporation
Status: A-Prequalified

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ISN in Numbers

75+
Countries with ISN Customers

450+
Employees

950+
Years of HSE and Insurance/Risk Management Experience

Enterprise Products

ENBRIDGE

SUMMIT MIDSTREAM

KINDER MORGAN

bp

Chevron

American Midstream

Marathon Pipe Line LLC

ExxonMobil

PLAINS ALL AMERICAN PIPELINE, L.P.

Shell

QUALITY SYSTEM CERTIFICATION
DNV·GL
ISO 9001

ISN Offices
Dallas • Calgary • Sydney • London • Los Angeles • New York • Toronto

ISN

Contractor/Supplier Benefits

CONTRACTOR ASSISTANCE
Contractors stay informed with a To-Do List, email reminders, in-person meetings and unlimited, toll-free help desk support.

CONTRACTOR WEBSITE BUILDER AND MARKETING EXPOSURE
In addition to a company profile searchable by ISNetworld Hiring Clients, contractors have the ability to easily create their own website hosted by ISN to increase online visibility.

REVIEW AND VERIFICATION SERVICES (RAVS)
RAVS provides resources and informational videos to assist contractors in the development and implementation of effective health, safety, environmental and sustainability programs.

BENCHMARKING
ISN publishes a collection of benchmarking publications that allow contractors to measure their health and safety data against their industry peers, gauge their performance and drive improvement.

QUESTIONNAIRE
A standard questionnaire reduces administrative burden by eliminating duplicative work.

INSURANCE AGENT/ BROKER TOOL
Provides a searchable database of registered insurance agents and brokers who can upload insurance and Experience Modifier documents directly into ISNetworld on behalf of contractors.

ONLINE TRAINING TOOL
Site orientation/induction videos are posted to allow contractor employees to complete required training before starting a job, saving time and resources on site.

SMARTLOG
A decision tree assists contractors with classifying incidents and near misses to create OSHA and incident forms.

TRAINING MANAGER
A customizable tool that allows contractors to manage in-house training records specific to their company.

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The Results

ISN US Contractors vs. BLS 2013 Nonfatal TRIR Rate Comparison
All Industries, Most Frequent NAICS Code in ISN

	213112 - Support Activities For Oil & Gas Operations	23821 - Electrical Contractors and Other Wiring Installation Contractors	54133 - Engineering Services	23822 - Plumbing, Heating and Air Conditioning Contractors	23712 - Oil & Gas Pipeline and Related Structures Construction
2013 BLS NONFATAL TRIR*	1.90	3.50	0.70	5.00	1.40
2013 ISN NONFATAL TRIR	1.44	1.60	0.47	2.35	0.85
	3,836 Contractors	1,477 Contractors	1,246 Contractors	1,228 Contractors	1,102 Contractors

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Section 3.1

Total Recordable Incident Rate (TRIR)

INJURY RATE PER 100 EMPLOYEES (TRIR)

BENCHMARKING HIRING CLIENTS (39)

Client	TRIR
A	0.67
B	0.72
C	0.79
D	0.81
E	0.85
F	0.86
G	0.87
H	0.87
I	0.88
J	0.89
K	0.89
L	0.90
M	0.91
N	0.93
O	0.94
P	0.95
Q	0.98
R	1.00
S	1.01
T	1.01
U	1.02
V	1.03
W	1.03
X	1.05
Y	1.09
Z	1.10
AA	1.11
AB	1.12
AC	1.12
AD	1.12
AE	1.13
AF	1.16
AG	1.16
AH	1.16
AI	1.18
AJ	1.30
AK	1.41
AL	1.46
AM	1.60

1ST QUARTILE = 0.89
2ND QUARTILE = 1.01
3RD QUARTILE = 1.12
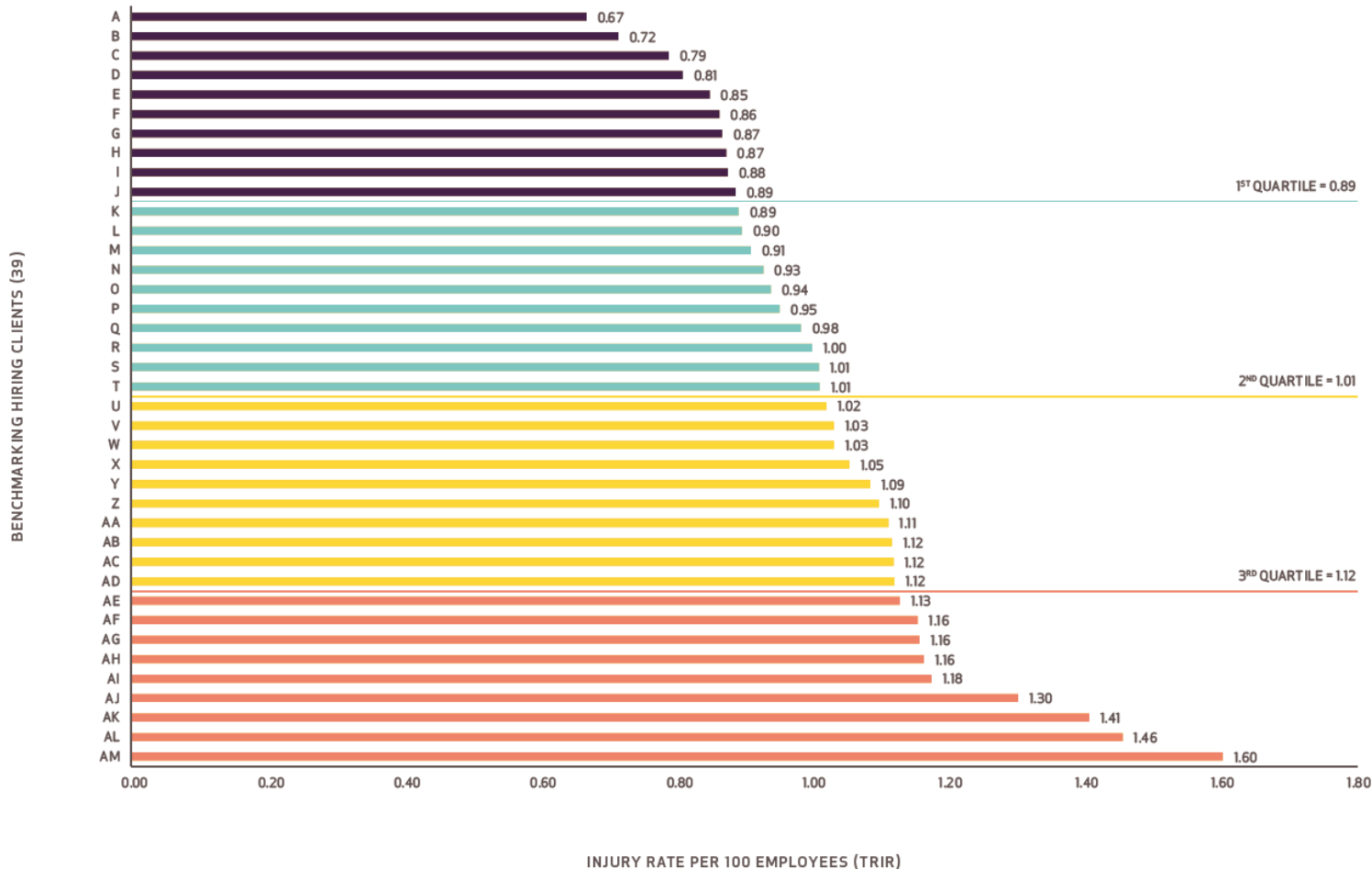
The 2013 Benchmarking Report was created by ISNetworld to compare Pipeline Hiring Clients to their peer companies in the Midstream Oil & Gas (Pipeline) industry.

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ISN Benchmarking Report – Contractors
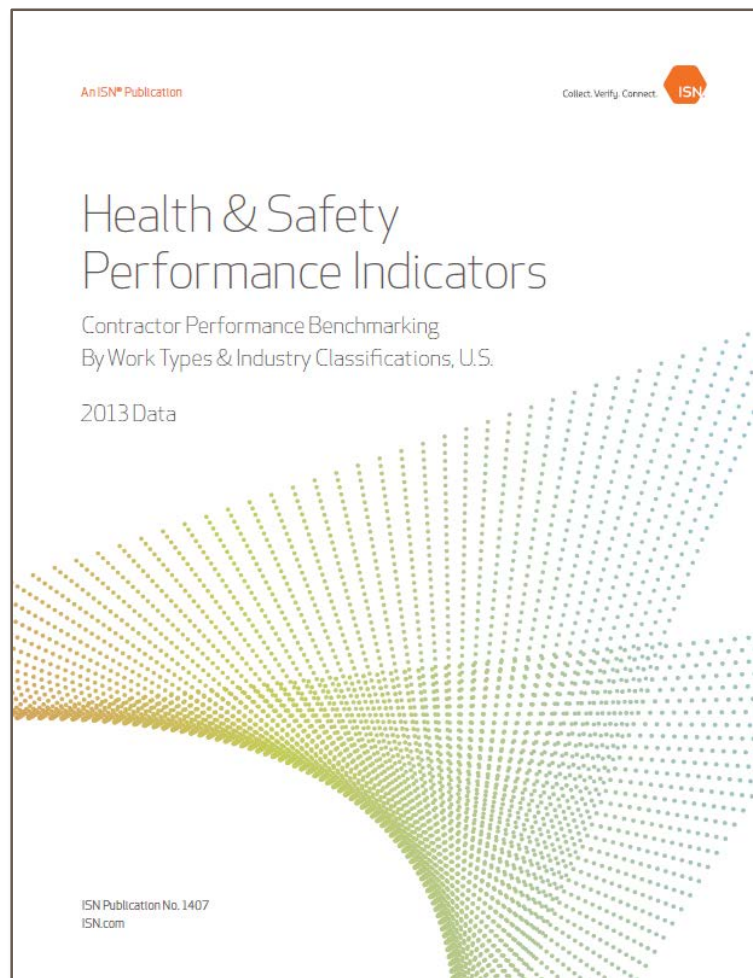
An ISN® Publication

Collect. Verify. Connect. ISN.

Health & Safety Performance Indicators

Contractor Performance Benchmarking
By Work Types & Industry Classifications, U.S.

2013 Data

ISN Publication No. 1407
ISN.com

Table of Contents

Operator Qualifications (OQ)

Operator Qualifications Process in ISNetworld

1. Hiring Client Determines OQ Covered Task List

Hiring Client: Determines acceptable qualifications and data providers

Task: Pipeline Repairs

- ☑ Hot Tapping
- ☑ Welding
- ☑ Installation
- ☑ Replacement

2. Contractor Inputs OQ Data Provider IDs

Contractor: Inputs employee data into ISNetworld

Data Provider: Sends employee qualifications to ISNetworld via automatic data feed

Qualification Methods

- ☑ Client Specific
- ☑ 3rd Party Data Providers

3. Hiring Client Monitors Compliance

- ➡ Reporting Capabilities
- ➡ Continuous Employee Evaluation
- ➡ Notifications

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OQ Covered Task List

Task List Management

- Task Number

- Task Name

- Qualification Methods

- Expiration Periods

140 Total Records

	Task Code	Task Name	Type	Details
	0.0	Recognition and appropriate response to Abnormal Operating Conditions	(LG)	☰
	1.1	Measure structure-to-soil potentials	(LG)	☰
	1.2	Conduct Close Interval Surveys (1 to 3)	(LG)	☰

Data Provider	Qualification Method	Type	Year End Expiration	Status	Renewal Months	Init / Sub	Class
NCCER	66102-02 (Liquid Pipeline General Abnormal Operating Conditions) - NCCER Contren Learning Series	AW		Active	36	Both	V
OQSG	CT01 (Conducting Annual Cathodic Protection Surveys) - OQSG - Performance	P		Active	36	Both	V
NACE	A03 (Senior Corrosion Technologist) - NACE	W		Active	36	Both	V
Energy Worldnet	13051 - EWN-CBT-Abnormal Operating Conditions: Gas AOCs - ENERGY worldnet - Written	A		Active	36	Both	V
NCCER	PV012 (PV012) - NCCER Performance Verifications	P		Active	36	Both	V
NACE	A04 (Corrosion Technician) - NACE	W		Active	36	Both	V
NCCER	67107-02 (Abnormal Operating Conditions) - NCCER Contren Learning Series	AW		Active	36	Both	V
NACE	CP2 (CP Technician) - NACE	PW		Active	36	Both	V
NACE	A03 (Senior Corrosion Technologist) - NACE	W		Active	36	Both	V
Energy Worldnet	13051 - EWN-CBT-Abnormal Operating Conditions: Gas AOCs - ENERGY worldnet - Written	A		Active	36	Both	V
NACE	CP1 (CP Tester) - NACE	PW		Active	36	Both	V
NACE	CP3 (CP Technologist) - NACE	PW		Active	36	Both	V
NCCER	66102-02 (Liquid Pipeline General Abnormal Operating Conditions) - NCCER Contren Learning Series	AW		Active	36	Both	V
NACE	CP1 (CP Tester) - NACE	PW		Active	36	Both	V

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Hiring Clients can use current OQ data providers listed below or sponsor new data provider relationships.

Employee Quick Check

Viewing an OQ Report

Ability to Print and Email any Generated OQ Report

Expiration set by the Client

Designates type of qualification

Browsing OQ Reports

Runs new/live report

Allows Client to run deficiency report based on tasks needed

View latest generated OQ report

View all-time list of OQ reports generated

Mobile Site

- Works on all mobile devices with internet access
    - iPhone, Android, Blackberry, Windows Phone

- Mobile site does not require download or reinstallation

- Ability to quickly view/search for information on contractors, check ISN Messages, etc.

- ISN Mobile Tools:
    - Browse OQ Reports
    - Bulletin Board
    - Dashboard
    - Evaluation Reports
    - Messages
    - Contractor Search
    - QuickCheck

Quick Facts

Statistics – February 2015

78

Number of Active Task Lists in ISNetworld

2,472

Number of Contractor Companies Who Have Current OQ Reports

172,085

Number of Current Qualifications

361,814

Number of Current OQ Reports Submitted

950,000,000+

Number of Qualifications housed in ISN

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2015 Pipeline Safety Operator Training
ISN

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