



# Safety, Health & Risk Professional for 16+ Year

- Loss control rep for insurance carrier
- Utility owner's safety rep
- General contractor safety

Current head of safety & health at Leopardo Companies

- Oversight of corporate program and project approaches
- Manage 2 full-time coordinators





# Commercial general contractor / construction manager

In business for 40+ years

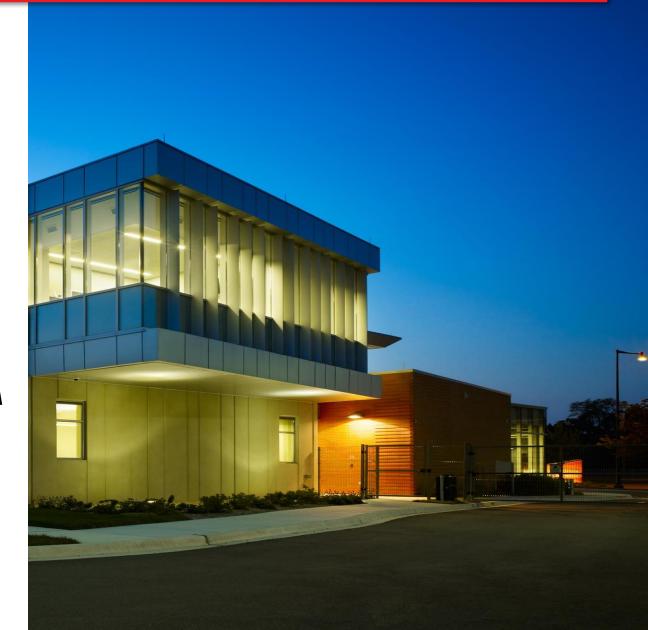
Target several strategic markets:

- Tenant interiors
- Healthcare / Institutional
- Corporate / Community
- Residential

Project ranges: \$2k to almost \$100MM

Self-Perform: 175 union trades

- Demolition
- Carpentry (framing, drywall)
- Wall finishes (taping, painting)





- Utilize construction standards and contractor case study to plan and review the safety approach to the next construction project at your facility
- Specifically: Review contractor safety plans and work conditions for effectiveness
- Contractors: Gain new insights into approaches, software, etc. that can be taken back to co-workers for evaluation



- Construction standards
- Project safety planning and coordination
- Approaches to critical risks
- Inspections
- Sharing lessons learned
- Recent challenges
- **Q&A**



### 1910: General Industry

Everything but agriculture, construction and maritime

### 1926: Construction

- Construction, demolition, alteration or repair
- NOT maintenance

### Key differences:

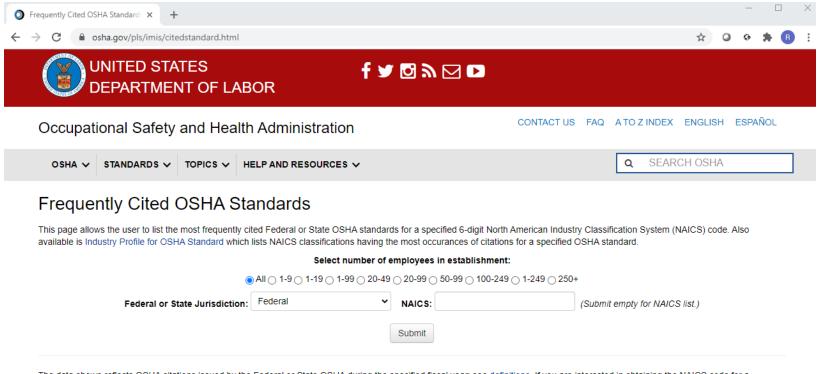
- Construction-specific OSHA 10- and 30-Hour
- Fall protection: 4 feet vs. 6 feet
- Specialized standards (ex: Excavations)

### **Commonalities**

- General Duty Clause of the OSH Act
- Recordkeeping
- Directly-referenced 1910 standards
  - HazCom, Forklifts, Respirators...







The data shown reflects OSHA citations issued by the Federal or State OSHA during the specified fiscal year; see definitions. If you are interested in obtaining the NAICS code for a particular industry, references are available on the NAICS Manual. This manual contains descriptions of every NAICS sector.



### 1910

- Hazardous energy control
- Machine guarding
- Hazard communication
- Powered industrial trucks
- Mechanical power presses / transmission
- Respirators
- Electrical wiring / components
- Fall protection
- Personal protective equipment
- Process safety management

### 1926

- Fall protection
- Scaffolds
- Ladders
- Eye and face protection
- General safety and health programs
- Head protection
- Excavations
- Lifts (MEWP's)
- Hazard communication
- Respirators



- Stopping these fatal incidents would eliminate over half of the causes of workplace fatalities in construction:
  - Falls
  - Caught-In or –Between
  - Struck-By
  - Electrocution
- So how do companies like Leopardo address these and other hazards?





- Pre-Job Risk Meeting
  - Environmental
  - Production
  - Quality
  - Safety and health
- Entire project team
  - Project executive, manager, engineer, superintendent, safety rep
- Weeks to months before the start of project
  - Based on size and complexity
  - Ex: Owner contract or letter of intent signed



- Goal: To address the safety and health items that require the most time and resources to control:
- "STCKY" and "STBY" items
  - Owner requirements (ex: full-time safety rep)
  - Hazardous surroundings (ex: overhead power lines)
  - Environmental issues (ex: contaminated soils, asbestos)
  - Specialized access (ex: skip hoists)
  - Significant fall protection (ex: roof systems)
  - New subcontractors
  - Specialty conditions (ex: confined spaces, post tension)



- Template that elaborates on the Pre-Job Risk Meeting
- Emergency action plan
  - Important phone numbers
  - Critical shutoff locations
  - Incident / crisis response even media
  - Clinic locations
- Safety orientation
  - Specific to the site
  - In-person daily or weekly
  - Numbered stickers for the hard hats



#### **Project Safety Startup Plan**

\* Complete this plan with guidance from the Leopardo Safety Department as needed at the start of the project. (Interiors only projects can utilize the Project Safety Startup Plan in Capital in lieu of this plan.)

Project Name and Number	
Market	
Project Executive	
Superintendent	
Project Manager	
Meeting Attendees	
Today's Date	

Owner / Facility Items	Applicable?	Action Items
Unique owner requirements		
Unique contract structures (multiple GC's, joint ventures, etc.)		
Critical neighboring facilities (power lines, train tracks, cell towers, airport/helipad)		
Environmental status reports (soils, asbestos, lead, mold, pathogens)		
Public interaction and barriers (partitions, canopies)		
Security provisions		

Documentation / Training	Applicable?	Action Items
Signage in place (Fed, State, Custom, gates, fencing)		
Emergencies (plan, clinics)		
Orientation / stickers needed		
Unique training/certs needed (scaffolds, stages, forklifts)		

Safety Supplies	Applicable?	Action Items
First aid kit, AED?, extinguishers,		
caution/danger tape		
PPE (hard hats, glasses, ear plugs, masks,		
vests, gloves, face shields, tie-off)		
Important Meetings	Applicable?	Action Items
Subcontractor Kick-Off / Phase Pulls		

Important Meetings	Applicable?	Action Items
Subcontractor Kick-Off / Phase Pulls		
High-risk pre-install meetings (structural, enclosure trades, new subcontractors)		
Crew leader meetings		
Weekly orientation date		



#### **Emergency Action Plan**

### Project Location

#### Emergency Numbers (Leopardo, Facilities, Demo/MEPFP Subcontractors)

Name	Company	Title	Phone

#### **Utility Emergencies**

Sprinklers	
Water	
Electrical	
Fire Alarm Panel / Zones	
Other	

#### Emergency Response / Supplies (Poison Control Center: 800-222-1222)

Safety Data Sheets					
AED					
Other					

#### Evacuations and Severe Weather

Evacuation Alarm	
Evac Route / Backup	
Assembly Point / Backup	
All-Clear Signal	
Shelter Alarm	
Shelter Area / Backup	

#### For Injuries or Illnesses:

#### • Secure the scene

- · Voluntarily provide first aid (if trained)
- If necessary, call 9-1-1 immediately

diagrams, etc. Secure items as needed

- o Inform dispatcher that it is construction-related o In Chicago, ask for Unit 515 for Special Rescues
- · Inform a Leopardo supervisor immediately
- · Leopardo supervisors: Call Safety, Super Team Leader, Operations Officer, or Human Resources
- If outside medical treatment is needed, coordinate an escort to the facility (Subs should escort their own personnel) • Complete incident report, witness statements, photos,

#### For Crises or Emergencies:

- · Initiate site control and determine if a shut-down is needed
- · Post personnel at access sites as needed • Make sure all site personnel are accounted for
- Notify all personnel to direct questions from outside groups to the Leopardo supervisor on-site
- Contact critical personnel: Leopardo Safety / Super Team Leader, Project Executive / Principal, Owner's Reps Media Response:
- o "We are currently focused on responding to the needs of the situation. Please contact our client representative or our marketing department at 847-783-3914 for updates as they become available."
- o "We ask that you please stay in a safe area while personnel respond to the situation."



Project description

Project Overview

**Emergency Procedures** 

Unique aspects

 Current hazardous operations

Access points & security

Overhead Photo

### Project Overview

- Contacts
- Meetings
- Deliveries / parking - Start times
- Dumpsters / cleanup
- Noise / radios
- Smoking - Facilities
- Logistics Photo

- Evacuations
- Evacuation alarm:
- Evacuation routes:
- Assembly point: - Backup:
- All-clear signal:
- Severe weather shelter - Backup:
- Emergency supplies:
- Utility shut-off locations:

Health

Provisions

sick

Pre-screen for illness

#### Project Do's

- · Communicate and ask questions
- · Report any issues to supervision immediately
- · Maintain awareness at all times
- · Obey all signage and barricades
- · Complete permits and forms as needed
- Daily Report, Hot Work, Crane Checklist, etc.
- Follow all rules (project, OSHA, equipment, ...)
- Report incidents immediately!
- Drug and alcohol test if outside treatment is needed
- Competent Person required for each crew
- Documentation Review: - Certifications
- Daily Huddles and Reports

Stay home if sick / close contact with someone Follow current health guidelines - Social distancing - Face coverings Follow hygiene practices - Hand washing / sanitizing - Cover coughs, sneezes

Project Safety Startup Plan Page 1 of 2 Updated: June 2020 Emergency Action Plan Page 1 of 5 Undated: June 2020



- Most of our work is subcontracted!
- Pre-qualification
  - TradeTapp software
  - Tied into bidding software (Building Connected)
  - Financials
  - Experience Modification Rating check
    - Below 1.0, or
    - Explanation with risk plan
  - Corporate safety plan & SDS
- Contracts and insurance
  - Subcontractor master agreement (safety and health expectations)
  - Project-specific agreements (scope of work)
  - Certificate of insurance



- Pre-installation conference ("pre-con meeting")
  - Key sub personnel (ex: safety rep, competent person)
  - Scope of work
  - Safety plan
  - Project-specific SDS
- Project safety orientation



## Phase Pulls

- Verify a front-end schedule by pulling it back to today
- Based on reaching critical milestones (ex: watertight)

# Look-Ahead Meetings

- Replaced a traditional crew leader meeting
- Trades place tags on a board to identify work to be done for 5-6 weeks
- Great opportunity to "flag" critical risks

# Morning Huddles

- Conducted by each crew leader with their crews
- Then all crew leaders huddle afterwards to share insights / concerns
- Complete relevant forms such as hot work permits

- Great way to flag an activity that warrants additional consideration
  - Confined space permit
  - Crane pick plan
  - Demolition plan
  - Fall protection plan
  - Job hazard analysis
- Check-valve to Project Safety Plan and Pre-Install Meeting

Crane

Pick

Plan

29



- Daily by Superintendent
  - Raken app
  - Brief, 12 general questions
- Weekly (or more) by Safety Department
  - Real Time Risk Solutions app
  - More in-depth, closer to an audit
- Monthly by Project Executive and Manager
  - Microsoft Forms
  - Monthly themes (ex: overhead work)

No entry

### 

	Weather	
6:00 AM	12:00 PM	4:00 PM
32° 🍊	34° 🍊	32° 💮
Overcast Wind: 17 MPH   Precipitation: .03"   Humidity: 72%	Overcast Wind: 16 MPH   Precipitation: .05"   Humidity: 53%	Snow Wind: 16 MPH   Precipitation: .27"   Humidity: 77%

Work Logs						
Name	Description	Quantity	Hours	Hours To Date		
All Sealants		0	0	230		
Arcorp Steel	Install angle on underside of Level 3 deck for MEP penetrations  Jason Samolinski 103/16/21 108:54AM	3	8	3036		
Builders Concrete	Weather Day 15.5 - ironworkers called off with high winds Jason Samolinski   03/16/21   09.01AM	0	0	3761		
ECS		0	0	194		
Ewing Doherty Plumbing		0	0	436		
Federal Rental Fence		0	0	12		
Gilco Scaffolding		0	0	184		
HTH Mechanical	Continue suspended duct at East side of Level 1  Jason Samolinski   03/16/21   08:54AM	2	8	120		
LB Hall Fireproofing		0	0	176		
Leopardo Carpenter Company #1		0	0	72		
LEOPARDO Laborers	Continue visqueen at level 5 windows and continue setting up heaters at level 5 for Concrete pour	4	8	1831		
	Jason Samolinski   03/16/21   08:58AM					
Merit Electric	Backfill Com Ed underground at SE corner of site and continue switchgear installation. Install panel risers at	6	8	1288		

	Level 6 deck Jason Samolinski   03/16/21   08:55AM			
Michels Foundation	Jason Samolinski   U3/10/21   U6.55AM	0	0	2623
Nova Fire Protection	Continue standpipe at both stairwells from level 1-4 Jason Samolinski   03/16/21   08:55AM	2	8	128
R Carrozza Plumbing	Continue suspended cast iron at 1st floor and continue layout at Level 4	6	8	1174
	Jason Samolinski   03/16/21   08:57AM			
RG Construction	Continue exterior framing at Level 1 north, continue structural studs at Level 2 and layout at Level 5  Jason Samolinski   03/16/21   08:56AM	6	8	1376
RV Builders	Continue masonry at south wall along G line Jason Samolinski   03/16/21   08:55AM	5	8	2261
Taylor Excavating		0	0	1192
V3 Surveyors		0	0	48
Total		34	272	20142

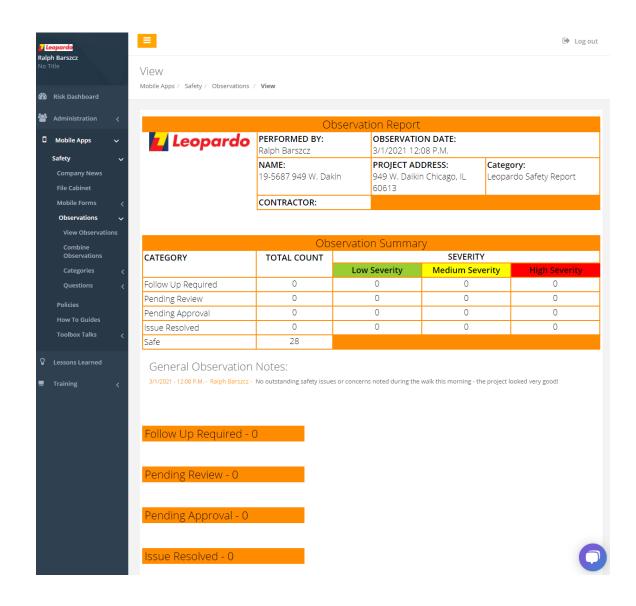
Materials

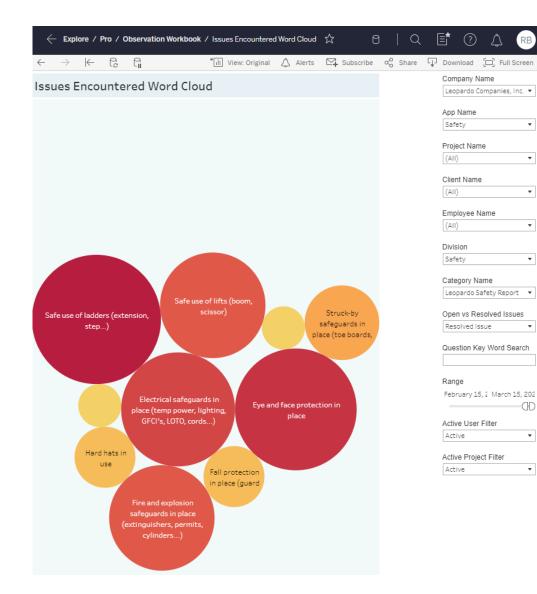
Equipment					
General Notes					
Site Safety Observations					No entr
	St	ırvey			
Que	estions	N/A	No	Yes	Description
1.	Did a municipal inspection occur today?		<b>~</b>		
2.	Were any visitors on site today?		<b>~</b>		
3.	Did weather cause any delays?			<b>~</b>	Experienced weather day 15.5 with high winds and snow later in the day Jason Samolinski   03/16/21   09/02AM
4.	Did any other schedule delays occur?		<b>~</b>		
5.	Was any rental equipment delivered or returned today?		<b>~</b>		
6.	Were any dump boxes delivered or returned today?		<b>~</b>		
7.	Were any permits issued? (e.g. Hot Work)		<b>~</b>		
8.	Were any incidents reported or noted on site today? (Incident report needed)		<b>~</b>		
9.	Did any worker report a project safety concern		~		

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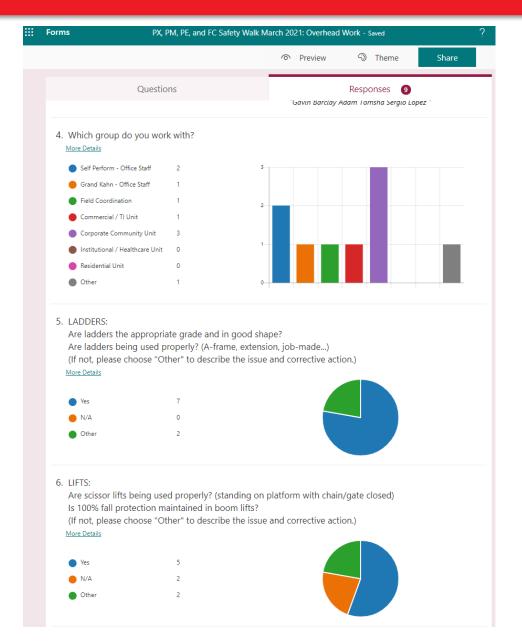
\*

-aD





Forms PX, PM, PE, and FC Safety Walk March 2021: Overhead Work - Saved
Questions Responses 9
PX, PM, PE, and FC Safety Walk March 2021:
Overhead Work
The survey will take approximately 4 minutes to complete. Project Executives, Managers, Engineers, and Field Coordinators:
In honor of National Ladder Safety Month, the theme for this month's walk will focus on overhead work. From ladders, lifts and scaffolds to steel erection, many of the hazards that arise out of construction are related to elevated work.
Choose one project to stage the walk and answer the questions below: Please invite the Superintendent, Safety Department and Self Perform (if applicable) to your walk.
THESE WALKS CAN BE SCHEDULED VIRTUALLY - CONTACT THE SAFETY DEPARTMENT FOR ADDITIONAL INFO!  If you are in between active projects, please participate in the monthly Safety Committee WebEx (more info to follow).
As always, please direct concerns, questions and suggestions to the Leopardo Safety Department.
1. Project(s) Visited
Enter your answer
2. First and Last Name *
Enter your answer
3. Who else participated in the walk?
Enter your answer





- Electrical (cords, lighting, GFCI use...)
- Eye and face protection
- Ladders
- Fall protection
- Fire prevention / protection
- Lifts (MEWP's)
- Head protection
- Struck-by hazards
- Slips and trips / housekeeping
- Scaffolds



- Weekly toolbox talk quizzes
- Microsoft Forms
- More engaging and competitive
  - Safety lunch for highest-scoring team monthly
- Analytics
  - See average scores
  - Increase focus where needed

4. Which of the following ladder ratings is NOT acceptable on Leopardo projects? (HINT: CHOOSE THE ONE WRONG ANSWER!) * (1 Point)	•
Type IA Extra Heavy Duty	
○ Type IAA Extra Heavy Duty	
○ Type III Household	
O Construction-Grade	
5. How often should ladders be inspected our our projects? (Hint: Choose ALL that apply!) * (1 Point)	
Upon arrival at the project	
Daily before use	
Periodically by a	•



Key Project Risks

- •8 Key Topics
- Project Team with Pre-Con & Safety

Pre-Job Meeting

- Refine Project Safety Risk Plan
- •Schedule Startup Plan completion
- •PX / PM, Super, and Safety

Project Safety Startup Plan

- Specific action items
- Due dates & responsibilities
- •Super, Safety, and PX / PM

Project Safety Activities

- Pre-Installs
- Orientations
- Inspections
- TBT Quiz



- COVID-19
  - Changing guidelines
  - "Fatigue"
- Strains and sprains
- Data integration
  - Project management
  - Production
  - Quality
  - Safety



# **Objectives**

- Use construction standards and case study to review upcoming construction work
- Review construction safety plans and conditions for effectiveness
- Contractors gain new insight into approaches, software, etc. that can be reviewed with teams

# **Agenda**

- Construction standards
- Project safety planning and coordination
- Approaches to critical risks
- Inspections
- Sharing lessons learned
- Recent challenges