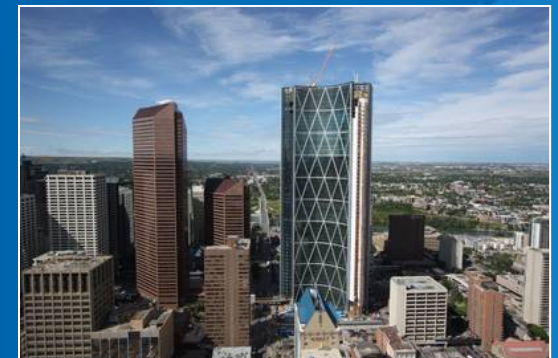
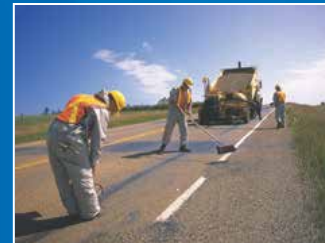


# FIELD LEVEL HAZARD ASSESSMENTS

Rob Dhillon  
Director, HSE  
Ledcor Technical Services



# LEDCOR GROUP OF COMPANIES



# LEDCOR TECHNICAL SERVICES

WE BUILD AND SERVICE COMMUNICATION NETWORKS FOR CUSTOMERS ACROSS NORTH AMERICA



NATIONAL DATA NETWORK MAINTENANCE



TRANSPORT EQUIPMENT INSTALLATION



MIDDLE MILE TELECOM BUILDS



TELECOM NETWORK MAINTENANCE



WIRELESS BUILD & MAINTENANCE



LONG HAUL FIBER BUILDS



SUBMARINE BEACH LANDINGS



I & R SERVICES



FTTP DESIGN BUILD & OPERATION



24/7 CUSTOMER SERVICE CENTER

# LEDCOR TECHNICAL SERVICES

## OUR FOOTPRINT



SERVICING NETWORKS



BUILDING NETWORKS

# LEARNING OBJECTIVES

1. Distinguish a Field Level Hazard Assessment (FLHA) from basic hazard assessment processes
2. Learn about the key features of a FLHA
3. Discuss three values of the FLHA process

# HAZARD ASSESSMENT

## BASIC HAZARD ASSESSMENT (JHA/JSA) vs. FIELD LEVEL HAZARD ASSESSMENT

- Basic hazard assessments are limited in the value they present
- Field Level Hazard Assessments empower field employees and are:
  - site and task specific
  - real time
  - cognitive tool

	FEATURES	JHA	FLHA
J o b	Creates hazard awareness	YES	YES
	Training & communication tool	YES	YES
	Hazard & control inventory	YES	YES
	Develops practices and procedures	YES	YES
	Pre-job planning	YES	YES
T A S K & S I T E	Site and environment specific	NO	YES
	Real time	NO	YES
	Captures new & changing hazards/risks	NO	YES
	Task specific job planning	NO	YES
	Encourages active risk assessment	NO	YES
	Empowers field employees	NO	YES
	“Last chance” hazard assessment	NO	YES
Makes procedures site specific	NO	YES	

# RISK & HAZARD ASSESSMENTS IN LEDCOR



## 1. Project/Contract Risk Assessment

- 100,000 ft. view risk assessment of the entire project or contract.
- Considers all risks from project bidding to project completion. Completed by Project Managers.



## 2. Job Hazard Assessment (JHA)

- 10,000 ft. view assessment specific to a worksite or segment of a project.
- Completed by the most senior site supervisor.
- Required for larger, higher risk, and more complex worksites



## 3. Field Level Hazard Assessment (FLHA)

- 1,000 ft. view assessment at the location of a specific task.
- Completed by a work crew at the worksite prior to the start of the task. Updated as new hazard are introduced or change in the work plan.

# FLHA

- Executed by each crew or individual technician
- Completed at start of task
- Updated throughout task execution
- Crew or Tech's work plan
- Supervisor / manager review and feedback



# FIELD LEVEL HAZARD ASSESSMENT (FLHA)

### STEP 1: WHAT IS THE TASK?

Task Description: \_\_\_\_\_

Break the above task down into steps involved in getting it completed safely on the inside of this card in column 1. Consider the following activities when developing steps:

Picking up materials      Deliverance  
Drive to/on site              Job activity steps  
Job set up                      Equipment operation

### STEP 2: ASSESS THE HAZARDS

Below is only an example of common workplace hazards. Be sure to identify all other hazards not on this list. List all identified hazards in column 2 on the inside of this card next to the applicable task step.

PEOPLE	EQUIPMENT
Employees and subcontractors	Mobility and stationary equipment
Site workers	Vehicles/trucks
MATERIALS	ENVIRONMENT
Lifting, bending, twisting, tripping	Where are you working and what is around you?
Sharp edges	Weather & conditions

### STEP 3: CONTROL THE HAZARDS

Always follow the below hierarchy when selecting hazard controls. Combinations of controls (2 or more) are typically used when controlling any HAZARD to a safe and acceptable level.

List all controls required in column 3 on the inside of this card next to the applicable hazard.

- Eliminate the hazard. Don't do it / don't use it.
- Substitute the hazard. Find a safer way.
- Physical Controls. A physical barrier or guard.
- Instructions/training. Safe work instructions.
- PPE. Last line of protection.

### STEP 4: PRE TASK CHECKLIST

Complete this checklist prior to starting the task.

	Y	N	NA
1. Reviewed the Project/Control Task Assessment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All PPE to perform the task available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Tools, equipment, and vehicles been inspected prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do all personnel involved in this task have the required training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are lock-out requirements in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a job specific Emergency Response Plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have all required permits been completed? (e.g. municipal ground disturbance, confined space, hot work, environmental, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is there a rescue plan in place (e.g. confined space working at height)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

### STEP 5: UPDATE THE FLHA

When steps, hazards, and/or controls are changed or introduced during the shift, update the FLHA to reflect those changes. Communicate the changes to all persons affected by them.

### STEP 6: POST TASK CHECKLIST

Complete this checklist after the task has been completed.

	Y	N	NA
1. Was the work area cleaned up at the end of the job/shift?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all safety controls/overnight work signage in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have tools and equipment been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the site been secured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## FIELD LEVEL HAZARD ASSESSMENT

### DATE PRODUCTION JOB PLANNING

Business Unit # \_\_\_\_\_ Project # \_\_\_\_\_  
Production Report or Job # \_\_\_\_\_  
On Site Supervisor \_\_\_\_\_  
Date \_\_\_\_\_ Time \_\_\_\_\_  
Job Location \_\_\_\_\_

All persons who the work prior to work must sign below prior to commencing work to indicate that they have reviewed, understood, and agree to the safe production work plan documented in this FLHA.

#	Name	Signature
1		
2		
3		
4		
5		
6		

Medicated Employees      Experienced Personnel

1 \_\_\_\_\_ 1 \_\_\_\_\_  
2 \_\_\_\_\_ 2 \_\_\_\_\_

The supervisor must sign below to indicate that the FLHA has been reviewed and discussed with all persons on site involved with the work scope covered by this FLHA.  
All new persons to be at site must review and sign off on the FLHA prior to being granted on site access.

On Site Supervisor Review Sign Off:

**THINK SAFETY – WORK SAFELY**

### THINK SAFETY – WORK SAFELY

#### STEP 1. BREAK THE TASK DOWN INTO STEPS

- Load and verify equipment, materials, tools
- Drive to work site
- Work site staging / site set up
- 
- 
- 
- 
- 
- 
- Site clean up, demobilization, and drive home / to office (review and update steps 1-3)

What Steps Might Change? \_\_\_\_\_

**STEPS CHANGED? UPDATE THIS JOB PLAN**

### THINK SAFETY – WORK SAFELY

#### STEP 2. NEXT TO EACH STEP WRITE DOWN THE APPLICABLE HAZARDS

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

What Hazards Might Change? \_\_\_\_\_

**HAZARDS CHANGED? UPDATE THIS JOB PLAN**

### THINK SAFETY – WORK SAFELY

#### STEP 3. NEXT TO EACH HAZARD WRITE DOWN HOW IT WILL BE CONTROLLED

- 
- 
- 
- 
- 
- 
- 
- 
- 
- 

What Controls Might Change? \_\_\_\_\_

**CONTROLS CHANGED? UPDATE THIS JOB PLAN**

Outside

Inside

# THE VALUE OF FLHAs

- Value 1:  
Process to assess risk in the work environment in real time.
- Value 2:  
Cogitative process to address complacency
- Value 3:  
Integrated Work Planning

# MANAGING RISK

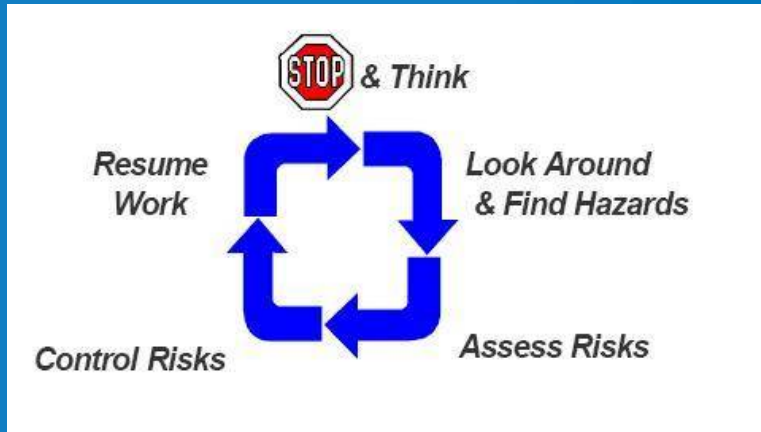
Where do FLHAs fit in?

- Risk Assessment → FLHA →
  - Risk Perception → ? →
  - Risk Tolerance → ? →
- Reduce at-risk behavior

To maximize effectiveness FLHAs require:

- supporting processes that address risk perception and tolerance
- strong organizational culture both favorable to safety and integrated with safety.

# ASSESSING HAZARDS



- Stop and think process
- Real time assessment of hazards at the job site and the required controls
- Continuous process

THINK SAFETY – WORK SAFELY		THINK SAFETY – WORK SAFELY		THINK SAFETY – WORK SAFELY	
<b>STEP 1. BREAK THE TASK DOWN INTO STEPS</b>		<b>STEP 2. NEXT TO EACH STEP WRITE DOWN THE APPLICABLE HAZARDS</b>		<b>STEP 3. NEXT TO EACH HAZARD WRITE DOWN HOW IT WILL BE CONTROLLED</b>	
1. Load and verify equipment, materials, tools	1 →		1 →		1 →
2. Drive to work site	2 →		2 →		2 →
3. Work site staging / site set up	3 →		3 →		3 →
4.	4 →		4 →		4 →
5.	5 →		5 →		5 →
6.	6 →		6 →		6 →
7.	7 →		7 →		7 →
8.	8 →		8 →		8 →
9.	9 →		9 →		9 →
10. Site clean up, demobilization, and drive home / to office (review and update steps 1-3)	10 →		10 →		10 →
What Steps Might Change?		What Hazards Might Change?		What Controls Might Change?	
STEPS CHANGED? UPDATE THIS JOB PLAN		HAZARDS CHANGED? UPDATE THIS JOB PLAN		CONTROLS CHANGED? UPDATE THIS JOB PLAN	

What are you doing today?

What could go wrong?

What are you going to do to prevent it?

# ASSESSING HAZARDS

Train employees on Field Level Hazard Assessments



Communicate generic risks associated with work



Communicate job hazards



Employees execute process



Monitor employees in the field



Review and provide feedback

Create an awareness of risks and hazards

Active hazard assessment  
Empower employees  
Problem solve  
Habituation

Reinforcement + Recognition  
Continuous Improvement  
Internalization  
Habituation

# ASSESSING HAZARDS

- Site specific
- Real time
- Last chance
- Empowers employees
- Positively influences at-risk behaviors



## FIELD LEVEL HAZARD ASSESSMENT

### SAFE PRODUCTION JOB PLANNING

Business Unit #: \_\_\_\_\_ Project #: \_\_\_\_\_

Production Report or Job #: \_\_\_\_\_

On Site Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Job Location: \_\_\_\_\_

All persons on site must print their name and sign below prior to commencing work to indicate that they have reviewed, understand, and agree to the safe production work plan documented in this FLHA.

1. \_\_\_\_\_  
Name Signature

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

Mentored Employee: \_\_\_\_\_ Experienced Partner: \_\_\_\_\_

1. \_\_\_\_\_ 1. \_\_\_\_\_

2. \_\_\_\_\_ 2. \_\_\_\_\_

- The supervisor must sign below to indicate that the FLHA has been reviewed and discussed with all persons on site involved with the work scope covered by this FLHA.
- All new persons to the site must review and sign off on the FLHA prior to being granted on site access.

On Site Supervisor Review Sign Off: \_\_\_\_\_

**THINK SAFETY – WORK SAFELY**



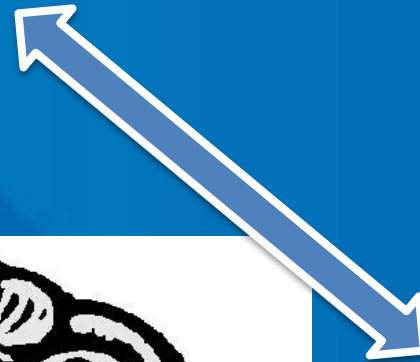
VALUE #2  
THE COGITATIVE PROCESS

# THE COGITATIVE PROCESS

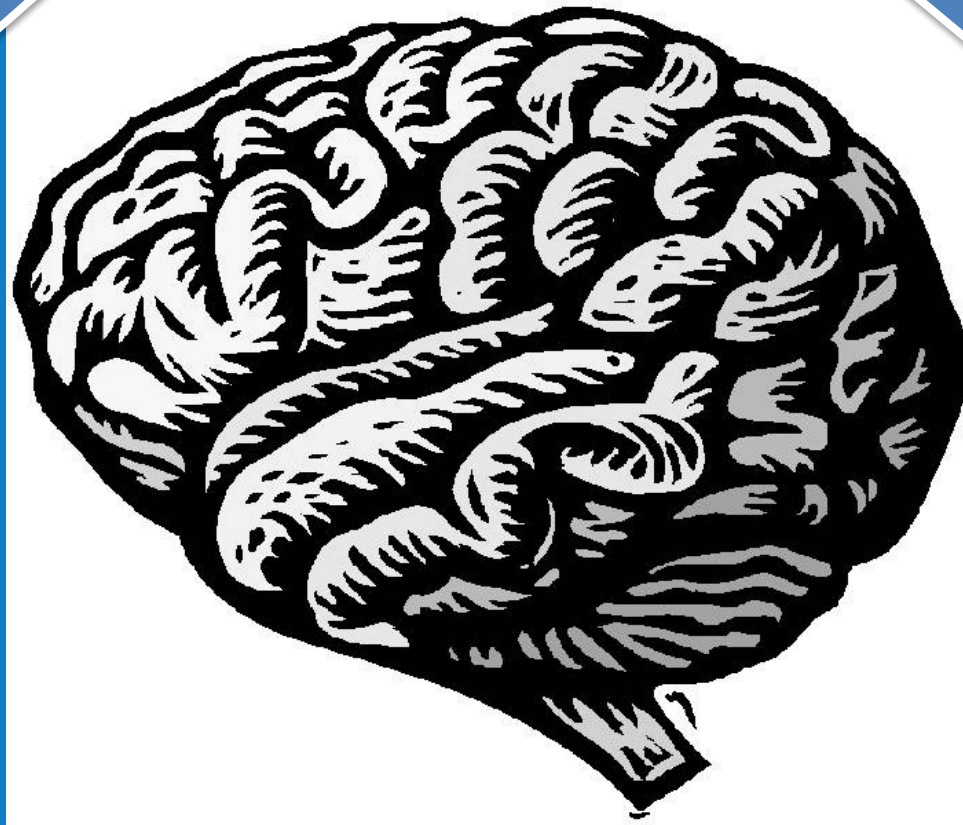
- Three simplified components to thinking:
  - Working memory
  - Long-term memory
  - Gatekeeper function



Gatekeeper



Working  
Memory



Long-Term  
Memory

## Gatekeeper

- Transfers information back and fourth between the working memory and long-term memory

## Working Memory

- Retains about 7 bits of information
- 30 sec. cycle
- Critical information only
- Lives in the now
- Easily distracted

Working  
Memory



Gatekeeper

Long-Term  
Memory

## Long-Term Memory

- Holds all information not being processed by the working memory
- Includes knowledge gained through experiences

# THE COGITATIVE PROCESS

- To be efficient the human brain will over time filter out:
  - Low probability risks
  - Risks that over time have not resulted in loss
  - Low risk perception
  - Any risk when individual's risk tolerance is too high
- We naturally fall complacent through habituation and a conscious or unconscious sense of security
- Human brain is designed to fall into auto-pilot mode for routine activities

# THE COGITATIVE PROCESS

- When an employee is executing a FLHA:
  1. Senses detect hazards
  2. Gatekeeper associated hazards with experience and knowledge
  3. Gatekeeper brings it forward to the working memory.
- When important information is written down we are more likely to completely pull information from the back of the mind to the front.
  - Less distracted
  - More focused.



# THE COGITATIVE PROCESS

- Eliminates / reduces complacency
- Creates active thinkers
- Trains the mind – habituation
- Task-hazard-control association
- Breaks down bad habits



## FIELD LEVEL HAZARD ASSESSMENT

### SAFE PRODUCTION JOB PLANNING

Business Unit #: \_\_\_\_\_ Project #: \_\_\_\_\_

Production Report or Job #: \_\_\_\_\_

On Site Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Job Location: \_\_\_\_\_

All persons on site must print their name and sign below prior to commencing work to indicate that they have reviewed, understand, and agree to the safe production work plan documented in this FLHA.

1. \_\_\_\_\_  
Name Signature

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

Mentored Employee: \_\_\_\_\_ Experienced Partner: \_\_\_\_\_

1. \_\_\_\_\_ 1. \_\_\_\_\_

2. \_\_\_\_\_ 2. \_\_\_\_\_

- The supervisor must sign below to indicate that the FLHA has been reviewed and discussed with all persons on site involved with the work scope covered by this FLHA.
- All new persons to the site must review and sign off on the FLHA prior to being granted on site access.

On Site Supervisor Review Sign Off: \_\_\_\_\_

**THINK SAFETY – WORK SAFELY**



VALUE #3  
JOB PLANNING

# JOB PLANNING

- Holistic approach to job planning
- Three cogs of successful field execution

- Safety
- Quality
- Productivity



# JOB PLANNING

## STEP 1

- What am I doing?
- How am I going to get it done?

### STEP 1: WHAT IS THE TASK?

Task Description: \_\_\_\_\_

Break the above task down into steps involved in getting it completed safely on the inside of this card in column 1. Consider the following activities when developing steps:

Picking up materials

Deliveries

Drive to/from site

Job activity steps

Job site set up

Equipment operation

### THINK SAFETY – WORK SAFELY

#### STEP 1. BREAK THE TASK DOWN INTO STEPS

1. Load and verify equipment, materials, tools

2. Drive to work site

3. Work site staging / site set up

4.

5.

6.

7.

8.

9.

10. Site clean up, demobilization, and drive home /  
to office (review and update steps 1-3)

What Steps Might Change?

STEPS CHANGED?  
UPDATE THIS JOB PLAN





# JOB PLANNING

## STEP 2

- What hazards are associated with each step
- Look/walk around
  - What could:
    - Hurt people
    - Damage equipment/property
    - Stop work
    - Result in litigation

### STEP 1: WHAT IS THE TASK?

Task Description: \_\_\_\_\_



Break the above task down into steps involved in getting it completed safely on the inside of this card in column 1. Consider the following activities when developing steps:

Picking up materials	Deliveries
Drive to/from site	Job activity steps
Job site set up	Equipment operation

### STEP 2: ASSESS THE HAZARDS

Below is only an example of common workplace hazards. Be sure to identify all other hazards not on this list. List all identified hazards in column 2 on the inside of this card next to the applicable task step.

<b>PEOPLE</b>	<b>EQUIPMENT</b>
Employees and subcontractors	Mobile and stationary equipment
Site visitors	Vehicle traffic
<b>MATERIALS</b>	<b>ENVIRONMENT</b>
Lifting, bending, twisting, rigging	Where are you working and what is around you
Sharp edges	Weather & conditions

THINK SAFETY – WORK SAFELY		THINK SAFETY – WORK SAFELY	
STEP 1. BREAK THE TASK DOWN INTO STEPS		STEP 2. NEXT TO EACH STEP WRITE DOWN THE APPLICABLE HAZARDS	
1. Load and verify equipment, materials, tools	1 →		
2. Drive to work site	2 →		
3. Work site staging / site set up	3 →		
4.	4 →		
5.	5 →		
6.	6 →		
7.	7 →		
8.	8 →		
9.	9 →		
10. Site clean up, demobilization, and drive home / to office (review and update steps 1-3)	10 →		
What Steps Might Change?		What Hazards Might Change?	
<b>STEPS CHANGED? UPDATE THIS JOB PLAN</b>		<b>HAZARDS CHANGED? UPDATE THIS JOB PLAN</b>	




# STEP 3

- What needs to be done to mitigate all hazards/risks to a safe and acceptable level?

STEP 1: WHAT IS THE TASK?	
Task Description: _____	
Break the above task down into steps involved in getting it completed safely on the inside of this card in column 1. Consider the following activities when developing steps:	
Picking up materials	Deliveries
Drive to/from site	Job activity steps
Job site set up	Equipment operation

STEP 2: ASSESS THE HAZARDS	
Below is only an example of common workplace hazards. Be sure to identify all other hazards not on this list. List all identified hazards in column 2 on the inside of this card next to the applicable task step.	
<b>PEOPLE</b>	<b>EQUIPMENT</b>
Employees and subcontractors	Mobile and stationary equipment
Site visitors	Vehicle traffic
<b>MATERIALS</b>	<b>ENVIRONMENT</b>
Lifting, bending, twisting, rigging	Where are you working and what is around you
Sharp edges	Weather & conditions

STEP 3: CONTROL THE HAZARDS
Always follow the below hierarchy when selecting hazard controls. Combinations of controls (2 or more) are typically used when controlling any hazard to a safe and acceptable level.
List all controls required in column 3 on the inside of this card next to the applicable hazard.
<ol style="list-style-type: none"> <li>1. Eliminate the hazard. Don't do it / don't use it.</li> <li>2. Substitute the hazard. Find a safer way.</li> <li>3. Physical Controls. A physical barrier or guard.</li> <li>4. Instructions/Training. Safe work instructions.</li> <li>5. PPE. Last line of protection.</li> </ol>

THINK SAFETY – WORK SAFELY	THINK SAFETY – WORK SAFELY	THINK SAFETY – WORK SAFELY
<b>STEP 1. BREAK THE TASK DOWN INTO STEPS</b>	<b>STEP 2. NEXT TO EACH STEP WRITE DOWN THE APPLICABLE HAZARDS</b>	<b>STEP 3. NEXT TO EACH HAZARD WRITE DOWN HOW IT WILL BE CONTROLLED</b>
1. Load and verify equipment, materials, tools		
2. Drive to work site		
3. Work site staging / site set up		
4.		
5.		
6.		
7.		
8.		
9.		
10. Site clean up, demobilization, and drive home / to office (review and update steps 1-3)		
What Steps Might Change?	What Hazards Might Change?	What Controls Might Change?
<b>STEPS CHANGED?</b> <b>UPDATE THIS JOB PLAN</b> 	<b>HAZARDS CHANGED?</b> <b>UPDATE THIS JOB PLAN</b> 	<b>CONTROLS CHANGED?</b> <b>UPDATE THIS JOB PLAN</b> 

# JOB PLANNING

## STEP 4

- Pre task process checklist:
  - Document review
  - Inspections
  - Permits
  - Rescue plans

## STEP 4: PRE TASK CHECKLIST

Complete this checklist prior to starting the task.

	Y	N	NA
1. Reviewed the Project/Contract Risk Assessment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. All PPE to perform the task available?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Tools, equipment, and vehicles been inspected prior to use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Do all personnel involved in this task have the required training?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5. Are lock-out requirements in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6. Is a job specific Emergency Response Plan in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7. Have all required permits been completed? (e.g. municipal, ground disturbance, confined space, hot work, environmental, etc.)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8. Is there a rescue plan in place (e.g. confined space, working at heights)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# JOB PLANNING

## STEP 5

- Start Work
- Update the job plan when steps, hazards, and/or controls are:
  - Changed / modified
  - Introduced
- All new persons on the job site must sign off on the FLHA before entry

## STEP 5: UPDATE THE FLHA

When steps, hazards, and/or controls are changed or introduced during the shift, update the FLHA to reflect those changes. Communicate the changes to all persons affected by them.



# JOB PLANNING

## STEP 6

- Post Task Checklist:
  - Work site clean up
  - Signage, barriers
  - Inspections
  - Security

### STEP 6: POST TASK CHECKLIST

Complete this checklist after the task has been completed.

	Y	N	NA
1. Was the work area cleaned up at the end of the job/shift?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Are all safety controls/overnight work zone signage in place?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3. Have tools and equipment been inspected?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4. Has the site been secured?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

# JOB PLANNING

- Include in tech training
- Everyone on the same page
- Hazard communication process
- Further integrates safety into operations
- Creates a “Safe Production” mindset
- Disassociates the process from being “safety” paperwork



## FIELD LEVEL HAZARD ASSESSMENT

### SAFE PRODUCTION JOB PLANNING

Business Unit #: \_\_\_\_\_ Project #: \_\_\_\_\_

Production Report or Job #: \_\_\_\_\_

On Site Supervisor: \_\_\_\_\_

Date: \_\_\_\_\_ Time: \_\_\_\_\_

Job Location: \_\_\_\_\_

All persons on site must print their name and sign below prior to commencing work to indicate that they have reviewed, understand, and agree to the safe production work plan documented in this FLHA.

1. \_\_\_\_\_  
Name Signature

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. \_\_\_\_\_

6. \_\_\_\_\_

Mentored Employee: \_\_\_\_\_ Experienced Partner: \_\_\_\_\_

1. \_\_\_\_\_ 1. \_\_\_\_\_

2. \_\_\_\_\_ 2. \_\_\_\_\_

- The supervisor must sign below to indicate that the FLHA has been reviewed and discussed with all persons on site involved with the work scope covered by this FLHA.
- All new persons to the site must review and sign off on the FLHA prior to being granted on site access.

On Site Supervisor Review Sign Off: \_\_\_\_\_

**THINK SAFETY – WORK SAFELY**

Thank You.

Questions?

**FORWARD.  
TOGETHER.**

