

# ALWAYS SAFE

YOUR FIELD GUIDE  
TO WORKING SAFELY

NAME:

# ALWAYS SAFE



Safety at Vortex is more than a priority—it's what we value and it's a part of the habits we expect every member of our team to live out every day. Always being safe means more than knowing the rules, it means looking out for one another and having each other's backs.

This safety field guide was designed to give you some of the most important safety information in one easy-to-find place. Like your Vortex Way Book, keep this on you at all times for easy access. This safety field guide does not replace our Health and Safety Plan, however, the goal is to empower you to work safely every day.

**REMEMBER SWA  
(STOP WORK AUTHORITY):**

**"I have the authority to stop work when I see and recognize a safety risk to myself or my team member."**



# WORKING SAFELY

DOESN'T JUST PROTECT YOU, IT HELPS PROTECTS EVERYONE UNDER VORTEX'S UMBRELLA.



WHO DOES THE VORTEX HEALTH & SAFETY PROGRAM COVER?

ALL VORTEX COMPANIES & EMPLOYEES

GENERAL PUBLIC  
SUBCONTRACTORS

VISITORS OF  
OUR JOBSITES  
& FACILITIES



# INCIDENT REPORTING

## KINDS OF INCIDENTS

### LIFE-THREATENING INJURY

### NON-LIFE-THREATENING

### MOTOR VEHICLE ACCIDENT

an accident involving a company owned or operated motor vehicle.

### NEAR MISS

an unplanned event that did not result in injury, illness, or damage—but had the potential to do so.

### UNUSUAL INCIDENT

An incident that is not an injury or motor vehicle accident, however, causes damage to Vortex owned or operated vehicle and equipment, public/private property damage, or an uncontrolled release of fluid or materials.

## WHAT TO DO WHEN THERE IS AN INCIDENT

1. Address the incident appropriately. Refer to Vortex's Incident Reporting policy.

2. As soon as reasonably possible, notify:

CONTACT 1: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

CONTACT 2: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

CONTACT 3: \_\_\_\_\_

Phone: \_\_\_\_\_

E-mail: \_\_\_\_\_

3. Fill out an Incident Reporting Form with your regional HSE Manager immediately.



# STEP 1

Define the general task for each activity

# STEP 2

Identify known and potential safety hazards associated with the task

# STEP 3

Determine work practices to complete the task safely

# SAFETY TASK ASSESSMENT

# STA

**THE STA IS THE  
RESPONSIBILITY  
I HAVE TO MYSELF  
AND MY TEAM.**



# SELF-CHECK USING STAR

Using STAR can help you work safer by helping you focus on you're doing at that moment!

## STOP

Pause and focus your attention on the task at hand.

## THINK

Consider what you're about to do.

## ACT

Concentrate and carry out the task.

## REVIEW

Check to make sure that the task was done right and that you got the right result.



**STOP** is the most important step. It gives your brain a chance to catch up with what your hands are about to do.



# TRAPS

Traps are factors or conditions that could easily lead to dangerous situations or accidents. Use these questions to make sure you're not falling into one or more of these error traps.

## CHANGE/OFF NORMAL

I left what I was doing for a moment—is anything different?

Am I anticipating any unexpected conditions or changes?

## DISTRACTIONS/ INTERRUPTIONS

Are people, noises or other distractions interrupting me or making me lose focus?

## FIRST SHIFT/ LAST SHIFT

It's the first shift—am I really ready to work? It's the last shift—am I rushing to go home?



## MENTAL STRESS

Is there anything stressing me out? Do I feel really emotional, angry, or sad?

## MULTIPLE TASKS

Am I doing too many things at once right now?

## OVERCONFIDENCE

Am I underestimating this job? Am I fully prepared? Am I doing this task the RIGHT way?

## PEER PRESSURE

Even though I KNOW how to do this RIGHT, are my peers telling me to do it a different way?

## PHYSICAL ENVIRONMENT

Am I aware and careful about my surroundings?

## TIME PRESSURE

Am I rushing? Are we doing this job the RIGHT way?

## VAGUE GUIDANCE

Do I really understand the instructions? Do I clearly know what my supervisor is wanting me to do here?





# PEER COACHING

## TOGETHER WE BUILD WINNING TEAMS

Feedback doesn't always have to come from your manager or boss. Peer coaching allows all members of the team to provide constructive feedback on how we can all work better together.

**REFLECT AND DEBRIEF**

**SHARE STRENGTHS  
AND WEAKNESSES**

**DISCUSS GOALS**

**COLLABORATE WITH  
YOUR WORK TEAM**

**HOLD EACH OTHER  
ACCOUNTABLE**





# ARE YOU AND YOUR TEAM FIT FOR DUTY?

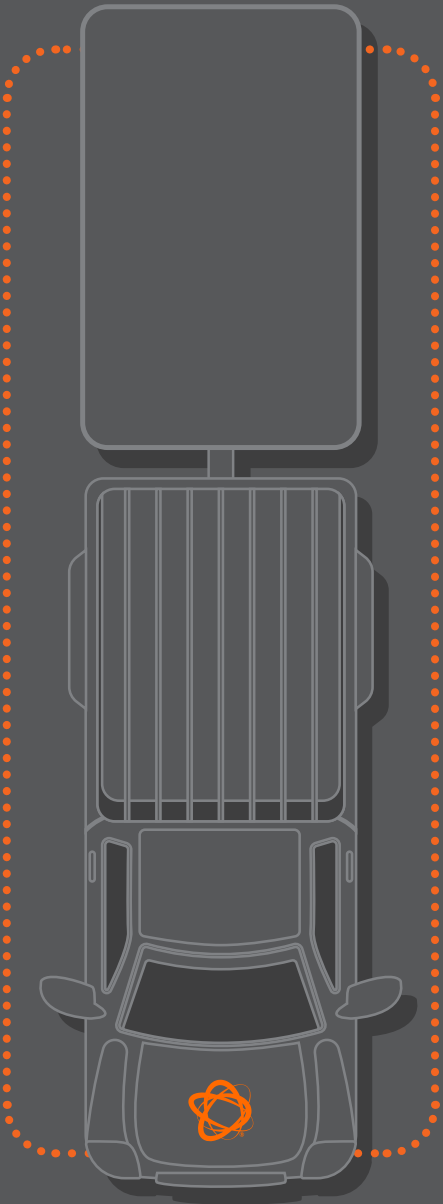
ASK YOURSELF THESE  
QUESTIONS BEFORE  
STARTING WORK.

1. Are you distressed, under the influence, or fatigued?
2. Are you in good physical condition?
3. Is this your first or last shift?
4. Do you have experience doing this, or is this a new task?
5. Have you stretched?



# VEHICLE PRE-TRIP CHECKS

PERFORM  
360° PRE-TRIP  
INSPECTION



## IS YOUR VEHICLE SAFE TO OPERATE?

1. Complete Pre-trip inspections
2. Hands-free cell phone use
3. Am I complying with DOT and FMCSA safety regulations?
4. Am I subject to Hours of Service (HOS) regulations? Am I compliant?
5. House-keeping – is the vehicle clean and in order?
6. If pulling a trailer, is the trailer hooked up properly? Are the lights functioning properly?
7. Is your load secure?
8. All licenses, permits, and registrations up to date and on hand?
9. Do you have fuel?
10. Most importantly, are you fit to drive?



# STRETCHES

We are pipeline rehabilitation athletes! Stretching before starting work helps you avoid injury on the job. Here are a few stretches to get you and your team started.

## TIP: SUPERVISORS, MAKE IT FUN!

This is a good chance to talk with your team.



### BACK

Standing with feet apart, slowly lean backwards, reaching both arms back and toward each other. Hold for 5 seconds and repeat 3 times.



### NECK

Gently tilt head towards your shoulder without twisting the neck for 15 seconds. Repeat on the opposite side.



### FRONT THIGH

Lift one leg behind you and grasp with your hand. Pull your foot toward your bottom. Hold for 15 seconds and repeat on the opposite leg.



### CALF

Assume a lunge position, bending the back knee and reaching for your toes in your front leg. Hold for 15 seconds and repeat on the opposite leg.



### SHOULDER

Place your left forearm on your right elbow. Use your left arm to pull your right arm across your chest. Hold for 15 seconds and repeat on the opposite arm.



# PIPE

PERSONAL PROTECTIVE EQUIPMENT IS KEY IN KEEPING YOU SAFE.

Always make sure you're wearing the right PPE for the job, and that it's in good condition.

EYE PROTECTION



HARD HAT



EAR PROTECTION



RESPIRATORY PROTECTION



PROTECTIVE BOOTS



HIGH-VISIBILITY VEST

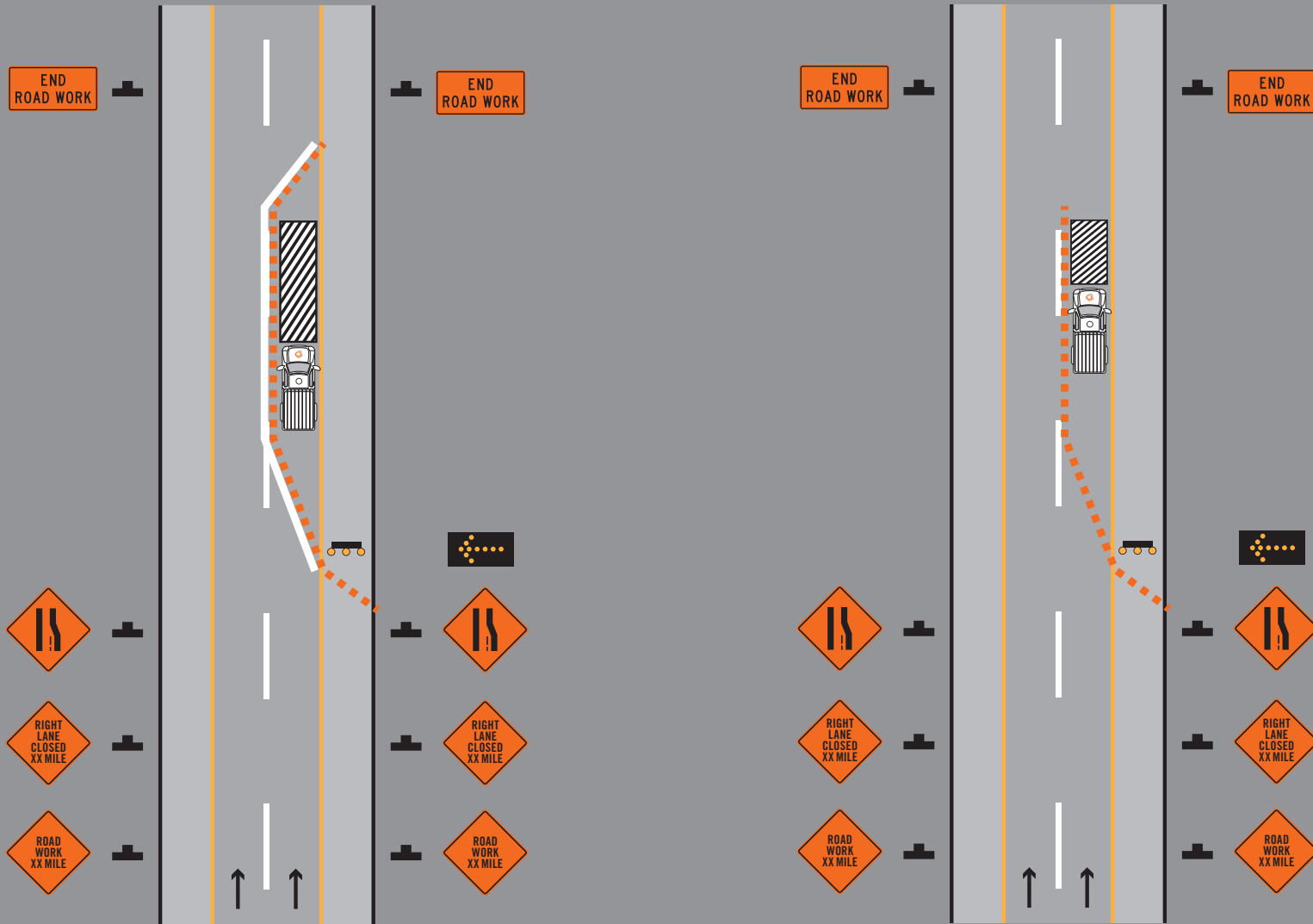
DAY/SPEED LIMIT < 50 MPH: CLASS 2

NIGHT/SPEED LIMIT > 50 MPH: CLASS 3



SAFETY GLOVES













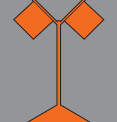
A: LONG-TERM & INTERMEDIATE








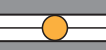




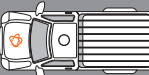
B: SHORT-TERM

# TYPICAL TRAFFIC CONTROL

# TRAFFIC CONTROL KEY

Setting up the right traffic control for short or longer term jobs keeps your crew and drivers safe while you work. Always refer to the MUTCD\*, the TTCP, or the MOT for your particular work site and check with specific federal, state, or local requirements with your project manager.

-  ARROW BOARD
-  ARROW BOARD SUPPORT OR TRAILER (SHOWN FACING DOWN)
-  CHANGEABLE MESSAGE SIGN OR SUPPORT TRAILER
-  CHANNELIZING DEVICE
-  CRASH CUSHION
-  DIRECTION OF TEMPORARY TRAFFIC DETOUR
-  DIRECTION OF TRAFFIC
-  FLAGGER
-  HIGH-LEVEL WARNING DEVICE (FLAG TREE)

-  LONGITUDINAL CHANNELIZING DEVICE
-  LUMINAIRE
-  PAVEMENT MARKINGS: TO BE REMOVED FOR LONG-TERM PROJECT
-  POLICE DETAIL
-  SIGN
-  SURVEYOR
-  TEMPORARY BARRIER
-  TEMPORARY BARRIER WITH WARNING LIGHT
-  TRAFFIC OR PEDESTRIAN SIGNAL
-  TRUCK-MOUNTED ATTENUATOR
-  TYPE 3 BARRICADE
-  WARNING LIGHT
-  WORK SPACE
-  WORK VEHICLE



# FALL PROTECTION

FALLS CAN BE PREVENTED WHEN WE PLAN PROPERLY AND USE THE RIGHT EQUIPMENT.

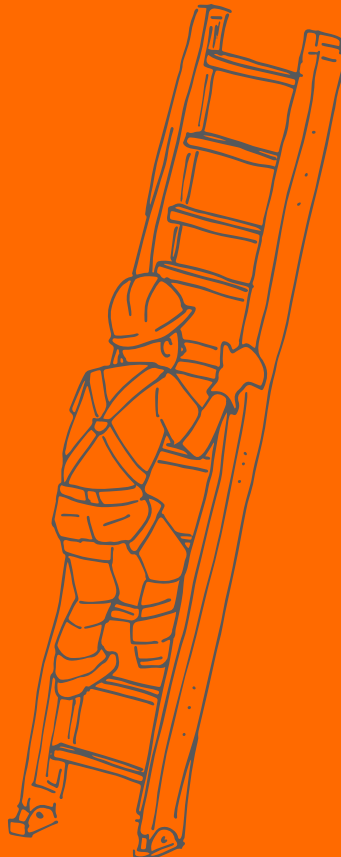
## LADDERS

### DO

- ✓ Choose the right ladder for the job
- ✓ Maintain three points of contact
- ✓ Secure the ladder
- ✓ Always face the ladder

### DON'T

- ✗ Overreach
- ✗ Stand on top or on the top step of a stepladder
- ✗ Place the ladder on unlevelled footing



## GENERAL

### DO

- ✓ Tie off if the height is 6 feet or greater
- ✓ Wear a harness and always stay connected
- ✓ Make sure your harness fits properly
- ✓ Use guardrails or lifelines
- ✓ Inspect all fall protection equipment before use
- ✓ Guard or cover all holes, openings, or excavations

### DON'T

- ✗ Disconnect from the lifeline
- ✗ Work around unprotected openings
- ✗ Use defective equipment





Consider air quality testing, monitoring, and ventilation.

Keep rocks, soil, materials, and equipment a minimum of 2 ft. away from the edge of the trench.

Check with the competent person before entering a trench.

Ingress/egress must be available every 25 ft. Ladders must be tied off and extend 3 ft. past the top of the trench.

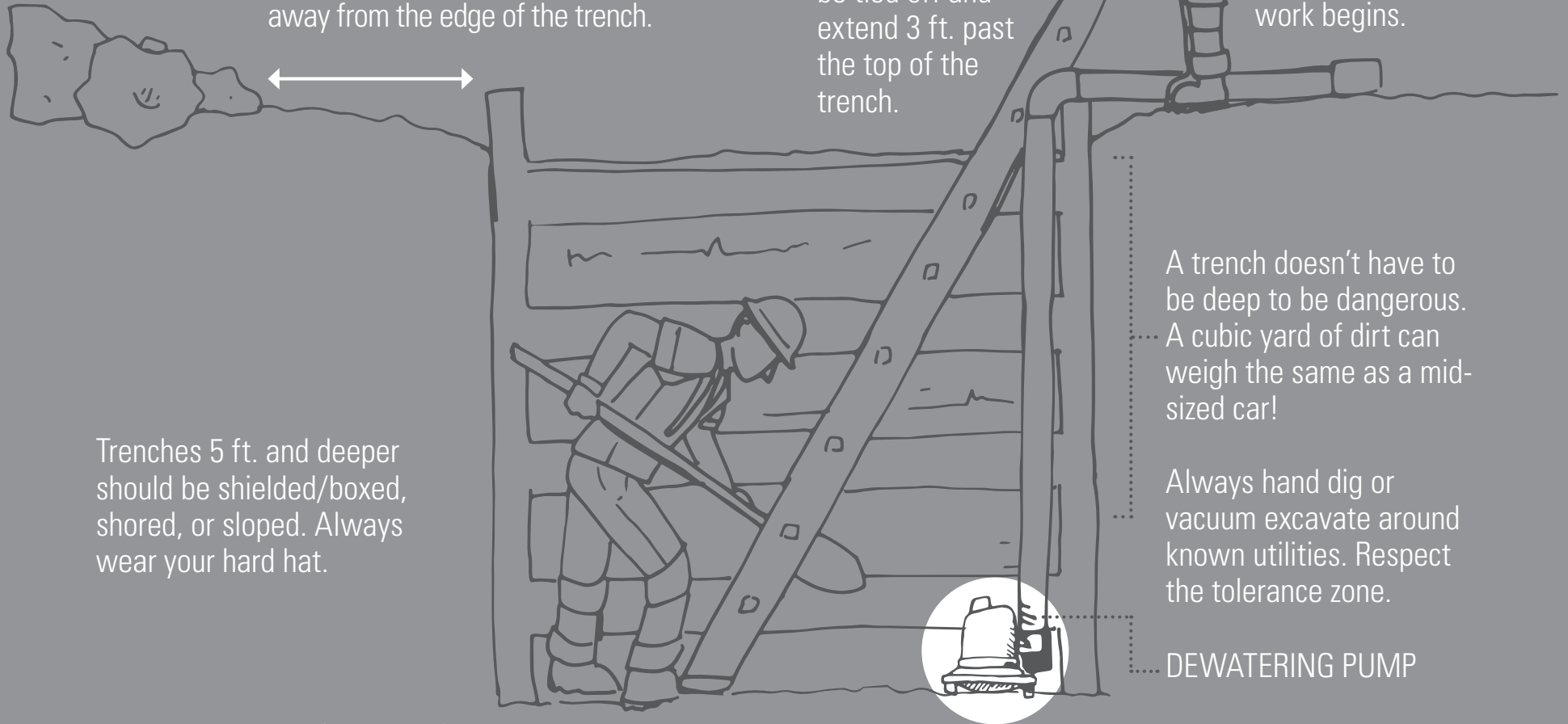
Never enter a trench that has not been properly inspected. A competent person must inspect the trench and fix problems before work begins.

Trenches 5 ft. and deeper should be shielded/boxed, shored, or sloped. Always wear your hard hat.

A trench doesn't have to be deep to be dangerous. A cubic yard of dirt can weigh the same as a mid-sized car!

Always hand dig or vacuum excavate around known utilities. Respect the tolerance zone.

DEWATERING PUMP

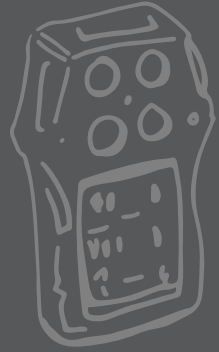


# EXCAVATION

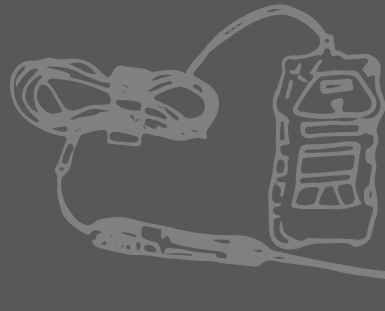
REMEMBER THESE TIPS WHEN WORKING IN OR AROUND A TRENCH



# CONFINED SPACE ENTRY EQUIPMENT



PERSONAL MONITOR



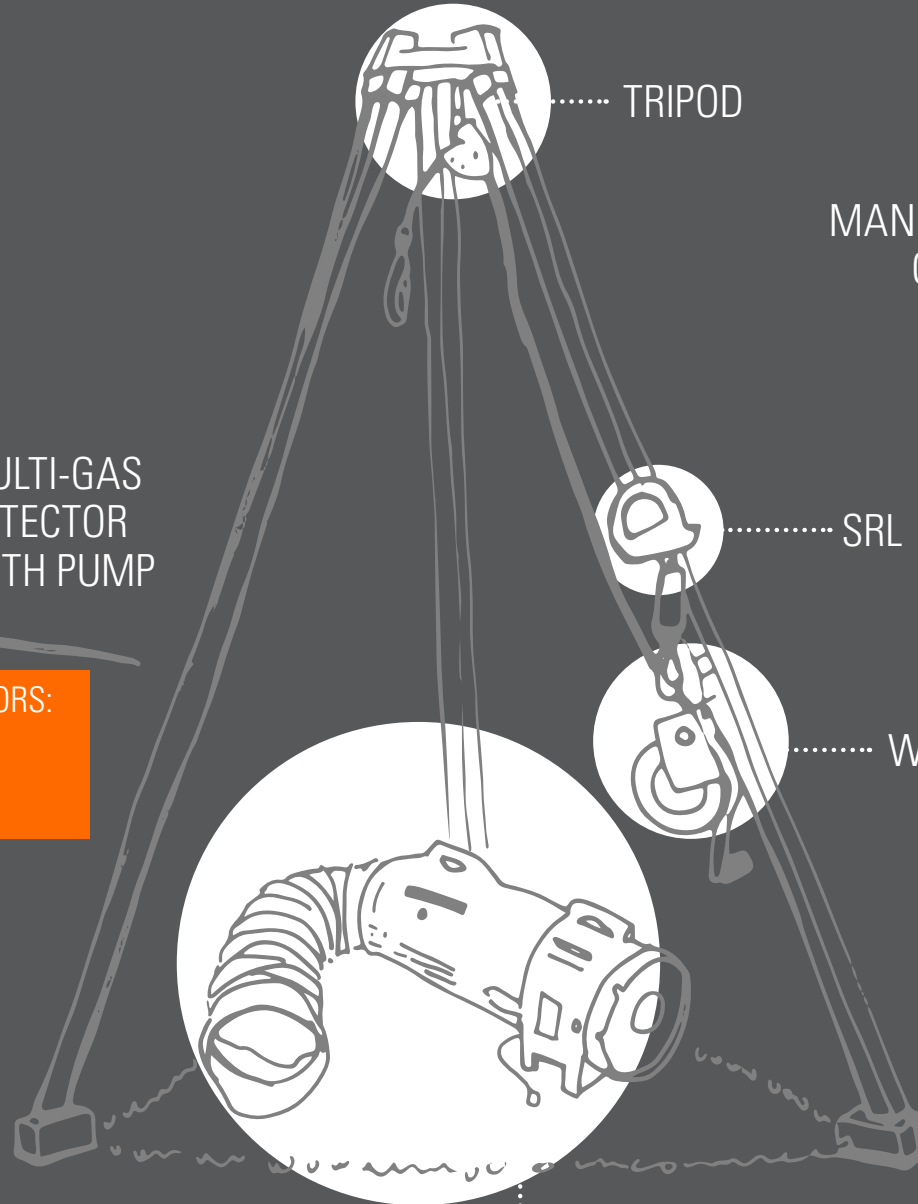
MULTI-GAS DETECTOR WITH PUMP

TARGETS FOR GAS DETECTORS:

O<sub>2</sub>: 19.5-20.9%    LEL: 0.0  
H<sub>2</sub>S: 0.0            CO: 0



PERMIT



TRIPOD

MANHOLE CAGE

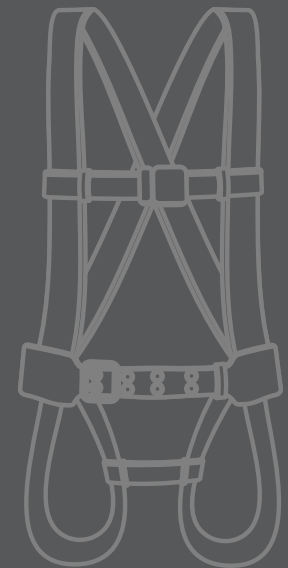
SRL

WINCH

BLOWER/FORCED AIR

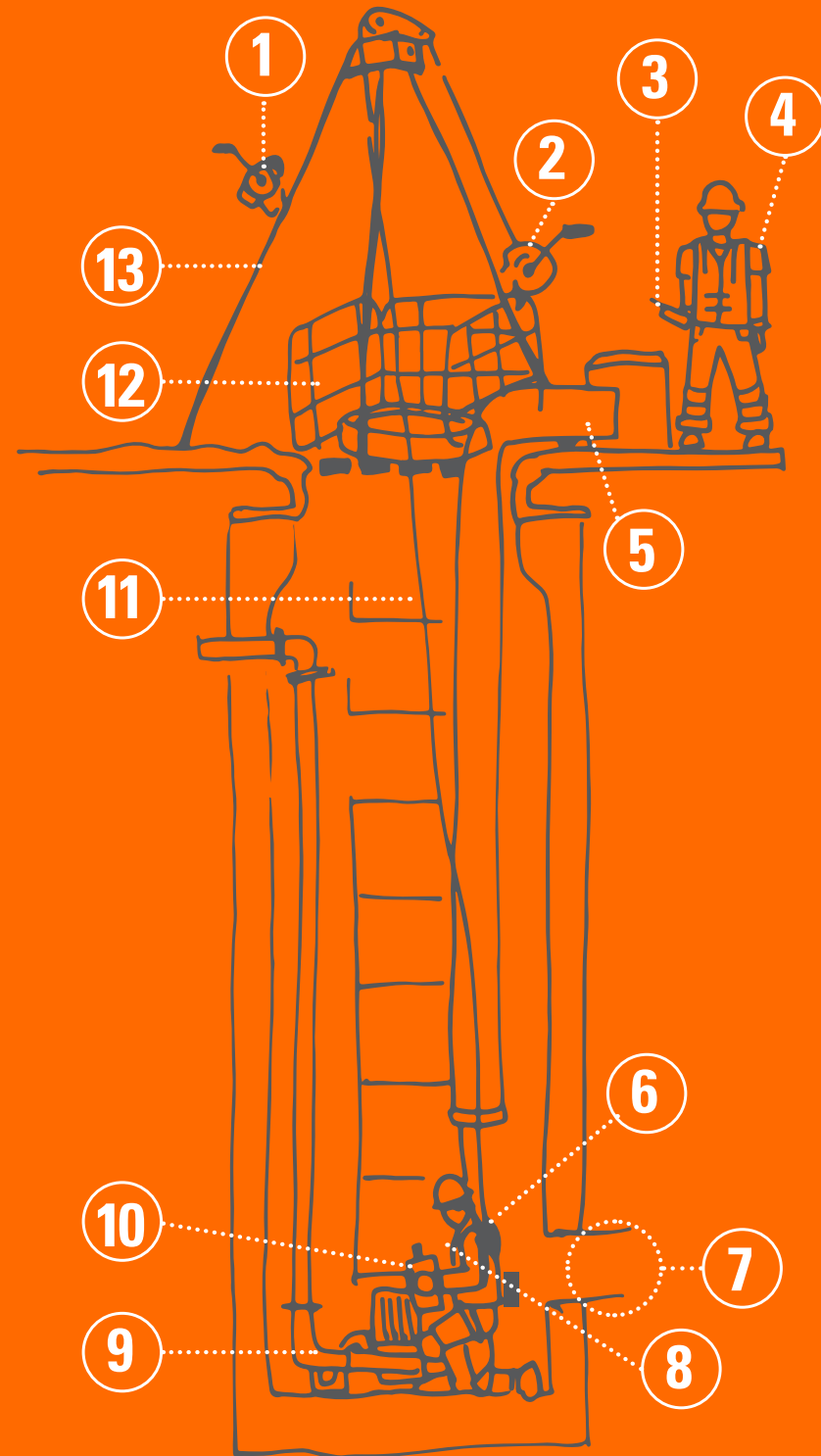


HARNESS



# ISOLATION FROM HAZARDS

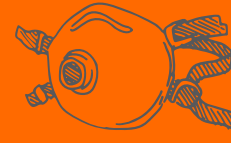
1. Self-Retracting Lifeline (Yo-yo)
2. Winch
3. 4-Gas Monitor with pump
4. Attendant/Hole Watch CSE Permit
5. Forced Air (Ventilation)
6. Harness & Lifeline
7. Incoming Pipelines (Isolate with pipe plug. Is temporary bypass required?)
8. Personal 4-Gas Monitor
9. Equipment being worked on
10. Radio for communication
11. Winch Cable
12. Manhole Barricade
13. Tripod



# RESPIRATORY PROTECTION

## HOW TO CHOOSE AND USE THE RIGHT RESPIRATOR

1. Identify Risk
2. Select the proper respirator
3. Select the proper filter
4. Ensure you are fit tested and properly trained for respiratory protection use
5. Maintain your respirator (keep clean)



HALF MASK,  
PARTICULATE



HALF MASK, DUAL  
CARTRIDGE DISPOSABLE



HALF MASK, DUAL  
CARTRIDGE REUSABLE



FULL-FACE, DUAL  
CARTRIDGE REUSABLE



CANISTER TYPE  
GAS MASK



POWERED AIR PURIFYING  
RESPIRATOR (PAPR)



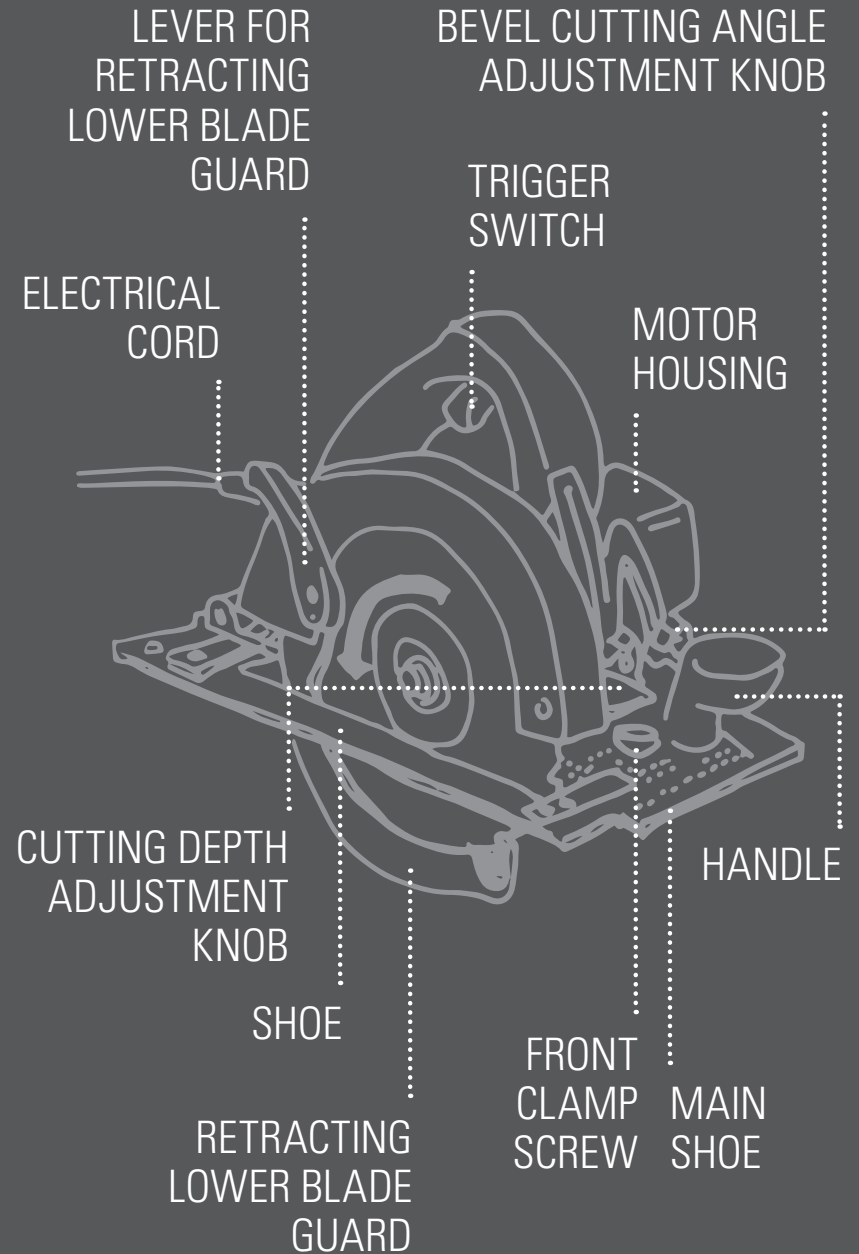
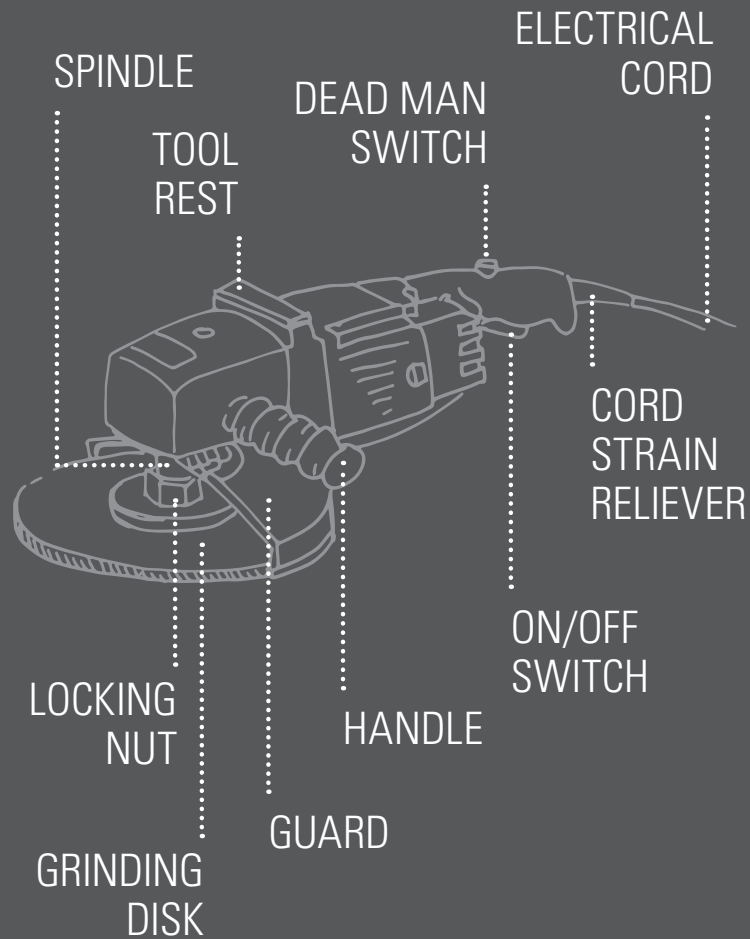
# HAND AND POWER TOOL SAFETY

**BEFORE YOU  
USE A HAND OR  
POWER TOOL  
ASK YOURSELF:**

1. Am I trained and authorized to use this tool?
2. Do I have the right power tool safety gear? Gloves, boots, hard hat, eye protection?
3. Is this the best power tool for the job?
4. Is this tool in good shape? Does it work properly?
5. Is the power tool clean?
6. Is the power cord damaged? Are the batteries charged?
7. Is the cord untangled? Could someone trip over the cord?
8. Is the outlet my power tool is plugged into in good shape?
9. Is there clutter around my workspace?
10. Is my workspace dry?
11. When I turn the power tool on, does it sound normal?
12. Does it sound normal during actual operation?
13. Am I prepared to store and unplug the power tool once I am finished operating it?
14. Am I connected to a GFCI protected power source?

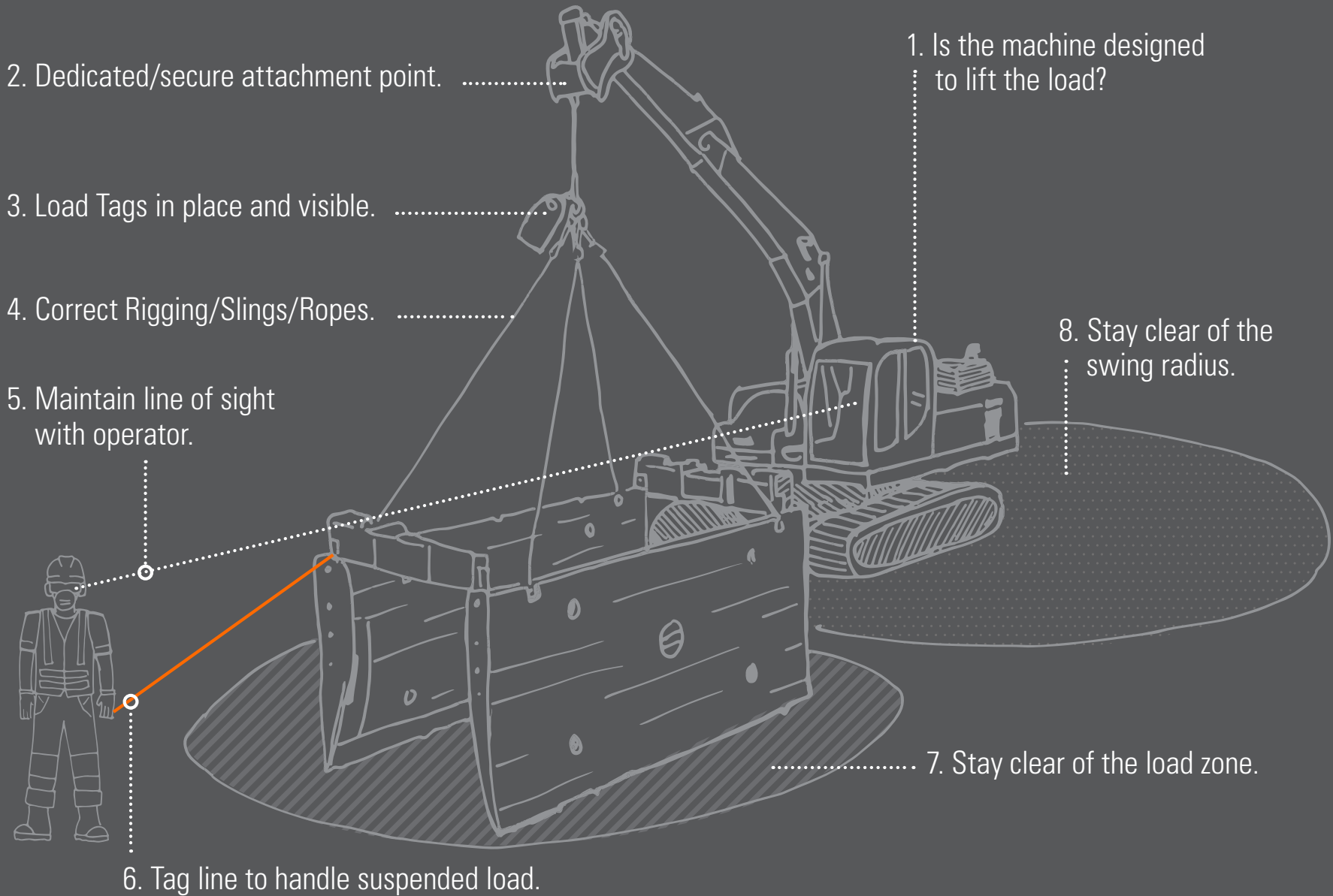


# HAND AND POWER TOOL SAFETY



# LIFTING

Watch for overhead wires and hazards.



# AFTER ACTION REVIEW

**ALWAYS BEING SAFE  
MEANS THAT WE'RE  
CONSTANTLY LOOKING  
FOR WAYS TO IMPROVE  
HOW WE WORK SAFELY.**

One way we're doing that is through After Action Reviews, or AARs. AARs were developed by the military to help teams learn quickly from experiences in the field. During an AAR, there is no hierarchy, and every member, no matter what their position or role is, is encouraged to share their input.

**THE AAR SHOULD BE  
PERFORMED DAILY. A DAILY  
AAR IS MADE UP OF THESE  
3 SIMPLE QUESTIONS:**

- What went well?
- What went wrong?
- What can we do to improve?

**AN END OF THE PROJECT AAR  
WILL GO INTO MORE DETAIL AND  
SHOULD INVOLVE THE CREW PM  
AND OPERATIONS MANAGER.**

**IT EVALUATES OUR ACTIONS  
AGAINST THE VORTEX WAY**

- Were we safe? (Was safety a priority?)
- Did we do the right thing? (Were we honest and transparent?)
- Did we think BIG? (Were we forward thinking and planning ahead?)
- Did we work together as a Team? (Daily pre-con meetings? Communication?)
- Were we driven? (Did we show up prepared and ready to work everyday?)





