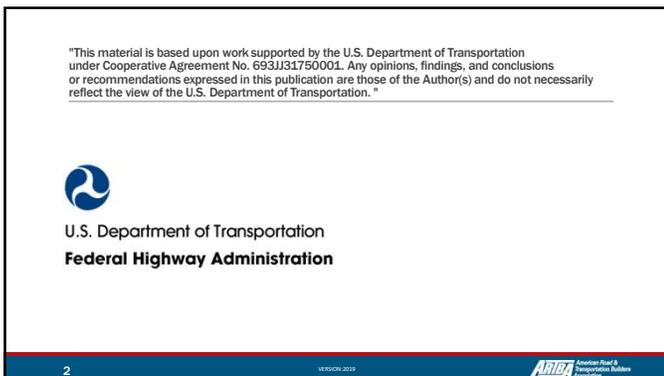
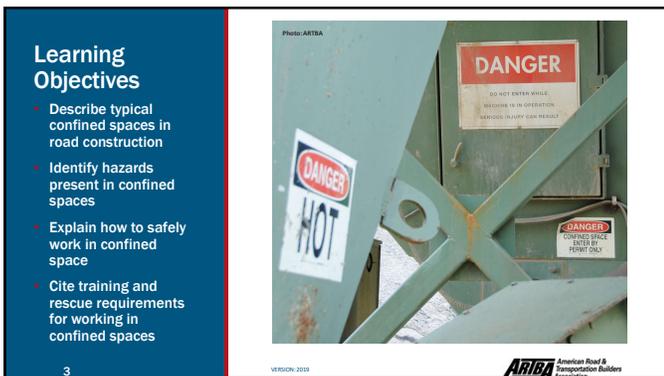


1



2



3

VIDEO: OSHA

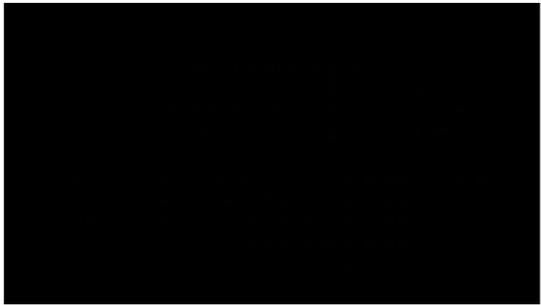
STUDY CASE: CONFINED SPACE INCIDENT

4

VERSION: NOVEMBER 2017



4



5

VERSION: 2020



5

Discussion: What is a Confined Space?

Activity instructions:
What does "confined space" mean to you?



6

VERSION: 2020



6

OSHA Regulation

A confined space in the context of construction is:

- Large enough for a worker to enter and perform the necessary work
- Having a limited means of entry or exit
- Not designed for continuous occupancy

[29 CFR 1926 Subpart AA](#)



7

VERSION: 2019



7

VIDEO: WorkSafeBC

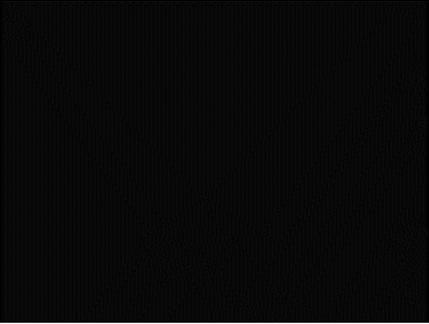
CONFINED SPACES DEADLY SPACES

8

VERSION: NOVEMBER 2017



8



9

VERSION: 2018

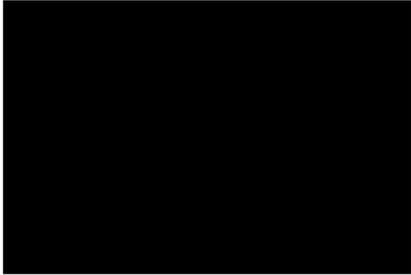


9

Video Presentation

Precious Time – The Cody McNulty Story
WorkSafeBC

WARNING: This video deals with deaths at a construction site and contains some adult language that may be disturbing to some viewers.



10

VERSION: 2019



10

Employer's Responsibilities

- Employee training
- Identifying confined spaces
- Providing required PPE
- Providing monitoring where appropriate
- Administering a confined space program



11

11

Classifying Confined Spaces

<p>Permit-Required Confined Space</p> <p><small>Sign is required by OSHA</small></p> 	<p>Non-Permit Required Confined Space</p> <p><small>Sign is NOT required by OSHA</small></p> 
--	--

12

VERSION: 2019



12

Permit-Required Confined Space

- 1. Contains or has the potential to contain hazardous atmosphere.
- 2. Contains a material that has the potential for engulfing the worker, such as water or sand.
- 3. Has an internal configuration containing inwardly sloping walls or a floor that slopes downward or tapers to a smaller cross section.
- 4. Contains any other recognized serious safety or health hazard such as mechanical hazards, electrical wires or sewage.

13

VERSION: 2010



13

About Permits

- 1. Tasks
- 2. Personnel
- 3. Testing
- 4. Safety



Graphic: ARIBA

14

VERSION: 2010



14

Hazardous Atmosphere Hazard

- Flammable gas, vapor, or mist
- Airborne combustible dust
- Too much or too little oxygen
- Toxic contaminants
- Immediately dangerous to life or health (IDLH) conditions



Photo: Arman 37 Chris J. Smith, Inc.

15

VERSION: 2010



15

Engulfment

- Water
- Sewage
- Grain
- Sand
- Sawdust
- Gravel
- Plastic pellets



16

VERSION: 2020



16

Inwardly Sloping Walls or Floor



Photos: ARTBA

17

VERSION: 2020



17

Safety or Health Hazards

- Electricity
- Stream
- Heat
- Cold
- Radiation
- Mechanical



18

VERSION: 2020



18

Discussion: What Types of Confined Spaces Occur in Road Work?



19

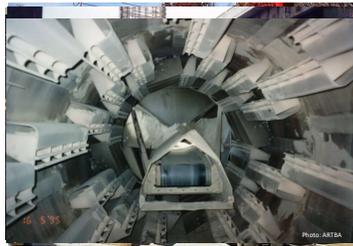
VERSION: 2020



19

Examples of Confined Space

- Aggregate Dryer
- Forms
- Manholes
- Pipe assemblies
- Tanks



20

VERSION: 2020



20

Monitoring and Communication



- Regular communication
 - Sight
 - Verbal
 - Camera
 - Radio
 - Phone
 - Text
- Scheduled breaks
- Monitoring hazards

21

VERSION: 2020



21

Awareness

- Equipment
- Communication
- Entry and exit
 - Access
 - Barriers
 - Occupancy load
 - Emergency exit time



22

VERSION: 2010



22

Know Your Rescue Plans

- Site has equipment for rescue
- List of known and potential hazards
- Access routes and project plan
- First responders have Personal Protective Equipment (PPE), other safety equipment, and training in confined space rescue



VERSION: 2010

23

23

Summary

- Identify hazards present in confined spaces.
- Describe typical confined spaces in road construction.
- Explain how to safely work in confined space
- Cite training and rescue requirements for working in confined spaces.



VERSION: 2010



24

24

Break

Questions?
Poll
We Will continue in ... minutes



25

VERSION 2020

ARBA American Pool & Spa Association

25