



SITE ENTRY CRITERIA

OBJECTIVE & STRATEGY



The objective of this section is to protect worker safety and health by giving guidance on establishing minimum standards for site entry by properly trained oil spill response workers. Safety is always the primary objective of any response.

Either of the following two documents supersedes this guidance:

- **Incident-specific Site Safety Plan**
- **Corporate or Agency safety procedures and training for employees/responders**

This section contains recommended site safety entry guidelines for crude oil/petroleum spill cleanup operations. In all cases, physical hazards of entry must be considered along with health hazards. The exposure limits in this section are based on standards established by the Occupational Safety and Health Administration (OSHA). More restrictive limits may be set by your employer. Verify your exposure limits before site entry.

See references for additional information.

TACTIC DESCRIPTION

General Limits to Entry

The decision as to whether or not any given entry shall be attempted is ultimately the responsibility of the On-Scene Commander with advice and guidance from:

- The Site Safety Officer
- The Field Team Leader
- Unified Command

Site Safety Assessment

Before commencing oil spill response operations, a site safety assessment should be completed by a Site Safety Officer, or a properly trained field team member. Once the site safety assessment is completed, the proper level of Personal Protective Equipment (PPE) will be determined.

The following are four levels of respiratory protection for entry into varying conditions listed in descending order of protection. Other PPE, such as splash suits, hard hats, safety glasses, steel-toed boots,



etc., will also be needed, depending on the situation, to ensure the health and safety of the responders. It is required to consult with a “competent person” for job specific PPE requirements. All employees must have had the necessary training pertaining to their tasks prior to entering any site.

Please note that the recommended levels reflect a 12-hour shift.

Level A – Highest Level of Protection*

Entry by two or more workers dressed in fully-encapsulated suits and SCBAs is allowed under the following conditions:

- Back-up observers with SCBAs standing by
- Oxygen atmospheric concentration should be below 23.5%
- Percentage of LEL is less than 10% as measured by a calibrated direct reading handheld instrument



Level B*

Entry by two workers with SCBAs is allowed under the following conditions:

- Back-up observers with SCBAs standing by
- Oxygen atmospheric concentration should be below 23.5%
- Percentage of LEL is less than 10% as measured by a calibrated direct reading handheld instrument
- Normal natural or mechanical ventilation is available
- No visible mist or fog of oil present



Level C

Entry with full-face or half-face air purifying respirator and organic vapor cartridges is allowed by any number of workers without back up observers under the following conditions:

- Oxygen atmospheric concentration is between 19.5% and 23.5%
- Percentage of LEL is less than 10% as measured by a calibrated direct reading handheld instrument
- Total hydrocarbon concentration is less than 500 ppm
- H₂S air concentration is less than 10 ppm
- Benzene air concentration:
 - Full-face respirator - less than 10 ppm
 - Half-face respirator - less than 5 ppm



*NOTE: When available, positive-pressure supplied air respirators with an escape SCBA can be used instead of SCBAs.





Site Entry Criteria

- Normal natural or mechanical ventilation is available
- No visible mist or fog of oil present

Level D – Lowest Level of Protection

Entry without respiratory protection is allowed for any work required under the following conditions:

- Oxygen atmospheric concentration is between 19.5% and 23.5%
- Percentage of LEL is less than 10% as measured by a calibrated direct reading handheld instrument
- Total hydrocarbon concentration is less than 50 ppm
- H₂S air concentration is less than 10 ppm
- Benzene air concentration is less than 0.6 ppm
- Normal natural or mechanical ventilation is available
- No visible mist or fog of oil is present

Note that in environments in which excess dust and debris are present, an organic vapor/high efficiency particulate air filter is recommended (OV/HEPA).

DEPLOYMENT CONSIDERATIONS AND LIMITATIONS

- A trained person using properly calibrated equipment must conduct air monitoring prior to and periodically during response operations, and as necessary when conditions change.
- If permissible entry conditions change outside of allowable criteria during entry, the entry must be terminated.
- The team conducting the site assessment should enter the site from an upwind or cross-wind aspect and progress slowly. After the airborne flammability, oxygen, and toxicity have been determined, the team should assess the site's chemical and physical hazards so that proper decisions can be made regarding PPE and other safety and health issues.
- Respiratory protection should only be worn by responders operating under respirator operating procedures (i.e., regular training, fit-testing, medical monitoring, inspection, cleaning, storage and periodic program evaluations) as required by OSHA 29 CFR 1910.134.

REFERENCES TO OTHER TACTICS

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 • PERSONAL PROTECTIVE EQUIPMENT
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 • SITE LAYOUT & CONTROL
- 
 • PERSONNEL DECONTAMINATION





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