

Restricted Access

Custodian: Strategic EH&S
Date approved: October 25, 2013

Purpose

The purpose of this Restricted Access Practice is to:

- define the responsibilities of Encana personnel and its service providers
- define the various zones to limit access
- assist in the management of pressure and other hazardous energy
- limit personnel in the “line of fire”

Restricted access is sometimes referred to as ‘No Go Zones’ according to the zone classifications listed below.

Definitions

Term	Definition
Blooi Line	A surface pipe on an air drilling unit through which the air, water, and well cuttings are blown out.
Hazardous energy	Any electrical, mechanical, hydraulic, pneumatic, chemical, nuclear, thermal, gravitational or other energy that has the potential to cause injury, illness or death.
Service Provider	A company Encana has selected to perform a service without specifying the individuals who provide the service (e.g., Ensign Drilling or Halliburton).
Staff	Includes all Encana employees and contractors hired to conduct work on Encana’s behalf.
Red Zone	High hazard area, no access unless approved by Encana supervisor and service provider supervisor with additional limitations.
Yellow Zone	Moderate hazard area, access limited to essential personnel
White Zone	Limited hazards present – no restrictions

Scope and application

This practice applies to pressure and other hazardous energy sources during pressure testing, pumping and operations as they occur in drilling, completions and production disciplines within the Canadian Division of Encana.

Responsibilities of staff and service providers

Encana Staff and Site Leadership

Encana staff is responsible to monitor and enforce the implementation of this Practice on their impacted worksites.

The onsite Encana representative shall ensure that red and yellow restricted access zones are assessed, identified, documented and marked as outlined in the body of this Practice.

The onsite Encana representative shall ensure that red and yellow restricted access zones remain clearly and properly marked for the duration of the work involved.

Service Providers

Service providers are expected to meet or exceed the expectations of this Practice.

Service providers are expected to communicate restricted access requirements as listed in Encana’s *Service Provider Expectation Manual* to their staff on Encana field sites.

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Risk identification and control

Pressure and other hazardous energy sources exist on many oil and gas worksites; however, hazards associated with our early lifecycle well development are typically greater because of the transient nature of the equipment, the high pressures involved, changing environments and associated risk that may be present.

Identification of restricted access zones is to be incorporated as part of work hazard assessments, communicated and documented in site work permits and/or safety meeting records. This assessment must consider potential sources of pressure, other hazardous energy sources as well as environmental factors (silica, H₂S, NORMS etc.) In considering pressure in particular, specific effort should be made to consider potential “lines of fire”.

Please be aware that the presence of pressure and other hazardous energy sources is subject to change on location depending on the nature of the operations, situations and tasks.

Worksites shall designate areas by risk into one of three hazard groups:

Red Zone – High hazard area, no access unless approved by Encana supervisor and service provider supervisor with additional limitations.

Yellow Zone – Moderate hazard area, access limited to essential personnel.

White Zone – Limited hazards present – no restrictions.

Red and yellow restricted access zones must be clearly and consistently designated using banner tape, pylons, signage, barricades, etc. when adjacent personnel are likely to be present or impacted by the hazards.

All reasonable efforts shall be made to limit Red Zone access. Red zone access shall be:

- limited in duration
- restricted to select tool tasks
- limited to routine tasks
- limited to trained and experienced personnel only

Tasks conducted inside red zones are critical tasks and, as such written procedures must exist. A variety of safety management mechanisms likely already exist that will meet this need such as JSA's etc.

On sites where an onsite medic service is present, the Encana onsite representative shall provide a diagram/map identifying high and medium hazard areas (red and yellow zones). This map shall be provided to the onsite medics for inclusion in site orientations, and posted in service provider doghouses, data shacks etc.

Examples of restricted access areas/tasks/events are provided in [Appendix I](#).

Examples of red and yellow zone maps are provided for various disciplines in [Appendix II](#).

Training requirements for staff and service providers

Role	Description
Staff	Impacted Encana staff and field supervisors must have this Practice acknowledged as part of their Talent Hub learning profiles.
Service Providers	Impacted service providers will have their requirements under this Practice communicated via Encana's <i>Onsite Service Provider EH&S Expectations</i> document.

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Disciplinary actions

Role	Description
Staff	Appropriate disciplinary action up to and including termination must be taken based on the severity of the violation and individual circumstances.
Service Providers	Appropriate disciplinary action up to and including dismissal from the worksite and / or loss of contract services must be taken based on the severity of the violation and individual circumstances.

Regulations & reference material

Owner	Name
Encana	Pressure and Pipe Principles Fact Sheet

Performance Measures

- Incorporation of this Practice into Encana staff learning profiles
- Incorporation of service provider requirements in this Practice into the *Onsite Service Provider EH&S Expectations* document
- Incorporation of the requirements of this Practice into the *Site Inspection Form*
 - o Results of site inspections to the requirements of this Practice

Change management

To ensure alignment with current regulations, corporate policy, and industrial best practices, Encana's Canadian Division Safety Practices will be collectively evaluated annually and those practices identified for review will be prioritized and revised. Regulatory changes, changes in best practice and incident investigations may command a shorter review cycle. To suggest changes or provide comments, please email CDEH&S@encana.com.

Record keeping

Please refer to the Encana Canadian Division EH&S [Records Management Practice](#).

Revision History

Rev	Description of Change	Date	Sign Off		
			Custodian	Reviewers	Approver
1.0	Edited for clarity of language and expectations.	Oct. 25, 2013	Strategic EHS	R. Waterhouse M. Sunstrum	B. Harrison

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Appendices/Support information

Appendix I

Red Zone Examples:

- pressure testing equipment such as wellheads, flow lines, pipelines, and well control equipment
- during hydraulic fracturing operations from high pressure pumping equipment and treating iron to the wellhead
- wellheads and pressure piping that are open during active operations such as snubbing, e-line, slick-line, coil tubing, fracturing, acidizing, flow back, etc.
- rig floor, piping, and truck pump-end during cementing, acidizing operations or non-routine operations such as fishing
- area around wireline truck and wellhead while setting gun charges, loading/unloading radioactive sources, perforating, and while TIH/TOH with tools
- around coiled tubing and wellhead while rigging up or moving, spooling, suspended loads areas and activities managing hydrates
- pig launchers/receivers during pigging operations
- areas within swing radius of lift operations, no closer than tag line
- drilling, completions and production environments that are under a well control event
- drilling operations using compressed air or compressed gases such as the compressor area and the Blooie* line area
- non-destructive testing equipment using radioactive sources
- plant start-up (re-energized with gas flow typically following a turnaround)
- areas where H₂S and flammable atmospheres are expected

Yellow Zone Examples:

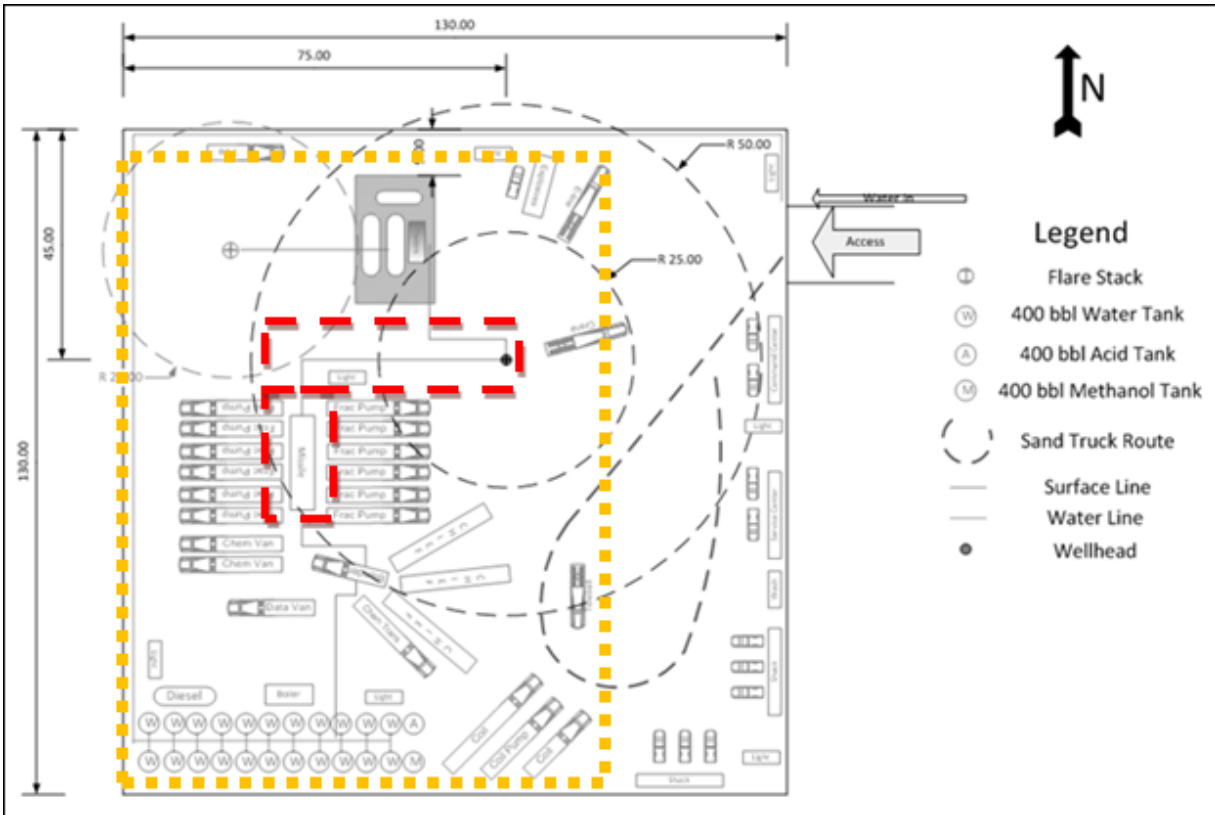
- from saddle tanks of pumping equipment to the front of the truck
- wellheads, production equipment and flow lines during normal operating conditions
- drilling rigs under normal operating conditions including any fluid separation equipment
- flowback separation equipment
- snubbing unit under normal operating conditions
- workover rigs under normal operating conditions
- pumping of chemicals down hole in operations such as batching, hydrate inhibition etc.
- frac proppant (sand) moving equipment including trucks, site storage equipment, conveyors and telebelts and associated silica dust
- disturbance of NORM-containing materials as outlined in the Physical Health Hazards Practice
- extremely loud noise areas, e.g. ≥105 dBA

Note: The list above is not all-inclusive and may include other activities and equipment considered to have elevated risk by operational personnel.

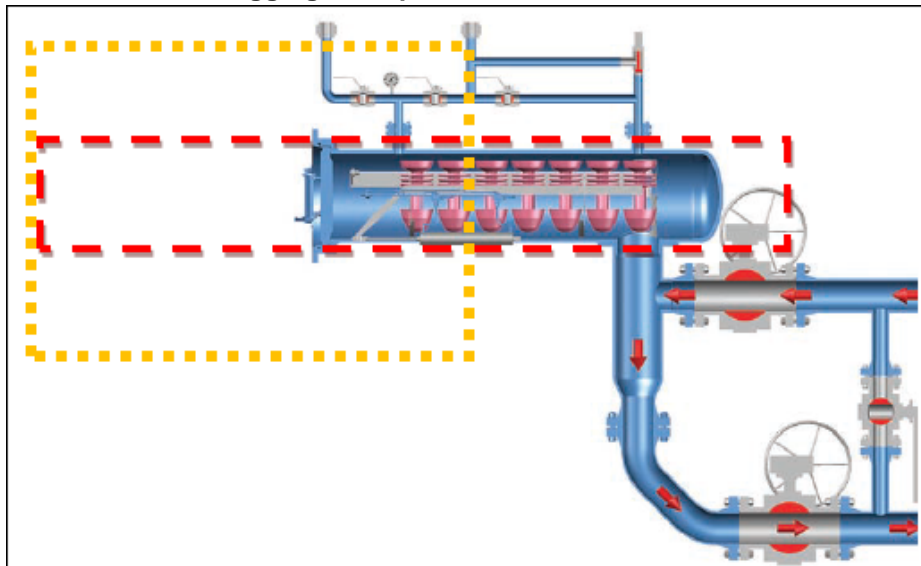
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Appendix II

A Frac Example of Restricted Access Areas



A Pigging Example of Restricted Access Areas



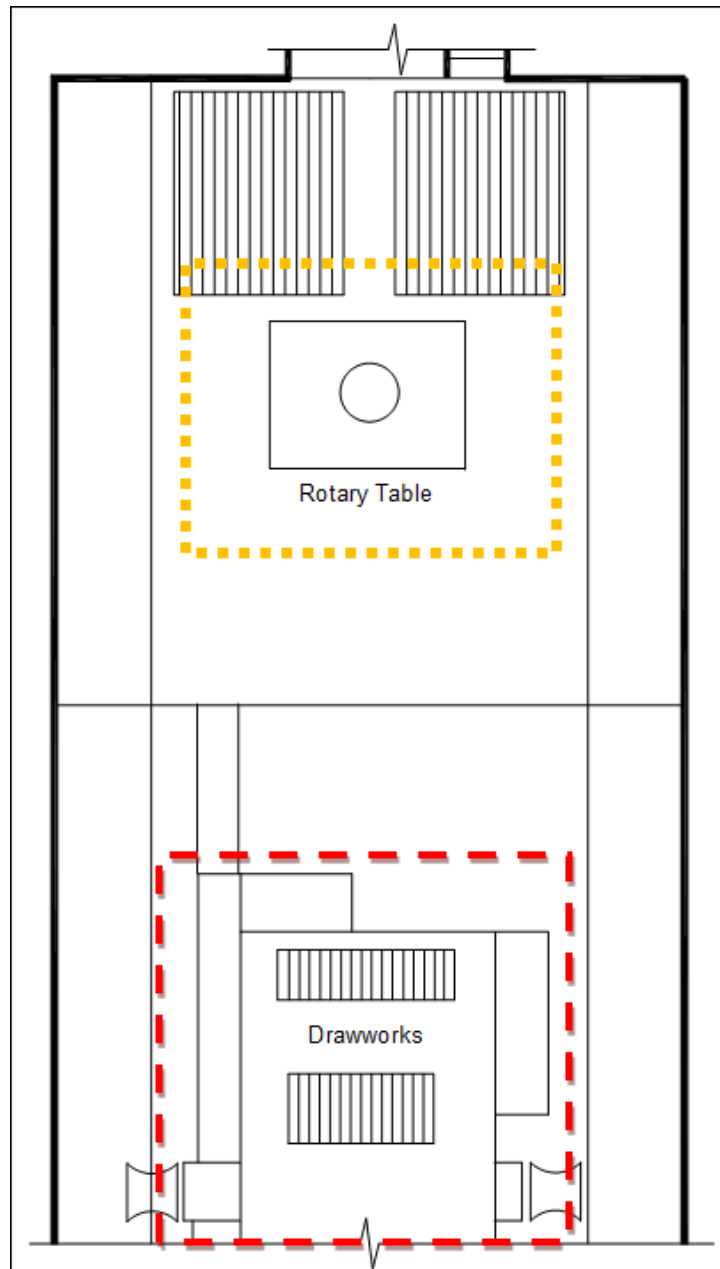
(Image provided courtesy of Roto-Launch Inc.)

Please be aware that the presence of pressure and other hazardous energy sources is subject to change on location depending on the nature of the operations, situations and tasks.

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Appendix II

A Drilling Rig Example of Restricted Access Areas



(Image provided courtesy of Precision Drilling Corp.)

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