Title:	**Distance Requirements**
Number:	**ED2006-15**
Program Name:	**Operations**
Effective Date:	**Nov 8, 2006**
This document was updated on:	**Dec 1, 2013**

Background

Pursuant to Section 44 of the *Exploration Regulation* (*AR 284/2006*), setback distances from specified structures are required for various energy sources used in an approved exploration program.

Requirements

Explosive Energy Source

An explosive energy source uses dynamite or other explosives in a drilled shot hole to produce a signal for acquiring exploration data. All charges or accumulated charges at each energy source that are larger than 20 kg must be approved for each program (Section 49 of the *Exploration Regulation*). The setback distance for an explosive energy source is set forth in the "Table of Required Setback Distance to Specified Structures". With the consent of the owner this distance can be reduced as per the "Table of Reduced Setback Distances to Specified Structures". All distances are measured from the shot point(s) to the structures.

Non-explosive Energy Source

A non-explosive energy source includes, but is not limited to, vibroseis or air gun. This is a mechanically generated energy source at the ground surface that produces a signal for acquiring exploration data. The setback distance for a non-explosive energy source is set forth in the "Table of Required Setback Distance to Specified Structures". With the consent of the owner this distance can be reduced as per the "Table of Reduced Setback Distances to Specified Structures". If the individual source points cannot be determined all distances are measured from the centre of the source line to the structures.

Other Energy Sources

Other energy sources are devices used at the ground surface level to produce a signal for acquiring exploration data. This includes but is not limited to the elastic wave generator (EWG).

Table of Required Setback Distances to Specified Structures

Specified Structures	Explosive Charge Size		Explosive Distance	Non-Explosive/Other Distance
Residence, barn, or any building(s) with a concrete base, concrete irrigation structures (e.g., drop structures, head works), concrete lined irrigation canals, and concrete water pipelines.	Up to and including 12 kg		180 m	50 m
	>12 kg <=20		200 m	
Water wells, developed spring,* observation well, or peizometer.	Up to and including 12 kg		180 m	100 m
	>12 kg <=20		200 m	
High - pressure Pipelines High - pressure pipelines are pipelines that operate at, or are intended to operate at a pressure in excess of 700 kilopascals. **Note**: All distances are measured from the centre of the pipeline.	<=2 kg		32 m	15 m
	>2 & <4 kg		45 m	
	>=4 & <6 kg		55 m	
	>= 6 & <8 kg		64 m	
	>=8 & <10 kg		70 m	
	>=10 & <12 kg		78 m	
	>=12 kg <=20		100 m	
Low - pressure Pipelines Low-pressure pipelines are pipelines that operate at, or are intended to operate at a pressure of 700 kilopascals or less. **Note**: All distances are measured from the centre of the pipeline.	Up to and including	20 kg	3 m	3 m
Dugouts* Measured from the inside edge of high water mark			50 m	25 m
Irrigation Canal (other than concrete lined) Irrigation canals that are more than 4 m wide			10 m	10 m
Buried Water Pipelines (other than concrete lined)			3 m	3 m
Dams Dam means a barrier constructed and having a storage reservoir capacity of at least 30,000 m^3, and which is at least 2.5 m in height when measured vertically to the top of the barrier.			180 m	50 m
Cemetery Distance to the energy source is measured to the surveyed boundary of the cemetery.			100 m	50 m
Buried Lines and Survey Monuments Telephone lines and telecommunication lines.			2 m	2 m
Domestic Septic Tank or Mound A septic tank is defined as a tank that is used as a septic storage device. A mound is a septic storage device that is located above ground surface.			15 m	15 m

* A developed spring is an area of local groundwater discharge that has had human intervention to make the water usable or attainable for domestic and/or non-domestic purposes, and is intended for long - term use.

* Dugouts are earthen excavations designed to collect runoff and store it for use during drier times. Typically, dugout capacity ranges from a few hundred cubic meters to thousands of cubic meters.

Table of Reduced Setback Distance to Specified Structures with Written Consent of the Owner of the Structures

	Explosive		Non-Explosive/Other
Specified Structure	**Charge Size**	**Distance**	**Distance**
Residence, barn, or any building(s) with a concrete base, concrete irrigation structures (e.g., drop structures, head works), concrete - lined irrigation canals, and concrete water pipelines.	<=2 kg	64 m	50 m
	>2 & <4 kg	90 m	
	>=4 & <6 kg	110 m	
	>= 6 & <8 kg	128 m	
	>=8 & <10 kg	142 m	
Water wells, developed spring*, observation well, or peizometer	>=10 & <12 kg	156 m	

* A developed spring is an area of local groundwater discharge that has had human intervention to make the water usable or attainable for domestic and/or non-domestic purposes, and is intended for long - term use.

Other

If **written consent of the owner of the specified structure** is obtained, then reduced setback distances to the specified structures for explosive energy can be implemented, as can a reduced distance to specified structures for non-explosive energy sources.

Enforcement/Compliance

Enforcement policy and procedures are currently under review and this directive will be updated accordingly.

Contact Information

Alberta Energy Regulator
Twin Atria Bldg., 4th Floor
4999 – 98 Avenue
Edmonton, Alberta T6B 2X3
Phone: 1-855-297-8311
E-mail: inquiries@aer.ca

Authorities

Mines and Minerals Act (Part 8) and Exploration Regulation (AR 284/2006)

Approved

Original Signed By

Kem Singh, Executive Director
Land and Forestry Policy Branch
Environment and Sustainable Resource Development