

## Overview of Changes in Air Monitoring Directive – Amendments to Chapter 1 Introduction

The following amendments were made to Chapter 1 of the Air Monitoring Directive to reflect alignment with the release of other chapters.

Chapter 1: Introduction		
Page	Section/Clause	Amendment
	Cover, formatting	Changed format of document to reflect new Alberta Environment and Parks design standards
2		Chapter documentation table added with effective date, ISBN's, etc.
4 – 19	Definitions	<p>“AAAQO” – Added “means Alberta Ambient Air Quality Objectives and Guidelines, as listed in the Alberta Ambient Air Quality Objectives and Guidelines Summary (Alberta Environment and Sustainable Resource Development 2013), as amended from time to time”.</p> <p>“AER” – Added “means the Alberta Energy Regulator”.</p> <p>“air emission” – Added “means the release of a substance or substances into the atmosphere”.</p> <p>“air emission non-point source” – Added “means an area, on-road mobile, non-road mobile, volume, line or group of point sources responsible for the release of a substance to the atmosphere, which cannot be practically inventoried as separate individual sources or release points because they are too small, too large, too numerous, too geographically dispersed, or because they are non-stationary. Non-point sources include, but are not limited to, materials handling, mine face, mine fleet, solid mine tailings, non-stationary equipment, fugitive leaks, road dust, space heating, storage tanks and liquid tailings ponds”.</p> <p>“air emission release point” – Added “means a stationary source responsible for the release of a substance to the atmosphere that can be practically traced back to a single identifiable source, such as, but not limited to, a smokestack.”</p> <p>“Alberta Real-time Ambient Air Website” – Added “means Alberta’s current central repository for real-time ambient air monitoring data collected in the province, made available online to the public.”</p> <p>“ambient air monitoring data” – Added “means air data, including, but not limited to, measured ambient air concentrations, speciation, deposition, meteorological parameters, method codes, units of measurement, time period of measurement and any required data flags”.</p> <p>“ambient air monitoring station” – Added “means a continuous, passive, static, intermittent or portable ambient air monitoring station”.</p> <p>“annual actual air emissions” – Added “means the actual, measured or estimated quantity of a substance being emitted to the atmosphere from a source during a specific calendar year”.</p>

## Chapter 1: Introduction

Page	Section/Clause	Amendment
4 – 19	Definitions	<p>“AQHI” – Added “means the Air Quality Heath Index”.</p> <p>“as found or unadjusted” – Added “means the output value of the measurement device that corresponds to the reference value input before a calibration check or adjustment”.</p> <p>“CAS” – Added “means the Chemical Abstracts Service”.</p> <p>“CASA” – Added “means the Clean Air Strategic Alliance”.</p> <p>“CEMS User Manual” – Added “means the Electronic Reporting of Continuous Emission Monitoring (CEMS) Information User Manual (Alberta Environment and Parks, 2015), as amended from time to time”.</p> <p>“certification methodology of the electronic submission system” – Added “means the mechanism by which data is certified during submission to an electronic reporting system. The certification methodology can include, but may not be limited to, authorized user-specific login credentials and digital sign off on the data prior to final submission”.</p> <p>“certify” – Added “means formally signed-off by the person responsible, indicating that the data or reports being submitted to the Director (a) have been reviewed by the person responsible prior to submission, (b) accurately reflect the monitoring results and reporting timeframe and (c) meet the specified analysis, summarization and reporting requirements”.</p> <p>“Codes for Electronic Reporting” – Added “means the industrial operation specific report provided to the person responsible for submitting CEMS data to the Director, as referenced in the CEMS User Manual”.</p> <p>“continuous ambient monitoring” – Added “means air sampling or flow measurement through equipment that creates an uninterrupted output of the analysis or flow measurement”.</p> <p>“Continuous Emission Monitoring System” – Added “means the equipment as a system required to analyze, measure, and provide, on a continuous basis, a permanent record of emission and other parameters as established by the CEMS Code”.</p> <p>“Cylinder Gas Audit” – Added “means a challenge of a monitoring system with a cylinder gas of a known concentration which is traceable to standard reference materials (SRMs) of the U.S. National Institute of Standards and Technology (NIST) according to Protocol 1 of the US EPA”.</p> <p>“exceedance” – Added “means a stack, source or ambient reading not meeting established limits, guidelines, standards, objectives or performance criteria, as determined according to established procedures”.</p>

**Chapter 1: Introduction**

Page	Section/Clause	Amendment
4 – 19	Definitions	<p>“industrial operation” Modified to “means any facility, plant, site, mine, structure or thing where an activity listed in the Activities Designation Regulation occurs, including all the buildings, equipment, machinery and vehicles that are an integral part of the activity”.</p> <p>“maximum air emissions” – Added “means the maximum rate at which a substance is emitted to the atmosphere from a source, factoring in emission limits, equipment specifications, or other relevant information”.</p> <p>“NAIT” – Added “means the Northern Alberta Institute of Technology”.</p> <p>“normal air emissions” – Added “means the rate at which a substance is emitted to the atmosphere from a source under normal operating conditions”.</p> <p>“NPRI” – Added “means the Environment Canada National Pollutant Release Inventory”.</p> <p>“pollution control technology or equipment” – Added “means any technology, process or piece of equipment which captures, reduces, limits or destroys air pollutants from an exhaust stream or other source before it is emitted into the atmosphere”.</p> <p>“portable monitoring” – Added “means air sampling or flow measurement through portable equipment that creates an uninterrupted output of the analysis or flow measurement, usually done at a temporary monitoring location for a specific period of time, usually two to six months”.</p> <p>“precipitation sampling equipment” – Added “means an automated sampling device that opens during precipitation to collect a sample and closes during dry periods to protect the sample (includes a wetness sensor to identify precipitation periods and a sample container that can be removed to decant collected sample)”.</p> <p>“reference method” – Added “when pertaining to the Reporting Chapter is any method of sampling and analyzing a substance, or determining flow rate, as specified in the Alberta Stack Sampling Code, or any other such air monitoring method authorized in writing by the Director”.</p> <p>“relative accuracy” – Added “when pertaining to a CEMS is the absolute mean difference between the gas concentration or emission rate determined by a CEMS and the value determined by an appropriate reference method plus the 2.5 percent error confidence coefficient of a series of tests, divided by the mean of the reference method tests”.</p> <p>“Relative Accuracy Test Audit” – Added “means the test required by the CEMS Code to determine relative accuracy in order to provide a measure of the systematic and random errors associated with data from a CEMS”.</p> <p>“SAIT” – Added “means the Southern Alberta Institute of Technology”.</p>

<b>Chapter 1: Introduction</b>		
<b>Page</b>	<b>Section/Clause</b>	<b>Amendment</b>
4 – 19	Definitions	<p>“source sampling” – Added “means the type of sampling carried out on an industrial source including, but not limited to, manual stack sampling, RATA and CGA”.</p> <p>“special air studies” – Modified to “means any additional air monitoring studies carried out by an industrial operation or Alberta airshed that go beyond their normal routine air monitoring (for example for the industrial operation’s or Alberta airshed’s own purposes, or to satisfy an EPEA approval requirement or written notice from the Director)”.</p> <p>“stack sampling” – Added “means a method, or series of methods, to extract a sample from a stack or duct that is representative of the emissions from that source, usually conducted during normal operating conditions, or at conditions specified in the approval”.</p> <p>“submit” – Added “means the transfer of files or documents containing the required content. Examples include, but are not limited to, the transfer of files via an electronic reporting system, emailing of reports, or sending files on a flash drive. Note that sending a link to a File Transfer Protocol site would not constitute submission to the Regulator, as the files or documents are not actually transferred from the person responsible to the Regulator”.</p>
21	Section 2.0	Removed Air Monitoring Directive 1989 and 2006 amendment from the list of components that make up the current AMD. Added Chapter 9 to the list of components that make up the current AMD.
22	Section 2.2	Replaced clauses Int 2-A through Int 2-G (repeals of 1989 and 2006 AMD sections) with the following 2 clauses: <p>“Int 2-A The Air Monitoring Directive: Monitoring and Reporting Procedures for Industry (Alberta Environment 1989) is hereby repealed and replaced with the Air Monitoring Directive (Alberta Environment and Parks 2016).</p> <p>Int 2-B The 2006 Amendments to the Air Monitoring Directive, 1989 (Alberta Environment 2006) is hereby repealed and replaced with the Air Monitoring Directive (Alberta Environment and Parks 2016).”</p>
23 – 24	Section 5.0	Updated the mailing address to “Air Policy”.