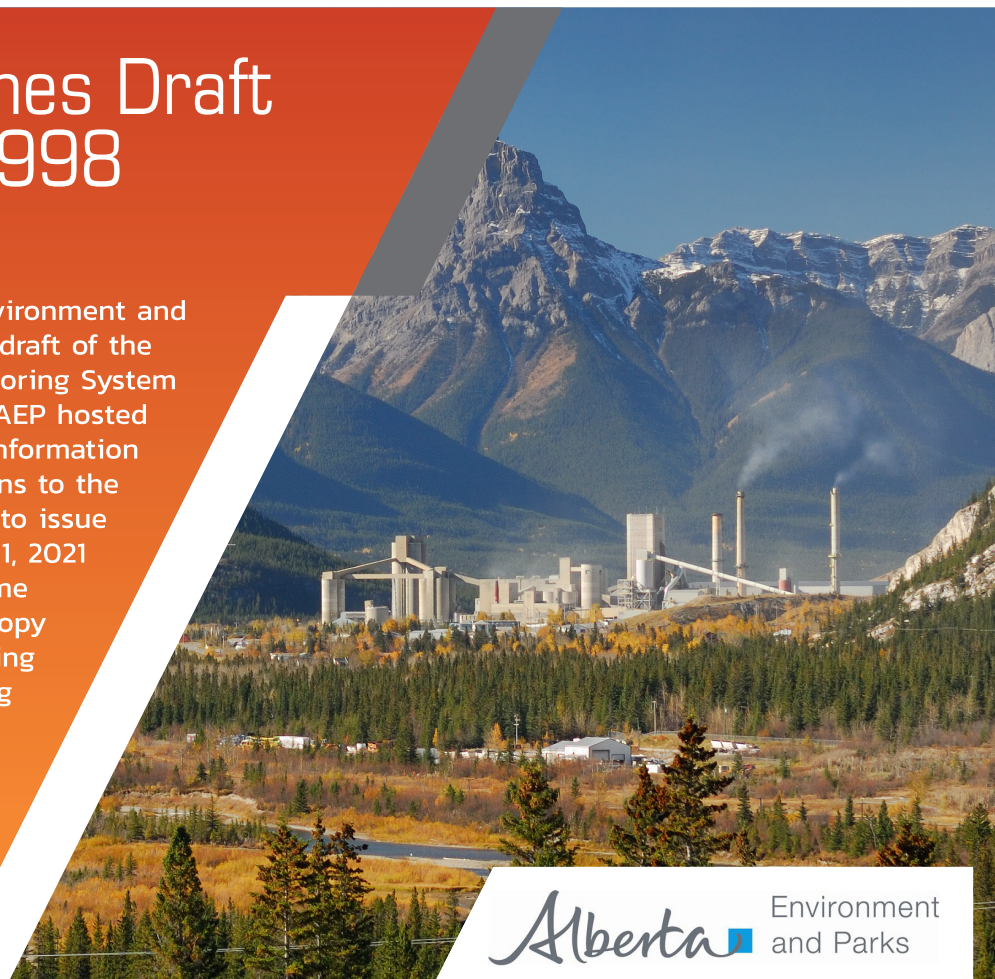


# Alberta Publishes Draft Revisions to 1998 CEMS Code

On October 13, 2020, Alberta Environment and Parks (AEP) published a second draft of the 1998 Continuous Emission Monitoring System (CEMS) Code. On the same day, AEP hosted a webinar designed to provide information concerning the proposed revisions to the CEMS Code. AEP currently plans to issue the final CEMS Code on January 1, 2021 and the CEMS Code would become effective on January 1, 2022. A copy of the draft CEMS Code, supporting documents as well as a recording of the AEP webinar is available at [www.alberta.ca/continuous-emissions-monitoring.aspx](http://www.alberta.ca/continuous-emissions-monitoring.aspx). Comments on the proposed CEMS Code were due no later than November 30, 2020.



Alberta Environment and Parks

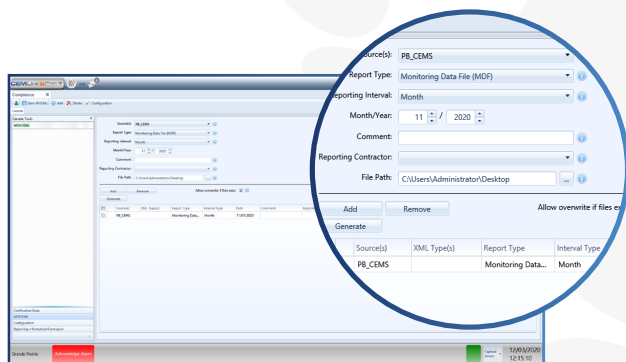
## Summary of Significant Proposed Revisions to Alberta CEMS Code (October 13, 2020)

SECTION/CITATION	PROPOSED REQUIREMENT
1.2-A	Proposed compliance date is January 1, 2022
1.5.1	Predicative emission monitoring systems (PEMS) approved on case-by-case basis. Introduces Alberta Predictive Monitoring Methodology specifying the requirements for developing, maintaining, and updating a PEMS.
2.0	Monitoring Plan submitted a minimum of 90 days prior to new CEMS installation. Introduces new Monitoring Plan content requirements.
3.1-B	After 1/1/2022, installation of new analyzers must use flowing test gas to conduct CGAs
3.2-A	After 1/1/2022, new in-stack opacity analyzers must meet design specifications specified in ASTM D6216 and must be installed in accordance with Performance Specification 1.
3.4-K	Monitor availability based on operational analyzer hours (in control & meeting performance specifications) and total unit operating time during the month.
3.4.4	May use historian or back-up data sources as temporary back-up during periods of primary DAS reporting loss.
4.4	Beginning 1/1/2022, must conduct cyclonic flow testing prior to completing CEMS certification testing.
5.1-B	CEMS initial certification must be completed within 90 unit operating days or 180 calendar days, whichever, occurs first, after emissions first exit through stack or duct.

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# Summary of Significant Proposed Revisions to Alberta CEMS Code (October 13, 2020) *Continued from front*

SECTION/CITATION	PROPOSED REQUIREMENT
5.1-J	Flow monitor correction factors may not be changed following certification without written authorization from the Director.
5.2; TABLE 4	Introduces recertification requirements for major component replacements.
5.3	QA Plan must address what diagnostic tests must be performed after minor component replacements to demonstrate that the CEMS is collecting quality-assured data.
6.2.2	EPA Protocol Gases must be used for CGAs, alternate biannual audits and 7-day calibration error tests.
6.2.4; 6.2-V	After 1/1/2022, for analyzers that do not allow flowing test gas for CGAs must conduct alternate biannual audit using a portable analyzer. Must use EPA Protocol Gases to calibrate portable analyzer per 6.2-B.
6.2-TT	If the calculated bias exceeds the performance specification, the RATA is failed and the CEMS is out-of-control
6.2-UU, 6.2.6	Must conduct a flow analyzer orientation sensitivity test for initial certification.
7.0, Table 11	Introduces more detailed QA Plan requirements.
7.1-C	QA Plans must be updated to comply with revised CEMS Code no later than September 1, 2022.
7.2-D	QA Plan must address frequency and procedures for conducting optical alignment check for in-stack opacity monitors.
7.3.1	Introduces provisions for reduced RATA frequency to qualify for annual RATA versus two RATAs per year.
7.3.1	Reduced RATA frequency is not available to analyzers that cannot conduct CGAs with flowing test gas.
7.4	Must conduct a quarterly calibration error test on in-stack opacity monitors in accordance with PS-1 or Procedure 3 (Appendix F to 40 CFR Part 60). Note that both rules include requirements to recalibrate the audit filters.
7.4	Calibration error test for in-stack opacity monitors not reported using AMD file.
7.5	For stack flow monitors, a flow-to-load check is an optional QA check. Also, reference Appendix D.
7.6	If RATA, CGA, or alternate biannual audit fails and a specific point in time cannot be determined when the root cause occurred, data is invalidated back to the last successful quarterly performance tests (whether the last tests was a RATA, CGA or biannual audit. (Page 75 of Code)
7.7	Annual Evaluation requirements for CEMS program and QA Plan are expanded.
8.0	Introduces several options to collect valid data during primary CEMS downtime.
8.0	Data from a like-kind analyzer or third party short-term continuous monitoring may be conditionally validated with a calibration drift test until the CGA is passed. The conditionally valid data procedures are not clearly defined. (Page 80 of Code).
9.0	CEMS User Manual specifying reporting requirements will be revised after revised Code is finalized.
9.0-G	Beginning 1/1/2022, must electronically report 1-hour averages for all temperature sensors.
9.0-I	Alternate biannual audit reporting requirements still under development.



In addition to our state-of-the-art data acquisition and handling system, CEMLink 6, VIM's experienced COMPAS Division offers a variety of consulting services tailored to assist our customers in complying with complex air quality regulations. For more information concerning our products and services, contact the VIM team at [sales@vimtechnologies.com](mailto:sales@vimtechnologies.com).