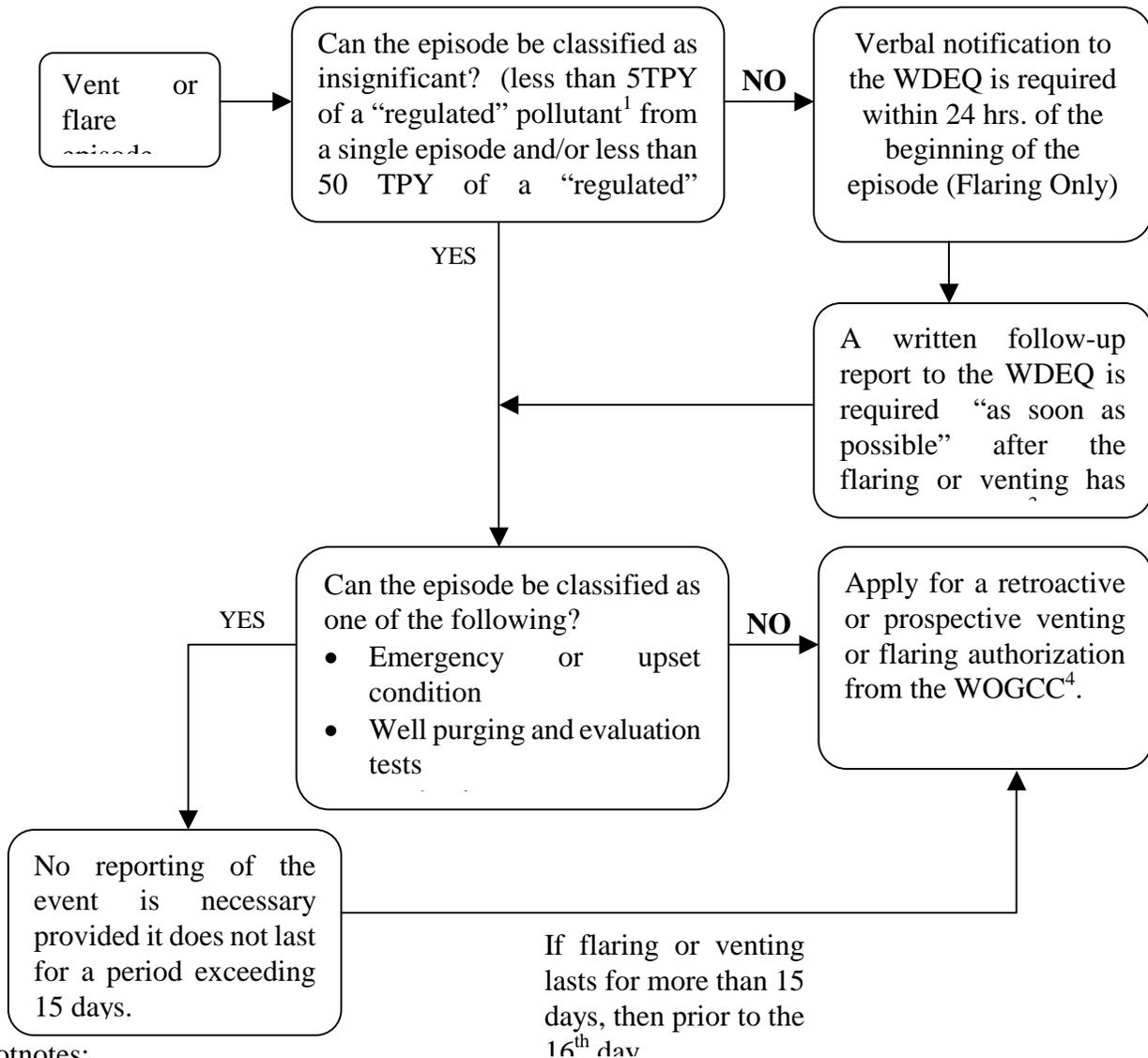


**APPENDIX C**

**AUTHORIZATION FOR THE VENTING OR FLARING OF GAS**

Note: The Wyoming Oil and Gas Commission (WOGCC) and the Wyoming Department of Environmental Quality (WDEQ) are the two agencies that regulate venting and flaring from oil and gas operations in Wyoming



Footnotes:

The term “regulated pollutant” would not include methane or ethane. Regulated pollutants include NO<sub>x</sub>, CO, SO<sub>x</sub>, VOCs, Particulate Matter, and Lead

If the 50 TPY threshold is exceeded an annual summary report would be required by March 1 of each year.

The WDEQ will accept the WOGCC forms (Form 3 – Well Completing or Recompletion Report and

Log, and Form 4 – Sundry Notices and reports of Wells)

Application is a letter sent to the WOGCC requesting authorization to vent or flare with the details listed in Chapter 3, Section 40 ( c ) i vii.

Narrative

Venting or flaring at oil and gas facilities is regulated by two agencies. The Wyoming Department of Environmental Quality (WDEQ) and the Wyoming Oil and Gas Conservation Commission (WOGCC). Each agency regulates these activities with a slightly different objective. The WDEQ is concerned about the emission of regulated pollutants and the WOGCC is concerned about royalties of the vented gas. Both parties are concerned about safety of the public with regard to the venting of H<sub>2</sub>S gas.

In general venting CBM gas from a well head does not release any regulated pollutants. Constituents of CBM gas usually include methane (CH<sub>4</sub>), carbon dioxide (CO<sub>2</sub>), and nitrogen. Therefore, in general, no notification is required for the WDEQ for venting CBM gas from a well head.

Flaring operation (combustion of the gas) does release regulated pollutants. The WDEQ's policy is to require verbal notification within 24 hours of the beginning of the episode (see attached memo dated December 7, 1999 for contact information). Notification is only required if the flare event emits more than 5 tons per year (TPY) of a regulated pollutant in a single event or 50 TPY annually.

Using emissions factors published by the EPA in AP-42 Chapter 13, more than 82,000 standard cubic feet of gas (900 btu/scf) would have to be consumed in a single event or more than 820,000 standard cubic feet of gas would have to be consumed over an entire year for the notification thresholds to be met.

The WOGCC requires a retroactive notice of venting or flaring operations that persist for a period exceeding 15 days. This notice requests an authorization to continue flaring or venting.

Chapter 3 Section 40. Authorization for Flaring and Venting of Gas (WOGCC Rules)

(a) Venting or flaring under the following circumstances has not and does not constitute waste and is authorized by the Commission:

(i) Emergencies or upset conditions: During temporary emergency situations, such as compressor or other equipment failures, relief of abnormal system pressures, or other conditions which result in the unavoidable short-term venting or flaring of gas at a lease, gas plant or other facility;

(ii) Well purging and evaluation tests: During the unloading or cleaning up of a well during routine purging or drillstem, producing, or evaluation tests;

(iii) Production tests: During initial or recompletion evaluation tests not exceeding a period of fifteen (15) days, unless a longer test period is authorized by the Supervisor.

(b) Low rate casing head gas. Unless it is determined by the Supervisor or the Commission that waste is occurring, up to 60 MCF of gas per day is authorized to be vented or flared from individual oil wells. Venting or flaring is authorized either at the well or at a lease facility which serves several wells.

(c) Unless flaring or venting is authorized under paragraph (a) or (b) of this section, an owner must apply for retroactive or prospective venting or flaring authorization under (c) or (d) of this section. Authorization may be granted upon review of an application, provided that the venting or flaring does not constitute waste. An application to vent or flare shall contain the following items as a minimum:

(i) a statement of reason for venting or flaring;

(ii) the estimated duration of venting or flaring;

(iii) the estimated daily volume of gas in thousands of standard cubic feet per day (MCFD);

(iv) the estimated daily volume and type of associated produced fluids, gas or plant products in barrels, MCF's, gallons or tons per day, as applicable;

(v) a compositional analysis of the gas if hydrogen sulfide is present or if the gas stream has a low BTU content;

(vi) a legal description of the well(s), plant or facility and distance to the nearest potential sales point or pipeline(s); and

(vii) a discussion of applicable safety factors and plans such as use of a constant flare igniter, facility pressure release, or emergency protection practices.

(d) The Supervisor may grant temporary authorization of verbal requests, including plant start-up/shut down. Follow-up documentation of the request may be requested of the applicant containing, at a minimum, the items set forth in subsection (c) above within fifteen (15) days of the initial request.

(e) All operations shall be conducted in a safe and workmanlike manner. If the gas is sour and venting would present a safety hazard, a constant flare igniter system may be required.

**MEMORANDUM**

**TO:** The Oil and Gas Production Companies Operating in Wyoming  
**FROM:** Dan Olson, Administrator, Air Quality Division  
**SUBJECT:** Reporting Guidelines for Well Flaring or Venting  
**DATE:** May 5, 1986 - Original Issuance  
July 5, 1995 - Update \*  
December 7, 1999 - Update \*

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On April 11, 1986, the Air Quality Advisory Board approved and adopted as policy the reporting of well flaring under Chapter 1, Section 5 of the Wyoming Air Quality Standards and Regulations. The Board additionally approved the use of the procedures in this guideline for satisfying the reporting requirements of Chapter 1, Section 5. The flaring events which are covered by this guideline include well testing and completions, well work overs, and other uncontrollable events that the Division may determine to be applicable. The minimum reporting requirements necessary to comply with the provisions of Chapter 1, Section 5 are as follows:

1. The Air Quality Division must be verbally notified within 24 hours of the beginning of a flaring episode. For planned long term flaring operation, the Division may be notified in advance and the requirement of the "24-hour" notification will be waived. The verbal notification of flaring for all gas wells may be made to any of the following offices:

Cheyenne	Casper	Lander	Sheridan
(307) 777-7391	(307) 473-3455	(307) 332-6755	(307) 672-6457
Bob Gill	Chris Hanify	Tony Hoyt	Mike Warren
Diana Hulme	Jeff Hancock <sup>1</sup>	Dan Fauth	Judy Shamley
		Greg Meeker	
		Carl Disel	

2. A written follow-up notice must be sent to the Cheyenne office as soon as possible after the flaring has been completed. The Division will accept the Oil and Gas Commission forms (Form 3 - Well Completing or ReCompleting Report and Log, and Form 4 - Sundry Notices and Reports of Wells) to fulfill reporting requirements for gas flaring. The additional information noted below can be included on the forms if there is sufficient space. The

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\* Updates include only personnel and regulation reference changes. The reporting guidelines adopted by the Air Quality Advisory Board on April 11, 1986 remain unchanged.

*Environmental Assessment, Lower Bush Creek Pilot Exploratory  
Coal Bed Methane Project*

**Memorandum**  
**Reporting Guidelines for Well Flaring or Venting**  
**December 7, 1999**  
**Page 2**

Division is primarily concerned with the reason for the required flaring, the amount of gas flared, the hydrogen sulfide content of the gas flared, the time period over which the gas is flared, the total sulfur dioxide emissions resulting from the flaring and the efforts made to minimize the emissions.

3. To minimize reporting requirements, the Division will not require verbal notification of insignificant emissions (less than 5 tons of a regulated pollutant from a single flaring episode and/or less than 50 tons of a regulated pollutant from a well or a well field over a one year period.) An annual summary report must be submitted to the Division by March 1 of the following year when the 50 ton per year figure is exceeded.
4. In addition to the information listed above, the company must maintain records of the significant flaring events including the height of the flare and general meteorological conditions associated with the flaring episode to allow for modeling of an event if it is deemed necessary.
5. All of the above requirements also apply to non-flared venting operations.

Due to safety concerns, the rules are more stringent if gas containing H<sub>2</sub>S is vented or flared. In these cases it is best to consult the regulations or the agencies to ensure compliance.