

## EMERGENCY EPISODE CONTINGENCY PLAN

### Purpose

The contingency plan shall provide for taking any emission control actions necessary to prevent ambient air pollutant concentrations at any location in any one of Wyoming's three (3) Air Quality Control Regions from reaching levels which could cause significant harm to the health of persons within the affected area. The State of Wyoming will operate a State and Local Air Monitoring Station (SLAMS) for monitoring episodes in the cities of Cheyenne and Casper.

### Conditions for an Air Pollution Alert

Conditions justifying the proclamation of an air pollution alert, air pollution warning or air pollution emergency shall be determined to exist whenever the Division determines that the accumulation of air pollutants in any place within an air quality control region is attaining or has attained levels which could, if such levels are sustained or exceeded, lead to a substantial threat to the health of persons. In making this determination, the Division will be guided by the criteria given in Section 20 b. of the Wyoming Air Quality Standards and Regulations (WAQSR), and Section 51.16 and Appendix L of 40 CFR Part 51.

### Air Pollution Forecasts

The mechanism for declaring an air quality episode will be activated by a National Weather Service Advisory that an Atmospheric Stagnation Advisory, or the equivalent local forecast of a stagnant atmospheric condition is in effect.

### Procedure

Once an Atmospheric Stagnation Advisory is received, the following procedure(s) will be implemented to measure the impact of sulfur dioxide, nitrogen dioxide, and particulate emissions\*:

- A) The high-volume air sampler(s), particulate tape sampler(s) and SO<sub>2</sub>/NO<sub>2</sub> bubbler(s) located in the affected area will be placed in service on a continuous basis until stagnation conditions have ceased or the alert is terminated.

- B) Staff personnel from the Division will be dispatched to the area as soon as possible to coordinate activities on the scene and operate additional monitors. Pollutant levels and/or concentrations will be determined on site where possible or samples will be transmitted to and analyzed at Cheyenne by the most expeditious methods available.

\*With the exception of particulates (TSP) which has been classified as a Priority II pollutant, all of the other "criteria pollutants" (carbon monoxide, CO; sulfur dioxide, SO<sub>2</sub>; nitrogen dioxide, NO<sub>2</sub>; and photochemical oxidants, ozone O<sub>3</sub>) have been given a Priority III classification. A Priority III classification means that levels of that particular pollutant are well below the National Ambient Air Quality Standard (NAAQS) and, therefore, no monitoring sites are required for these pollutants (40 CFR, Part 51, Section 51.17, Item g.). It is EPA's and the State of Wyoming's intent as stated in 40 CFR, Part 58 for the state to have cost-effective monitoring networks. Thus, the episode monitoring network will consist only of hi-vol, SO<sub>2</sub>/NO<sub>2</sub> bubblers, particulate tape samplers and wind speed/direction recorders.

Because there is no universally consistent relationship between the tape sampler and reference high-volume (hi-vol) method, a site specific relationship between the hi-vol and tape sampler will be established prior to January 1, 1983, for each episode station as described in EPA guideline, "Guidance for Selecting TSP Episode Monitoring Methods, OAQPS No. 1.2-114". Tape sampler data will, therefore, be converted to an equivalent micrograms per cubic meter value for use in monitoring episodes.

#### Communications

Should the results of the sampling indicate one of the levels as defined in Section 20 b. of the WAQSR is present, a chain of events will be set into motion immediately as defined below:

- A) Notification of:
1. Administrator, Division of Air Quality
  2. Director, Department of Environmental Quality
  3. Governor's Office

4. Newspapers, television, and radio in the affected area
  5. Mayor or city manager in the affected area
  6. Environmental Protection Agency Region VIII Administrator
  7. Doctors and hospitals in the affected areas (at the emergency level)
  8. City and local health department, where available
- B) The Administrator of the Air Quality Division will decide on a control action to be taken and notify those sources responsible to take corrective actions.
- C) The person making the contact shall make note of the date and time the contact is made. This record will be placed on file in Cheyenne.

#### Abatement

During the initial stage of the episode, the actions taken by major sources of pollution will normally be voluntary. However, if the Director of the Department of Environmental Quality determines that the voluntary actions have not resulted in sufficient improvement, the Director has the authority (under the Wyoming Statutes, Section 35-502.15) to "with the concurrence of the Governor . . . order persons causing or contributing to the air pollution to reduce or discontinue immediately the emission of air contaminants . . ." Additional personnel will be reassigned from routine assignments to inspect major sources to ascertain compliance with the reduction and/or discontinuance order.

#### Records

Permanent records of stagnation advisories and of declared episode stages will be kept. A permanent record shall be retained by the Administrator, Division of Air Quality. Information such as date and time of declaration, duration of alert, air quality levels reached, action taken . . . will be entered.

## V. Emergency Episode Plan

A. Section 420.16 of the August 14, 1971, Federal Register, describes certain requirements of a state implementation plan regarding the prevention of air pollution emergency episodes. The magnitude and complexity of these requirements is dependent upon the classification of the Air Quality Control Regions within the State. The State of Wyoming has been classified Priority II for suspended particulates for the Casper and Cheyenne AQCR's and Priority III for all other pollutants for all AQCR's as shown in Appendix C. Therefore, pursuant to Section 420.16, the State of Wyoming is required to have a contingency plan for suspended particulates for the Casper and Cheyenne AQCR's meeting the following minimum requirements:

- (1) Two or more stages of episode criteria must be specified
- (2) A provision for public announcement must be implemented whenever any episode stage has been determined to exist

In conjunction with these requirements, Wyoming has adopted an episode regulation shown as Section 20, Chapter I, Appendix E, Wyoming Air Quality Standards and Regulations. This regulation is entitled, "Air Pollution Emergency Episodes" and specifies three stages of episode criteria. The authority for adopting an emergency plan of action is contained in Section 35-496, Wyoming Air Quality Act of 1967.

B. Air quality levels exceeding those criteria levels specified in Section 20 b have been observed in Wyoming in the past; however, in most cases there was not a generalized meteorological stagnation condition existing. In fact, Wyoming is subject to very few stagnation conditions. The potential for an emergency condition is present, therefore this contingency plan must be provided.

The forecast mentioned in Section 20 b (1) will be obtained from the U.S. Weather Service at their Casper and Cheyenne stations. The forecasts will be updated every 12 hours during a "Stagnation Advisory." Any one of the monitoring sites as listed in Table III, Appendix J, will be capable of triggering an episode stage.

C. When one of the levels, as defined in Section 20 b, is reached, a communications chain of events shall be set into motion immediately. This communications chain is described below:

1. The Wyoming Air Quality Section Director shall be notified.
2. The Wyoming Division of Health & Medical Services Administrator shall be notified.
3. The Governor's office shall be notified.
4. The newspaper, television, and radio in the affected areas shall be notified.
5. The mayor or City Manager in the affected area shall be notified.

6. The Environmental Protection Agency, Region VIII, Administrator, shall be notified.
7. Doctors and hospitals in the affected areas shall be notified at the emergency level.
8. City and local health departments, where available, shall be notified.
9. The Wyoming Air Quality Section Director shall decide upon a control action to be taken and notify those sources of emissions responsible for the high levels of pollutants to take corrective actions.

The person making the contact shall make note of the date and time the contact was made. This record shall be placed with the permanent log book in Cheyenne.

The names, addresses, and telephone numbers of the people or media (and their designated alternate) included in this communications chain are listed in Appendix I of this plan. This list will be revised as required.

During the initial stage of the episode the actions taken by major sources of pollution shall be voluntary. However, if the Director of the Division of Health and Medical Services determines that the voluntary actions have not had a curtailing effect, he has the authority under the Wyoming Statutes, Section 35-496, to "with the concurrence of the Governor ... order persons causing or contributing to the air pollution to reduce or discontinue immediately the emission of air contaminants ... ." Field enforcement personnel will be reassigned from day to day routine assignments to inspection of major sources to ascertain compliance with an applicable order of compliance.

Permanent records of stagnation advisories and of declared episode stages should be kept. To facilitate this, a permanent log book shall be retained with the Director in the Department of Health and Social Services. Information such as date and time of declaration, duration of alert, air quality levels reached, control actions taken, etc. will be entered in the log.

Appendix I

Wyoming Emergency Episode Plan  
Notification Directory

TABLE  
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VIII  
RECEIVED NATCA REG VIII MAY 4 1972

THE STATE OF WYOMING



*Department of Health and Social Services*

*Division of Health and Medical Services*

STATE OFFICE BUILDING CHEYENNE, WYOMING 82001

May 3, 1972

Mr. Fred Longenberger  
Environmental Protection Agency  
Region VIII  
1860 Lincoln St. - Suite 900  
Denver, CO 80203

Dear Mr. Longenberger:

In order to clarify procedures for determining the existence of emergency episode pollution levels, the following statement may be inserted after Paragraph 2 of Item B, Page 10 of the Wyoming Implementation Plan:

Station operators will transmit the exposed particulate filters and sulfur dioxide reagent solutions after every other collection is completed. This schedule will allow an approximate twice-monthly mailing, except when a more frequent mailing is warranted. During periods when the forecast in Section b (1) indicates the presence of a "stagnation advisory", the station operator will be advised by the Air Quality Section, Wyoming Division of Health and Medical Services to mail all collected sample materials immediately after collection. The sample schedules will be altered to include more frequent sampling for particulates and sulfur oxides at all monitoring sites when the stagnation advisory is in effect. Such additional sampling and forwarding of samples will continue until the alert forecast for the monitoring area is terminated as determined by the U.S. Weather Service. The monitoring sites will be visited by section field staff every thirty days.

Item VI, Page 12: H. With respect to air quality surveillance the following procedures apply:

Particulate levels will be determined by using a standard high-volume air sampler with a tared 8" x 10" fiber glass filter, running time meter and a calibrated flow meter. All such units will be calibrated and inspected for mechanical

Mr. Fred Longenberger  
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service such as brush replacement after twenty 24-hour sampling intervals, or approximately 500 hours of operation. Calibration will be performed in the Section laboratory by using a calibration orifice, variac, and a differential manometer calibrated in inches of water. A General Metal Works calibration unit is utilized, and flow meter scales are attached to the samplers to give appropriate corrected flow ranges for field use. A log describing each station sampler, its calibration, and hours of operation is maintained at Cheyenne.

Sulfur oxide detection equipment consists of a sampling unit patterned after the specifications outlined in Appendix A, Federal Register, Volume 36, No. 84, April 30, 1971. A critical orifice is provided by using a 27 gauge hypodermic needle preceded by a membrane filter to protect the orifice. Figure A 1 a of this Register is used as a guide in assembling the sampling train.

Polypropylene centrifuge tubes (32 x 164 mm) are used for the potassium tetrachloromercurate solution. These tubes are mailed by the monitoring station operator in protective mailers furnished by the Section laboratory. Station operators are instructed in maintaining a proper pump air pressure differential to secure adequate sampling flows. All maintenance of the equipment will be performed by State personnel during monthly visits to the field locations. Pre-weighing of high-volume filters and preparation of the sulfur oxide reagent will be accomplished by State staff. Post collection analysis will also be performed in the Cheyenne laboratory.

Analyses of exposed filters and sulfur oxide solutions will be performed in accordance with practices outlined in Appendix A and B of the Federal Register, Volume 36, No. 84, April 30, 1971. Results will be recorded in the station log, and in cases where alert levels are exceeded, station operators will be informed by telephone within 24 hours, so that appropriate additional sampling instructions will be transmitted.

The tape samplers located at Casper and Cheyenne will be serviced at 30-day intervals by State personnel. These units are calibrated with a precision wet test meter after each 30-day operational period by returning them to the Cheyenne laboratory. Since these stations are also contiguous to the particulate and sulfur oxide samplers, visual checks for sampler

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operation will be made every six days. Exposed tapes will be evaluated in Cheyenne every 30 days, unless alert conditions warrant additional attention. If alert conditions are established as specified in Section 20 b (1), the monitoring station operator will be instructed regarding removal of exposed tape and disposition by mail to Cheyenne for evaluation. Laboratory evaluations are made by using a RAC Model 2256 spot evaluator, and results are tabulated in the station log in coefficient of haze units.

Data from all monitoring stations will be compared with State standards. Individual particulate levels will be compared with ambient standards shown in Section 3 a (2), Wyoming Air Quality Standards and Regulations. After each quarter, geometric means will be calculated to afford a comparison with Section 3 a (1) of State standards.

Station operators will record start-stop times, flow meter reading and, in the case of high-volume samples, the running time meter readings.

Whenever possible, sampling stations will be chosen to be representative of the area and will be located to avoid influences and interferences that would tend to minimize or maximize ambient conditions.

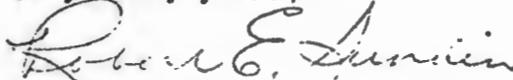
To avoid apparent confusion, paragraphs 1 and 2, Item VIII Source Surveillance, Page 14, should be changed to read as follows:

The State Of Wyoming's source surveillance program is based on source oriented sampling and testing, general field investigation, and source emissions inventory updating.

An annual updating of the source emissions inventory will allow comparisons of air quality data to emissions data. The status of control measures will give current information on achievement of ambient air quality standards by 1975. The successful application of emission standards is dependent upon a current inventory to determine compliance with standards.

We appreciate your referral of these matters to our attention and would be glad to furnish whatever additional information you may require.

Very truly yours,



Robert E. Sundin  
Director  
Air Quality Section

RES:sz

Episode Communications Personnel

1. Wyoming Air Pollution Control Program Director

Robert E. Sundin, Director, Air Quality Section  
Wyoming Department of Health and Social Services  
State Office Building  
Cheyenne, Wyoming 82001

Office Telephone: 307/777-7511

Alternate

John B. Mills, Industrial Hygienist, Air Quality Section  
Wyoming Department of Health and Social Services  
State Office Building  
Cheyenne, Wyoming 82001

Office Telephone: 307/777-7511

2. Wyoming State Division of Health and Medical Services Director

Lawrence J. Cohen, Administrator  
Wyoming Division of Health and Medical Services  
Wyoming Department of Health and Social Services  
State Office Building  
Cheyenne, Wyoming 82001

Office Telephone: 307/777-7275

Alternate

Herman S. Parish, Jr., M.D., Assistant State Administrator  
Wyoming Division of Health and Medical Services  
Wyoming Department of Health and Social Services  
State Office Building  
Cheyenne, Wyoming 82001

Office Telephone: 307/777-7424

3. Newspaper, Television, Radio

a. Casper

Casper Star-Tribune  
East First & Jefferson  
Casper, WY 82601

KATI Radio Station  
1400 Kati Lane  
Casper, WY 82601  
307/234-4545

KTWO TV & Radio  
4200 E. 2nd  
Casper, WY 82601  
307/237-3711

b. Cheyenne

Cheyenne Newspapers, Inc.  
110 East 17th St.  
Cheyenne, WY 82001  
307/ 634-3361

Episode Communications Personnel (continued)

b. Cheyenne (continued)

KCGO Radio, 309 W 18 St., Cheyenne, WY 82001  
307/634-7975

KFBC Broadcasting & TV, 2923 E. Lincolnway, Cheyenne, WY 82001  
307/634-4461

KRAE Radio Station, 2109 E 10 St., Cheyenne, WY 82001  
307/632-5898

KTWO TV & Radio, Capitol Bldg., Cheyenne, WY 82001  
307/638-8738

4. Environmental Protection Agency, Region VIII

Suite 900, 1860 Lincoln Street  
Lincoln Tower Building  
Denver, Colorado 80203

Telephone: 303/837-4904

a. Regional Administrator

John A. Green

Telephone: 303/837-3895

b. Alternate

Charles W. Murray  
Director, Air and Water Programs Division

Telephone: 303/837-4871

5. Hospitals

a. Casper

Memorial Hospital  
1233 East 2nd St.  
Casper, WY 82601  
307/235-1311

b. Cheyenne

DePaul Hospital  
2600 E 18 St.  
Cheyenne, WY 82001  
307/632-6411

Memorial Hospital of Laramie Co.  
300 E 23 St., Cheyenne, WY 82001  
307/634-3341

Episode Communications Personnel (continued)

6. Local Health Agencies

a. Casper Natrona County Health Department  
241 South Conwell  
Casper, WY 82601

Telephone: 307/234-4589

b. Cheyenne City-Laramie County Health Unit  
315 West 20th Street  
Cheyenne, WY 82001

Telephone 307/638-8995

c. Laramie Health Department  
Post Office Box C  
Laramie, WY 82070

Telephone 307/742-6625

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