

OKLAHOMA STATE IMPLEMENTATION PLAN

Rec'd: MAY 20, 1981

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FRL # : 1822-5

TAB # C

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE

SUBJECT

Submission of the Revision to the State Implementation Plan
for the State of Oklahoma for Incorporation by Reference

FROM

Office of the Federal Register, EPA

TO

Office of the Federal Register

Please add this document to the Oklahoma Implementation
Plan file and tab it in the appropriate sequence.

Identification of the Document:

Approval of a Variance to Regulations for Oklahoma-
McAlester Army Ammunition Plant OK-03-79

OK-03-79

State Board of Health

LITHE B. WHITFIELD M.D.
ROBERT D. McULLOUGH D.D.
MARILDA TOAZ M.D.
GLEN B. BIRNBAUM M.D.
WALLACE BYRD M.D.
THOMAS DOMICA M.D.
ARNOLD MELVEY
EUGENE A. ORFEN M.D.
W. A. TATE-TAYLOR



Commissioner

JOAN K. LEAVITT, M.D.

Oklahoma

State Department of Health

Northeast 10th Street & Stonewall
Post Office Box 53551
Oklahoma City, Oklahoma 73105

September 21, 1979

Ms. Adlene Harrison
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Ms. Harrison:

Attached is a list of industrial variances granted by the Oklahoma State Board of Health. All variances were granted in accord with "The Oklahoma Clean Air Act," as recommended by the Air Quality Council after public hearings and the required notice period.

The attached table summarizes the status of each variance petition. All variances are accompanied by a compliance schedule as required by the Oklahoma State Air Quality Implementation Plan.

If there are any questions on these variances or their compliance schedules, please contact the Oklahoma State Department of Health, attention Air Quality Service, as specified in Governor Nigh's letter to you.

Sincerely,

John W. Gallion
John W. Gallion, Chief
Air Quality Service

eam
Enc.

cc: Joan K. Leavitt, M.D.
Commissioner of Health

Mr. Mark Coleman, Deputy Commissioner
for Environmental Health Services

RECEIVED

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Oklahoma State Air Pollution Variance Status

Variance Number	Company Name	Regulation Number	Council Hearing Date	Board of Health Approval	Variance Date
75-1	Texaco, Inc., West Tulsa Refinery, Tulsa	15	5-8-79	9-8-79	5-13-80
79-2	U.S. Army Ammunition Plant, McAlester Bomb Plant B	7 & 8	7-10-79	9-8-79	7-10-80
79-3	U.S. Army Ammunition Plant, McAlester Open burning contaminated wastes	1	7-10-79	9-8-79	7-10-80
79-4	U.S. Army Ammunition Plant. McAlester Open burning of explosive waste	1	7-10-79	9-8-79	7-10-80

State Board of Health

OTHO R. BENTLEY, DDS
ROBERT D. McCULLOUGH, DDS
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WALLACE BYRD, MD
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Oklahoma
State Department of Health

Northeast 10th Street & Stonewall
Post Office Box 53551
Oklahoma City, Oklahoma 73105

September 18, 1979

David H. Parker, Col, OrdC
Plant Commander
Department of the Army
McAlester Army Ammunition Plant
McAlester, Oklahoma 74501

Dear Col. Parker:

Re: Petition for Variance
No. 79-2, Bomb Plant B

On July 10, 1979, in public hearing, the Oklahoma Air Quality Council considered your petition to continue to operate at variance with Oklahoma Air Pollution Control Regulations Nos. 7 and 8. Upon receiving assurance from the representatives of your organization that the compliance schedule recommended by the Council would be strictly adhered to, the Council granted the petition. Subsequently, this favorable action by the Council was considered by the State Board of Health in a regular meeting September 8, 1979. At that time, the Board of Health granted the variance until July 10, 1980.

Therefore, please be advised that as the result of the action by the Air Quality Council and the State Board of Health, you have been granted permission to operate the facilities covered by the above-referenced petition at variance to Regulations Nos. 7 and 8 until July 10, 1980.

In order to assure that the increments of the progress set forth in your compliance schedule are being fulfilled, progress reports each two months will be required. Please transmit a copy of your bi-monthly progress reports to the Air Quality Service, Oklahoma State Department of Health, N.E. 10 and Stonewall, Oklahoma City, Oklahoma 73152.

If you have any questions regarding this matter, please feel free to call upon us.

Sincerely,

J. Scott Thomas

J. Scott Thomas, Director
Monitoring & Compliance Division
Air Quality Service

eam

**Fact Sheet for McAlester Army Ammunition Plant
McAlester, Oklahoma**

Staff Recommendation:

On February 26, 1979 the McAlester Army Ammunition Plant was cited by the Environmental Protection Agency Region VI with a Notice of Violation of the Clean Air Act. The notice stated that Bomb and Mine Plant "B" emits aluminum particulate matter in excess of Oklahoma Air Pollution Control Regulation No. 8, and that combustible materials are open burned in violation of Regulation No. 1.

On May 10, 1979 the McAlester Army Ammunition Plant petitioned to operate following three sources at variance with applicable Oklahoma Air Pollution Control Regulations:

Petition for Variance No.	Source Operation	Regulation for Which Variance Is Requested
79-2	Bomb & Mine Plant "B"	Regulation No. 7, "Pertaining to the Control of Smoke, Visible Emissions, and Particulates," and Regulation no. 8, "Pertaining to the Control of the Emission of Particulate Matter from Industrial and other Processes and Operations"
79-3	Open Burning of Contaminated Wastes	Regulation No. 1, "Prohibition of Open Burning"
79-4	Open Burning of Explosive Wastes	Regulation No. 1, "Prohibition of Open Burning"

In regard to Petition No. 79-2 (Bomb Plant "B") the Department of the Army proposes at a cost of \$537,000 to install a cyclone separator at the aluminum sifting buildings and wet scrubbers at the TNT buildings and melt and pour buildings. The variance is requested until August 1981 to allow time for design and construction of this project.

In regard to Petition No. 79-3 (contaminated waste) the Department of Army proposes to construct a contaminated waste processor with air pollution controls at a cost of approximately 2.0 million dollars. The variance is requested until May 1982 to provide time for design, funding and construction of this project.

In regard to Petition No. 79-4 (explosive waste) the Department of Army proposes to install a rotary kiln incinerator with air pollution controls at an estimated cost of 1.3 million dollars. The variance is requested until April 1981.

The following attachments have been received and reviewed by the staff:

- 1) February 26, 1979 Notice of Violation issued by EPA Region VI
- 2) May 1, 1979 from Col. Parker to Mr. Gallion requesting variances for the three sources in question
- 3) May 10, 1979 Petition for Variance Application No. 79-2, supplementary information and compliance schedules for Bomb Plant "B"
- 4) May 10, 1979 Petition for Variance Application No. 79-3, supplementary information and compliance schedules for burning of contaminated waste
- 5) May 10, 1979 Petition for Variance Application No. 79-4, supplementary information and compliance schedules for burning of explosive waste

The proposed controls will allow the sources in question to operate in compliance with Oklahoma Air Pollution Control Regulations. The staff recommends favorable consideration of Petition for Variance Nos. 79-2, 79-3, and 79-4 through the first portions of the Department of Army's compliance schedules until July 10, 1980 with final compliance dates of August 1, 1981, March 1, 1982, and April 1, 1981 respectively.

July 10, 1979

Council Action:

On July 10, 1979 in public meeting the Air Quality Council unanimously voted to recommend the petitions to the Board of Health for adoption until July 10, 1980 with final compliance dates of August 1, 1981, March 1, 1982, and April 1, 1981 respectively.

MCALISTER ADONT ABATEMENT PLANT

McAlester, Oklahoma 74301

BOPE AND MINE "B" PLANT

III-2. Method of Measuring - The emission test contained a particulate sample sequence that provided sampling collections during a period of 48 to 64 minutes each. Samples were extracted isokinetically (90 to 110 per cent) as described in Methods 1, 2, and 3 of the Federal Register, Vol. 41, No. 111, Part II, 8 June 1976.

V-2. Shutdown of "B" Plant, with a considerable loss of local and state economy, would result in the loss of work for 110 employees and a direct wage loss of approximately 2.0 million dollars per year. In the past, there was some concern about the safety aspect of the abatement method and equipment. The automation system suggested was grossly in excess of funds available; therefore, it was uneconomical.

Due to technological improvement and acceptance of cyclone separator, the abatement equipment can be installed within the available funds. Furthermore, all emissions are minor in nature and in size, and are contained well within the boundary of the Plant's 45,000 acres, none of which are transmitted outside the property. All higher Commands are concerned and involved, which results in concrete plans with set schedules and firm funding having been determined for abatement.

Oklahoma State Department of Health
 Environmental Health Services
 Air Quality Service
 Northeast 10th Street & Stonewall
 Post Office Box 53531
 Oklahoma City, Oklahoma 73105

PETITION FOR VARIANCE

- I. Petitioner:
- A. Name McAlester Army Ammunition Plant
- B. Address McAlester, Oklahoma 74501
- C. Location of facility Nine miles South - Southwest
City of McAlester, Pittsburg County, Oklahoma 74501
- D. Individual authorized to act for petitioner:
- Name David H. Parker, Col., Ordn. Title Plant Commander
- Address McAlester Army Ammunition Plant, McAlester, OK 74501
- Telephone: Area Code 918 No. 621 2311
- II. Type of Operation or Process: Ammunition Plant
 Number of employees - 800
- III. Emissions:
- A. Characteristics Aluminum powder particulate
emission from bldg. 182 of the Bomb and Mine "B" Plant
- B. Quantity or Emission Level Maximum emission level during normal operation of
24 hours per day is 18.43 lbs/hr. The average emission over 24 hours is 1.92
lbs/hr. Method of measuring (see attached sheet)
- C. Manner of discharge to the atmosphere The process is ventilated by a single
duct to a curved lateral exhaust hood to stack atop of building.
- IV. Air Pollution Control Equipment:
- A. Present equipment, if any None
- B. Proposed method or equipment to meet Regulations Installation of cyclone
separator at building 182.
- V. Time Period for Variance:
- A. Date by which Petitioner will be in compliance with Regulations _____
August 1981
- B. Reasons for requesting variance The plant has no solution for abatement by
July 1, 1979 without ceasing production at the Bomb and Mine "B" Plant.
(Continued on attached sheet)
- VI. Plot or Property and Area Map Showing Location are attached.
- I, David H. Parker, Col., Ordn., Plant Commander (Title),
 certify that the statements in this petition are true and correct to the best of
 my knowledge and belief.
- David H. Parker
 (Signature)
- Date: 10 May 1978

(See reverse side for instructions)

27 April 1979

PARTICULATE EMISSIONS AT "B" PLANT

Nature and scope of emission (aluminum particulate)

1. December 1972 Navy Environmental Support Office test results were 11.55 lbs per hour.
2. March 1977 Navy Environmental Support Office test results were 18.42 lbs per hour.
3. Outside professional consultants (based on on-site visual observations) officially question the validity of tests, and state that "...for that location and application, neither the tests nor the Standards are valid".
4. The Plant is considered a minor source of air pollution.

a. Over the past year (1978), the Plant actually produced only for 62 8-hour shifts, times 5.5 hours duration of aluminum powder operation, which equals a total yearly time of 341 hours of aluminum particulate emission. Considering that the environment offers 365 days, times 24 hours/day, or 8,760 total hours available for air pollution, the Plant's particulate problem existed only 4% of the total time available.

b. During 1979, when McAAP received the EPA NOV, a different type bomb product was being produced. The total program for 1979 is 88 8-hour shifts, times 2.75 hours duration of aluminum powder operation, which equals a total yearly time of 241 hours of aluminum particulate emission. This equates to the Plant's particulate problem existing only 2.75% of the total time available.

c. The planned production schedule and resultant particulate emission for the year 1980 is projected at only 3.5% of the total time available.

5. "B" Plant is centrally located on this 45,000-acre installation, and particulate fallout remains on the ground within a maximum radius of 300 feet of the source building. The particulate has no ecological impact whatsoever. The dust is non-toxic, and under the action of normal precipitation of dew, it rapidly oxidizes to aluminum oxide which is not only harmless but a normal component of the soil.

Plans and Schedules for Abatement

1. FY-72 Navy Military Construction funds are being transferred to Ft. Worth Corps of Engineers District in amount of \$531,000 for a Plant Particulate Abatement project.
2. The scope of this project is installation of cyclone separator at aluminum sifting buildings, and wet scrubbers at the TNT screening buildings and Melt and Pour buildings.

Final 2

3. Following schedule has been determined:

a. Similar system at Hawthorne, Nevada, Army Ammunition Plant has been site investigated, and some preliminary design work has already started.

b. Design complete by June 1980.

c. Construction start September 1980.

d. Construction complete July 1981.

e. Operational by August 1981.

Significance of "B" Plant operation

1. No alternative exists for abatement before August 1981, other than shut-down.

2. McAAP is second largest ammunition storage and production facility in the free world.

3. Due to location and capabilities, McAAP is very important to national defense.

4. McAAP provides approximately 24 million dollars per year for local economy.

5. McAAP is the largest employer for Pittsburg County and other surrounding counties.

6. The "B" Plant provides a substantial portion of Installation's total workload. Shutdown of "B" Plant would result in loss of 110 employees and direct wage loss of approximately 2 million dollars per year.

7. The projected workload for "B" Plant for FY-79 is 7,000 H-6 bombs, and for FY-80 9,000 H-6 bombs.