

ROUTING AND TRANSMITTAL SLIP

Date 7/24/84

TO: (Name, office symbol, room number, building, Agency/Post)	Initials	Date
1. Fran McDonald		
2.		
3.		
4.		
5.		

Action	File	Note and Return
Approval	For Clearance	For Conversation
As Requested	For Correction	Prepare Reply
Circulate	For Your Information	See Me
Comment	Investigate	Signature
Coordination	Justify	

REMARKS

Attached is IBR for the State
of Oklahoma.
FRL # 2640-2

DO NOT use this form as a RECORD of approvals, concurrences, dispositions, clearances, and similar actions

FROM: (Name, org. symbol, Agency/Post) Angela Tyler Office of Standards and Regulations	Room No.—Bldg. 415 WT
	Phone No. 382-7203

8041-102

© GPO : 1982 O - 261-529 (228)

OPTIONAL FORM 41 (Rev. 7-76)
Prescribed by GSA
FPMR (41 CFR) 101-11.605

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

DATE: 7/24/84

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

FROM: EPA Federal Register Office

TO: Office of the Federal Register

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

Part 52 of Chapter 1, title 40 of the Code of Federal Regulations is amended as follows:

Subpart LL - Oklahoma

1. In 52.1920, (c) is amended by adding paragraph (31) as follows:

52.1920 Identification of Action

* * * * *

(c) * * *

(31) Revision to Regulation 1.4 "Air Resources Management - Permits Required" and variance and extension for Mesa Petroleum Company submitted by the Governor on February 6, 1984. A letter of clarification on section 1.4.2 (f) Cancellation of Authority to Construct or Modify was submitted by the State on February 17, 1984.

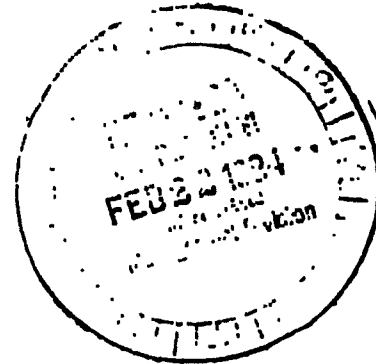


STATE OF OKLAHOMA
OFFICE OF THE GOVERNOR
OKLAHOMA CITY

GEORGE NIGH
GOVERNOR

RECEIVED
FEB 21 1984
FBI
RECEIVED
FEB 21 1984

February 6, 1984



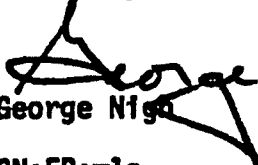
Mr. Dick Whittington, P.E.
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

Dear Dick:

Submitted under separate cover are revisions to the State of Oklahoma Air Quality Control Implementation Plan consisting of revisions to Oklahoma Air Pollution Control Regulations 1.4 and 3.1. These revised regulations were adopted by the State Board of Health after appropriate public hearings were held by the Air Quality Council.

Your consideration of these revisions will be appreciated. If you have any questions or desire additional information concerning this matter, please feel free to contact the Air Quality Service, Oklahoma State Department of Health.

Sincerely,


George Nigh

GN:EP:m/s

RECEIVED
FEB 23 1984

G. NIGH



State Board of Health

EDWARD H FITE, JR. M.D. PRESIDENT
W A TATE TAYLOR, VICE-PRESIDENT
HAROLD A TOAZ, SECRETARY
WALLACE BYRD, M.D.
JOHN S. CARSMICHAEL, D.D.S.
JAMES A. COX, JR., M.D.
LEIDA M. JOHNSON, M.D.
ROBERT D McCULLOUGH, N. D. O.
WALTER SCOTT MASON, M.D.



Oklahoma

State Department of Health

1000 Northeast 10th Street
Post Office Box 53551
Oklahoma City, Oklahoma 73152

February 17, 1984

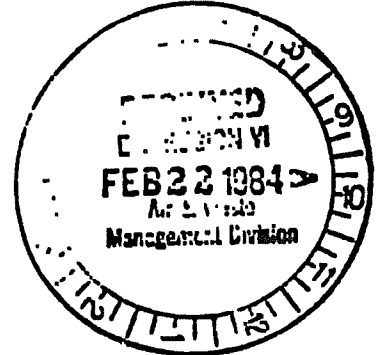
REC'D

FEB 21 1984

EPA
REGION VI
PHOTO

Commissioner

JOAN K LEAVITT, M.D.



Mr. Dick Whittington
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, TX 75270

Dear Mr. Whittington:

Pursuant to Governor Nigh's letter dated February 6, 1984, please find enclosed revisions to the State of Oklahoma Air Quality Control Implementation Plan consisting of revisions to Oklahoma Air Pollution Control Regulation 1.4 (Air Resources Management Permits Required) and Regulation 3.1 (Pertaining to the Control of Smoke, Visible Emissions and Particulates). These regulations were adopted by the State Board of Health after appropriate public hearings were held by the Air Quality Council.

Your consideration of these regulations will be appreciated. If you have any questions or desire additional information, please feel free to contact us.

Sincerely,

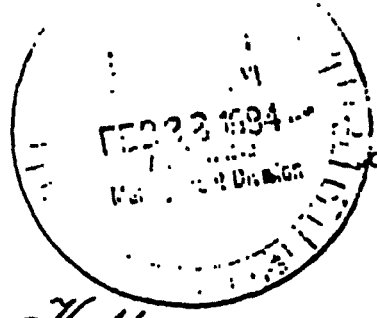
John W. Drake
John W. Drake, Chief
Air Quality Service

JWD/LB:eam
enc.

RECEIVED
FEB 22 1984
6AW-A

Oklahoma Board of Health

- EDWARD H. FITE, JR., M.D., PRESIDENT
- W. A. "TATE" TAYLOR, VICE-PRESIDENT
- HAROLD A. TOAZ, SECRETARY
- WALLACE BYRD, M.D.
- JOHN B. CARMICHAEL, D.D.S.
- JAMES A. COX, JR., M.D.
- LINDA M. JOHNSON, M.D.
- ROBERT D. McCULLOUGH, H.D.D.
- WALTER SCOTT MASON, III



Emmanuel
JOAN K. LEAVITT, M.D.

Oklahoma

State Department of Health

1000 Northeast 10th Street
Post Office Box 53551
Oklahoma City, Oklahoma 73152

February 17, 1984

REC'D
EPA
VI
FEB 21 9 11 AM '84

Mr. Jack Divita, Chief
Air Program Branch
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, TX 75270

Dear Mr. Divita:

This is in response to your letter of January 20, 1984 concerning clarification intent of a portion of revised Regulation 1.4.2(f).

The regulation as originally proposed for hearing required the applicant to conduct BACT review prior to commencing construction if a protract extension was granted. EPA VI submitted comment at the hearing pointing out that the regulation was of general applicability and could also apply to nonattainment areas. Thus as a result of public comment the Sections 1.4.2(f)(2)(C) and (D) were revised to read "appropriate available control review" which would encompass either BACT or LAER review as would be required for the given plant site. Thus the wording change was made to indicate either BACT or LAER would be required, whichever applies.

Sincerely,

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

1.4.2 (f) Cancellation of Authority to Construct or Modify

(1) A duly issued permit to construct or modify will terminate and become null and void (unless extended as provided below) if the construction is not commenced within 18 months of the permit issuance date, or if work is suspended for more than 18 months after it has commenced.

(2) An applicant may secure extension of the permit expiration date by written request of the Commissioner stating the reasons for the delay/suspension and providing justification for the extension. Except as provided below, extensions will be granted for terms of 18 months or less.

(A) One extension of up to 36 months will be granted where the applicant is proposing to expand an already existing facility to accommodate the proposed new construction or the applicant has expended a significant amount of money (1% of total project cost as identified in the original application, not including land cost), in preparation for meeting the definition of "commence construction" at the proposed site; or,

(B) One extension of up to 72 months will be granted to major industrial facilities (project cost greater than \$100,000,000.00), where the applicant proposes to construct at an existing site and demonstrates that the existing site was originally designed and constructed to accommodate the proposed new facilities. The applicant shall show a commitment to the site by having purchased land necessary to construct facilities covered by this extension and expended \$1,000,000.00 or more on engineering and/or site development.

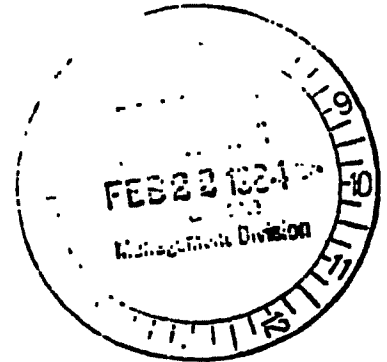
(C) If construction has not commenced within three (3) years of the effective date of the original permit, the permittee must undertake and complete an appropriate available control technology review and an air quality analysis. This review must be approved by the Air Quality Service before construction may commence.

(D) Upon formal request by any applicant whose permit has been denied for lack of increment, the Air Quality Service may require any permittee under (A) or (B) above, to furnish a complete air quality analysis and/or an appropriate available control technology review if such review is required in order to provide new or current information.



STATE OF OKLAHOMA
OFFICE OF THE GOVERNOR
OKLAHOMA CITY

GEORGE NIGH
GOVERNOR



February 6, 1984

Mr. Dick Whittington, P.E.
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, Texas 75270

RECEIVED
FEB 21 9 12 AM '84
FEDERAL BUREAU OF INVESTIGATION
U.S. DEPARTMENT OF JUSTICE

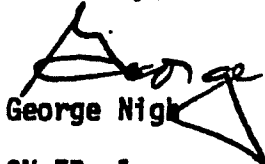
Dear Dick:

Forwarded under separate cover are a variance extension petition and a copy of the original variance granted to Mesa Petroleum Company, Amarillo, Texas. This variance has been granted by the Oklahoma State Board of Health after public hearing and a favorable recommendation by the Air Quality Council.

This variance will allow Mesa Petroleum to implement new technologies to develop a previously unavailable portion of Oklahoma's natural gas resources. I urge that you favorably consider this variance as prescribed in the Federal Clean Air Act.

Any questions regarding these petitions should be referred to the Oklahoma State Department of Health, Air Quality Service.

Sincerely,


George Nigh

GN:EP:m1s

RECEIVED
FEB 23 1984
6:17 PM



Oklahoma Board of Health

EDWARD H. FITE, JR., M.D., PRESIDENT
W. A. "TATE" TAYLOR, VICE-PRESIDENT
HAROLD A. TOAZ, SECRETARY
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JAMES A. COX, JR., M.D.
LINDA M. JOHNSON, M.D.
ROBERT D. McCULLOUGH, M.D.
WALTER SCOTT MASON, III



Examiner

JOAN K. LEAVITT, M.D.

Oklahoma

State Department of Health

1000 Northeast 10th Street
Post Office Box 53551
Oklahoma City, Oklahoma 73152

February 17, 1983

Mr. Dick Whittington
Regional Administrator
U.S. Environmental Protection Agency
Region VI
1201 Elm Street
Dallas, TX 75270

Dear Mr. Whittington:

Enclosed you will find a copy of a variance for Mesa Petroleum Company of Amarillo, Texas, granted by the Oklahoma Board of Health on January 27, 1983. Also enclosed is an extension to that variance, granted on January 12, 1984, which extends the variance period to January 27, 1985.

Note that the issuance of the original variance was necessary to allow construction of a new facility under the provisions of a PSD permit issued by your offices. Supporting documentation, which was considered in granting the variance and extension, are contained in that PSD permit.

We regret that due to the unusual nature of this variance, e.g. its being issued concurrently with a construction permit, it did not go through the customary administrative channels and thus was not submitted for your consideration at the appropriate time. Apparently due to market conditions for natural gas and other unforeseen conditions, Mesa Petroleum Company made no use of the variance during the first year for which it was granted. Thus, there are no unaccounted emissions associated with the variance.

Sincerely,

A handwritten signature in cursive script that reads "John W. Drake".

John W. Drake, Chief
Air Quality Service

JWD/MT:eam
enc.



October 25, 1982

OCT 27 1982

AIR QUALITY
SERVICE

Mr. Alwin Ning
Oklahoma State Department of Health
Air Quality Service
P. O. Box 53551
Oklahoma City OK 73152

Dear Mr. Ning:

Subject: Request for Variance
NE Mayfield Gas Treating Facility
Beckham County, OK

Attached please find one (1) copy of the proposed schedule for design and construction of the necessary facilities to meet applicable air quality permitting standards at subject facility. Please note that the equipment ultimately installed will be determined during the crucial four (4) month testing phase.

If we may provide you with any additional information in this matter, please do not hesitate to contact the undersigned.

Yours very truly,

Henry F. Galpin

Henry F. Galpin

pb

Enclosures

Copy to Trinity Consultants, Inc.
James C. Clary, Jr.

**Fact Sheet for Mesa Petroleum Company
Amarillo, Texas**

Staff Action:

On October 1, 1982 MESA Petroleum Company of Amarillo, Texas petitioned the Air Quality Council to operate its gas incinerator at variance with Oklahoma Air Pollution Control Regulation No. 3.4 (Control of Emission of Sulfur Compounds) until March 1, 1984.

MESA proposed to treat sour gas produced near Sweetwater, Oklahoma. Acid gases will be incinerated emitting a maximum of 1004 pounds of sulfur dioxide per hour. MESA planned to install sulfur recovery unit to process the sour gas. In order to design such a unit of appropriate capacity a few months time is needed to quantify the gas components. Procurement and installation of equipment are expected to begin in the latter half of 1983.

The staff has reviewed the following materials:

- 1) MESA Petroleum Company, October 1, 1982 letter of transmittal
- 2) The petition for variance and attachments
- 3) Proposed schedule
- 4) Plot plan for the proposed facility

The staff recommends favorable consideration of this variance until March 1, 1984.

November 16, 1982

Council Action:

The Council recommended that the variance be approved with the State Board of Health setting the beginning and ending dates (no more than one year duration).

PETITION FOR VARIANCE

1982
AIR QUALITY
SERVICE

- I. Petitioner:
- A. Name Mesa Petroleum Co.
 - B. Address P. O. Box 2009
Amarillo, Texas 79189
 - C. Location of facility The Mesa Petroleum facility will be located near the Tipton No. 2-29 well app. 2 miles south and 3 miles east of Sweetwater, Oklahoma.
 - D. Individual authorized to act for petitioner:
Name Henry Galpin Title Manager - Special Projects
Address P. O. Box 2009, Amarillo, Texas 79189
Telephone: Area Code 806 No. 378-1022
- II. Type of Operation or Process: Natural Gas Sweetening Plant
- III. Emissions:
- A. Characteristics The emissions from this facility will primarily consist of sulfur dioxide (gaseous) due to the incineration of the sour gas.
 - B. Quantity or Emission Level See Attachment III-B.
 - C. Manner of discharge to the atmosphere The sulfur dioxide will be emitted through the incinerator stack.
- IV. Air Pollution Control Equipment:
- A. Present equipment, if any None
 - B. Proposed method or equipment to meet Regulations. See Attachment IV-B
- V. Time Period for Variance:
- A. Date by which Petitioner will be in compliance with Regulations The Mesa Petroleum facility will be in compliance within a year after the incinerator begins operation.
 - B. Reasons for requesting variance See Attachment V-B.
- VI. Plot or Property and Area Map Showing Location are attached.
- I, Henry P. Galpin, Manager - Special Projects (Title), certify that the statements in this petition are true and correct to the best of my knowledge and belief.

Henry P. Galpin
(Signature)
October 1 1982

Attachment III-B

Mesa Petroleum proposes to treat all sour gas produced at the NE Mayfield Prospect in a central gas treating facility located near the Tipton No. 2-29 well.

Initially, Mesa will install a DEA plant to remove all acid gases from the sour gas. The acid gases will be incinerated to meet air quality requirements under the one year variance requested from the State of Oklahoma. In addition to the incinerator, the plant will have a DEA reboiler (direct-fired heater) rated at 7.2 million BTUs per hour. The reboiler will use the sweet treated gas for fuel.

The maximum sulfur dioxide emissions from the incinerator will be 1004 pounds per hour (49,700 parts per million). The average emission rate is difficult to determine since the hydrogen sulfide present in the gas stream has been variable in the well stream tests.

The effects of the incinerator on the ambient air quality are evaluated in the attached report. Dispersion modeling results indicate that the incinerator will meet the 3-hour, 24-hour, and annual National Ambient Air Quality Standards.

Attachment IV-B

A Claus sulfur recovery plant will be installed in order to remove at least 90% of the hydrogen sulfide from the sour gas. In order to achieve an acceptable feed composition for the sulfur plant, an additional treating plant may need to be installed upstream of the DEA plant. This plant would use the Union Carbide process or a similar process. The additional plant will require a direct fired heater rated at approximately 4.3 million BTUs per hour. The reboiler will be fired with sweet treated gas.

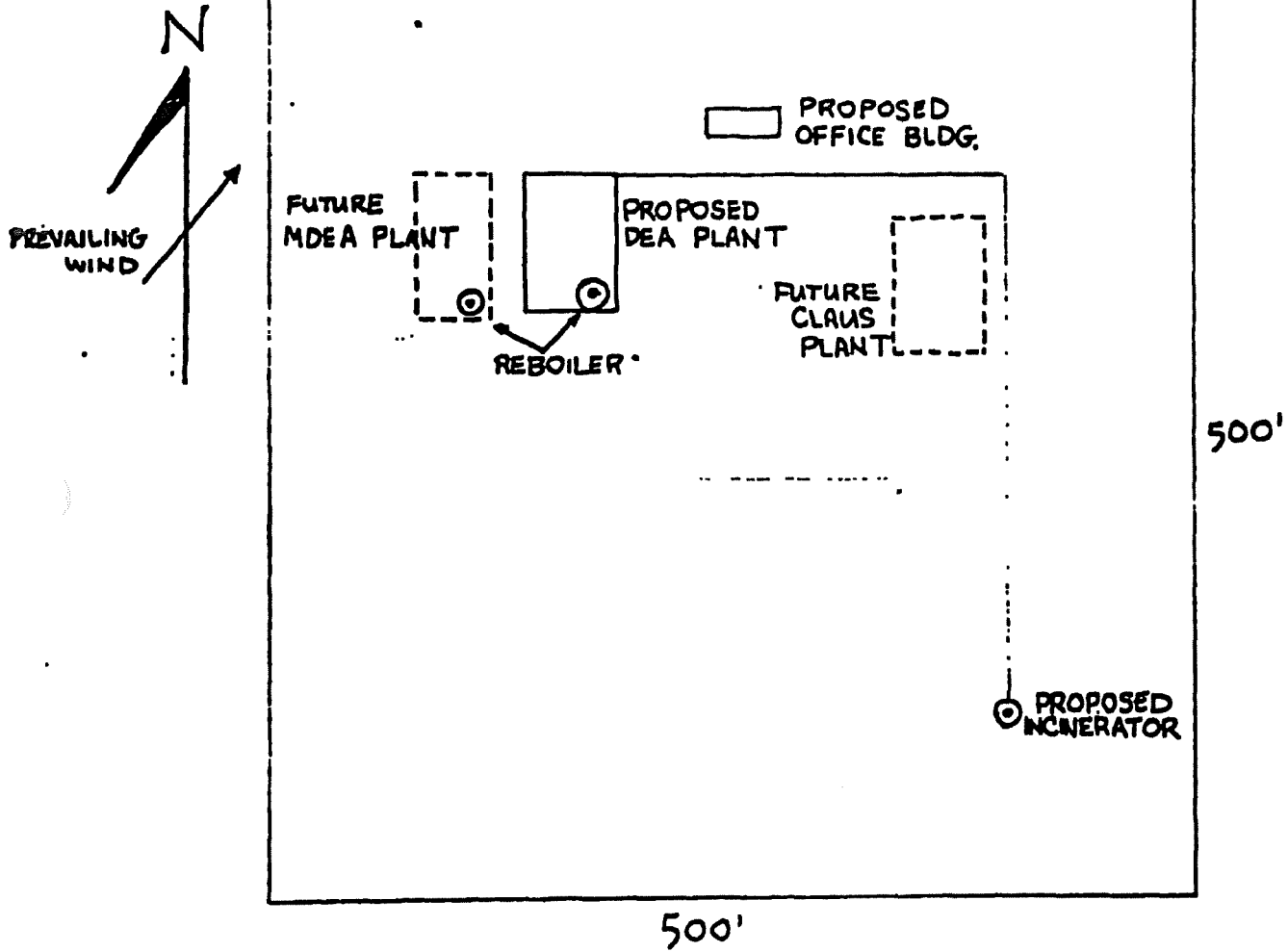
Attachment V-B

A variance is requested in order to incinerate the sour gas produced in the NE Mayfield Prospect until the gas stream composition can be accurately determined and the sulfur recovery plant can be properly designed to process the sour gas. The well stream tests which have been performed are inconclusive. The amount of hydrogen sulfide and carbon dioxide vary significantly, and therefore, the type of plant required to remove the hydrogen sulfide is difficult to design. After a few months of production, the gas stream composition should be defined, and the remainder of the plant will be designed and built.

PROPOSED PLOT PLAN

NE MAYFIELD TREATING FACILITY

BECKHAM COUNTY, OKLAHOMA



SCALE 1" = 100'

HFG 10/82



*Larry B
Pet, discussed
w/ Grant*

October 1, 1982

Mr. Grant C. Marburger
Oklahoma State Department of Health
Air Quality Service
P. O. Box 53551
Oklahoma City, OK 73152

RECEIVED
OCT 4 1982
AIR QUALITY
SERVICE

Dear Mr. Marburger:

Subject: Petition for Variance
NE Mayfield Treating Facility

Enclosed, for your consideration, please find four (4) copies of the subject Petition for Variance complete with all attachments. Also enclosed is one set of computer runs generated by Trinity Consultants, Inc. during their study of the effects on ambient air quality due to the proposed incinerator.

Mesa is currently negotiating a surface use agreement for a 500' X 500' plot which will be located near the Tipton No. 2-29 location shown on the attached General Highway Map of Beckham County. The exact coordinates of the proposed plant site will be provided upon successful completion of said negotiations.

If we can provide any additional information in this matter, please do not hesitate to contact the undersigned.

Yours very truly,

Henry F. Galpin

Henry F. Galpin

Enclosure

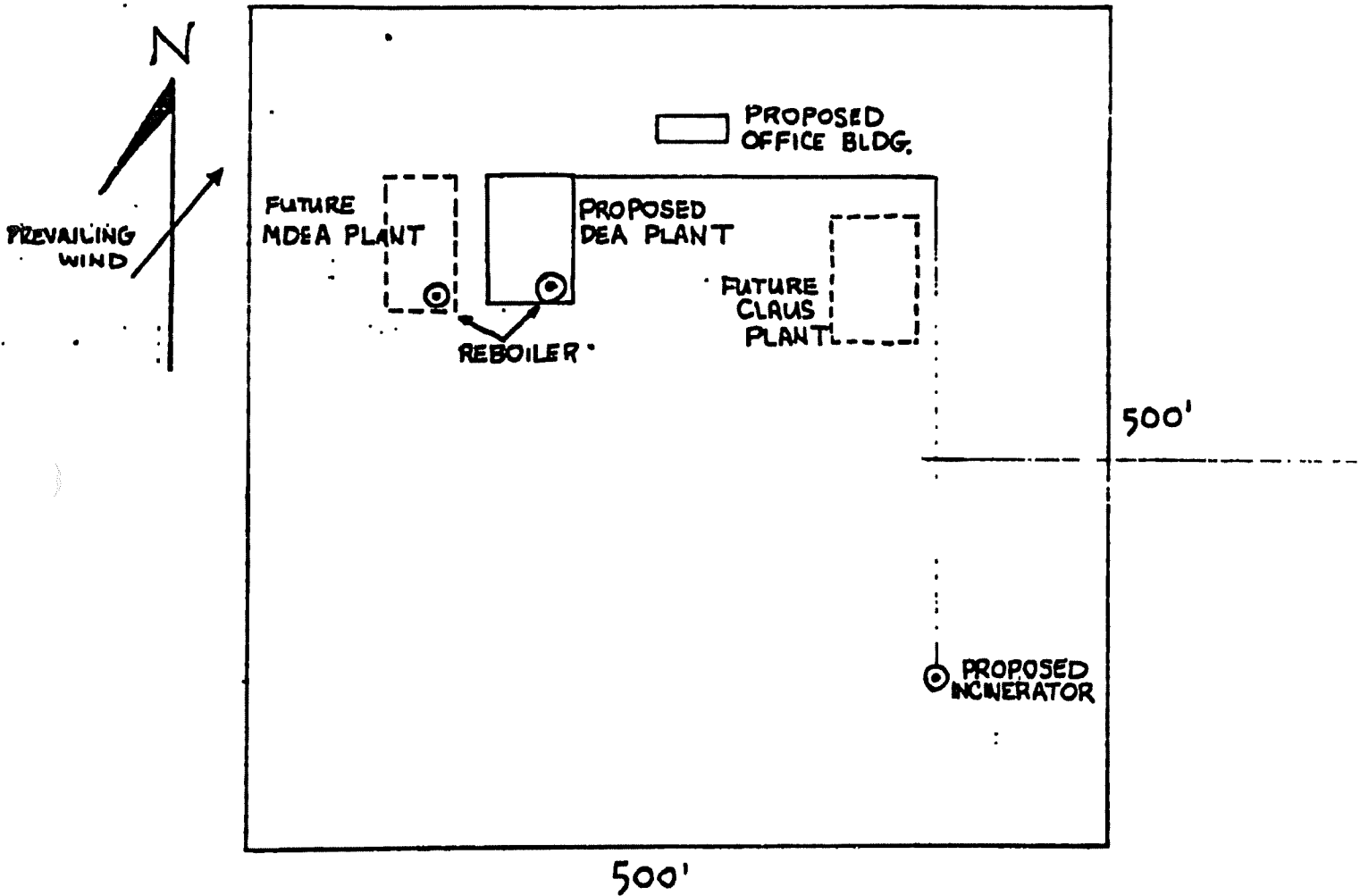
clr

Copy to Trinity Consultants, Inc.
100 North Central Expressway
Suite 910
Richardson, TX 75080

PROPOSED PLOT PLAN

NE MAYFIELD TREATING FACILITY

BECKHAM COUNTY, OKLAHOMA



SCALE 1" = 100'

HFG 10/82

Fact Sheet for Mesa Petroleum Company

Amarillo, Texas

Staff Action: .

A year ago, (October 1, 1982), Mesa Petroleum petitioned the Council to operate its N.E. Mayfield gas treating facility at variance with Regulation 3.4 (Control of Emission of Sulfur Compounds).

Mesa proposed to treat sour gas produced near Sweetwater, Oklahoma with a sulfur recovery plant. The amount of hydrogen sulfide and carbon dioxide vary considerably from this deep gas well stream, and therefore, data must be acquired so the plant could be designed to remove the hydrogen sulfide. To acquire these data a few months production time was necessary to define the gas stream composition, thereby allowing the plant's design and construction. During this time period Mesa would install a diethylamine (DEA) plant to remove all acid gases and incinerate them to meet air quality standards.

The Air Quality Council recommended the variance which was approved by the Board of Health with expiration on January 27, 1984.

However the construction and testing on this project could not be conducted because of inability to market the gas during this period. Consequently a request was received September 12, 1983 to extend the variance for an additional year.

The staff has reviewed all of the variance petition material and recommends favorable consideration of this extension for one year.

November 14-15, 1983

Council Action:

The Council recommended that the variance be extended from January 27, 1984 with the State Board of Health setting the ending date (no more than one year duration).

PETITION FOR VARIANCE

9-13-83
AIR QUALITY
SERVICE

I. Petitioner:

Name Mesa Petroleum Co.

B. Address P. O. Box 2009

Amarillo, Texas 79189

C. Location of facility The Mesa Petroleum facility will be located on the Tipton No. 2-29 well approx. 2 miles south and 3 miles east of Sweetwater, Oklahoma.

D. Individual authorized to act for petitioner:

Name Henry Galpin Title Manager - Special Proj

Address P. O. Box 2009, Amarillo, Texas 79189

Telephone: Area Code 806 No. 378-1022

II. Type of Operation or Process: Natural Gas Sweetening Plant

III. Emissions:

A. Characteristics The emissions from this facility will primarily consist of sulfur dioxide (gaseous) due to the incineration of the sour gas.

B. Quantity or Emission Level See Attachment III-B.

C. Manner of discharge to the atmosphere The sulfur dioxide will be emitted through the incinerator stack.

IV. Air Pollution Control Equipment:

A. Present equipment, if any None

B. Proposed method or equipment to meet Regulations See Attachment IV-B.

V. Time Period for Variance:

A. Date by which Petitioner will be in compliance with Regulations The Mesa Petroleum facility will be in compliance within a year after the incinerator begins operation.

B. Reasons for requesting variance See Attachment V-B.

VI. Plot or property and Area Map Showing Location are attached.

I. Henry F. Galpin, Manager - Special Projects (Title) certify that the statements in this petition are true and correct to the best of my knowledge and belief.

Henry F. Galpin
(Signature)

Date: September 12, 1983

(See reverse side for instructions)

Attachment III-B

Mesa Petroleum proposes to treat all sour gas produced at the NE Mayfield Prospect in a central gas treating facility located near the Tipton No. 2-29 well.

Initially, Mesa will install a DEA plant to remove all acid gases from the sour gas. The acid gases will be incinerated to meet air quality requirements under the one year variance requested from the State of Oklahoma. In addition to the incinerator, the plant will have a DEA reboiler (direct-fired heater) rated at 7.2 million BTUs per hour. The reboiler will use the sweet treated gas for fuel.

The maximum sulfur dioxide emissions from the incinerator will be 1004 pounds per hour (49,700 parts per million). The average emission rate is difficult to determine since the hydrogen sulfide present in the gas stream has been variable in the well stream tests.

The effects of the incinerator on the ambient air quality are evaluated in the attached report. Dispersion modeling results indicate that the incinerator will meet the 3-hour, 24-hour, and annual National Ambient Air Quality Standards.

Attachment IV-B

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~~PROPOSED PLOT PLAN~~

N.E. MAYFIELD TREATING FACILITY

BECKHAM COUNTY, OKLAHOMA

