

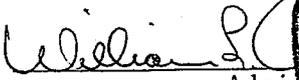
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming 82801; telephone, 672-6457.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

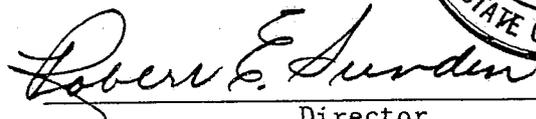
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:

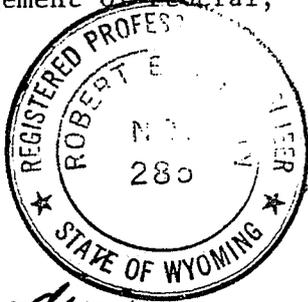


Admin. Strat. # 1479
Water Quality Division
November 5, 1984
Date of Issuance





Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

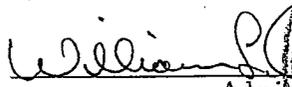
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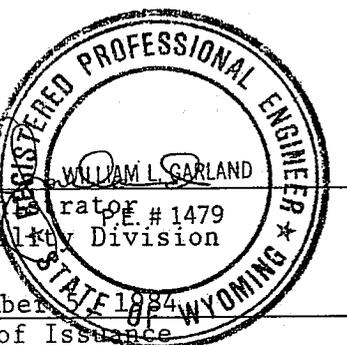
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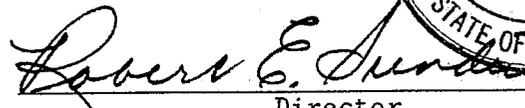
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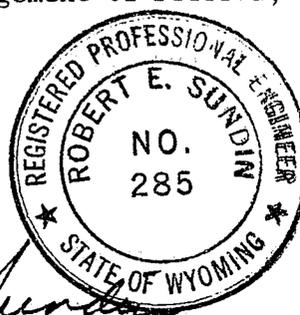
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator # 1479
Water Quality Division
November 1984
Date of Issuance




Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

Norma

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
2161 COFFEEN AVE., SUITE 301
SHERIDAN, WYOMING 82801

PROJECT: Caballo Mine and Rawhide Mine
General Sedimentation Control Structures

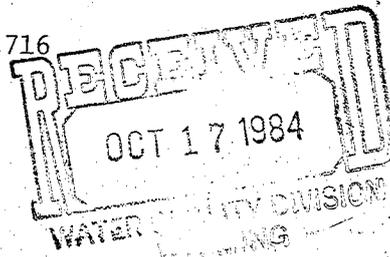
ARCHITECT OR ENGINEER: Thomas C. Peterson
The Carter Mining Company
P.O. Box 3007
Gillette, Wyoming 82716

WATER QUALITY DIVISION
REFERENCE NUMBERS: 84-451 and 84-452

REVIEWING ENGINEER: Rich Ruyle *RR*

DATE OF REVIEW: October 15, 1984

ACTION: Not Authorized



COMMENTS:

Some additional information is needed for the typical design and construction details of the facilities - f.(3).

- If the control facility is located on-channel, it should have a spillway that can safely pass the 25 year flood event.
- Soils used in constructing pond dikes should be compacted to at least 95 percent of maximum density.
- The minimum top dike width should be sufficient to provide structural stability.
- At least one-half foot of freeboard should be provided for facilities on top of their design capacities.
- Inlet ditches into the facility and the point of discharge leaving the facility should be protected against erosion if necessary.

Including the above statements in your narrative or submitting a drawing of a typical facility including the above information would meet our requirements.

Please call me if you have any questions.

REQUEST FOR GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

Returned to SH
9-17-84

APPLICATION NUMBER 84-451

DATE SUBMITTED FOR REVIEW 9/12/84

NAME AND LOCATION OF FACILITY Caballo Mine Sedimentation Structure Control Plan,

Sections: 9 thru 16 and 22 thru 26

T.48N., R.71W., Campbell County and S19 $\frac{1}{2}$ 30, T48N, R70W

rec'd in Cheyenne 9-13-84 NC

COMMENTS _____

No comments.

ajm 9/17/84

Please return your comments to me by 10/1/84

SIGNED Thomas J. Mudd

DATE 9/12/84

TO: ~~NORMA~~

*Returned to Sh
9-17-84*

REQUEST FOR GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-452

DATE SUBMITTED FOR REVIEW 9-12-84

NAME AND LOCATION OF FACILITY Rawhide Mine Sedimentation Structure Control

Plan, Sections:

S 2, 3, 10 thru 15 T. 51N., R. 72W., Campbell County

rec'd in Cheyenne 9-13-84 mc

COMMENTS _____

No comments

ajm 9/17/84

Please return your comments to me by 10/1/84

SIGNED Tom Muller

DATE 9/12/84

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-453

Parkview Drive
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

M. George Wilson
4206 North College Drive
Cheyenne, WY 82001

to construct, install, or modify a municipal wastewater collection and water distribution facility according to the procedures and conditions of the application No. 84-453. The facility is located in Section 27, T14N, R66W in the County of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

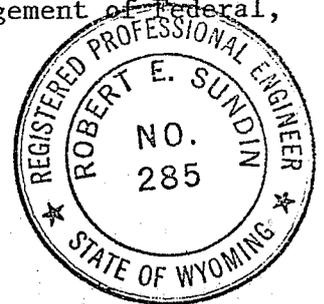
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

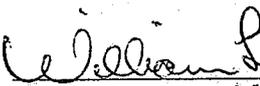
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

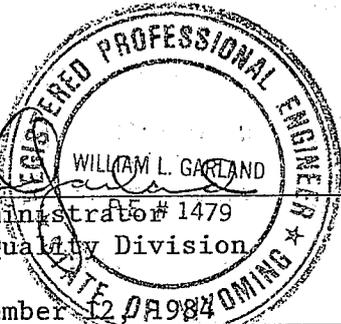
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

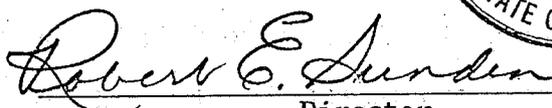
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:




WILLIAM L. GARLAND
Administrator # 1479
Water Quality Division
September 12, 1984
Date of Issuance

A circular seal for a Registered Professional Engineer. The outer ring contains the text "REGISTERED PROFESSIONAL ENGINEER" at the top and "STATE OF WYOMING" at the bottom, separated by two stars. The center of the seal contains the name "WILLIAM L. GARLAND" and the number "NO. 1479".


Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Edward C. Fry, Civil Engineering Services, 3234 Acacia Dr., Cheyenne, WY 82001
Cheyenne Board of Public Utilities, Box 1469, Cheyenne, WY 82003

*Department of Environmental Quality**Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

November 14, 1984

Jeffrey Neal
c/o Ponderosa Campground
1815 8th St.
Cody, WY 82414

RE: As Built Authorization - Water and
Sewer Improvements - Ponderosa
Campground #84-454R

Dear Mr. Neal:

The Wyoming Department of Environmental Quality cannot issue a permit to construct for the already constructed water and sewer line improvements at the Ponderosa Campground. However, we can treat your application as "As Built" plans and grant authorization of the system. As a condition of this "As Built" authorization, please notify this office in writing when the actual manholes and cleanouts are installed. We will arrange for an inspection to view the improvements.

As a reminder, construction of a wastewater treatment facility without first obtaining a permit to construct is a violation of W.S. 35-11-301 of the amended Wyoming Environmental Quality Act. If this practice continues in the future, this office may recommend that legal action be initiated against you.

Sincerely,

A handwritten signature in cursive script that reads "Ed".

Ed Baruth, P.E.
Northwest District Supervisor

EB:dcn

cc: Jake Strohman, DEQ/WQD Cheyenne
Roy Holm, Holm, Blough and Company
File
City of Cody: Earl Mathers

aba

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Ponderosa Campground

ENGINEER: Holm, Blough & Company
P. O. Box 1748
Cody, WY 82414

OWNER: Ponderosa Campground

WATER QUALITY DIVISION REFERENCE NUMBER: #84-454

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: September 24, 1984

ACTION: Not authorized.

COMMENTS:

1. Present State of Wyoming regulations require the use of a minimum 6" gravity sewer line. However, since you are adding on to existing 4" sewer line, we will consider this application to use 4" if the following can be verified:
 - (a) That hydraulically, the 4" PVC can carry the expected waste load.
 - (b) This is apparently within the City of Cody town limits. If this is the case, Cody may wish to exercise their jurisdiction in the matter and require the minimum 6" pipe placement. Please verify this with the Cody staff.
 - (c) That satisfactory cleaning equipment is available to maintain the sewer lines.
2. How was the pipe installed? Were proper bedding, backfill and compaction techniques utilized?
3. Please reference the attached materials from our Chapter 11 Rules & Regulations. Verify that water supply and pressures are available.
4. Is the dump station holding tank a new installation? You will need to provide us information on where the materials will be placed, who will do the hauling, and a letter from the destination station owner stating he will accept the wastes. If this is a "new" installation, this Department will not authorize the holding tank as a permanent installation; only temporary authorization is possible.

ABC

5. At a minimum, cleanouts are needed at all changes in alignment and sewer line terminations. Manholes, at a minimum, are required at all junctions. Specifically, additional cleanouts are needed at:

(a) Near Space 52, between Space 43 and 44; near Space 3; near Space 48, near Space 18, near Space 17. Your sewer service risers at the end of lines can also function as cleanouts.

Manholes are needed at:

(b) Between Space 88 and 89, near Space 62, near Space 29, downstream from the lift station near Space 34, near Space 11.

6. Please verify that the State requirement for sewer/water main separation will be maintained. The following paragraph is from our Chapter 11:

"(ii) Horizontal and vertical separation from water mains. Minimum horizontal separation shall be ten feet (3 m) where the water main is less than 1.5 feet (0.46 M) at crossing. Joints in sewers at crossing shall be located at least ten feet (3 m) from water mains. The upper line of a crossing shall be specially supported. Where vertical and/or horizontal clearances cannot be maintained, the sewer shall be placed in a separate conduit pipe."

7. The as built plans need to be signed by a Wyoming Professional Engineer.

8. An application for "Permit to Construct" is needed. Although a permit cannot be authorized for construction already in place, the information is needed before we issue a letter of authorization.

EB:dcn

Enclosure



THE STATE

OF WYOMING

Sub



Department of Environmental Quality

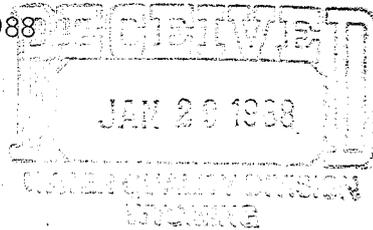
Air Quality Division
(307) 332-3144

Land Quality Division
(307) 332-3047

Solid Waste Management Program
(307) 332-3144

Water Quality Division
(307) 332-3144

January 25, 1988



Jess Bartlett
P.O. Box 43
Bairoil, WY 82322

RE: Bartlett Welding Service

Dear Mr. Bartlett:

During a check of our "Application for a Permit to Construct" records, we find that you did not respond to our January 9, 1986 request to notify us of the status of the referenced project.

Due to your lack of response, your application is considered inactive and is being returned under the assumption that the applicant does not wish to proceed with the permit to construct process.

This project has not been permitted. Construction of this facility without a permit is a violation of the Environmental Quality Act and punishable with fines not to exceed \$10,000 per day of violation. If you wish to reconsider construction of this facility, then application procedures pursuant to Chapter III, Water Quality Rules and Regulations, must be followed.

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/JH/jw
cc: Norma Coulson, DEQ/WQD, Cheyenne



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

January 9, 1986

Robert C. Hartley
RCH & Associates
P.O. Box 1659
Glenrock, WY 82637

Dear Mr. Hartley:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project is:

Facility Name:	<u>Bartlett Welding Service</u>
DEQ/WQD Reference Number:	<u>84-455</u>
Engineering Consultant:	<u>Robert C. Hartley</u>
DEQ/WQD Review Engineer:	<u>Jack Bedessem/Bill Locke</u>
Date of DEQ/WQD Review:	<u>10-2-84</u>

Please indicate below the status of this project and return this form to our office.

The application will not be resubmitted as the proposed project has been cancelled.

The application will be resubmitted within thirty (30) days.

The facility has been constructed, or is under construction. As built construction plans and specifications will be submitted within thirty (30) days.

Other Remarks: _____

You are reminded that the construction, installation, or modification of any sewage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes, and is punishable with a fine not to exceed \$10,000 for each day of violation. Unless the Water Quality Division review engineer receives information concerning the status of this project within fifteen (15) days of the receipt of this letter, follow-up action will be taken.

Sincerely,

A handwritten signature in cursive script that reads "Bill Locke".

Bill Locke, P.E.
Water Quality Engineer

BL/jw

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

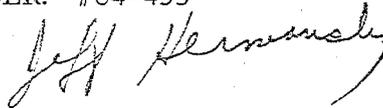
PROJECT: Bartlett Welding Service

ENGINEER: Robert C. Hartley
R.C.H. & Associates
P. O. Box 1659
Glenrock, WY 82637

OWNER: Jess Bartlett
Box 43
Bairoil, WY 82322

WATER QUALITY DIVISION REFERENCE NUMBER: #84-455

REVIEWING EVALUATOR: Jeff Hermansky



DATE OF REVIEW: October 2, 1984

ACTION: Not authorized.

COMMENTS: The following questions and comments need to be addressed before a Permit to Construct can be issued:

1. You have listed a percolation rate of 2 minutes per inch and sandy clay as the soil type. I would expect a percolation rate of greater than 30 minutes per inch for a sandy clay. Could you explain the discrepancy?
2. How many gallons of wastewater are to be disposed of by the proposed facility? How many people are to be served?
3. What is the depth to groundwater or impervious layer?
4. How is the leach field to be protected from traffic and parking?
5. Please show the leach field replacement area.
6. The legal description shows the South $\frac{1}{2}$ Lot 1 as part of the Bartlett property. From your plan sheet, I can't determine which direction is north or south.
7. What is the distance from the leach field to any wells, property lines, or any waterways?
8. The septic tank must have a clean out riser to the ground surface. It is not acceptable to just recommend one.

AC

Review of Plans and Specifications

Bartlett Welding Service #84-455

October 2, 1984

Page Two

9. Why do you show 18" of gravel over the leach pipes? What purpose does this much gravel over the pipes serve?

10. Please submit 4 copies of any sheets that you resubmit in response to this review. The 4th copy is sent to Sweetwater County for a reference during their inspection of the installation.

Please feel free to contact me if you have any questions.

JH:dcn



THE STATE

OF WYOMING



Department of Environmental Quality

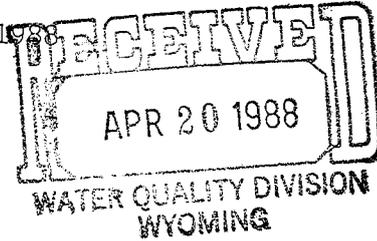
Air Quality Division
(307) 332-3144

Land Quality Division
(307) 332-3047

Solid Waste Management Program
(307) 332-3144

Water Quality Division
(307) 332-3144

January 25, 1988



Jess Bartlett
P.O. Box 43
Bairoil, WY 82322

RE: Bartlett Welding Service

84-455

Dear Mr. Bartlett:

During a check of our "Application for a Permit to Construct" records, we find that you did not respond to our January 9, 1986 request to notify us of the status of the referenced project.

Due to your lack of response, your application is considered inactive and is being returned under the assumption that the applicant does not wish to proceed with the permit to construct process.

This project has not been permitted. Construction of this facility without a permit is a violation of the Environmental Quality Act and punishable with fines not to exceed \$10,000 per day of violation. If you wish to reconsider construction of this facility, then application procedures pursuant to Chapter III, Water Quality Rules and Regulations, must be followed.

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/JH/jw

cc: Norma Coulson, DEQ/WQD, Cheyenne

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-456R

ROCK SPRINGS 12" MAIN
EXTENSION TO CHEVRON PUMP STATION
 (Name of Facility)

This permit hereby authorizes the applicant (name and address):

Pacific Power & Light Company
920 S.W. Sixth Ave.
Portland, Oregon 97204

to construct, install, or modify ~~or~~ approximately 4,550 feet of 12" water main to
Chevron's Rock Springs Development booster pump station

facility according to the procedures and conditions of the
application No. 84-456R. The facility is located in

Section 34, R18N, R107W

in the County of Sweetwater,

in the State of Wyoming. This permit shall be effective for a period of two (2)
 years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and dur-

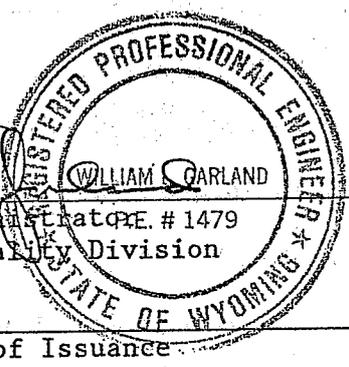
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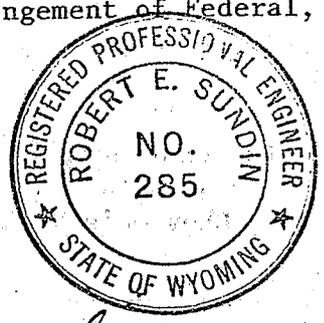
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


William Garland
Admin. License # 1479
Water Quality Division
Date of Issuance
October 22, 1984


Robert E. Sundin
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

JH:dcn

MEMORANDUM

TO: Plans #84-456
FROM: Jeff Hermansky 
DATE: October 2, 1984
SUBJECT: Phone Review

On October 2, 1984 I spoke with Roger Raeburn, water systems engineer for Pacific Power & Light Company, about the proposed 12-inch A.C. main extension to serve the Rock Springs Chevron development.

I asked Roger why the plans did not show any blowoffs at the low points of the line. Roger said that they will have at least 2.5 ft/sec. scouring velocity in the line when they blow off so he didn't feel it necessary to blowoff at low points.

I noted, however, that there were no blowoffs or fire hydrants shown anywhere in the new line.

Roger said he would take care of providing a blowoff and would submit a revised plan.

JH:dcn

e

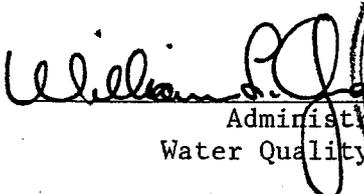
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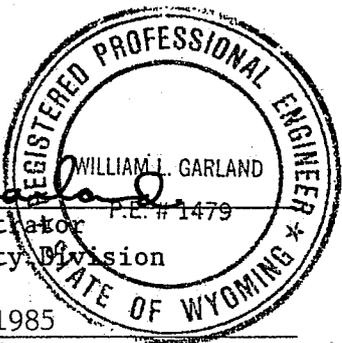
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Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


Administ^rator
Water Quality Division
October 8, 1985
Date of Issuance



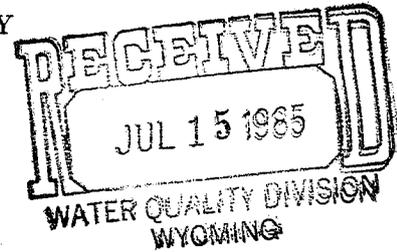

Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144



PROJECT: Star Valley Water System Expansion

ENGINEER: Charles V. King
King Associates
925 E. Executive Park Dr., Suite A
Salt Lake City, UT 84117

OWNER: Leisure Valley, Inc.
P.O. Box 127
Thayne, WY 83127

WATER QUALITY DIVISION REFERENCE NUMBER: 84-457RRR

REVIEWING EVALUATORS: Jack Bedessen *JB* & Jeff Hermansky *JH*

DATE OF REVIEW: July 10, 1985

ACTION: Not authorized.

COMMENTS:

This office has reviewed your May 15, 1985 submittal of your response to our April 2, 1985 review letter.

We appreciate your efforts in supplying us with the information that we require for our evaluation of the Star Valley Ranch water system.

Although we have had phone and face to face discussions and exchanged a few letters, this office still feels that we do not have adequate information for the permitting of further development.

With this in mind, please review our April 2, 1985 letter and the following comments. The numbering is the same as the April 2, 1985 letter.

1. (a) This office is concerned that the storage tank for Prater Canyon water could be isolated for repairs without the relief line in the canyon being opened. This of course would cause extremely high pressures in the system.

We don't feel that noting the potential problem on the plans will protect the system. Would you please propose some positive protection plan which would not be dependent upon someone reading the plans or someones memory.

(b) O.K.

AC

(c) Under the present flow requirements for the domestic water system, this department has no objections to using the water from Prater and Green Canyons for golf course watering. However, all points where the domestic water system connects to the irrigation system must be protected with one of the following backflow prevention devices:

- (1) a double check valve in the system line,
- (2) an approved reduced pressure principal backflow prevention device in the system line,
- (3) an approved pressure vacuum breaker valve located at an elevation at least 12 inches above the highest sprinkler head and a spring-loaded check valve downstream of the vacuum valve.

You must show the locations on the plans where the backflow prevention devices must be installed. A complete specification for the device and installation must be included.

Our question regarding the use of the domestic system for irrigation has not been addressed in your response. Address the effect on the system pressures and the demand caused by irrigation.

(d) Chapter XII, Section 8(a) of the Wyoming Water Quality Rules and Regulations states that where water use records are not available to establish water use, the equivalent per capita water use shall be at least 125 gpd to size facilities for average water demand. As a matter of comparison, Metcalf and Eddy, Inc., a very respected company in the wastewater field has listed the typical per capita rate of water use for a private dwelling on an unmetered public water supply to be between 106 and 211 gpd.

Using your "more realistic" estimate of 4 persons per lot, the average use per lot would be 500 gpd. This number approaches the 600 gpd per lot that we cited in our last review letter; a use factor for the subdivision near Evanston, Wyoming.

Therefore, we will accept your design factors of 4 people per lot and a peaking factor of 4.0 as well as using the regulations requirement of 125 gallons per person per day. With these factors, the network analysis must be based upon 1.39 gpm/lot.

Please resubmit the network analysis based upon this demand.

(e) Please compile a table to put on the network analysis plan sheets or to include as an attachment to the network analysis that shows all the parameters that form the basis for the analysis. This will help all persons currently or more importantly in the future, understand the system design.

Review of Plans & Specs.

Ref. No. 84-457RRR

Page Three

2. (a) Use 500 gpd/lot as per discussion in 1.(c). We agree with using 150 gpd/RV site. Please reference 2(b) regarding the ranch facilities flows.

Please reevaluate the storage requirements based upon these values.

(b) Although we realize that the ranch facilities comprise only a relatively small portion of the total water demand, please address the following:

(1) How many seats and/or meals are served in the restaurant? Does the restaurant have automatic dish washing?

(2) Why did you allow only 2,000 gpd for the restrooms-showers? Doesn't this facility serve 1,400 RV lots?

(c) Since you noted that the Green Canyon flow measuring device was badly worn when checked on April 17, 1985, have you made provisions for replacement? Is the Prater Canyon device still working properly?

(d) Final decision regarding the required storage capacity is still pending.

3. A pressure sustaining valve may be an acceptable method for insuring each source of water reaches all portions of the subdivision. However, it appears that some of the high points in plat 8 could not be served at the 100 psi setting at joint 43. Furthermore, can the Green Canyon transmission line sustain the static pressures that would develop? Had the AWWA C-900 Class 150 pipe that was specified in permit 82-528RR been installed?

4. Thank you for the network analysis plan sheets. As you know, there are still areas of very high pressure. Although pressure reducing valves at each service connection protect individual residences, the developer should be aware that high pressure can be expected to cause increased problems with the operation and maintenance of the distribution system.

5. Response O.K.

6. Final approval and future expansion of the water system is dependent upon the complete and proper installation of all specified piping and appurtenances. This office will be conducting inspections and/or requiring written certification by an independent engineer.

7. (a) and (b). Response O.K.

Review of Plans & Specs.
Ref. No. 84-457RRR
Page Four

8. A study of the soil conditions must be conducted prior to the installation of the storage tank. The foundation design must be based upon the study and soils report.

If you so choose, the storage tank could be permitted under a separate application at a future date. If not, please complete the necessary study, report, design and specifications.

9. Since apparently all the water used within the subdivision does not go through the storage tank, could automatic air/vacuum release valve be installed in appropriate locations?

10. Response O.K.

11. Response O.K. Inspection is scheduled for July of 1985.

As always, please feel free to contact us. I believe we could save a great deal of time if we had more phone conversations during this submittal/review process.

JH/jw

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Star Valley Ranch Water System Expansion

ENGINEER: Charles V. King
King/Dance
740 East 3900 South
Salt Lake City, UT 84107

OWNER: Leisure Valley, Inc.
P. O. Box 127
Thayne, WY 83127

WATER QUALITY DIVISION REFERENCE NUMBER: #84-457R

REVIEWING EVALUATOR: Jeff Hermansky, Jack Bedessem

DATE OF REVIEW: January 10, 1985

ACTION: Not authorized.

COMMENTS: We regret that you were dissatisfied with our initial review. It may be inconvenient for you to submit "as built" drawings, but certainly not unreasonable.

As you know, the safety and dependability of a water system is contingent on the integrity of the developed source and distribution system. Furthermore, this office has received several letters of concern regarding the Star Valley Ranch water system.

The Wyoming Environmental Quality Act requires that when a complaint or, in this case, letter of concern is received, an investigation shall be initiated by this department. The "as built" drawings have been requested as a part of this investigation.

Your December 6, 1984 response has been reviewed. A number of the items we requested were not included or addressed in this response. This review has been arranged in the same order as our October 11, 1984 letter.

The following items still need to be addressed and/or resolved:

1. The "as built" plans of the water system are to be sent by the engineer. They have not been received at the time of this review.
2. According to Mr. King, the well listed as U.W. 37449 was bailed to produce 400 gpm. However, its capacity is not necessary for the SVR at this time, so the flow is not considered in the design.
3. Our concerns regarding the spring listed as Prater Canyon No. 1 (U.W. 13319) still remain unanswered. Mr. King has given a few different reports as to the capacity of the spring which was further confused by leakage during some of the tests.

ABC

The Council of Concerned Members of the Star Valley Ranch Association has notified this office that another engineer, a Mr. Linke from Salt Lake, recorded a flow of 636 gpm in late August, 1984. We have not seen a written report signed by Mr. Linke that substantiates this information.

One thing is evident, however. As you might expect, the flow the spring produces appears to vary throughout the year. Our concern is, what is the lowest flow that can be expected from the spring? Consider the month of lowest flow as well as the fact that a dry year or a couple of dry years in a row could severely limit the flow. Is it possible that under poor conditions, the spring may produce only 200 or 300 gpm?

4. As per Mr. King's response to our initial review, we expect that all submittals of plans and specifications, engineering reports and "as built" plans will be signed by Charles V. King, P.E.

5. Our comment regarding "a minimum pressure of 20 psi" no way implies that we would require reducing valves set at 20 psi downstream pressure for a house connection.

Please read the comment once again.

The network analysis must be conducted for the worst case scenario. All the individual plats served by a single source must be analyzed in conjunction at the peak demand flow rate.

6. The design and plans for a 400,000 gallon reservoir were included in the Star Valley Ranch RV Park application which was granted a permit on November 3, 1982 as No. 82-528RR. However, since the proposed location of the tank has been revised, it is necessary to submit a soils report for the new site. The tank's foundation design must be based on this report. Please submit the detailed construction plans and specifications for the storage tank foundation and associated piping.

7. We found it interesting that your water system demand has been reduced from 1,205 gpm in your September 1984 Engineering Report to 605 gpm in your most recent submittal of the Report in December.

Specifically, what happened to the 250 lots near the airstrip for which you estimated water use at 1,000 gallons per day per lot?

We agree that 150 gallons per day per R.V. site is reasonable.

In your December Engineering Report, you reduced the design water demand for each lot to 300 per day. In the September report, the design demand was 450 gallons per lot per day. Since 300 gallons per lot per day is at the lowest end of the range we consider acceptable, do you have any flow information recorded or other information that would substantiate your reduction in design demand?

8. We will expect the "as built" information on water system appurtenances and pressure regulation stations at some future time.

9. The Department of Environmental Quality standards for water systems have not changed since your last submittal.

Review of Plans and Specifications

Star Valley Ranch Water System Expansion #84-457R

January 10, 1985

Page Three

The Wyoming Public Works Standards give far more detail than your proposed specifications. We suggest that for clarity, you show the Public Works Specifications as the project specifications and supplement with your own "special conditions" where necessary.

To avoid confusion, your disinfection and testing specifications should be removed.

10. In areas where profile drawings of the waterlines are difficult to determine accurately, provide a topographical map showing the water line locations in plan view and approximate depths.

A Permit to Construct will not be issued for the modification of Plat 4, or expansion of the water system into Plats 11 and 22, until all the "as built" information is received.

Please feel free to contact either Jack Bedessem or Jeff Hermansky if you have any questions or if you would like to arrange a meeting.

JH/JB:dcn

THE STATE



OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

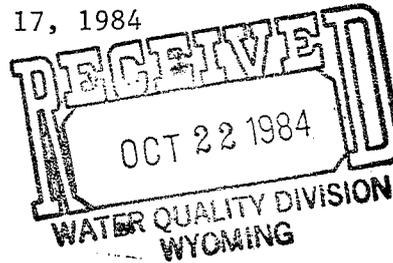
210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

October 17, 1984

King/Dance
540 East 3900 South
Salt Lake City, Utah 84107



Attention: Charles King

RE: Star Valley Ranch Review
DEQ NO. 84-457

Dear Mr. King:

I am sending this letter to clarify the Department of Environmental Quality, Water Quality Division's position regarding comment number 1 of our October 11, 1984 review letter.

Comment number 1 stated:

"This department has a serious concern that some of the original water system was not constructed in full accordance with the issued "Permit to Construct"(s). "As Built" plans and details showing exactly what has been constructed need to be submitted to this office. Include all gate valves and blow off valves, pipe locations, material and sizes, sources, collection facilities, booster stations, pump sizes, storage facilities, etc. for the entire subdivision and R. V. Park."

In general, we are not asking for as built of any parts of the water system that was constructed prior to July of 1973 when our regulations took effect. However, since everything constructed after July of 1973 should have been constructed to meet our standards and regulations, we are requesting their submittal.

Furthermore, any part of the water system constructed prior to July of 1973 that is an integral part of the water system constructed after July of 1973, must be included in the as built submittal. Such items could be wells and pumps, spring development, water storage, transmission lines, booster stations, pressure reducing stations, etc.

King/Dance
October 17, 1984
Page Two

Since Star Valley Ranch is getting so large and the water system relatively complex, the only way we can evaluate new proposals is to consider the entire system.

I suspect that after we have an opportunity to review all the appropriate as built plans, a meeting will be necessary.

Please feel free to contact either Jack Bedessem or me if you have any questions.

Sincerely,



Jeff Hermansky
Water Quality Evaluator

JH:dcn

xc: Jake Strohman, DEQ/WQD Cheyenne
Plans #84-457
File

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Star Valley Ranch Water System Expansion

ENGINEER: Charles V. King
King/Dance
540 E. 3900 South
Salt Lake City, UT 84107

OWNER: Leisure Valley, Inc.
P. O. Box 127
Thayne, WY 83127

WATER QUALITY DIVISION REFERENCE NUMBER: #84-457

REVIEWING EVALUATOR: Jack Bedessey, Jeff Hermansky

DATE OF REVIEW: October 11, 1984

ACTION: Not authorized.



COMMENTS: An initial review of your application, plans and specifications has been completed. The information submitted is much too general to determine whether the proposal meets the minimum design standards defined by the State of Wyoming. The following items need to be addressed and/or resolved:

1. This department has a serious concern that some of the original water system was not constructed in full accordance with the issued "Permit to Construct"(s). "As Built" plans and details showing exactly what has been constructed need to be submitted to this office. Include all gate valves and blow off valves, pipe locations, material and sizes, sources, collection facilities, booster stations, pump sizes, storage facilities, etc. for the entire subdivision and R. V. Park.
2. The February 1982 Amendment to Water System and Wastewater Treatment Facilities Master Plan states that the well drilled in December 1981 was drilled to over 400 feet without encountering water bearing strata. Clarify as to whether this pertains to Well U.W. 37449. Production from this well is used in the water supply demand calculations. Also, according to the State Engineer's Office, this application has been pulled for cancellation.
3. The Engineering Report states that the Prater Canyon No. 1 (U.W. 13319) water right appropriation will be changed from 300 gpm to 900 gpm. This report uses the 900 gpm when calculating water supply demand; however, during our October 11, 1984 tele-con, you stated that Prater Canyon No. 1 produced only 700 gpm. This discrepancy needs to be resolved and clarified in all State documentation.
4. All plans and specifications submitted with this application must be signed by a registered Wyoming Professional Engineer.

ABC

5. All water mains shall be sized based on flow demands and pressure requirements. A minimum pressure of 20 psi must be maintained at ground level at all points in the distribution system under all conditions of flow. Calculations are needed to show that this has been met.

6. Your September 17, 1984 letter indicates that you plan to move the 200,000 gallon Green Canyon Storage Reservoir to Lot 15, Plat 11 and increased the capacity from 200,000 to 400,000 gallons. Clarify whether the capacity of the existing reservoir is to be increased or is an additional reservoir to be constructed.

If this modification is to be included as a part of this permit, plans and specifications are needed.

7. The systems storage capacity shall be equal to or greater than the average daily consumption. This amount may be reduced if the source has sufficient capacity to supplement peak demands. According to your calculations, average daily demand will be about 1.74 million gallons. Information and calculations are needed, justifying total storage capacity requirements.

8. Details of all water system appurtenances are needed--blow off valves, air/vacuum valves, pressure reducing valves, gate valves, vaults, etc.

9. The construction specifications listed in the Engineering Report are inadequate. The specifications should be detailed and include:

- (a) Trench Excavation and Backfill;
- (b) Installation;
- (c) Handling and Laying of Pipe;
- (d) Pipe Jointing;
- (e) Hydrostatic/Leakage Testing;
- (f) Disinfecting Water Mains, etc.

Specifications should reference current ASTM and/or AWWA Standards. Refer to Wyoming Public Works Standards for additional information.

10. Because of the topography within this subdivision, profile drawings of all waterlines needs to be provided.

Please submit the required information and revised drawings to this office, in triplicate. If you have any questions, please feel free to contact either of us.

JB/JH:dcn

cc: Jake Strohman

9-24

PERMIT TO CONSTRUCT

Permit No. 84-458

- New
 Renewal
 Modified

Highland Park Community Church
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Casper Board of Public Utilities

200 North David

Casper, WY 82601

to construct, install, or modify a municipal water distribution and wastewater collection facility according to the procedures and conditions of the application No. 84-458. The facility is located in Section 29, T33N, R79W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

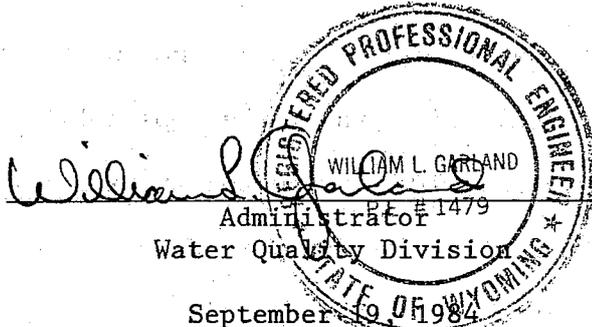
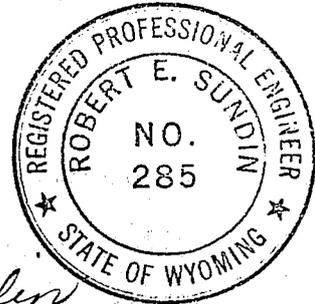
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



Robert E. Sundin

Director

Dept. of Environmental Quality

Administrator #1479
Water Quality Division

September 9, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Terry L. Titus
Worthington, Lenhart, Carpenter & Johnson
632 South David
Casper, WY 82601

9-29

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 84-459

Pratt Addition No. 6 - Phase Two
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Casper Board of Public Utilities

200 North David

Casper, WY 82601

to construct, install, or modify a potable water main and sanitary sewer facility according to the procedures and conditions of the application No. 84-459. The facility is located in Section 14, T33N, R79W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

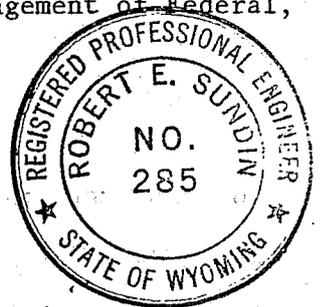
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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AUTHORIZED BY:




WILLIAM L. GARLAND
#1479
Administrator
Water Quality Division
STATE OF WYOMING


Director
Dept. of Environmental Quality

September 20, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Terry L. Titus
Worthington, Lenhart, Carpenter & Johnson
632 South David
Casper, WY 82601

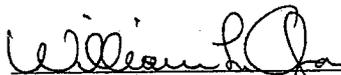
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

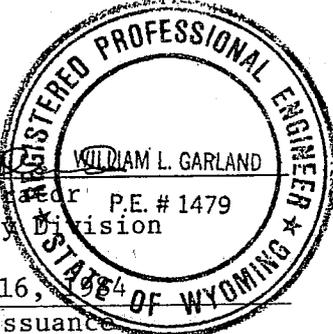
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming 82801; telephone, 672-6457.

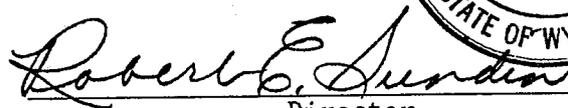
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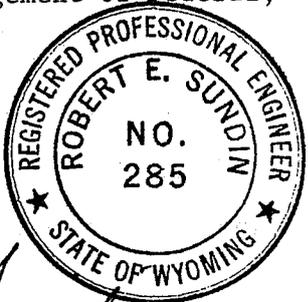
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


Administ~~ator~~ P.E. # 1479
Water Quality Division
October 16,
Date of Issuance



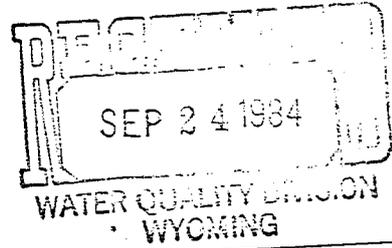

Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: Doyl Fritz
Western Water Consultants
P.O. Box 3042
Sheridan, WY 82801

REQUEST FOR GROUNDWATER SECTION
PERMIT APPLICATION REVIEW



APPLICATION NUMBER 84-460

DATE SUBMITTED FOR REVIEW 9/21/84

NAME AND LOCATION OF FACILITY Foot Union Mine Facilities Area
Sediment Pond Reservoir, Sec. 32, T. 51N., R. 71W.,
Campbell County

held in Cheyenne 9/24/84 re

COMMENTS No comments
ajm 9/25/84

Please return your comments to me by 10/15/84

SIGNED Tom Mueller

DATE 9/21/84

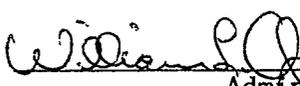
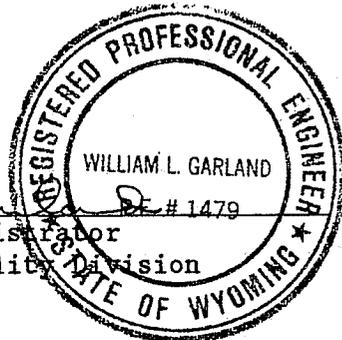
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

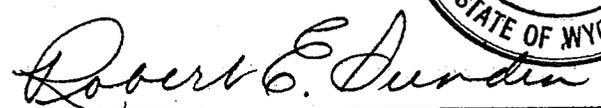
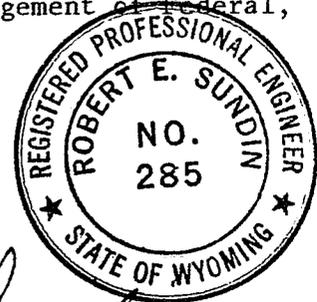
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
1479
Administrator
Water Quality Division



Director
Dept. of Environmental Quality


October 9, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

EB:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: Pechacek Water Line Extension

ENGINEER: Holm, Blough & Company
P. O. Box 1748
Cody, WY 82414

OWNER: Louis Pechacek
1720 29th St.
Cody, WY 82414

WATER QUALITY DIVISION REFERENCE NUMBER: #84-461

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: September 19, 1984

ACTION: Not authorized.

COMMENTS:

1. Please verify that available water pressure will meet the attached criteria from 10 States Standards, Section 8.1.
2. Either show a profile view of the water main or certify what the least amount of bury will be.

Thanks.

EB:dcn

Ac

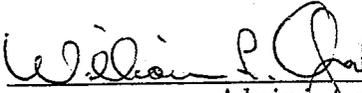
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

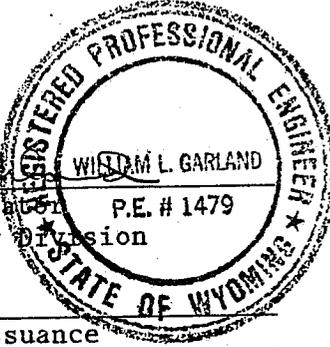
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

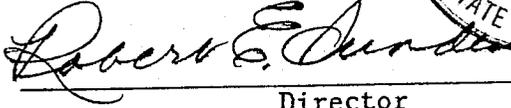
AUTHORIZED BY:



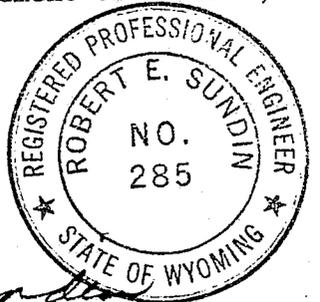
Administrator
Water Quality Division



September 19, 1984
Date of Issuance



Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

Prior to backfilling around the system, the applicant is required to contact the Fremont County Planning Office and arrange for their inspection of the installation. Please contact Mr. Ray Price at 332-5371.

EB:dcn

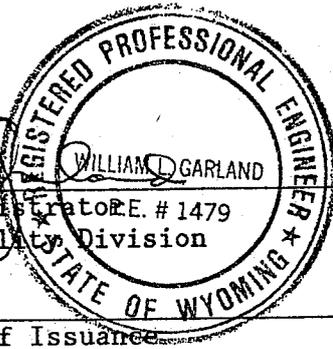
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

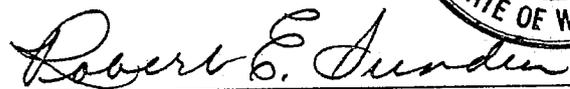
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

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AUTHORIZED BY:


WILLIAM D. GARLAND
Administrator E. # 1479
Water Quality Division

October 9, 1984
Date of Issuance


Robert E. Sundin
Director
Dept. of Environmental Quality


This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

Before placing the septic system improvements into service, the applicant is required to contact the Big Horn County Engineer in Basin and arrange for his inspection. Please contact Mr. Herb Jennerich at 568-2358 for the inspection.

EB:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: Hyattville School Teacherages

ENGINEER: Cardinal Engineering Co.
2334 Rose Lane
Riverton, WY 82501

OWNER: Big Horn County School District
Box 151
Basin, WY 82410

WATER QUALITY DIVISION REFERENCE NUMBER: #84-463

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: September 19, 1984

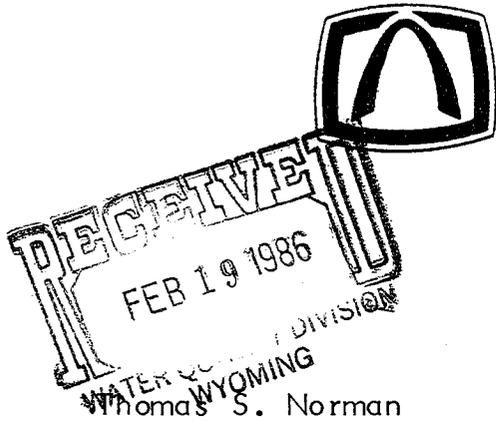
ACTION: Not authorized.

COMMENTS:

1. On this dosing system, please provide a detail of the proposed septic tank/pump tank or name of the manufacturer and dimensions.
2. I have attached Part D Section 40 of our Chapter 11 which deals with dosing systems following septic tanks. Please verify that the pressure, electrical controls, and transfer piping meet the regulations.
3. Please provide information on the mound leach field, waste flows, and the old septic system. This material was apparently provided you by Jeff Hermansky of this office. This modification will make it necessary for the system to meet our new Chapter 11 Rules and Regulations. I am open to discussion on this if there are specifics that I just don't know about.

EB:dcn

Ac



ARCH MINERAL CORPORATION

WESTERN DIVISION
P. O. BOX 460
HANNA, WYOMING 82327

February 18, 1986

Thomas S. Norman
Water Quality Engineer
Department of Environmental Quality
Water Quality Division
122 West 25th Street
Cheyenne, WY 82002

Re: Medicine Bow Coal Company, 331-T1, 35-24 Treatment Facility
84-464RR

Dear Mr. Norman:

As per our telephone conversation the week of February 10th, Arch Mineral Corporation wishes to confirm the verbal approval to install 12" diameter CMP, instead of 18" diameter shown on the approved drawing for 84-464RR. The 12" diameter CMP will be used because of its availability. The flowrate into the treatment ponds will still be approximately 450 gpm, depending on the pump used and the effluent quality from the secondary pond.

It is understood that a Professional Engineer's certification will reflect an approved design revision from 18" diameter CMP to 12" diameter CMP.

If you require any additional information, please call me.

Sincerely,

Scott Palmer
Western Division
Hydrologist

OK
TBN
2-19-86

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-464RR

M.B. 35-24 Treatment Facility
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Arch Mineral Corp.
P.O. Box 460
Hanna, WY 82327

to construct, install, or modify a sedimentation pond to treat process water facility according to the procedures and conditions of the application No. 84-464RR. The facility is located in E1/2 SW1/4 Section 35, T23N, R84W in the County of Carbon, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

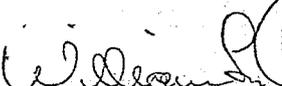
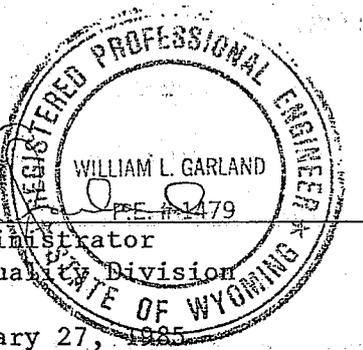
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

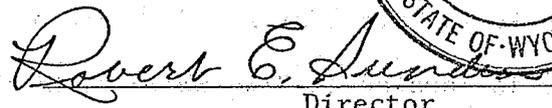
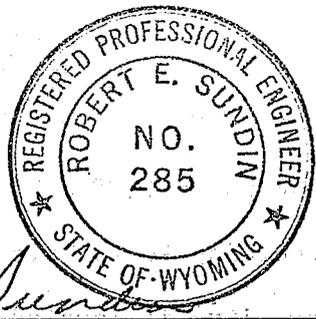
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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AUTHORIZED BY:



WILLIAM L. GARLAND
P.E. #1479
Administrator
Water Quality Division
STATE OF WYOMING



ROBERT E. SUNDIN
NO. 285
Director
Dept. of Environmental Quality
STATE OF WYOMING

February 27, 1985
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Robert Pixler
Arch Mineral Corporation
P.O. Box 460
Hanna, WY 82327

10-19-84

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: Medicine Bow Pit 35-24 Treatment Ponds, Carbon Co.

ARCHITECT OR ENGINEER: Robert Pixler, Arch Mineral Corp.
P.O. Box 460, Hanna, WY 82327

APPLICANT: Arch Mineral Corp.
P.O. Box 460, Hanna, WY 82327

WATER QUALITY DIVISION REFERENCE NUMBER: 84-464R

REVIEWING ENGINEER: Thomas S. Norman *T. Norman*

DATE OF REVIEW: October 18, 1984

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

The following areas need to be addressed in your design:

1. The specific gravity of coal is closer to 1.6 than 2.65. Is there a reason why you selected a heavier type material?
2. You have designed this system to remove particles greater than .015 mm which is assumed to be the average particle diameter. Therefore, at least half of the solids will be removed. However, I don't have any idea of what TSS concentration you are starting out with. Suppose your raw wastewater had 200 mg/l TSS and only half was removed. The remaining 100 mg/l TSS would exceed the NPDES limits.
3. Is the 0.015 mm average particle diameter representative for the Medicine Bow Mine? Have you ever done any particle distribution? To use Stoke's law and determine efficiency, this is really necessary.
4. The actual total pond detention time will actually be greater than 33 hours due to losses from evaporation and seepage. However to analyze the settling effectiveness, you can only use the detention time of each pond as a particle will be resuspended as it goes from pond #1 to pond #2.
5. What might be an easier approach is to provide some data from an existing pond that you may have. You mentioned that you do have some other ponds that are used for process water. You may want to relate efficiency and detention time to your proposed system.
6. Another approach is to agree to batch processing the wastewater. That is to fill the ponds and release the water only when effluent standards are met. This may be continuous or it may be very erratic. However, you must agree to quit pumping into the ponds until the standards are met. This could cause a lot of problems in your pit if it took a long time to settle out the solids.

Overall I am not too concerned as plenty of land is available for additional ponds. However, I would like to get a little more justification on paper before a permit is authorized.

9-24-84

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: Medicine Bow Sedimentation and Treatment Facility Pond #2-1, Carbon Co.

ARCHITECT OR ENGINEER: Robert Pixler, Arch Mineral Corp.
P.O. Box 460, Hanna, WY 82327

APPLICANT: Arch Mineral Corp.
P.O. Box 460, Hanna, WY 82327

WATER QUALITY DIVISION REFERENCE NUMBER: 84-464

REVIEWING ENGINEER: Thomas S. Norman *T.S. Norman*

DATE OF REVIEW: September 21, 1984

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Were these ponds ever constructed under permit No. 81-903R? The NPDES permit already identifies this discharge point (#004) in the permit but monitoring reports are never submitted concerning this point. Kathy Bauman stated that the status of this discharge point must be identified in every monitoring report.
2. The size and depth of riprap was not stated.
3. The ponds as shown will not contain the 10-year/24-hour precipitation event. The process water will keep the ponds at maximum capacity and the required additional capacity is not available for the design precipitation event. In fact, a 3-year flood event (or less) would probably cause a discharge.

You might consider lowering the effluent pipe in pond #1 so that there is adequate storage between the effluent pipe and the spillway for the 10-year/24-hour event. You would also need to reduce the size of the effluent pipe so that theoretically only process water (450 gpm) and not runoff water would enter the second pond during a storm.

4. Design information was not submitted showing that the process water would meet effluent limits with the detention time that the ponds allowed.
5. Note 3 on the plans calls out discharge point #005. I believe it should be #004 as the NPDES permit specifies #005 as the tipple area. You may want to contact Ms. Bauman as to whether both the 18" CMP from pond #2 and the spillway from pond #1 need to have a discharge point in the NPDES permit.
6. Note 4 on the plans calls for emptying pond #1 but it does not say how far down you will draw it. Also I doubt that the effluent standards will be met if you continue to pump process water into the pond as this will continue to agitate the runoff water. The problem I see is that when precipitation occurs, not only will you have runoff but the amount of pit water will also dramatically increase due to runoff and infiltration into the pit.



Department of Environmental Quality
Water Quality Division

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

November 5, 1985

Warren E. Patterson
Route 1, Box 402B
Torrington, WY 82240

Dear Mr. Patterson:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility name:	Patterson Residence	<i>Goshen Co.</i>
DEQ/WQD Reference Number:	84-465	
Engineering Consultant:	None	
DEQ/WQD Reviewing Engineer:	Theodore D. Coyer/Christian G. Norman	
Date of DEQ/WQD Review:	October 5, 1984	

According to Chapter III of the Water Quality Rules and Regulations, Section 7 b. (2), "If an application is denied because of incompleteness necessitating a request for additional information, the applicant shall have a maximum of six months to comply with the request. If the applicant fails to provide the requested information within that period, the entire incomplete application shall be returned."

Please indicate below the status of your application and return this form to our office:

- The application will not be resubmitted as the proposed project has been cancelled.
- The application will be resubmitted within 30 days.
- The facility has been constructed, or is under construction. As built construction plans and specifications will be submitted within 30 days.
- Other remarks _____

*5-9-86
Approved at
the County level
ADV single family units
two. TOW*

You are reminded that the construction, installation, or modification of any sewerage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes. Unless the Water Quality Division reviewing engineer receives this information within 15 days of the receipt of this letter, follow-up action will be taken.

Sincerely,

A handwritten signature in cursive script that reads "Christian G. Norman".

Christian G. Norman
Engineering Evaluator
Water Quality Division

CGN/nc

10-9-84

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: Patterson Residences, Goshen County

ARCHITECT OR ENGINEER: None

APPLICANT: Warren E. Patterson
Route 1, Box 402B, Torrington, WY 82240

WATER QUALITY DIVISION REFERENCE NUMBER: 84-465

REVIEWING ENGINEER: Theodore D. Coyer, P.E. *Theodore D. Coyer*

DATE OF REVIEW: October 5, 1984

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Plans for a proposed septic tank and soil absorption system were forwarded to this office by Harold Anderson, Goshen County Sanitarian. The plans were incomplete and cannot be accepted for review for the following reasons:

1. An application for a "Permit to Construct" a wastewater treatment and disposal system was not submitted. Application forms are enclosed for your use.
2. Since you propose two homes on one system, the plans must be prepared by and signed or sealed by an engineer registered in the State of Wyoming.

If you choose to install two separate systems, one for each house, you can obtain the construction permits from Mr. Anderson.

cc: Harold Anderson, Goshen County Sanitarian

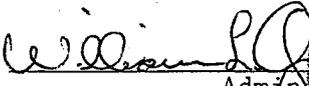
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming 82801; telephone, 672-6457.

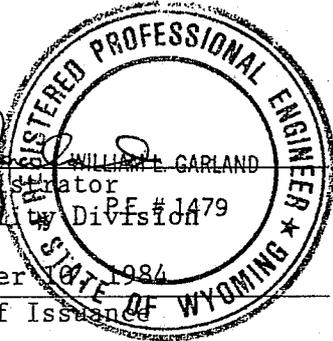
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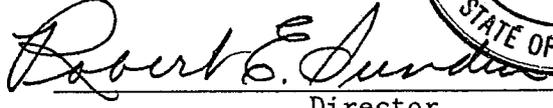
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AUTHORIZED BY:

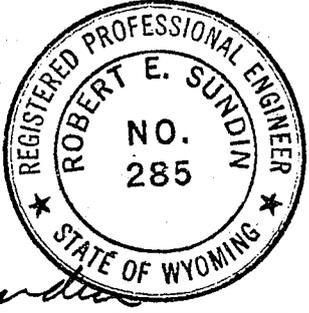


WILLIAM J. GARLAND
Administrator
Water Quality Division
PE # 1479
October 1984
Date of Issuance





ROBERT E. SUNDIN
Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: Paul J. Shattuck
Thunder Basin Coal Co.
P.O. Box 546
Wright, WY 82732

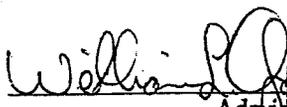
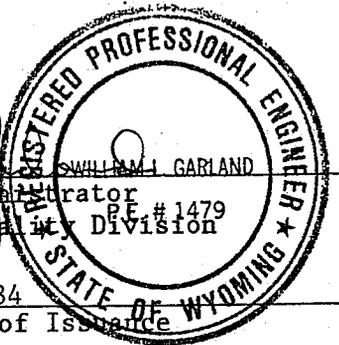
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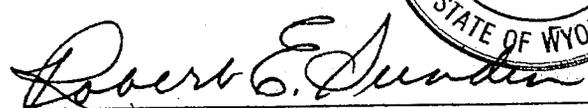
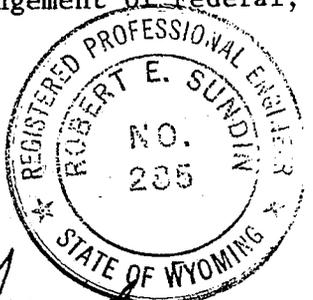
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AUTHORIZED BY:


WILLIAM J. GARLAND
Administrator
Water Quality Division
P.E. # 1479

September 28, 1984
Date of Issuance


ROBERT E. SUNDEN
NO. 235

Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

EB:dcn

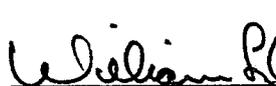
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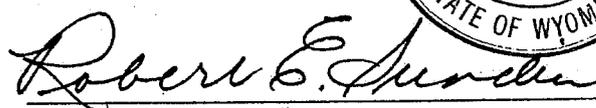
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AUTHORIZED BY:


WILLIAM J. GARLAND
Administrator # 1479
Water Quality Division
STATE OF WYOMING
REGISTERED PROFESSIONAL ENGINEER

October 2, 1984
Date of Issuance


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING

Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

The applicant is required to obtain the necessary Groundwater Pollution Control Permit, for the actual injection of acid into the hereby authorized collection well, from the Department of Environmental Quality/Water Quality Division, Groundwater Section in Cheyenne.

EB:dcn

returned to
Landon
10-2-84

WATER QUALITY DIVISION
GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-468

DATE SUBMITTED FOR REVIEW 9-27-84

NAME AND LOCATION OF FACILITY A-9 Collection system
Umpqua Minerals Corporation
Sec 15, T33N R89W Natrona County

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

SIGNED Kate Landon
TITLE Engineer Evaluator
DATE 10-1-84

APPROVED 10/1/84
(Date)

AJM
Groundwater Control Supervisor

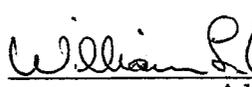
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

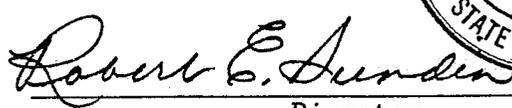
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AUTHORIZED BY:


WILLIAM L. GARLAND
P.E. #1479
Administrator
Water Quality Division
STATE OF WYOMING


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING
Director
Dept. of Environmental Quality

October 16, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

EB:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

210 LINCOLN

LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: City of Worland 8" Water Main Replacement-Big Horn Avenue

ENGINEER: Bob Shelton, City Engineer
City of Worland
P. O. Box 226
Worland, WY 82401

OWNER: City of Worland
Board of Public Utilities
P. O. Box 226
Worland, WY 82401

WATER QUALITY DIVISION REFERENCE NUMBER: #84-469

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: September 28, 1984

ACTION: Not authorized.

COMMENTS: We need a small amount of additional information before the Permit to Construct can be authorized:

1. Will the 10' horizontal separation/18" vertical separation regulation be met?
2. We need a total of three copies of this submittal. Could you please forward an additional copy to this office.

Thanks.

EB:dcn

AC

ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

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AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator
Water Quality Division
STATE OF WYOMING
PP# 1479


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING

Director
Dept. of Environmental Quality

September 28, 1984

Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

Before backfilling around the authorized improvements, the applicant is required to contact the Teton County Planner and arrange for his inspection of the septic system. Mr. Joe Chalfant can be reached at 307/733-3959.

EB:dcn

cc: Joe Chalfant, Teton County Planning Office

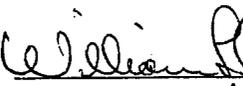
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

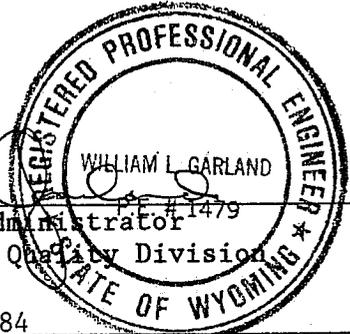
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

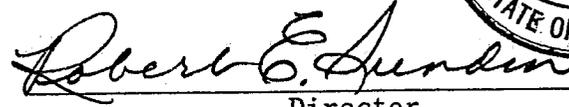
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

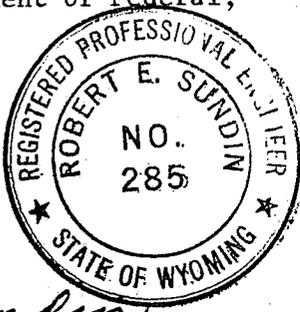
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator #1479
Water Quality Division
STATE OF WYOMING




Director
Dept. of Environmental Quality



October 18, 1984

Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

EB:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Laird Mobile Home Park

ENGINEER: Sherman B. Allred
John W. Donnell & Assoc. Inc.
P. O. Box 638
Worland, WY 82401

OWNER: Eugene Laird
2109 Big Horn Avenue
Worland, WY 82401

WATER QUALITY DIVISION REFERENCE NUMBER: #84-471

REVIEWING ENGINEER: Ed Baruth, P.E. *EB*

DATE OF REVIEW: September 28, 1984

ACTION: Not authorized.

COMMENTS:

1. The applicant must sign the "Application for Permit to Construct" form himself. The engineer cannot do this for him.
2. Please provide profile views of the water and sewer installations.
3. Please provide sign off from the City of Worland staff that they will accept the proposed improvements and hook your subdivision into their respective utility systems. Also, the City of Worland has recently been using the 1984 Wyoming Public Works Standard Specifications instead of the 1976 Worland Standard Specifications. Please check this with the City staff also.

EB:dcn

cc: City of Worland - Bob Shelton

ABC

PERMIT TO CONSTRUCT

Permit No. 84-472R

- New
- Renewal
- Modified

Torrington's Water Storage Tank, Contract 2-T
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Town of Torrington

P.O. Box 250

Torrington, WY 82240

to construct, install, or modify a municipal water storage tank facility according to the procedures and conditions of the application No. 84-472R. The facility is located in SE1/4 Section 11, T24N, R61W in the County of Goshen, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

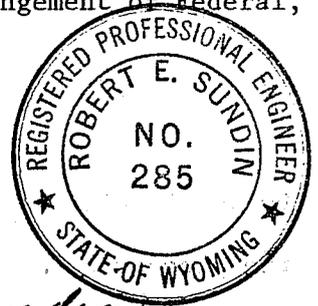
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

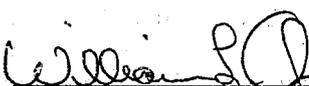
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

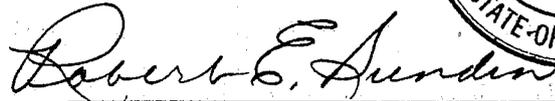
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:




WILLIAM L. GARLAND
Administrator, P.E. # 1479
Water Quality Division
November 2, 1980
Date of Issuance


Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: John T. Baker
Baker, Sweeney & Associates
1915 First Avenue
Scottsbluff, NE 69361

10-12-84

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: Torrington Water Storage Tank, Contract No. 2-T, Goshen Co.

ARCHITECT OR ENGINEER: John Baker, Baker, Sweeney & Associates
1915 First Ave., Scottsbluff, NE 69361

APPLICANT: Town of Torrington
P.O. Box 250, Torrington, WY 82240

WATER QUALITY DIVISION REFERENCE NUMBER: 84-472

REVIEWING ENGINEER: Thomas S. Norman *Thomas S. Norman*

DATE OF REVIEW: October 5, 1984

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. A legal description and a site map is necessary.
2. How do you propose to drain the storage tank? If the proposed fire hydrant is to be used, another valve is necessary to stop flow back into the distribution system.
3. More specific information is needed on where the chlorinated water will be discharged. Drainages or storm sewers are not acceptable disposal methods unless a discharge permit is obtained.
4. Specifications, Special Construction Provisions, item 11. I am not clear as to what provisions a contractor can do to offset settlement of the tank. The foundation report states that a 4-inch drop should be expected. I think this is an engineering problem and specific items should be identified.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-473R

Torrington's Water Distribution System, Contract 3-D
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Town of Torrington

P.O. Box 250

Torrington, WY 82240

to construct, install, or modify a municipal water transmission line facility according to the procedures and conditions of the application No. 84-473R. The facility is located in Section 11, T24N, R61W in the County of Goshen, in the State of Wyoming.

This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

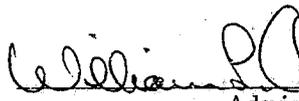
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

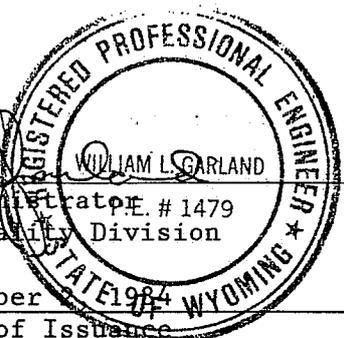
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

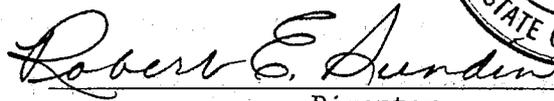
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

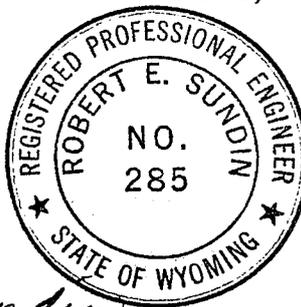
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator # 1479
Water Quality Division
November 1984
Date of Issuance




ROBERT E. SUNDIN
Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: John T. Baker
Baker, Sweeney & Associates
1915 First Avenue
Scottsbluff, NE 69361

10-12-84

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: Torrington Water Distribution System, Contract 3-D, Goshen Co.

ARCHITECT OR ENGINEER: John Baker, Baker, Sweeney & Assoc.
1915 First Ave., Scottsbluff, NE 69361

APPLICANT: Town of Torrington
P.O. Box 250, Torrington, WY 82240

WATER QUALITY DIVISION REFERENCE NUMBER: 84-473

REVIEWING ENGINEER: Thomas S. Norman *Thomas S. Norman*

DATE OF REVIEW: October 9,

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. A legal description was not provided on the application.
2. On page F-2 of the specifications, a deflection limit was not provided for 18-inch pipe.
3. On page F-8 of the specifications, more detailed information is required on the disposal of the chlorinated water.
4. On page 1 of the plans (between match line A-A and B-B), there is an 8-inch water line going to the west with no details. It refers to match line F-F on page 3 but a drawing is not provided.

PERMIT TO CONSTRUCT

Permit No. 84-474
SEE SPECIAL CONDITIONS

- New
- Renewal
- Modified

Karem By-Products
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Southwest Hide Co.

P.O. Box 388

Torrington, WY 82240

to construct, install, or modify a small wastewater facility facility according to the procedures and conditions of the application No. 84-474. The facility is located in Section 14, T24N, R61W in the County of Goshen, in the State of Wyoming. This permit shall be effective for a period of 1 month (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

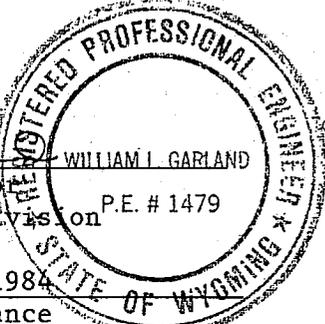
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

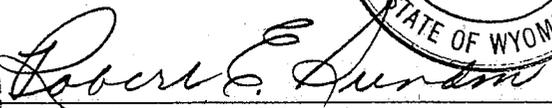
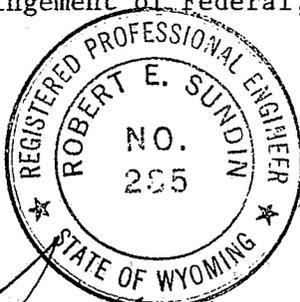
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


Administrator
Water Quality Division
P.E. # 1479



Director
Dept. of Environmental Quality


October 2, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

Conditions to Permit to Construct

1. The permittee shall notify representatives of the Goshen County Health Department of the estimated day construction will commence and the estimated day of completion of this project. Inspection of the installed system is required prior to backfilling. The authorized representative in your area can be contacted at the following address:

Harold D. Anderson, Goshen Co. Sanitarian, P.O. Box 1192, Torrington, WY 82240
Telephone: 532-5002
 2. This construction permit does not include authorization for a lift pump station. If a lift station is necessary, a modified permit will be required.
- cc: Russell Schamel, 4U2 Engineering & Land Surveying, P.O. Box 99, Torrington, WY 82240

PERMIT TO CONSTRUCT

New

* CONDITIONED *

Permit No. 84-475RR

Renewal

Modified

THREE SISTERS DISPOSAL PONDS
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Lonnie Burch

P. O. Box 689

Mountain View, WY 82939

to construct, install, or modify three PVC lined (30 mil) ponds, leak detection
system for the disposal of waste oil field drilling fluids and one PVC line (30 mil)
pond for the disposal of
domestic sewage facility according to the procedures and conditions of the

application No. 84-475RR. The facility is located in _____

Section 36, T15N, R114W

_____ in the County of Uinta,

in the State of Wyoming. This permit shall be effective for a period of two (2)

years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and dur-

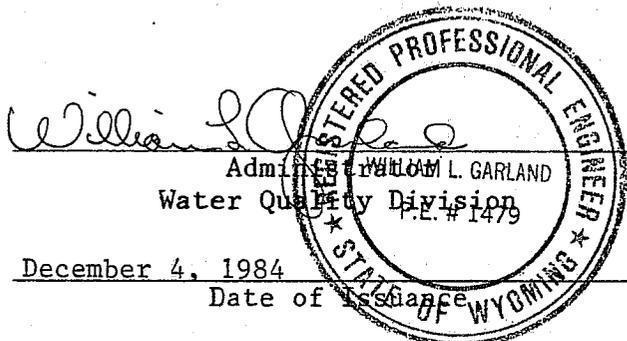
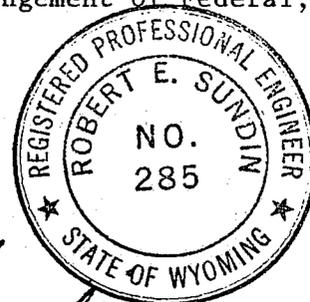
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



Robert E. Sundin

Director
Dept. of Environmental Quality

William L. Garland

Administrator
Water Quality Division
P.E. # 1479

December 4, 1984

Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITIONS OF PERMIT *

1. Written certification that the earthwork and liner installation was completed in accordance with the specifications by a Wyoming Professional Engineer, soils testing firm, and/or liner installation technician.
2. No hazardous wastes as defined by the USEPA or State of Wyoming shall be disposed of at this facility. Before any wastes, other than those specified by this permit, may be disposed of at this facility, authorization must be obtained from the Department of Environmental Quality, Water Quality Division.
3. The Department of Environmental Quality, Water Quality Division shall be contacted prior to the reclamation of this facility. The method of reclamation must be accepted by this department. Waste quality evaluation, mitigation, and/or stabilization methods may be required.

JB:dcn

cc: Tony Mancini, DEQ/WQD Cheyenne
LeRoy Feusner, DEQ/WQD Cheyenne

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Three Sisters Disposal Ponds

ENGINEER: Kenneth Walker
Uinta Engineering & Surveying, Inc.
P. O. Box 746
Evanston, WY 82930

OWNER: Lonnie Bunch
P. O. Box 689
Mountain View, WY 82939

WATER QUALITY DIVISION REFERENCE NUMBER: #84-475R

REVIEWING EVALUATOR: Jack Bedessem; ^{JB} Kate Laudon

DATE OF REVIEW: November 21, 1984

ACTION: Not authorized.

COMMENTS: A review of your revised application has been completed. The following items need to be addressed and/or resolved:

1. The specifications need to include information as to exactly what liner material will be used (Polyvinyl Chloride, Oil Resistant Polyvinyl Chloride, etc.). Note that this department recommended a reinforced chlorinated polyethelene material.
2. Information is needed as to whether the liner material is compatible with the climate, soils environment, waste fluids, etc. Documentation from the manufacturer/supplier should be provided.
3. Standard construction/installation specifications are needed for the liner (i.e. installation contractor, material characteristics and properties, substrate preparation, jointing, repairs, earthen cover material, quality assurance, etc.).
4. The construction specifications shall include the provision that: written certification that the earthwork and liner installation were completed in accordance with the permitted specification be submitted to this department by a Wyoming Professional Engineer, independent soil firm, and/or manufacturer/supplier representative.
5. Address the operation of the proposed disposal pond:
 - (a) This application proposes to allow the disposal of wastewater (reserve pit fluids and produced water) from oil and gas drilling operations. The disposal of hazardous or undesirable wastes must be prevented.

C

Review of Plans and Specifications
Three Sisters Disposal Ponds #84-475R
November 21, 1984
Page Two

(b) Oil on the pond water surface will reduce the rate of evaporation. The oil will need to be periodically removed or skimmed.

(c) A log must be kept indicating the date, quantity, type and source of each load dumped at this facility.

(d) The leak detection system will have to be checked routinely (monthly). If fluids are observed in the system, this department should be notified immediately.

Please submit the required information and revised drawings to this office in triplicate. If you have any questions, please feel free to contact me.

JB/KL:dcn

cc: Kate Laudon

Returned to Lender
11-17-84

WATER QUALITY DIVISION
GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-475R

DATE SUBMITTED FOR REVIEW 11-15-84

NAME AND LOCATION OF FACILITY Three Sisters Disposal Pit
Sec. 26 T15N R 114W
Winta County

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

SIGNED Kate Laudon

TITLE Engineer Evaluator

DATE 11-16-84

APPROVED 11/19/84
(Date)

ajm
Groundwater Control Supervisor

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Three Sisters Disposal Ponds

ENGINEER: Kenneth Walker
Uinta Engineering & Surveying, Inc.
P. O. Box 746
Evanston, WY 82930

OWNER: Lonnie Bunch
P. O. Box 689
Mountain View, WY 82939

WATER QUALITY DIVISION REFERENCE NUMBER: #84-475

REVIEWING EVALUATOR: Jack Bedessen^{JB}; Kate Laudon

DATE OF REVIEW: October 24, 1984

ACTION: Not authorized.

COMMENTS: An initial review of your application has been completed. The following items need to be addressed and/or resolved:

1. The Contract Specifications indicate that Wyoming Public Works Standards will be used for the construction specifications. This should be noted on the plans.
2. The construction specifications need to include provisions for soil testing during construction (i.e. density, moisture, particle size distribution, Atterburg limits, etc.).
3. The construction specifications need to include provisions for determining or testing the effectiveness of the liner after construction. Refer to Chapter XI Water Quality Rules and Regulations Section 30(f).
4. The construction specifications need to include the following provisions: Written certification that the soil liner was constructed in accordance with the specifications shall be provided by a Wyoming Professional Engineer or an independent soil laboratory and submitted to this office prior to operation of the facility.
5. Address provisions for dike protection and erosion control of inner and outer dike slopes.
6. The inner dikes need to be protected from erosion at locations where dumping will occur. Inflow structures (i.e. splash pads) should be provided at dumping locations. Indicate dumping location on plans and a detail.

ABC

7. It is recommended that flagging be installed to discourage waterfowl and birds.
8. Address whether any of these ponds are located within the 100 year flood event level.
9. Based on the information provided to this office, it appears that a recompacted liner will be required for these disposal ponds. The permeability data does not consider the effects of fractures in the bedrock surface.
10. The core sample from DH-2 (permeability 1×10^{-10} cm/sec) was taken at a depth of 33 feet--relative elevation 57 feet. The core sample for DH-3 (permeability 4×10^{-10} cm/sec) was taken at a depth of 20.5 feet--relative elevation 64 feet. The final elevations of the pond bottoms range from 78 feet to 83 feet. Address whether the core samples are representative of the pond bottom conditions.
11. It appears that the leak detection system will indicate seepage only from the pond side slopes. Generally, the function of a leak detection is to indicate seepage from all areas of the pond.
12. The test borings should be re-examined for the presence of groundwater. If groundwater is encountered, record the level and analyze for background water quality. Contact Kate Laudon (307-777-7781) or me concerning sampling, procedures, parameters, etc.
13. Sample No. 797, which was disturbed and recompacted to 95% maximum density, was determined to have a permeability of 3.5×10^{-6} cm/sec. Special Provision SP-8.03 stipulates--All fill be placed as specified under Section 601 of the specifications and shall be placed in 8" lifts and shall be compacted to 90% of maximum density. Address the difference in compaction in relation to the permeability.

Submit the required information and revised drawings to this office, in triplicate. If you have any questions, please feel free to contact me.

JB/KL:dcn

cc: Kate Laudon, DEQ/WQD Cheyenne
Carol Hurley, BLM, P. O. Box 1170, Rock Springs, WY 82901

Norma Turner
to review
returned
10-30

WATER QUALITY DIVISION
GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-475

DATE SUBMITTED FOR REVIEW 10-15-84

NAME AND LOCATION OF FACILITY Three Sisters Disposal Pit

Sec. 36 T15N R114W

Winta County

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

SIGNED Kate Laudon

TITLE Engineer Evaluator

DATE 10-24-84

APPROVED 10/29/84
(Date)

qjm
Groundwater Control Supervisor

MEMORANDUM

TO: Jack Bedessem, Southwest District Supervisor

FROM: Kate Laudon, Engineering Evaluator *KL*

DATE: October 24, 1984

SUBJECT: Groundwater Review, Three Sisters Disposal Pits, DEQ/WQD Reference #84-475, Telephoned to Jack on October 24, 1984

The proposed Three Sisters Disposal Pits consist of a total of four pits located near Mountain View in Uinta County. One small pit will be used for sewage disposal, one pit for drilling fluids, and two for produced water.

Northern Engineering and Testing drilled four test borings on the four corners of the site. Lithologic logs of the test borings are provided with the permit application. Descriptions from the four test borings indicate that the site generally is underlain by about six feet of sandy-clayey gravel over bedrock. Bedrock in three of the four holes is described as a soft claystone. Test hole DH-2 on the southeast side of the site encountered sandstone interbedded with siltstone.

The test holes should be re-examined for the presence of water. If significant water is observed, holes should be bailed dry, and water samples should be collected and analyzed. If water levels are decreasing, they should be measured periodically.

Permeability tests were run on one claystone sample and one sandstone sample from the site. Because very low permeabilities were reported for the samples (1 and 4 x 10⁻¹⁰ cm/sec.) the applicant proposes to leave the bottom of the ponds unlined, using the undisturbed native clay. The exterior dikes will be lined with a compacted clay core. A leak detection system consisting of four inch perforated pipe sloping to manholes will be constructed inside the dike. This may be effective to detect seepage through the dike, however any fluid leaving the unlined bottom of the ponds would not be detected by this system.

The permeabilities of the bedrock provided with the application may not be indicative of conditions at the site. Fracture permeability may be the factor controlling groundwater flow. This is not discussed in the application. Also excavation of the ponds could result in additional fracturing of the bedrock surface. Low RQD values reported on the well logs indicate a relatively incompetent claystone bedrock. Based on the information included in the permit application, I believe a liner should be constructed on the bottom of the ponds. Also a plan for monitoring possible seepage from the bottom of the ponds should be provided.

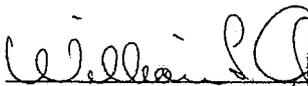
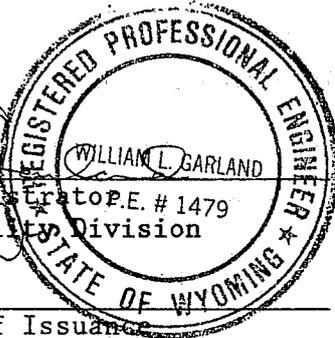
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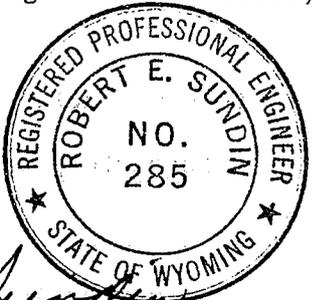
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division

December 4, 1984
Date of Issuance


Director
Dept. of Environmental Quality


This permit does not supercede the requirements for obtaining any permit from local agencies.

JH:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

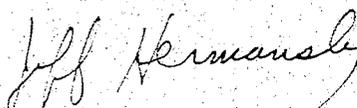
PROJECT: Chevron Phosphate Fertilizer Plant

ENGINEER: Badger Engineers, Inc.
Cambridge, Mass.

OWNER: Chevron Chemical Company
P. O. Box 1928
Rock Springs, WY 82902

WATER QUALITY DIVISION REFERENCE NUMBER: #84-476

REVIEWING EVALUATOR: Jeff Hermansky



DATE OF REVIEW: October 30, 1984

ACTION: Not authorized.

COMMENTS: The following questions and comments need to be addressed before a Permit to Construct can be issued:

1. On plan sheet 487-1, the 3 inch water main and the 2 inch pumped treated effluent line are shown to run 2.5 feet apart. Water mains and sanitary sewer forced mains must be separated by at least 10 feet horizontal distance.
2. Profile views of all sanitary sewage collection lines is required. Show invert elevations, finished grade, pipe slope, manholes, etc.
3. There must be specifications for hydrostatic pressure testing as well as disinfection specifications for the water lines.
4. How are service connections to be made to the water mains?
5. What are the average daily and peak demands on the water system?
6. Can the 6 inch sewer lines handle the peak flows and will the lines always have at least 2 ft. per second scouring velocity?
7. An engineer licensed in Wyoming must sign the plans and specifications.

As a matter of clarification, these plans have been reviewed with concern for the potable water mains and sewage collection system only. The water storage tank, booster pumps, sewage treatment plant, and lift stations have not been considered. These items will also need to be reviewed and permitted prior to their construction.

JH:dcn

ABC

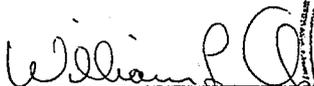
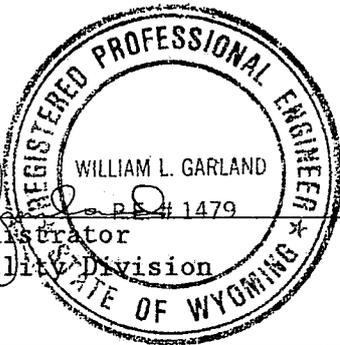
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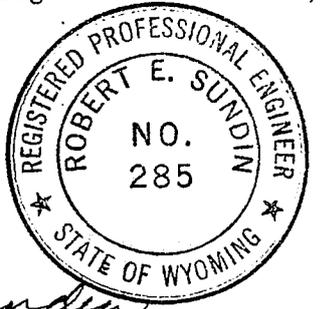
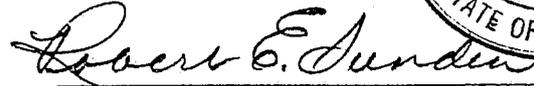
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AUTHORIZED BY:



WILLIAM L. GARLAND
P.E. # 1479
Administrator
Water Quality Division
STATE OF WYOMING



Director
Dept. of Environmental Quality

November 20, 1984

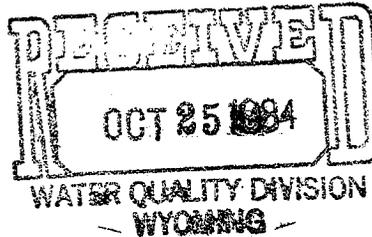
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

JH:dcn

MEMORANDUM

TO: Plans #84-477
FROM: Jeff Hermansky
DATE: October 22, 1984
SUBJECT: Phone Review



On October 22, 1984 I conducted a phone review of the Town of Opal water distribution system. I spoke with Sean McKnight, the project engineer for Greiner Engineering.

Sean and I discussed the following items:

1. I noted that a couple of the curves in the 8 inch line that runs from the edge of town to the water storage tank were too small a radius to be accommodated by deflecting the pipe joints.

Sean said that since they were unable to acquire a right of way for the pipeline as shown on the plans, a new route is being designed. There will be no curves used in the line. Cast iron bends are to be used.

2. I asked Sean if a flow analysis had been conducted for any other conditions. He said yes, with C=130. He is to send these results along with a check of the static pressure in the line.

3. I told Sean the open end of the air relief pipe from the automatic valve must extend out of the vault to at least one foot above grade and be provided with a screened downward-facing elbow.

Sean said that a contractor has been selected and construction had just begun on the project. AWWA C-900 PVC, Class 150 is the pipe being used.

JH:dcn

c

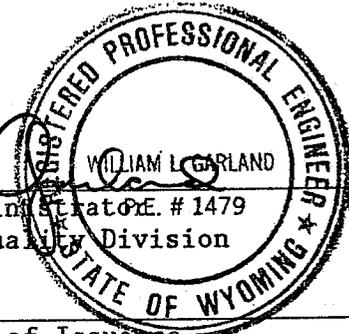
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

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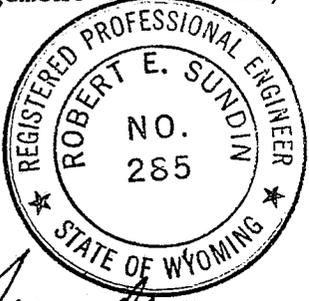
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AUTHORIZED BY:


WILLIAM L. GARLAND
Admin. Stat. E. # 1479
Water Quality Division


October 2, 1984

Date of Issuance


Director
Dept. of Environmental Quality


This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

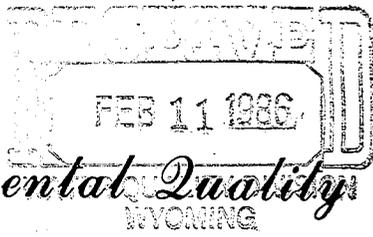
Before backfilling around the proposed improvements, the applicant is required to contact the Big Horn County Engineer and arrange for his inspection of the septic system. Please contact Mr. Herb Jennerich at 568-2358 to arrange for his inspection.

EB:dcn

cc: Herb Jennerich, Big Horn County Engineer

Norma

THE STATE OF WYOMING



ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

February 6, 1986

Mr. John Deromedi
P.O. Box 156
Meeteetse, WY 82433

RE: "As Built" Wastewater Facility (Permit Number 84-479R)

Dear Mr. Deromedi:

This letter is in response to the above mentioned facility. After reviewing the revised plans, they appear to meet the minimum design standards for the State of Wyoming. A "Permit to Construct" cannot be issued since the facility has already been built. Please retain this letter as verification that the facility has been accepted by the Wyoming Department of Environmental Quality.

Sincerely,

Steven P. Gerber, P.E.
Northwest District Supervisor

SPG/jw
copy: Vance Christiansen

aba

Norawa



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

December 6, 1985

CERTIFIED P 399 271 391

Mr. John Deromedi
P.O. Box 282
Meeteetse, WY 82433

Dear Mr. Deromedi:

Our records indicate your application for a permit to construct has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility Name:	<u>John's Vac & Water Service Shop Bldg.</u>
DEQ/WQD Reference Number:	<u>84-479</u>
Engineering Consultant:	<u>None</u>
DEQ/WQD Review Engineer:	<u>Steve Gerber</u>
Date of DEQ/WQD Review:	<u>October 9, 1984</u>

Please indicate below the status of your application and return this form to our office.

The application will not be resubmitted as the proposed project has been cancelled.

The application will be resubmitted within thirty (30) days.

The facility has been constructed, or is under construction. As built construction plans and specifications will be submitted within thirty (30) days.

Other Remarks: _____

You are reminded that the construction, installation, or modification of any sewage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes, and is punishable with a fine not to exceed \$10,000 for each day of violation. Unless the Water Quality Division review engineer receives information concerning the status of this project within fifteen (15) days of the receipt of this letter, follow-up action will be taken.

Sincerely,



Steven P. Gerber, P.E.
Water Quality Engineer

SG/jw

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 832-3144

PROJECT: John's Vac and Water Service Shop Building

ENGINEER: None

OWNER: John Deromedi
P. O. Box 282
1820 Wyoming Ave.
Meeteetse, WY 82433

WATER QUALITY DIVISION REFERENCE NUMBER: #84-479

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: October 9, 1984

ACTION: Not authorized.

COMMENTS: Thank you for your recent application for a Permit to Construct a septic system for your shop building. A system for a facility such as your shop building must be designed by a Wyoming registered professional engineer. Only septic systems for individual homes can currently be designed by the homeowner.

Some local engineers are available in the Cody area. You might try:

Engineering Associates
902 13th
Cody, WY 82414
Phone 587-4911

Graham, Dietz & Associates
1508 Stampede Ave.
Cody, WY 82414
Phone 587-3411

Holm, Blough & Company
1725 Sheridan Ave.
Cody, WY 82414

At this point, I will offer several comments for you and the engineer you select to consider:

ABC

Review of Plans and Specifications

John's Vac and Water Service Shop Building #84-479

October 9, 1984

Page Two

1. Will you be utilizing an oil trap in your shop? Oil wastes which wash out into a septic system can quickly ruin such systems.
2. You need to verify that all separation distance limits from adjacent property lines are met.
3. Will Schedule 40 PVC pipe be used for inlet/outlet pipe? You need to use Schedule 40 or heavier, to meet the regulations.
4. Who is the manufacturer of your septic tank?

EB:dcn

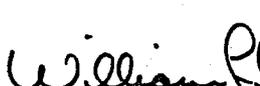
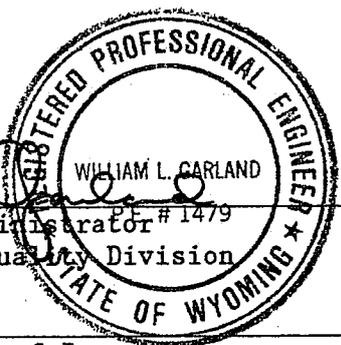
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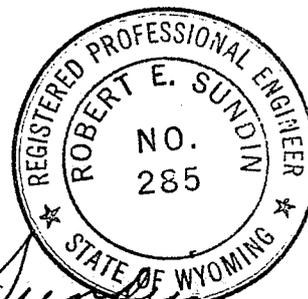
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AUTHORIZED BY:



WILLIAM L. CARLAND
Administrator # 1479
Water Quality Division
STATE OF WYOMING



ROBERT E. SUNDIN
NO. 285
STATE OF WYOMING
Director
Dept. of Environmental Quality

October 2, 1984

Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITIONS ON PERMIT *

1. After completing work on the holding tank installation, the Big Horn County Engineer is to be contacted and an inspection of the improvements arranged. Please contact Mr. Herb Jennerich at 568-2358 to arrange for the inspection.
2. This permit authorizes the applicant to utilize the holding tank facility for a period not to exceed six months after the date of issuance listed above.

EB:dcn

cc: U. S. agriculture Department, Forest Service, Paintrock District Office
Big Horn County Engineer--Herb Jennerich

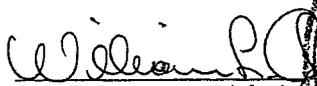
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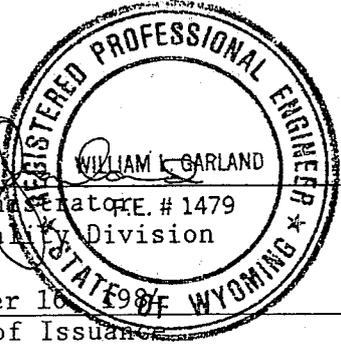
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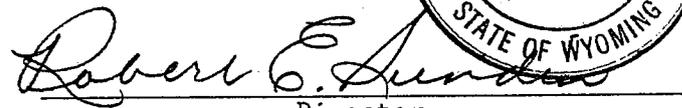
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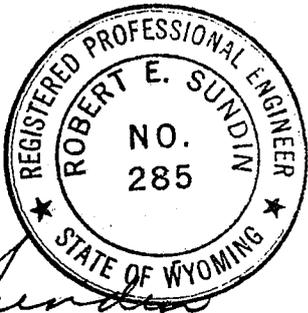
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AUTHORIZED BY:


Admin. # 1479
Water Quality Division
October 16, 1987
Date of Issuance




Director
Dept. of Environmental Quality



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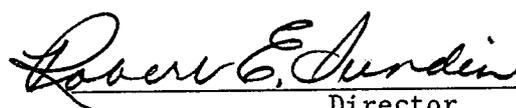
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AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator
Water Quality Division
STATE OF WYOMING
February 21, 1985
Date of Issuance


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: D. B. Poush
Shell Mining Company

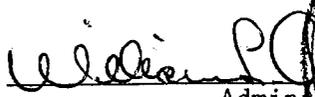
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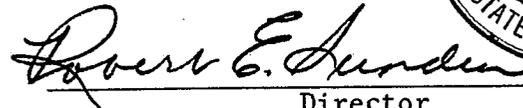
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AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division
STATE OF WYOMING
February 12, 1985
Date of Issuance


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: D. B. Poush
Shell Mining Company

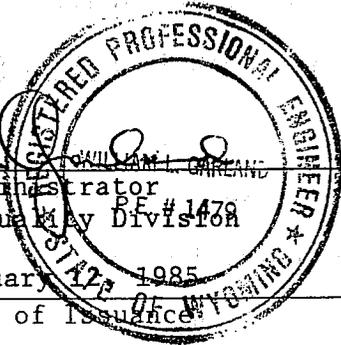
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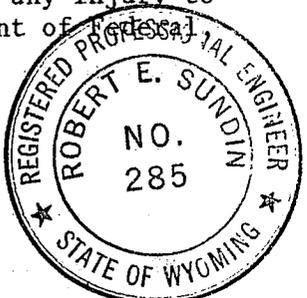
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AUTHORIZED BY:


William P. Poush
Administrator
Water Quality Division
February 1985
Date of Issuance


Robert E. Sundin
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: D. B. Poush
Shell Mining Company

213

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-485R

NORTH ROCHELLE WASTEWATER RESERVOIR NO. 2

(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Shell Mining Company
c/o Mr. J. F. Johnson
Mine Development Manager
P.O. Box 2906
Houston, Texas 77252

to construct, install, or modify a wastewater reservoir

_____ facility according to the procedures and conditions of the
 application No. 84-485R. The facility is located in Sec. 9, T.42N., R.70W.

_____ in the County of Campbell,
 in the State of Wyoming. This permit shall be effective for a period of five (5)
 years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and

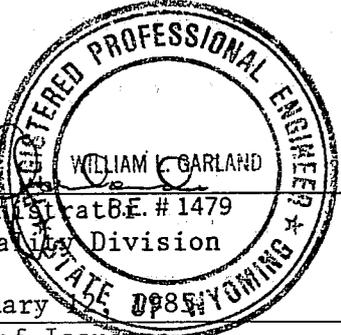
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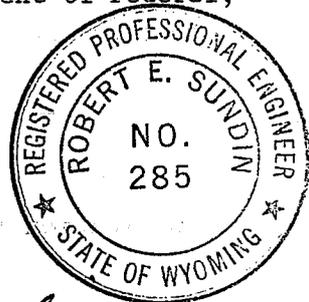
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AUTHORIZED BY:


William L. Garland
WILLIAM L. GARLAND
Administrative # 1479
Water Quality Division
February 1985
Date of Issuance


Robert E. Sundin
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: D. B. Poush
Shell Mining Company

during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming 82801; telephone, 672-6457.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



WILLIAM L. GARLAND
P.E. # 1479
Administrator
Water Quality Division
STATE OF WYOMING
April 1, 1985
Date of Issuance



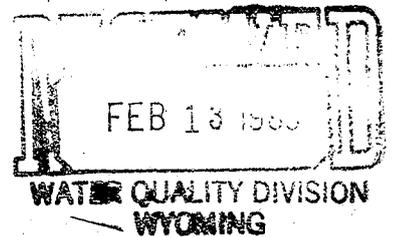
ROBERT E. SUNDEN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: D. B. Poush, Shell Mining Co.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
2161 COFFEEN AVE., SUITE 301
SHERIDAN, WYOMING 82801



PROJECT: North Rochelle Mine Sewage Disposal System

ARCHITECT OR ENGINEER: D. B. Poush
Shell Mining Company
P.O. Box 2906
Houston, Texas 77252

WATER QUALITY DIVISION
REFERENCE NUMBER: 84-486

REVIEWING ENGINEER: Rich Ruyle *RR*

DATE OF REVIEW: February 12, 1985

ACTION: Not Authorized

Sedimentation Reservoirs No. 1 and 2 and Wastewater Reservoirs No. 1 and 2 have been approved. Some questions remain on the sewage disposal system:

- 1.) Recently adopted Chapter XI of the Water Quality Division's regulations states that wastewater holding tanks will not be permitted except on a temporary basis (less than one year). Leach fields are considered less maintenance dependent and a less likely source of accidental sewage spills. Is there a reason that a holding tank rather than a leach field is proposed for the train loadout building?

If a temporary permit is issued for the tank, we will need a letter from the disposal facility receiving the wastewater stating that they are willing to accept it.

- 2.) Material specifications are needed for the sanitary sewer piping. A pipe specification is referred to on Exhibit 12, but I could not locate it.
- 3.) Schedule 40 PVC or cast iron must be specified for the inlet and outlet pipes to the septic, dosing, and holding tanks.
- 4.) I've located the water well and there is adequate separation between it and the septic system.
- 5.) I noticed construction trailers on Exhibit 10, Sheet 2. How will their wastewater be disposed of?

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
2161 COFFEEN AVE., SUITE 301
SHERIDAN, WYOMING 82801

PROJECT: North Rochelle Mine Reservoirs
and Sewage Disposal System

ARCHITECT OR ENGINEER: D. B. Poush
Shell Mining Company
P.O. Box 2906
Houston, Texas 77252

WATER QUALITY DIVISION
REFERENCE NUMBER: 84-482 through 84-486

REVIEWING ENGINEER: Rich Ruyle

DATE OF REVIEW: November 20, 1984

ACTION: Not Authorized

COMMENTS:

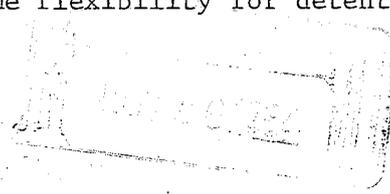
- 1.) The NPDES Discharge Permit issued for North Rochelle Mine requires that water in excess of the permanent pool capacity of sediment reservoirs be discharged within 10 days after meeting the applicable water quality standards.

Sediment Reservoir No. 1 should be able to meet this requirement rather than the 15 day pumping time listed on page 31.

- 2.) Sediment Reservoir No. 2 needs to be designed to completely contain the runoff from a 10 year, 24 hour storm, i.e. 139.61 ac.-ft. rather than the 111.3 ac.-ft. derived from the 24 hour theoretical detention time (p. 63). The outfall pipe should be valved or gated so that runoff can be held in the reservoir after a storm event to ensure its quality prior to any discharge.
- 3.) I am concerned that groundwater inflow to the pit may be greater than 75 gpm. How was this figure arrived at?

Have any jar tests been conducted to determine if a 5 day detention time for pit water will be sufficient to achieve the discharge permit limits?

Where does pit water pumpage enter Sediment Reservoir No. 2? Is there a possibility of short circuiting? This is another reason why the outfall pipe should be valved. It will provide some flexibility for detention time.



Review of Plans and Specifications
North Rochelle Mine, 84-482 - 84-486
November 20, 1984
Page Two

- 4.) Inner dikes of the Wastewater Reservoir should have a maximum slope of 3:1.
- 5.) On page 78 the sediment yield equation should have $LS = 0.31$ and $C = 0.44$. This is not very critical as the sediment yield is simply overestimated.
- 6.) A cross section drawing of the leach field showing the details of the trenches is needed. Is there five feet of absorption area per linear foot of trench?
- 7.) The sewer pipe to the holding tank should be six inches in diameter.

Please call me if you have any questions.

REQUEST FOR GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-482 through 84-486

DATE SUBMITTED FOR REVIEW 10/4/84

NAME AND LOCATION OF FACILITY North Rochelle Mine, Sedimentation Reservoir No. 1,
Sedimentation Reservoir No. 2, Wastewater Reservoir No. 1, Wastewater
Reservoir No. 2, and Sanitary Sewage Disposal System.

Rec'd in Chicago 10/9/84 m

COMMENTS _____

*No comments. A.D.M.
(Reviewed by Dick Lerner)*

Please return your comments to me by _____

SIGNED *A.S.H.*

DATE *10/2/84*

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 84-487

Casper College Water Supply Extension
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Casper College
125 College Dr.
Casper, WY 82601

to construct, install, or modify a municipal water distribution facility according to the procedures and conditions of the application No. 84-487. The facility is located in next to Performing Arts Building, Section 16, T33N, R79W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

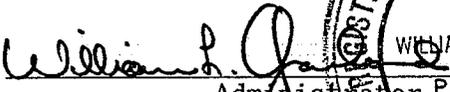
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

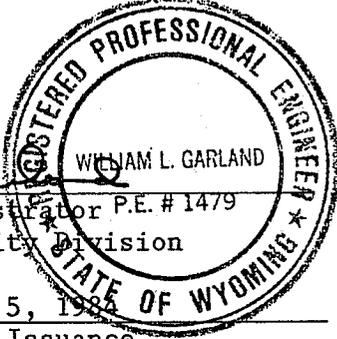
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

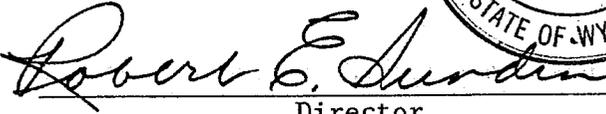
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:

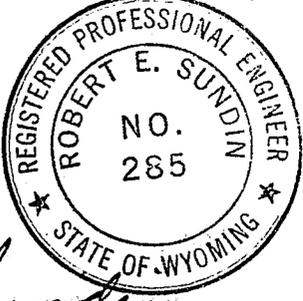


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division
OCTOBER 5, 1985
Date of Issuance





ROBERT E. SUNDEN
Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Patterson, Weber & Associates, P.C.
437 South Spruce
Casper, WY 82601

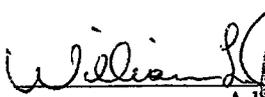
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

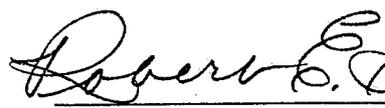
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



WILLIAM L. GARLAND
Administrator
Water Quality Division
P. O. Box 147
Cheyenne, WY 82002

October 5, 1984
Date of Issue



ROBERT E. SUNDIN
No. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING
Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

Before backfilling around the authorized improvements, the applicatn is required to contact the Fremont County Planner and arrange for his inspection. Please contact Mr. Ray Price at 332-5371 to schedule his review.

EB:dcn

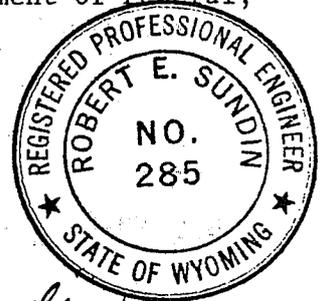
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

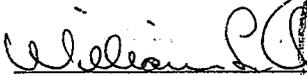
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming 82801; telephone, 672-6457.

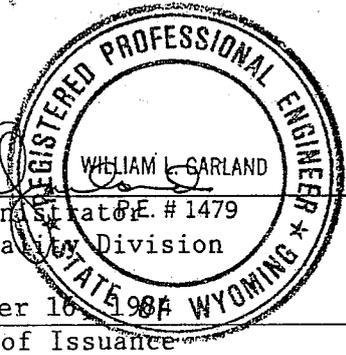
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

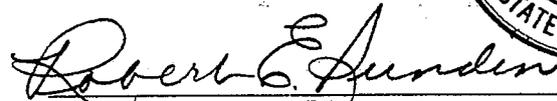
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:




WILLIAM L. GARLAND
Administrative # 1479
Water Quality Division
October 16, 1984
Date of Issuance

A circular seal for a Registered Professional Engineer. The outer ring contains the text "REGISTERED PROFESSIONAL ENGINEER" at the top and "STATE OF WYOMING" at the bottom, separated by two stars. The inner circle contains the name "WILLIAM L. GARLAND" and the number "# 1479".

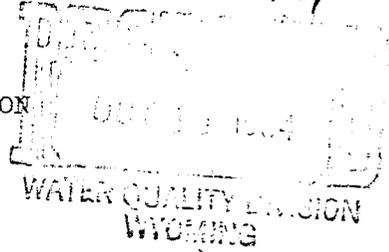

Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: Doyl Fritz
Western Water Consultants
P.O. Box 3042
Sheridan, WY 82801

Returned to TO: NORMA
Sheridan 10/15/84

REQUEST FOR GROUNDWATER SECTION
PERMIT APPLICATION REVIEW



APPLICATION NUMBER

84-489

(Ref. 84-282)

DATE SUBMITTED FOR REVIEW

10-9-84

NAME AND LOCATION OF FACILITY

WYODAK MINE Sediment Trap TS4-1 Reservoir, Section

22, T.50N., R.71W., Campbell County

COMMENTS

rec'd in Cheyenne 10/11/84 re

No com. with
T.M.

Please return your comments to me by

SIGNED

Bob Ruyb.

DATE

10-10-84

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 84-490
SEE SPECIAL CONDITIONS

DRW, Inc. - Office-Shop Building
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

DRW, Inc.

P.O. Box 338

Pine Bluffs, WY 82082

to construct, install, or modify a subsurface wastewater treatment and disposal system facility according to the procedures and conditions of the application No. 84-490. The facility is located in Section 15, T14N, R60W in the County of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

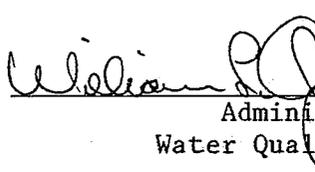
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

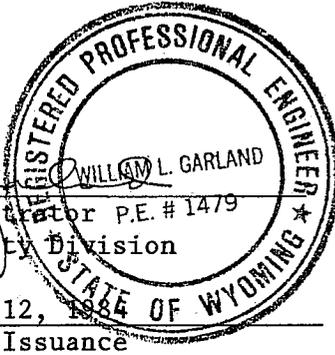
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

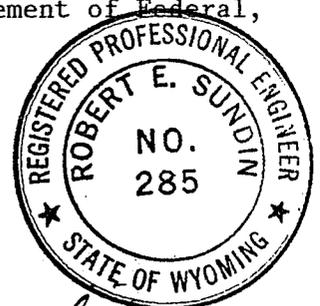
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division
October 12, 1984
Date of Issuance




Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

Condition to Permit to Construct

1. The trenches shall have a minimum of 12-inches of clean stone below the perforated pipe.
2. The permittee shall notify the Laramie County Environmental Health Unit of the estimated day construction will commence and the estimated day of completion of this project. Inspection of the installed system is required prior to backfilling. The authorized representative in your area can be contacted at the following address:

Don Pack, Laramie Co. Environmental Health, 1700 Snyder Ave., Cheyenne, WY 82001
Telephone: 638-8545

cc: Donald M. Hopkins
D.M. Hopkins & Associates
216 East 17th Street
Cheyenne, WY 82001



Amoco Production Company

Post Office Box 829
Evanston, Wyoming 82930
307-789-1700

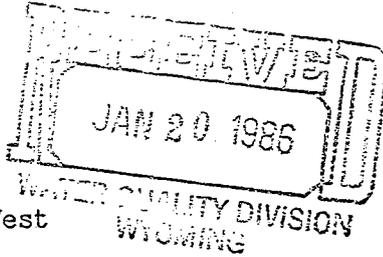
GPC84-491RR

T. G. Doss
District Manager

Certified Mail
P 183 182 319

January 15, 1986

Tom Williams
DEQ Water Quality
Herschler Building, 4 West
Cheyenne, WY 82002



File: VEP-24-986.

Notification of Use of Injection Well
Whitney Canyon GPC 84-491 RR

Pursuant to requirements of your department, Amoco would like to notify your office of commencement of injection at its Injection Well #2, GPC 84-491 RR, at Whitney Canyon. At 10:00 a.m. on January 13, 1986, the well was put into service. Advance notice for injection provided to your office by Kathy Bauman on January 10, 1986.

Please contact Kathy Bauman if you have any questions regarding this matter.

T.G. Doss
T.G. Doss

KAB/ml1

late



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

June 12, 1985

T. G. Doss
District Superintendent
Amoco Production Company
P. O. Box 829
Evanston, WY 82930

RE: Amoco Whitney Canyon Gas Plant Disposal Well #2, Uinta County, Permit
GPC 84-491RR

Dear Mr. Doss:

This letter will acknowledge the documentation of the mechanical integrity test performed on the Amoco Whitney Canyon Gas Plant Disposal Well #2. The results of the mechanical integrity testing are acceptable to the Water Quality Division, and the requirement of Section K (mechanical integrity) in permit GPC 84-491RR is satisfied.

The cement bond log along with other mechanical integrity information indicate that the well construction complies with the minimum standards for cementing strata as described in Water Quality Division Rules and Regulations, Chapter XI, Part G, Section 68. To verify that the injected fluid is being contained within the designated injection zone, the results of a recent radioactive tracer/temperature survey or other approved geophysical survey should be submitted to the administrator on an annual basis. This information may be included in the annual report required in Section I of the GPC permit.

Based on the water analysis report of the Nugget Formation water sample collected April 22, 1985, water in the injection zone is classified as Class VI.

Approval is granted to commence injection.

Sincerely,

William L. Garland, P.E.
Administrator

WLG/KL/pjb

cc: Tom Williams, DEQ/WQD
Paul Osborne, EPA, Denver
Don Basko, OGCC, Casper
Don Judice, BLM, Rock Springs



THE STATE OF WYOMING

4-2-85

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 27, 1985

Mr. T. G. Doss
District Superintendent
Amoco Production Company
P.O. Box 829
Evanston, WY 82930

RE: Permit GPC 84-491RR

Dear Mr. Doss:

Enclosed is the signed permit for the operation of the Whitney Canyon Gas Plant Disposal Well #2 (Federal 1-20EA) located in the SE1/4 NE1/4 Section 20, T17N, R119W, Uinta County Wyoming.

Please note the following:

1. The disposal operation must commence within one year from the date the permit is issued, or the permit is not valid.
2. Injection may not commence until construction is complete and well mechanical integrity has been demonstrated to the satisfaction of the Administrator of the Water Quality Division (WQD). An injection well has mechanical integrity if there is no significant movement of injected fluid into an underground source of usable water through vertical channels adjacent to the injection well bore. The absence of leaks will be determined by an acceptable pressure test.

The absence of significant fluid movement may be determined by the results and interpretations of appropriate geophysical log(s) such as cement-bond, temperature, noise, or other log, or combination of logs.

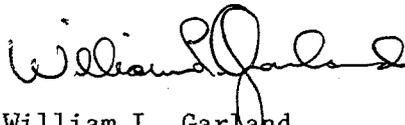
Please provide the WQD with sufficient advanced notice so that a WQD representative may witness the test if desired by WQD. Written results shall be provided the WQD as soon as the results are available.

3. Form GPC 9, Notice of Completion of Well Construction, is also enclosed. Please read this form carefully before submitting it to the WQD.

Mr. T. G. Doss
March 27, 1985
Page 2

4. Permittee shall notify the Administrator, or his representative, 48 hours before injection is to start; and shall provide written notification within seven (7) days after injection commences, of the date and time of commencement (a permit requirement).
5. Required analytical data shall be reported quarterly, within thirty (30) days after the end of the reporting period, to the Groundwater Section of the Division (a permit requirement). The first report will be due within 30 days of the end of the quarter in which injection commences.
6. Average and maximum daily injection rate (volume) and pressure shall be reported on a monthly basis; accumulative injection volume shall be reported at the same time (a permit requirement). The first monthly report is due within 30 days of the end of the month in which injection commences.
7. Also enclosed with this letter are several copies of form GPC 7 which must accompany the submittal of information to the Division/Section. This form can be reproduced, or additional copies may be requested as needed. Note Signatories Requirement in the Permit (Section Q). If an authorized representative is to sign the form, a principal executive officer of at least the level of vice-president must make a written authorization as described in Section Q of the Permit.

Sincerely,



William L. Garland
Administrator

WLG/KL/nc
Enclosures

cc: Mark Bingham, Amoco Production Co.

Mr. T. G. Doss
March 27, 1985
Page 2

4. Permittee shall notify the Administrator, or his representative, 48 hours before injection is to start; and shall provide written notification within seven (7) days after injection commences, of the date and time of commencement (a permit requirement).
5. Required analytical data shall be reported quarterly, within thirty (30) days after the end of the reporting period, to the Groundwater Section of the Division (a permit requirement). The first report will be due within 30 days of the end of the quarter in which injection commences.
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7. Also enclosed with this letter are several copies of form GPC 7 which must accompany the submittal of information to the Division/Section. This form can be reproduced, or additional copies may be requested as needed. Note Signatories Requirement in the Permit (Section Q). If an authorized representative is to sign the form, a principal executive officer of at least the level of vice-president must make a written authorization as described in Section Q of the Permit.

Sincerely,

William L. Garland
Administrator

WLG/KL/nc
Enclosures

cc: Mark Bingham, Amoco Production Co.

bcc: BLM, Don Judice, P.O. Box 1869, Rock Springs, WY 82902
EPA, ATTN: Paul Osborne
State Engineers Office
Oil & Gas Commission, Casper
Jack Bedessem, DEQ/WQD, Lander
Tom Williams, DEQ/WQD
A. J. Mancini, DEQ/WQD
2 file copies

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF WYOMING

GROUNDWATER POLLUTION CONTROL PERMIT
AUTHORIZATION TO DISCHARGE INTO UNDERGROUND RECEIVERS
(Permit to Inject)

(X) New

Permit Number:

() Modified

GPC 84-491RR
Class I

In compliance with the Wyoming Environmental Quality Act (W.S. 35-11-101 through 1104, specifically 301(a)(i) through (iv), Laws 1973, Ch. 250, Section 1) and Water Quality Rules and Regulations Chapter IX (September 4, 1980),

Amoco Production Company
ATTN: T.G. Doss, District Manager
P.O. Box 829
Evanston, WY 82930

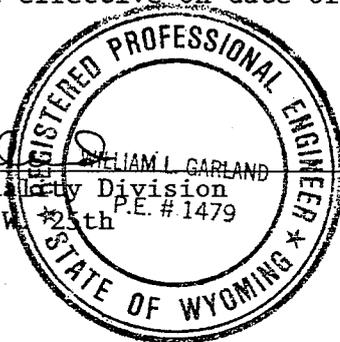
is authorized to operate

the Whitney Canyon Gas Plant Disposal Well #2 (Federal 1-20EA) located in the SE1/4 NE1/4 Section 20, T17N, R119W, Uinta County for the sub-surface disposal of industrial wastes

according to procedures and conditions of the application GPC 84-491RR and requirements and other conditions of this permit.

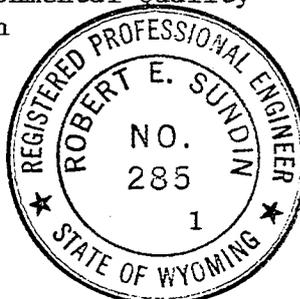
This permit shall become effective on date of issuance.

William I. Garland
Administrator - Water Quality Division
Herschler Building, 122 W. 25th
Cheyenne, WY 82002
Phone: (307) 777-7781



March 27, 1985
Date

Robert E. Sundin
Director - Department of Environmental Quality
Herschler Building, 122 W. 25th
Cheyenne, WY 82002



April 1, 1985
Date

A. Discharge (Injection) Zone and Area of Review

Injection is authorized into the Nugget Formation through perforations 11,926-11,972, 12,034-12,184, 12,216-12,344, 12,406-12,498, and 12,576-12,728 feet beneath the land surface. Injection and disposal into any other interval is prohibited, unless following a request by the Permittee, written approval is received from the Administrator, authorizing injection and disposal through additional perforations into the Nugget Formation.

The area of review calculated by the permittee is an area within the circle having a radius of one quarter mile from its center, the Whitney Canyon Disposal Well #2, for a projected life of 20 years.

B. Groundwater Classification

The groundwater in the injection zone will be classified as Class VI prior to injection.

1. Water quality analysis from another injection well completed in the Nugget Formation in the Whitney Canyon area indicates a sodium concentration of 15,810 mg/l, a chloride concentration of 29,900 mg/l, and a total dissolved solids concentration of approximately 49,100 mg/l. A formation water sample will be collected by the applicant, and analyzed to determine its compatibility with the disposal fluid. Results of the analysis will be verified by the Water Quality Division before injection is authorized.
2. The injection zone is located at sufficient depth so as to make normal use economically and technologically impractical.

C. Authorized Operations

The permittee is authorized to inject into this well in addition to an existing disposal well (Whitney Canyon Gas Plant Disposal Well #1, located in the NW1/4 SE1/4 Section 18, T17N, R119W, Uinta County) industrial wastes consisting of waste from raw water treatment, boiler blowdown, condensate wash water, DEA and TEG solution, and produced water from oil and gas production into the Nugget Formation between a depth of 11,926 feet and 12,728 feet. SIC 492, SIC 13, SIC 495 (as determined by the Water Quality Division). The total amount of produced and waste water permitted for disposal is 6400 B/D.

The industrial wastewater stream will be injected at a maximum rate of 63,000 gpd (1500 b/d); and will include:

1. Raw water treatment wastes from regeneration of softeners and dealkalizers, average 11.1 gpm; sodium chloride, 3062 lbs/day; and suspended solids from sand filter backwashing, maximum 6000 gal/week. Maximum injection rate for raw water treatment wastes is 16,810 gpd.

2. Boiler blowdown: 29 gpm maximum containing:

TDS	1260-1500 ppm
Sodium & Potassium	1107 ppm
Chloride	1048 ppm
Sulfate	173 ppm
Sodium Sulfite	38 ppm
Caustic (NaOH)	25 ppm
Magnesium Hydroxide	1-3 ppm
Calcium	1 ppm
Magnesium	1 ppm

3. Condensate wash water will contribute approximately 3 gpm to the wastewater stream.

4. Diethanolamine (DEA) is used to sweeten the gas in the plant. Approximately 10 gpd of DEA will become part of the wastewater stream.

5. Triethylene glycol (TEG) is used in the gas dehydration system. Approximately 1 gpd of TEG will become part of the wastewater stream.

The maximum amount of plant wastewater to be injected is 63,000 gpd (1500 B/D):

Raw water treatment wastes	16,810 gpd
Boiler blowdown	41,859 gpd
Condensate wash water	4,320 gpd
DEA solution	10 gpd
TEG solution	1 gpd

Analyses of the wastewater stream of 63,000 gpd:

Sodium Chloride	7716 mg/l
Sodium Potassium Chloride	736 mg/l
Chloride	696 mg/l
Hydrogen Sulfide	331 mg/l
Sulfate	115 mg/l
DEA Solution	48 mg/l
Sodium Sulfite	25 mg/l
Caustic (NaOH)	16 mg/l
TEG Solution	50 mg/l
Magnesium Hydroxide	.7-2.0 mg/l
Calcium	.7 mg/l
Magnesium	.7 mg/l

The total combined injection rates of Whitney Canyon Gas Plant Disposal Well #1 and Well #2 shall not exceed 6400 barrels per day including water produced with the gas without written approval of the Administrator of the Water Quality Division.

Permittee shall not modify operations such that the resulting waste stream will include new constituents or increase concentrations of existing constituents without prior written approval from the Administrator.

Permit GPC 84-340 authorizes the injection of effluent from the on-site domestic sewage treatment facility into Whitney Canyon Gas Plant Disposal Well #1 according to specific permit requirements and provisions. If domestic waste is also injected into Whitney Canyon Gas Plant Disposal Well #2, the identical provisions and requirements of permit GPC 84-340 shall apply in all respects including environmental monitoring and reporting.

The maximum injection pressure shall not exceed 2500 psig at the surface, unless data from the proposed step rate test and temperature log indicate that injection fluids are not retained within the disposal aquifer.

The permittee shall notify the Administrator of the Water Quality Division, or his representative, 48 hours before injection is to start. The permittee shall provide written notification within seven (7) days after injection commences, of the date and time of commencement.

D. Proper Operation and Maintenance

The permittee is required to conduct the operation in accordance with statements, representations and procedures presented in the complete permit application and supporting documents, as accepted and approved by the Administrator.

The permittee is required at all times to properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve permit compliance. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training and adequate laboratory and process controls, including appropriate quality assurance procedures.

The subsurface discharge (injection) authorized by permit shall be consistent with the conditions and content of the permit; any modifications which will result in a violation of permit conditions shall be reported by submission of a new or amended permit application and shall not be implemented until a new or modified permit has been issued.

E. Entry and Inspection

The permittee shall allow the Administrator, or an authorized representative, upon the presentation of credentials and other documents as may be required by law, to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate rules and regulations of the Department, any substances or parameters at any location.

F. Environmental Monitoring Program for Groundwaters of the State

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittee shall prepare records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation to be retained for a period of at least three (3) years after closure of the facility.
3. Records of monitoring information shall include:
 - a. The date, exact place, and time of sampling or measurements;
 - b. The name(s) of individual(s) who performed the sampling or measurements;
 - c. The date(s) analyses were performed;
 - d. Names of individuals who performed the analyses;
 - e. The analytical techniques or methods used; and
 - f. The results of such analyses.
4. The prescribed program for this permitted activity is as follows:

The control of injection fluid movement will be monitored through the well mechanical integrity evaluation during completion and at least once every five years. Pressure gauges along with continuous recording devices will be installed to measure injection pressure and annulus pressure. Continuous evaluation will be made on flow rate and injection volume.

G. Requirements for Monitoring the Discharge

Discharge (injection) volume and/or pressure shall be controlled and monitored to prevent fracturing of confining strata. Injection pressure, annulus pressure, flow rate and injection volumes will be monitored continuously.

Average and maximum daily injection rate (volume) and pressure shall be reported on a monthly basis. Accumulative injection volume shall be reported at the same time.

The wastewater shall be sampled just before being injected, and analyzed quarterly. Parameters at a minimum shall include:

Sodium	TEG
Chloride	Sulfate
Hydroxide	Calcium
Hydrogen Sulfide	Magnesium
DEA	TDS

Analytical results shall be reported quarterly. The report shall contain the information specified in section F.3 of this permit. All data shall be reported within thirty (30) days after the end of the reporting period to the groundwater section of the Water Quality Division.

H. Test Procedures

Test procedures for the determination of water quality parameters and constituents shall be in accord with provisions of Water Quality Rules and Regulations Chapter VIII, Section 7.

I. Records and Reports

1. The permittee shall retain copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the report or application.
2. The permittee shall give notice to the Administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
3. The permittee shall give advance notice to the Administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
4. Monitoring results shall be reported at intervals specified elsewhere in the permit.
5. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
6. The permittee shall report any noncompliance which may endanger health or the environment, orally within 24 hours from the time the permittee becomes aware of the circumstances. The report should include:

- a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable Groundwater of the State.
- b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable Groundwaters of the State.

A written submission shall be provided within five (5) days of the time the permittee becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted; such reports shall contain the information listed in 6. above.
8. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Administrator, it shall promptly submit such facts or information.
9. The permittee shall retain all records concerning the nature and composition of injected fluids until five (5) years after completion of any specified plugging and abandonment procedures. The Administrator may require the owner/operator to deliver the records to the Administrator at the conclusion of the retention period.
10. A subsurface discharge (injection) well may not commence subsurface discharge (injection) until, following public notice and an opportunity for hearing, a Groundwater Pollution Control Permit has been issued by the Department for the proposed operation, and:
 - a. Well construction is complete and the permittee has submitted notice of completion of construction to the Administrator, and
 - b. The Administrator has inspected or otherwise reviewed the subsurface discharge (injection) well and finds it in compliance with the conditions of the permit; or the permittee has not received notice from the Administrator of intent to inspect or otherwise review the facility within thirteen (13) days of the notice of a. above, in which case prior inspection or review is waived, and
 - c. Well mechanical integrity testing has been proven or demonstrated to the satisfaction of the Administrator.
11. Annual reports shall be submitted to the Administrator by February of the following year.

12. A comprehensive report for an aborted or curtailed operation authorized by this permit shall be submitted to the Administrator within thirty (30) days of complete termination of the injection (discharge) or associated activity, in lieu of an annual report.

J. Permit Actions

After notice and opportunity for a hearing, a permit may be modified, suspended or revoked in whole or part during its term for cause which includes, but is not limited to, any of the following:

1. Violation of the permit;
2. Obtaining a permit by misrepresentation or failure of the discharge well or system.

Each permit is reviewed at least once every five (5) years, and may be reviewed more frequently.

A permit may be modified at any time as may be required, including for conformity with changes in regulations or standards which occur after the permit is issued.

A permit may be modified in whole or part in order to apply more, or less, stringent standards; or prohibitions for a toxic or other substance present in the permittee's discharge, as may be ordered by the Council.

This operation (permit) can be terminated by authority of the Administrator for one or more permit violations.

Public notice of the permit review and request for public comment will be made every ten (10) years by the Administrator.

K. Mechanical Integrity

Each discharge well and associated discharge facilities is required to have mechanical integrity which demonstrates the unimpaired condition of the well and facilities. The approved procedures for demonstrating the mechanical integrity for the well and facilities handling the discharge authorized by this permit consist of:

At a minimum every five (5) years and more frequently if required by the Department of Environmental Quality, Water Quality Division, the permittee shall demonstrate the continued sound and unimpaired condition of all components of the injection well by well mechanical integrity testing. An injection well has mechanical integrity if there is no significant leak in the casing, tubing or packer; and there is no significant movement of injected fluid into an underground source of usable water through vertical channels adjacent to the injection well bore. The absence of leaks will be determined by an acceptable pressure test. Permittee shall provide the Water Quality Division sufficient advance notice so that a Water Quality Division representative

may witness the test if desired by the Water Quality Division. Written results shall be provided the Water Quality Division as soon as results are available.

The absence of significant fluid movement will be determined by the results and interpretation of appropriate geophysical log(s), such as a cement-bond, temperature, noise, or other log, or combination of logs.

Adequate mechanical integrity testing of the tubing, and packer-annulus, meaning testing at a pressure at least equal to the maximum proposed injection pressure, shall be conducted by the permittee prior to commencement of injection, and testing results shall be documented to the Water Quality Division as soon as results are available. Injection is not permitted before the Water Quality Division has informed the permittee that the results of the mechanical integrity testing are acceptable.

TD: 16,434 feet below datum
Casing: 30" Conductor Pipe, Surface to 101'
13-3/8", 72#/ft, S-80, ST&C, Surface to 2507'
9-5/8", 47 & 53.5#/ft, SS-95, LT&C, Surface to 6873'
9-7/8", 62.8#/ft, S-95 & S105, LT&C & Butt, 6873' to 10195'
7" liner 32#/ft, SS-95, LT&C, 9753' to 13755'
5" liner, 18#/ft, L-80, FL-4S, 13055' to 16434'
Tubing: 3-1/2" tubing will be tripped into the hole and stung into the packer at 11,800 ft.
Perforations: 11926' - 11972'
12034' - 12184'
12216' - 12344'
12406' - 12498'
12576' - 12728'

The operation (discharge) of any well or system will terminate immediately if mechanical integrity of the well or system fails and/or a leak or unauthorized fluid movement occurs. The discharge shall be discontinued until mechanical integrity has been restored and permission to continue the discharge has been obtained from the Administrator.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit.

L. Abandonment

The permittee shall notify the Administrator at least 180 days before well abandonment. Immediately following the permanent cessation of subsurface discharge or related activity, or where a well has not been completed, the appli-

cant/permittee shall notify the Director and follow the procedures prescribed by the Director for plugging and abandonment or the discontinuance of related activities:

Water Quality Division abandonment requirements shall be coordinated with requirements of the Wyoming Oil and Gas Conservation Commission.

Water Quality Division requires at a minimum that the injection zone be permanently isolated from overlying and underlying aquifers; that interaquifer communication be permanently prohibited; and that the well be permanently secured against the injection or disposal of anything after abandonment.

M. Duties of the Permittee

It is a duty of the permittee to:

1. Comply with all permit conditions;
2. Halt or reduce activity -- it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the permit conditions;
3. Take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit;
4. Furnish to the Administrator within a reasonable time, any information which the Administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit; and furnish to the Administrator, upon request, copies of records required to be kept by this permit.

N. Financial Responsibility

The permittee is required to maintain financial responsibility and resources in form approved by the Director, to close, plug and abandon the discharge operation in a manner prescribed by the Director.

The required Certification of Financial responsibility has been submitted by the permittee.

O. Special measures the Director finds necessary:

The permitted activity must commence within one year of the issuance date of the permit or the permit will be invalid.

P. Special permit conditions:

Pollution or waste which migrates into an aquifer containing a usable groundwater of the State is a violation of the permit.

Mechanical integrity -- operations terminate immediately if mechanical integrity of well or system fails and/or a leak or unauthorized fluid movement occurs.

Q. Signatories Requirement

All reports required by this permit and other requested information shall be signed as follows:

For a corporation -- by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;

For a municipality, State, Federal or other public agency -- by either a principal executive officer or ranking elected official; or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the described principals;
2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to or together with any reports or information, to be signed by an authorized representative.

Any person signing a report or other requested information shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

R. Noncompliance

Any permit noncompliance constitutes a violation of the permit.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification or planned changes or anticipated noncompliance, does not stay any permit condition.

S. Permit Transfer

The owner/operator of record (permittee) is always responsible for permit compliance. A permit holder cannot transfer his permit without approval of the Department Director.

T. Responsibilities

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

U. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

V. Severability

The provisions of this permit are severable, and if any provision of the permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

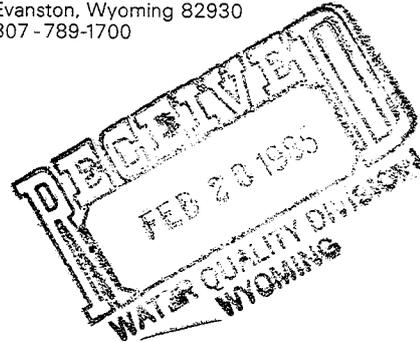
GPC 84-491RR



Amoco Production Company

Post Office Box 829
Evanston, Wyoming 82930
307-789-1700

T. G. Doss
District Manager



February 27, 1985

Katherin J. Laudon
Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building
122 W. 25th Street
Cheyenne, WY 82002

File: VEP-86-501.61/WF

Discharge Permit GPC 84-491
Federal 1-20EA
Section 20, T17N, R119W
Whitney Canyon Field
Uinta County, Wyoming

A review of the draft permit GPC 84-491 for authorization to discharge into the Nugget formation in the Federal 1-20EA has been conducted. The draft permit, along with recommended revisions, is attached for your consideration. In general, we find the permit acceptable and in order. If there are any questions concerning the revisions or the Federal 1-20EA, please contact Mark D. Bingham at (307) 789-1700, extension 2306.

T. G. Doss
T. G. Doss

MDB/jkb

Attachment

M-2-13-85



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

*Department of Environmental Quality
Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

February 12, 1985

Mr. T. G. Doss
District Manager
Amoco Production Company
P.O. Box 829
Evanston, WY 82930

RE: Permit GPC 84-491RR Whitney Canyon Gas Plant Disposal Well #2

Dear Mr. Doss:

Enclosed for your review are copies of the Public Notice and the draft permit for Whitney Canyon Gas Plant Disposal Well #2. Copies have been sent to all surface owners and lease owners and operators listed in your December 7, 1984 letter as well.

If you have any comments or questions, please address them to me.

Sincerely,

Katherine J. Laudon
Groundwater Engineering Evaluator

KJL/nc
Enclosures

cc: Mark Bingham, Amoco Production Company (w/enclosures)

Copies of the attached letter went to the following:

Uinta Livestock Grazing
Partnership
Attn: Wayne Rees
Woodruff, Ut 84086

State of Wyoming
Commissioner of Public Lands
Herschler Building, 3 West, 122 W. 25th
Cheyenne, WY 82002

Uinta Land and Grazing Co.
Attn: Mr. Wayne J. Kennedy, Jr.
Randolph, Ut 84064

Bureau of Land Management
Rock Springs District Office
P.O. Box 1869
Rock Springs, WY 82901

Conoco, Inc.
555 17th Street
Denver, CO 80202

Mr. Frank McAtee
Champlin Petroleum Co.
P.O. Box 1257
Englewood, CO 80150

Mr. Dick Stockdale
State Engineer's Office
Herschler Building, 4 East, 122 West 25th
Cheyenne, WY 82002

Mr. Donald B. Basko
State Oil and Gas Supervisor
Oil and Gas Conservation Commission
P.O. Box 2640
Casper, WY 82602

Mr. Paul Osborne
U.S. EPA Region VIII
1860 Lincoln Street
Denver, CO 80295

84-491/t

*TASK
*EOTASK
ATTNclear

February 12, 1985

#1
#2
#3
#4

RE: WDEQ/WQD Permit GPC 84-491RR Whitney Canyon Gas Plant Disposal Well #2

Dear #5:

Enclosed for your review are copies of the Public Notice and the draft permit for Whitney Canyon Gas Plant Disposal Well #2. If you have any comments or questions please address them to me:

Katherine J. Laudon
Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building, 4 West, 122 West 25th
Cheyenne, Wyoming 82002
Phone: 307-777-7781

Sincerely,

Katherine J. Laudon
Groundwater Engineering Evaluator

KJL/nc
Enclosures

11-19-84



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

November 19, 1984

Mr. T. G. Doss
District Manager
Amoco Production Company
P.O. Box 829
Evanston, WY 82930

RE: Permit GPC 84-491

Dear Mr. Doss:

Enclosed are review comments for Groundwater Pollution Control Permit 84-491. This number has been assigned to the application for a second disposal well at the Whitney Canyon Plant.

The State Engineer's Office and the Department of Environmental Quality, Water Quality Division, have reviewed the permit application. The EPA is also reviewing the application, but we have not received their comments. Because the Nugget Formation is known to be hydrocarbon bearing within the Whitney Canyon-Carter Creek area, the Oil and Gas Conservation Commission will review the permit application during their December hearings.

Before we can consider your permit application complete, the following comments should be addressed:

1. The permit application shows that the property surrounding the disposal well site was under ownership lease to Chevron U.S.A. Inc. until August 31, 1984. What is the current ownership status of the well site?
2. Please provide this office with written verification that the owners of oil and gas leases, operators of leases and surface owners located within 1/2 mile radius of the well site have been notified of Amoco's intention to convert Federal I-20EA to a disposal well.
3. The application indicates that two domestic wells are permitted to Amoco in Section 18 northwest of the area of review. Is this aquifer present within the area of review, and if so what steps will be taken to insure its protection?

C

Mr. T. G. Doss
November 19, 1984
Page 2

Additional review comments will be forwarded to you when we receive them from the EPA and the Oil and Gas Conservation Commission.

Sincerely,

Katherine J. Laudon

Katherine J. Laudon
Groundwater Engineering Evaluator

KJL/nc

cc: Donald Basko, Oil & Gas Conservation Commission
EPA
Richard Stockdale, State Engineer's Office

Normal



THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

*Department of Environmental Quality
Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

October 16, 1984

Mr. T. G. Doss
District Manager
Amoco Production Company
P.O. Box 829
Evanston, WY 82930

RE: Application for a subsurface discharge (injection) permit, DEQ/WQD
Ref. No. 84-491

Dear Mr. Doss:

We have received an application for a subsurface discharge (injection) permit for the Amoco Federal 1-20EA (Whitney Canyon Water Disposal Well #2), in Uinta County, Wyoming. Three copies of the application, Form GPC 4, have been received; however, only one copy of the supporting documentation has been received.

Please submit two more copies of all supporting documents as soon as possible so the application can be considered complete.

Sincerely,

A.J. Mancini

A.J. Mancini
Groundwater Control Supervisor

AJM/nc

cc: Mark D. Bingham
Amoco Production Company
P.O. Box 829
Evanston, WY 82930

PERMIT TO CONSTRUCT

New

Permit No. 84-492

Renewal

Modified

First Street Water Main
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Cheyenne Board of Public Utilities

P.O. Box 1469

Cheyenne, WY 82001

to construct, install, or modify a potable water main facility according to the procedures and conditions of the application No. 84-492. The facility is located in Third Street between Walterscheid Blvd. and Thomes Avenue and Deming Drive between Capital Ave. and House Ave., Sections 5 and 6, T13N, R66W in the County of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

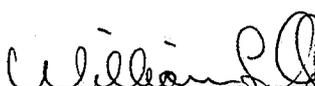
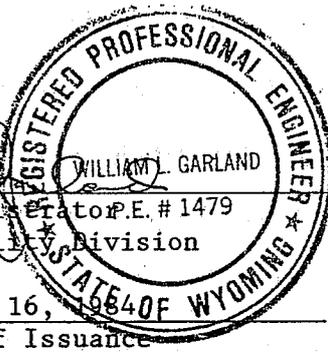
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

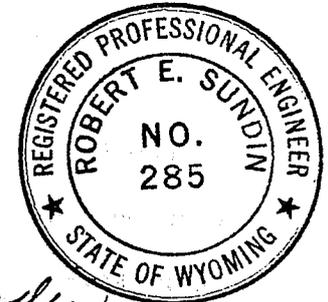
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division
OCTOBER 16, 1984
DATE OF ISSUANCE



ROBERT E. SUNDIN
Director
Dept. of Environmental Quality


This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Joseph E. Kub
Kub Engineering
1750 Westland Road
Cheyenne, WY 82001

THE STATE



OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

2161 COFFEEN AVENUE,
SUITE 301

SHERIDAN, WYOMING 82801

TELEPHONE 307-672-6457

October 17, 1984

Michael G. McDill
McDill Engineering
400 West Boxelder
Gillette, Wyoming 82716

RE: Antelope Hills Mobile Home Park
WQD Reference Number 84-493

Dear Mike:

In accordance with your telephone request of October 16, 1984, we have with-
drawn from our files the application for a Permit to Construct for the above
referenced project.

Enclosed are the materials for this project which were submitted to our
office.

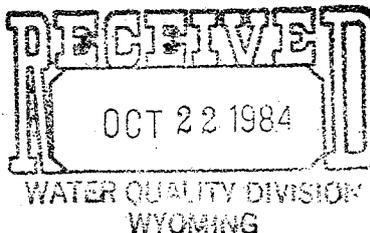
Sincerely,

A handwritten signature in cursive script that reads "Rich Ruyle".

Rich Ruyle
District Supervisor

RR:ls

xc: Norma Coulson



PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-494R

Wyoming Army National Guard
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Cheyenne Board of Public Utilities

2100 Pioneer Avenue

Cheyenne, WY 82001

to construct, install, or modify a sanitary sewer facility according to the procedures and conditions of the application No. 84-494R. The facility is located in Section 24, T14N, R67W in the County of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

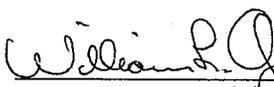
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

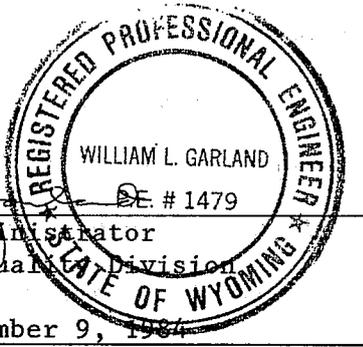
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

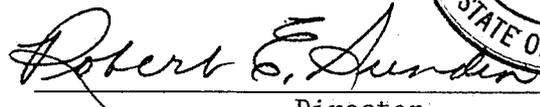
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:

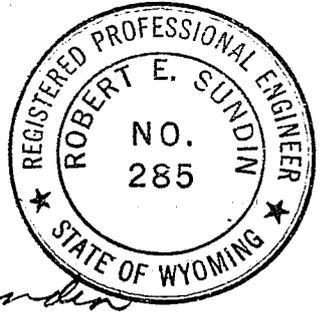


WILLIAM L. GARLAND
D.E. # 1479
Administrator
Water Quality Division
STATE OF WYOMING





ROBERT E. SUNDEN
Director
Dept. of Environmental Quality



November 9, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: Joseph E. Kub
Kub Engineering
1750 Westland Road
Cheyenne, WY 82001

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
1111 East Lincolnway
Cheyenne, Wyoming 82002

PROJECT: AML Project #7, Part III, Phase I, Carbon Co.

ARCHITECT OR ENGINEER: Jim Voeller, AVI
1700 Westland Road, Cheyenne, WY 82001

APPLICANT: Land Quality Division, c/o Kurt Anselmi
Herschler Bldg., 3rd Floor West, Cheyenne, WY 82002

WATER QUALITY DIVISION REFERENCE NUMBER: 84-495

REVIEWING ENGINEER: Thomas S. Norman *T.S. Norman*

DATE OF REVIEW: October 16, 1984

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

The DEQ/WQD has reviewed the plans and has determined that a permit to construct is not required.

Plans returned to Eng.

PERMIT TO CONSTRUCT

New

Permit No. 84-496

Renewal

Modified

Silvergate Addition, 4th Filing
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Cheyenne Board of Public Utilities

P.O. Box 1469

Cheyenne, WY 82001

to construct, install, or modify a potable water distribution system and sewage collection facility according to the procedures and conditions of the application No. 84-496. The facility is located in Section 33, T14N, R66W in the County of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

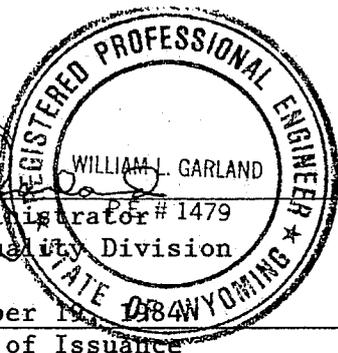
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

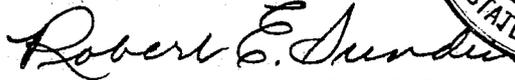
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

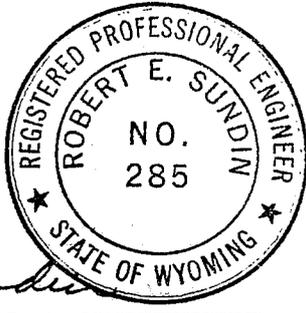
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator # 1479
Water Quality Division
October 19, 1984
Date of Issuance




Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

cc: James D. Voeller
A.V.I., p.c.
1700 Westland Road
Cheyenne, WY 82001

2/5

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-497RR

Pahaska Teepee
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Bob Coe

P.O. Box 2370

Cody, WY 82414

to construct, install, or modify a leach field to replace surface water discharge facility according to the procedures and conditions of the application No. 84-497RR.

The facility is located in Section 3, T52N, R109W in the County of Park, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

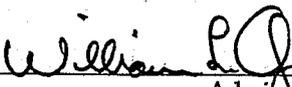
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

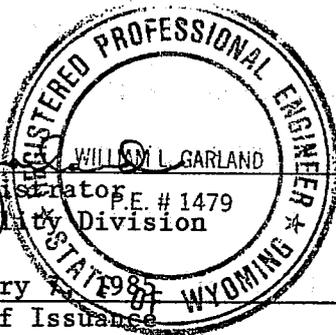
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

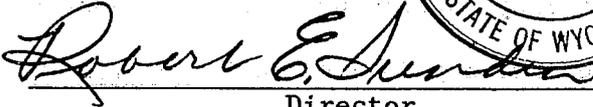
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator P.E. # 1479
Water Quality Division
February 1985
Date of Issuance




Director
Dept. of Environmental Quality



This permit does not supercede the requirements for obtaining any permit from local agencies.

EB/nc

cc: John Wagner, DEQ/WQD Cheyenne

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Pahaska Teepee Drainfield

ENGINEER: Engineering Associates
P. O. Box 1900
Cody, WY 82414

OWNER: Bob Coe
P. O. Box 2370
Cody, WY 82414

WATER QUALITY DIVISION REFERENCE NUMBER: #84-497R

REVIEWING ENGINEER: Ed Baruth, ^{JB for} Matt Langenfeld

DATE OF REVIEW: January 24, 1985

ACTION: Not authorized.

COMMENTS: The initial application was unclear on your proposed elimination of Cell No. 2.

If it is planned to eliminate the second cell of the lagoon system from service, please verify the capability of the aerated lagoon to adequately treat the sewage with either direct discharge to the leach bed or the North Fork. It would appear most advantageous to maintain a quiescent pond for settling of solids to prevent leach field plugging or NPDES violations.

EB/ML:dcn

C

Returned
1-22-85

WATER QUALITY DIVISION
GROUNDWATER SECTION
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 84-497R

DATE SUBMITTED FOR REVIEW 1/21/85

NAME AND LOCATION OF FACILITY Pahaska Teepee
Park County

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

SIGNED Matt Langenfeld
TITLE Groundwater Compliance Specialist
DATE 1/21/85

ACCEPTED FOR RECORD 1/21 (Date) gmm
Groundwater Control Supervisor

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Pahaska Teepee Drainfield

ENGINEER: Engineering Associates
P. O. Box 1900
Cody, WY 82414

OWNER: Bob Coe
P. O. Box 2370
Cody, WY 82414

WATER QUALITY DIVISION REFERENCE NUMBER: #84-497

REVIEWING ENGINEER: Ed Baruth; Matt Langenfeld *Ed*

DATE OF REVIEW: November 14, 1984

ACTION: Not authorized.

COMMENTS: Thank you for your patience in waiting for this review. Careful consideration has been given to both the plant and the possible groundwater impact. We have made every effort to keep our review in perspective so as to lessen your need to monitor the quality of effluents unnecessarily. Specific comments include:

1. In this review the DEQ groundwater staff developed a concern for impact to local groundwaters. In order for us to determine if you will need to install groundwater monitoring wells, we ask that you provide us detailed information on the existing water well just northeast of the detention cell. We request that you take a sample of the water and have it analyzed for concentrations of nitrate, ammonia, chlorides, pH and TDS.

Further, we would like to know the physical characteristics of the well, such as total depth, depth to water, yield, construction techniques, concrete seal description, gravel pack information, screening, if any confining layers exist, etc.

The idea is, if the well was securely constructed and a confining layer present, monitoring of possible upper level aquifers may not be needed. Documentation of this type will only lessen possible requirements to install monitoring wells and future sampling. Naturally, our final review will be based on your submittal.

In order to provide you the information we have on the well, we have investigated the State Engineers records on the well. The only well listed in the State Engineers record in Section 3, T.52, R.109 is temporary filing UW 17-8-20. Documentation included: 55 foot depth, 20 foot water level, 0 through 10 feet concrete sealed, and no impermeable layer discovered.

C

Review of Plans and Specifications

Pahaska Teepee Drainfield #84-497

November 14, 1984

Page Two

This may or may not be your well, so please verify this information with your records.

2. On the leach bed itself, please specify the slope of the lateral distribution piping.
3. Please provide a detail of the distribution box.
4. Will the submersible pump station freeze up in the winter? Please consider insulation. What plans have you considered for ventilating the wet well? Will the pumping station piping allow pumping from either the aeration cell or the detention cell?

Also, plans have been sent to the Wyoming OSHA office for their review of the pump, motor and controls. Their review will be forwarded when we receive it.

5. Will electric fencing be installed to discourage the maintenance problems caused by the local moose population on the lagoon system?
6. In that you have not indicated a replacement area for the leach bed, I suggest you consider keeping the NPDES surface water discharge permit current. This will provide for possible emergency discharges and possible future "rest" periods for the leach bed. If you are not discharging to the North Fork, you would only need to indicate on the NPDES discharge self monitoring report (that you now submit), "NO DISCHARGE." Again, this keeps your monitoring to a minimum and allows flexibility with your system.

EB:dcn

cc: State of Wyoming, OSHA, Cheyenne

11-9-84
returned to
Lambert

Water Quality Division
Groundwater Section
Permit Application Review

Application Number 84-497

Date Submitted For Review October 15th 1984

Name and Location of Facility Pahaska Teepee Drainfield
Sec-3; T52N, R 109W
Park County

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No Comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

Signed Matt Langenfeld
Title Groundwater Compliance Specialist
Date 11/7/84

Approved _____
(Date)

(Signed)
Groundwater Control Supervisor

MEMORANDUM

TO: Ed Baruth, Northeast District Engineer

FROM: A. J. Mancini, Groundwater Control Supervisor
Matthew M. Langenfeld, Groundwater Compliance Specialist *MML*

DATE: November 7, 1984

SUBJECT: Review of Permit Application #84-497, Pahaska Tepee Drainfield

A drainfield for wastewater effluent disposal has been proposed to be constructed at Pahaska Tepee, Wyoming. Presently an aeration/oxidation pond and a detention pond are in use at Pahaska Tepee. The effluent from this system has been piped to the North Fork Shoshone River.

To determine if the drainfield adversely affects groundwater, it is my opinion that 1 upgradient monitor well and 2 downgradient monitor wells would be appropriate. Also to properly assess the aeration/oxidation and detention pond system's effect on groundwater 1 downgradient well per pond would inform us of possible groundwater contamination. This is a total of 5 monitor wells.

Background groundwater quality should be established by sampling each well at least twice prior to the drainfield system becoming operational. These sampling events should be separated by at least one month. Once the drainfield system becomes operational, biannual samples should be collected from each well. Proper well excavation, sampling and analytical techniques should be followed. The water samples should be analyzed for the following list of parameters:

Background Groundwater Quality

Static Water Level	Cadmium
Total Dissolved Solids	Chromium
Sulfate	Copper
Chloride	Iron
Flouride	Lead
Nitrate Nitrogen	Manganese
Ammonia Nitrogen	Mercury
pH	Selenium
Arsenic	Silver
Barium	Zinc

Operation Groundwater Quality

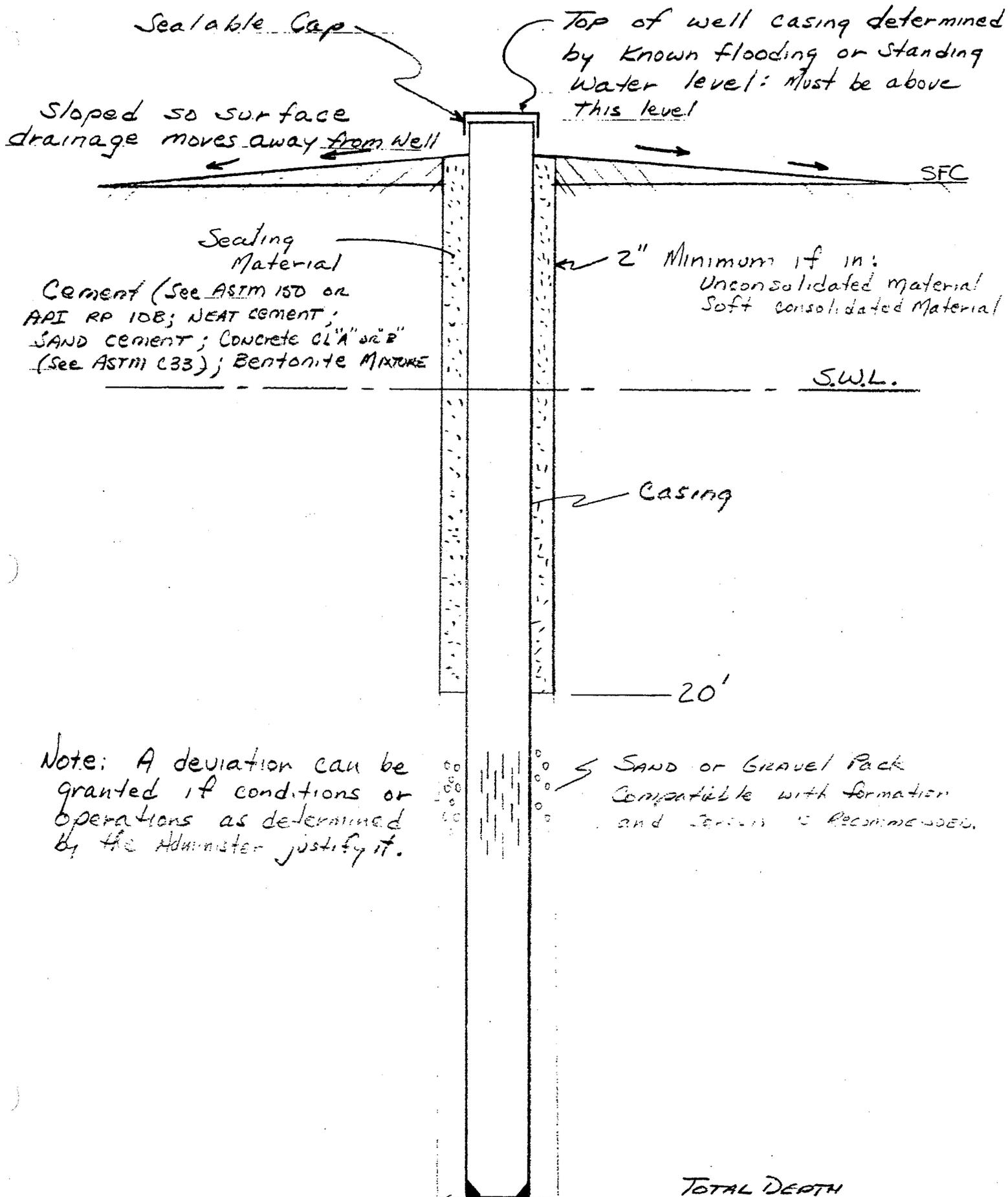
Static Water Level	Nitrate Nitrogen
Total Dissolved Solids	Ammonia Nitrogen
Chloride	pH

When the monitor wells are drilled, the cuttings should be analyzed to define the underlying geologic characteristics. The geologic study provided with the permit application went to a depth of 10.2 feet on one pit and to 3.5 feet on the remaining pits and does not adequately describe the geology in the area. When water is reached the static water level should be measured. Preferably the PVC pipe would be 4 inches and threaded not glued. Also, capping the bottom PVC pipe will stop soils from run-

ning up the inside of the pipe. The pipe should be perforated 2 feet below and above the lowest and highest expected water elevations respectively. Preferably the annulus would be sand or gravel packed a couple feet above the top perforation. The sand or gravel pack should be compatible with the formation and perforations. A bentonite seal will be placed above the gravel pack and the surface sealed with cement. A seal of 20 feet is required for monitor wells. The monitor wells must be capped and secured properly. I feel that in this case steel pipe should be placed around the PVC pipe to secure it. Before drilling these monitor wells, propose specific locations for them to the Department of Environmental Quality, Water Quality Division. Enclosed is a diagram showing proper completion of monitor wells. Completion results and specifications should be sent to the Department of Environmental Quality, Water Quality Division.

Based on information obtained during monitor well installation and water quality analysis, additional subsurface investigation may be required.

MONITOR WELL





THE STATE OF WYOMING

ED HERSCHLER
GOVERNOR

Department of Environmental Quality
Water Quality Division

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

June 13, 1985

CERTIFIED

Neil Earhart
Earhart Farms
770 Lane 13, HC73
Powell, WY 82435

RE: 84-498R

Dear Mr. Earhart:

The Department of Environmental Quality, Water Quality Division is in receipt of the first set of analytical data from the monitor wells at Earhart Farms for 1985. The question arises as to whether these samples were taken during a period of feedlot use. Please indicate this in writing and include this in future monitoring reports.

If cattle can remove caps from the monitor wells, they have been constructed improperly. Refer to the enclosed monitor well diagrams and renovate your wells accordingly. This can be accomplished by excavating two to three feet of annular fill material, pouring cement, and setting the steel casing in the cement. Cement should then be poured on the outside of the steel casing and sloped so that surface drainage moves away from the well. Please make these renovations and report their completion to this office within 30 days of receipt of this letter if the feedlot is in use. If the feedlot is not in use, please renovate the monitor wells before the next period of feedlot use.

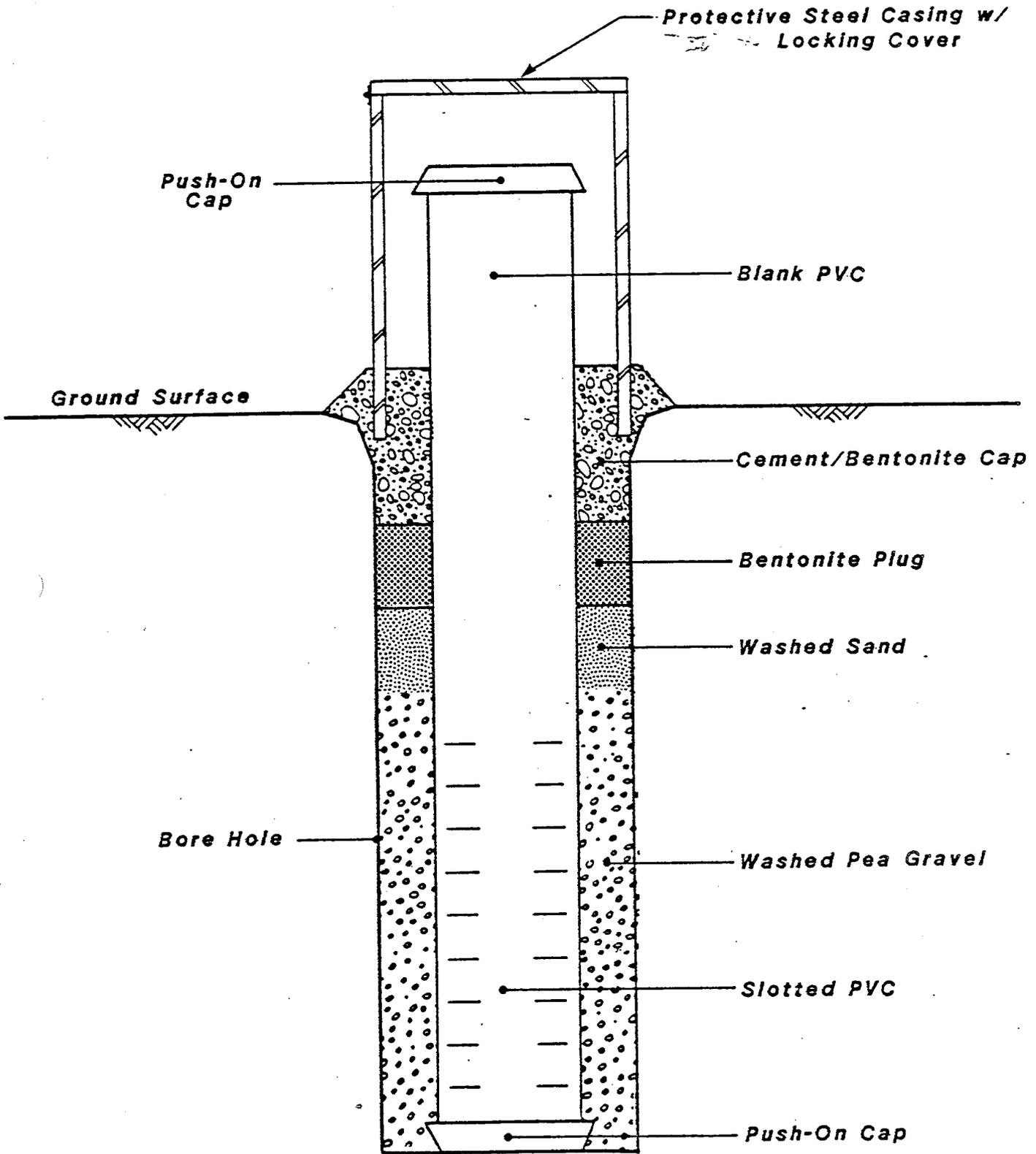
Sincerely,

A handwritten signature in cursive script that reads "Matt Langenfeld".

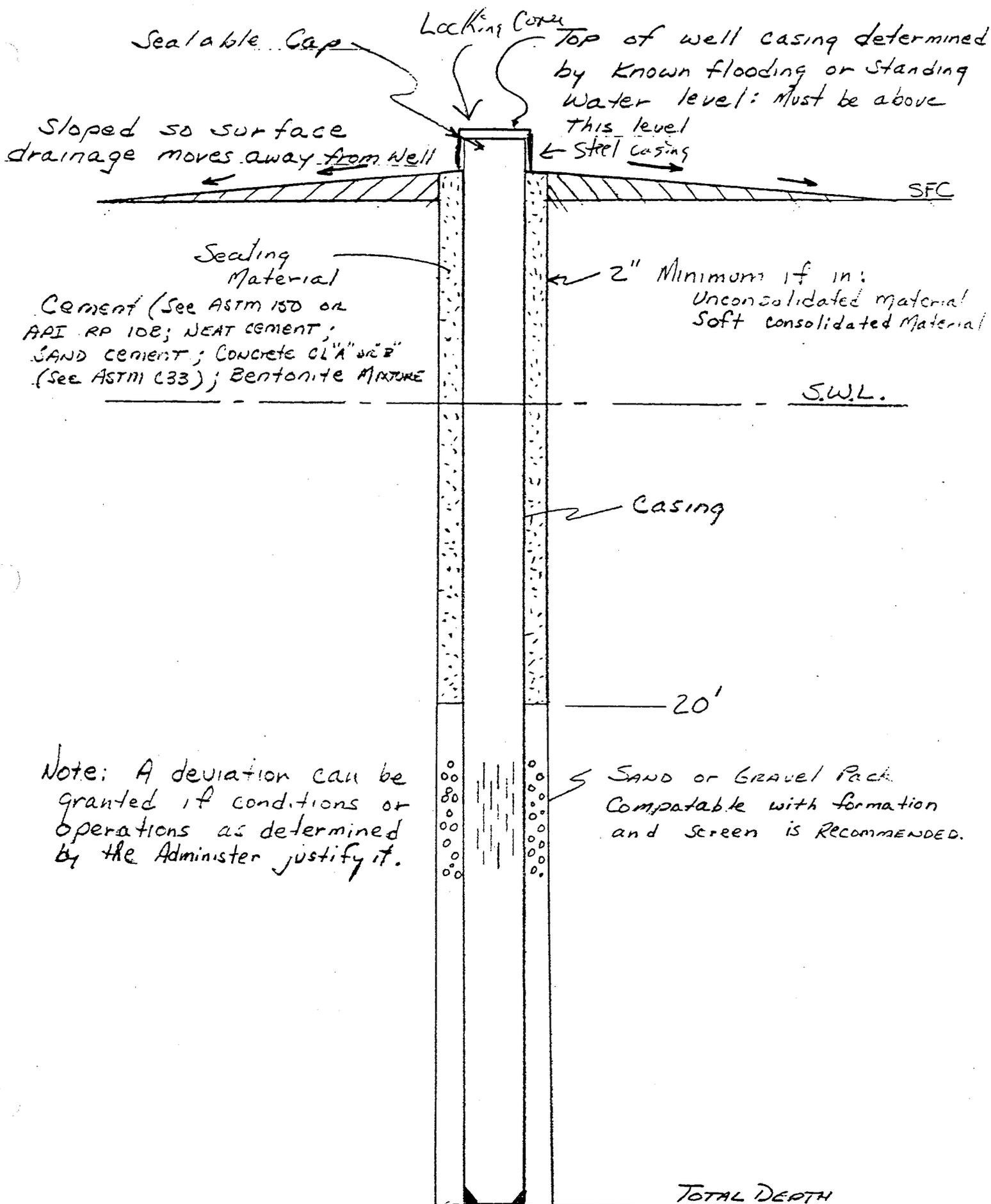
Matthew M. Langenfeld
Groundwater Compliance Specialist

MML/pjb
Enclosures

cc: Jake Strohmman, Engineering Control Supervisor
Steve Gerber, District Engineer, Lander
Norma Coulson, WQD



MONITOR WELL



Note: A deviation can be granted if conditions or operations as determined by the Administer justify it.

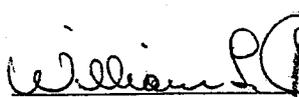
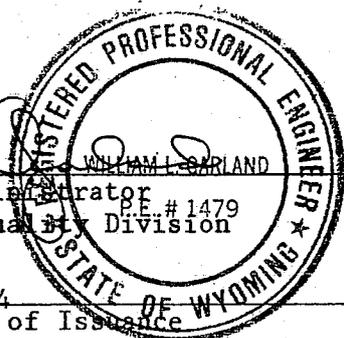
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

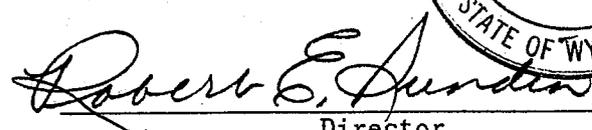
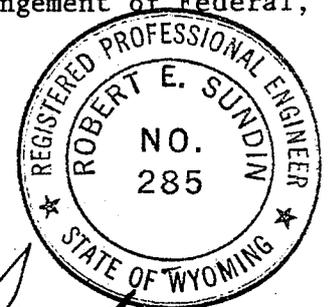
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. EARHART
Administrator
Water Quality Division
P.E. # 1479



ROBERT E. SUNDIN
Director
Dept. of Environmental Quality


November 1, 1984
Date of Issuance

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITIONS ON PERMIT *

1. The permittee, Earhart Farms Inc., is hereby required as a condition of this permit to construct, and to properly install, three groundwater monitoring wells, collect samples twice per year during periods of feedlot use and analyze the samples for ammonia, nitrate as N, and fecal coliform. The first series of samples shall be collected immediately before the feedlot is placed in service. The sample analysis is to be reported to the Department of Environmental Quality, Water Quality Division, Herschler Building, Cheyenne, Wyoming 82002, Attention: Mr. Tony Mancini.
2. Should the samples contain significant amounts of contaminants, the permittee may have to either discontinue use of the feedlot or install an impervious liner to prevent groundwater pollution.
3. Should the permittee desire to exceed the 400 head of animals as indicated in the application, he should first contact the Water Quality Division to discuss the potential need for additional permitting.

EB:dcn

cc: Tony Mancini, DEQ/WQD Cheyenne

Water Quality Division
Groundwater Section
Permit Application Review

*Forma -
Returned to
Lander*

Application Number

14-1998

Date Submitted For Review

10/15/84

Name and Location of Facility

Earhart Farms, Inc.

Feedlot Permit Application

Powell Wg

Park Co.

I have reviewed the plans and specifications with regard to all aspects of ground-water quality and find the following:

- No Comment. The submittal is consistent with current ground-water protection procedures and requirements.
- Comments attached.

Signed

Robert L. Lander

Title

Engineer

Date

10/15/84

Approved

10/18/84

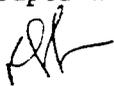
(Date)

ajm

(Signed)

Groundwater Control Supervisor

MEMORANDUM

TO: A. J. Mancini, Groundwater Control Supervisor
FROM: R. J. Lennox, Engineering Evaluator 
DATE: October 16, 1984
SUBJECT: Permit Application #84-498, Earhart Farms, Inc. Feedlot Installation

1. I conducted a review of the subject permit application for groundwater concerns.
2. Chapter XI (Design and Construction Standards ... Systems) of the Wyoming Department of Environmental Quality, Water Quality Rules and Regulations, states that "the seepage through the pond bottom and side walls shall not cause a violation of the groundwater standards as described in Chapter VIII (Quality Standards for Wyoming Groundwater) of the Wyoming Department of Environmental Quality, Water Quality Rules and Regulations. Liners shall be required if the wastewater characteristics or site conditions will not insure the protection of the groundwater for which it is classified."
3. In order to support the limited design proposal submitted in the application, the following data must be provided:
 - a. Piezometric map of feedlot and pond areas showing depth to groundwater.
 - b. Direction and rate of shallow groundwater movement.
 - c. Quality of the shallow groundwaters throughout the feedlot/pond area in accordance with the parameters contained in Chapter VIII, Wyoming Water Quality Rules and Regulations and the pesticide analyses contained in the EPA Safe Drinking Water Act document.
 - d. Location of all water wells within 1/2 mile of the feedlot area indicating use of groundwater, well construction details and depth of groundwater.
 - e. Permeability (vertical and horizontal) of shallow soils throughout feedlot/pond area.
 - f. Accurate characterization of wastes which can be leached and wastewater which may be collected/treated in the retention pond.
4. It is stated in the permit application that a stock well will be constructed within the feedlot area, based on limited data from the State Engineers Well Study. All indications are that this well could be a shallow well subject to contamination from the feedlot operation. This fact supports the data requirements requested by paragraph 3 above.
5. It should be noted that the soils report submitted as part of the application has a footnote on page 2 which states "Excessive permeability rate may cause pollution of groundwater."
6. There are many other shortcomings in the application when reviewed in accordance with the feedlot requirements of Chapter XI, however, they are primarily of an engineering concern and should be covered by the District Engineer.

7. Based on the lack of groundwater information submitted in the permit application and until the potential pollution to groundwaters of the state concerns can be answered, I recommend that this permit be not authorized.

cc: File

REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

PROJECT: Earhart Farms Inc. Feedlot

ENGINEER: Ralph Baumer
375 West 5th St.
Powell, WY 82435

OWNER: Earhart Farms, Inc.
770 Lane 13 HC 73
Powell, WY 82435

WATER QUALITY DIVISION REFERENCE NUMBER: #84-498

REVIEWING ENGINEER: Ed Baruth, P.E. *Ed*

DATE OF REVIEW: October 24, 1984

ACTION: Not authorized.

COMMENTS: Thank you for your recent application for a permit to construct retention facilities for your feedlot. In order to insure that surface waters and ground waters of the state will receive adequate protection from possible degradation, we ask that you consider and respond to the following concerns:

1. Concerning the south border of the feedlot, your elevation notations suggest possible movement of some runoff waters to the east. Please indicate how this will be remedied. An additional collection ditch is recommended.

2. I have attached pages 79 through 82 of our Chapter XI Rules and Regulations for your consideration. Please note page 79, (b) Basis of Design. This section requires that the area be properly graded and adequate collection ditches provided. Further, you need to have provisions to empty the pond after a precipitation event occurs.

This does not mean that you have to purchase, say a pumping apparatus, but that you will need to be able to rent or somehow obtain one when needed. Another requirement will be for you to notify this office prior to any future emptying of the pond, as needed.

3. As we discussed, the permit will be issued with a condition that groundwater be monitored and the quality reported to our Cheyenne office. You will need to install a minimum of three groundwater monitoring wells. Your proposed stock watering well can be considered as one, if properly constructed, and to an appropriate depth.

One well should be located upgradient and into the normal groundwater layer (you have indicated approximately 10 feet). The third well should be in an area which would

~~Review of Plans and Specifications~~

Earhart Farms Inc. Feedlot - #84-498

October 24, 1984

Page Two

intercept natural groundwater movement, such as the eastern side, to the north. These possible locations are the locations we discussed on the telephone October 23. Please have your engineer consider the appropriateness of the possible locations and modify if appropriate.

4. Further conditions on the permit when authorized will include:

- a) A condition that should you wish to exceed 400 head of confined animals, you will need to notify this office and discuss the modification.
- b) A condition to the affect that should contamination exceed the background levels measured after you first install and immediately sample your wells, you may be required to either discontinue use of the feedlot or install a liner such as bentonite under the feedlot to limit seepage of pollutants into the underlying aquifer.

5. We need three sets of complete plans and specifications in order to process your application. Please provide this office one more site plan sheet.

6. Please list the names and separation distances of all neighbors within $\frac{1}{2}$ mile.

7. Please provide a specification on how the dike will be constructed and include compaction levels. Reference page 80 and 81 on requirements for retention pond construction. Specifically, note the 3:1 inner dike slope requirement, and the eight (8) foot top width requirement.

8. Page 80 also requires a spillway on retention ponds to pass flows in excess of the 25 year 24 hour precipitation event. Item C,ii. Rock riprap is acceptable for the spillway.

EB:dcn

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 84-499R
SEE CONDITIONS ON BACK OF THIS PERMIT

Welchem Warehouse
(Name of Facility)

This permit hereby authorizes the applicant (name and address):

Welchem, Inc.
P.O. Box 829
Evanston, WY 82930

to construct, install, or modify a septic tank/leach field facility according to the procedures and conditions of the application No. 84-499R. The facility is located in Section 6, T14N, R120W in the County of Uinta, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable construction and design standards. The compliance with construction standards and the operation and maintenance of the facility to meet the applicant's engineer's design are the responsibility of the applicant, owner, or operator.

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or insures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The Permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

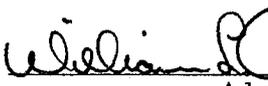
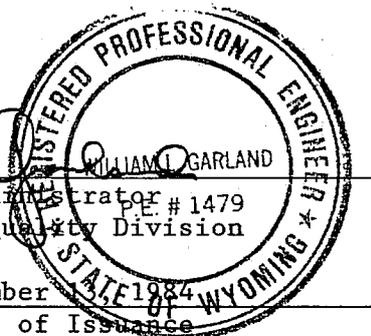
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

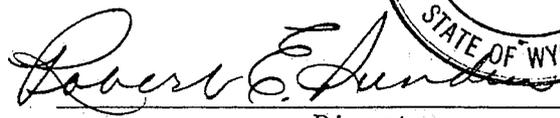
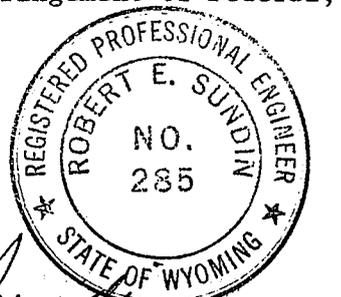
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM L. GARLAND
Administrator
P.E. # 1479
Water Quality Division
November 1984
Date of Issuance



Director
Dept. of Environmental Quality


This permit does not supercede the requirements for obtaining any permit from local agencies.

Conditions to Permit to Construct #84-499R

1. The intent of the construction authorized by this permit is to provide facilities for the interim treatment of wastewater until such time that treatment is available through a regional wastewater system. The Evanston 201 Facility Plan requires that treatment be provided through a regional system. The facilities authorized by this permit will be operated until services are available through the approved regional system. At that time these facilities will be abandoned or integrated into the regional system in accordance with the requirements of the Facility Plan.
2. The permittee shall notify the Uinta County Sanitarian of the day construction is scheduled to commence and the estimated completion date of this project. Final inspection of the installed system is required before backfilling. The Uinta County Sanitarian is William Cates. Mr. Cates can be contacted at:

P.O. Box 895
Evanston, WY 82930
Phone: 789-1780, Ext. 324

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

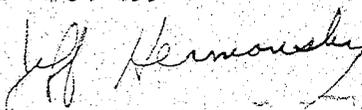
PROJECT: Welchem Warehouse

ENGINEER: Uinta Engineering & Surveying, Inc.
Attention: Kenneth Walker
P. O. Box 746
Evanston, WY 82930

OWNER: Welchem, Inc.
P. O. Box 829
Evanston, WY 82930

WATER QUALITY DIVISION REFERENCE NUMBER: #84-499

REVIEWING EVALUATOR: Jeff Hermansky



DATE OF REVIEW: October 29, 1984

ACTION: Not authorized.

COMMENTS: I have reviewed your application and have a few minor questions and comments that need to be addressed before a Permit to Construct can be issued:

1. Are the leach field trenches to be laid on the same grade or is the design for a side hill leach field?
2. How will the proposed leach field be protected from traffic, parking and storage?
3. I would strongly recommend that the pipe from the septic tank to the leach field be installed at $\frac{1}{4}$ inch per foot or about 2%.
4. What is the distance from the proposed leach field to the north property line and any water wells in the nearby area?
5. Please submit another copy of the plan sheet. A 4th copy is needed so we can send an authorized copy to the Uinta County Sanitarian for his use during construction inspection.

Feel free to contact me if you have any questions.

JH:dcn



ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone, 332-3144.

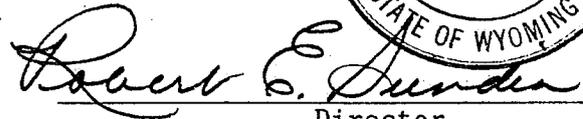
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:


WILLIAM K. GARLAND
Administrator # 1479
Water Quality Division
STATE OF WYOMING

December 3, 1984
Date of Issuance


ROBERT E. SUNDIN
NO. 285
REGISTERED PROFESSIONAL ENGINEER
STATE OF WYOMING

Director
Dept. of Environmental Quality

This permit does not supercede the requirements for obtaining any permit from local agencies.

* CONDITION ON PERMIT *

This permit is issued with the requirement that the following condition is followed:

The permittee shall notify the Sweetwater County Sanitarian of the day construction is scheduled to commence and the estimated completion date of this project. Final inspection of the installed system is required prior to backfilling.

The Sweetwater County Sanitarian is:

Al Emden
205 East Railroad Ave.
Green River, Wyoming 82935

(307) 875-2115

JH:dcn

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION
210 LINCOLN
LANDER, WYOMING 82520
PHONE: (307) 332-3144

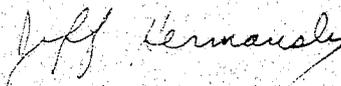
PROJECT: McKinnon Teacherage

ENGINEER: Nelson Engineering
P. O. Box 100
Green River, WY 82935

OWNER: School District No. 2
400 North First East
Green River, WY 82935
Attention: David Brandner

WATER QUALITY DIVISION REFERENCE NUMBER: #84-500

REVIEWING EVALUATOR: Jeff Hermansky



DATE OF REVIEW: October 24, 1948

ACTION: Not authorized.

COMMENTS: The following questions and comments need to be addressed before a Permit to Construct can be issued:

1. Please complete the enclosed application form and have it signed by an authorized representative of Sweetwater County School District No. 2.
2. Please supply the details of the septic tank construction. Details include length, width, height, fluid level, baffle location and depth, material, etc. If possible, send a copy of the manufacturers detail sheet.
3. What is the depth to groundwater in the area of the proposed leach field?
4. Please have an engineer licensed in Wyoming sign the plans.

JH:dcn

AISC

