

PERMIT TO CONSTRUCT

New  
 Renewal  
 Modified

Permit No. 85-502  
SEE SPECIAL CONDITIONS

Beason #1  
(Name of Facility)

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

Noreen Energy Resources Ltd.

202, 4712 - 13th St NE

Calgary, Alberta, Canada T2E-691

to construct, install, or modify a oil and gas production water facility according to the procedures and conditions of the application No. 85-502. The facility is located in NE 1/4, SW 1/4, Section 10, T57N, R73W in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) 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.

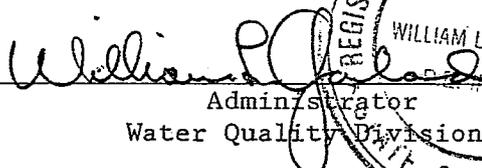
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

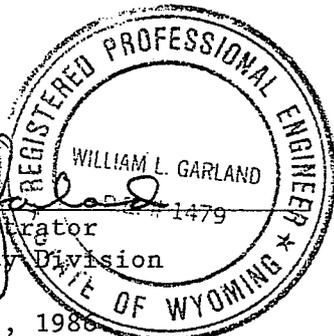
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
Administrator  
Water Quality Division  
1479  
April 18, 1986  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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

This permit authorizes you to dispose of the annual accumulation of oil and gas produced water on the road(s) included in the application up to a total annual liquid application of two inches based on a reported TDS concentration of 24,393 mg/l.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-502

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
4. This permit is valid only for the waste type received from the generating facilities described herein, and for the application areas delineated on the accompanying map. The permittee will contact the DEQ district engineer in Sheridan (672-6457) to arrange a field inspection of activities before the first disposal of produced water is accomplished.

cc: Rich Ruyle, Sheridan

PERMIT TO CONSTRUCT

New  
 Renewal  
 Modified

Permit No. 85-503  
SEE SPECIAL CONDITIONS

Gallion Fed. #2A  
(Name of Facility)

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

Kaiser Francis Oil Company

6733 South Yale

Tulsa, OK 74135

to construct, install, or modify a oil and gas production water facility according to the procedures and conditions of the application No. 85-503. The facility is located in SW 1/4, SW 1/4, Section 1, T55N, R73W in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (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.

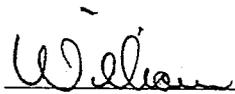
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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AUTHORIZED BY:

  
\_\_\_\_\_  
WILLIAM L. GARLAND  
Administrator #1479  
Water Quality Division  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF WYOMING

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

April 18, 1986  
Date of Issuance

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

This permit authorizes you to dispose of the annual accumulation of oil and gas produced water on the road(s) included in the application up to a total annual liquid application of four inches based on a reported TDS concentration of 9,228 mg/l.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-503

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
4. This permit is valid only for the waste type received from the generating facilities described herein, and for the application areas delineated on the accompanying map. The permittee will contact the DEQ district engineer in Sheridan (672-6457) to arrange a field inspection of activities before the first disposal of produced water is accomplished.

cc: Rich Ruyle, Sheridan

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-504R

MA 14542

The Kasler Corp. Batch Plant Wash Pond  
(Name of Facility)

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

The Kasler Corporation

2200 W. Lincolnway

Cheyenne, WY 82001

to construct, install, or modify a evaporative/containment pond facility according to the procedures and conditions of the application No. 85-504R. The facility is located in Section 9, T13N, R68W 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.

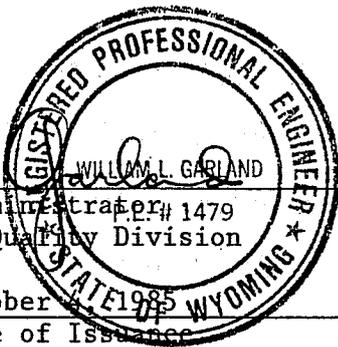
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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*  
WILLIAM L. GARLAND  
Administrator # 1479  
Water Quality Division  
October 1985  
Date of Issuance



*Ralph Wood*  
Director  
Dept. of Environmental Quality

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

cc: James D. Voeller  
AVI p.c.  
1700 Westland Road  
Cheyenne, WY 82001

Review of Plans and Specifications

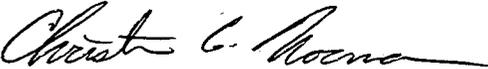
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: The Kasler Corporation Batch Plant Wash Pond, Laramie Co.

ARCHITECT OR ENGINEER: James D. Voeller, AVI  
1700 Westland Road, Cheyenne, WY 82001

APPLICANT: The Kasler Corporation, c/o Erik Shultz  
2200 W. Lincolnway, Cheyenne, WY 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 85-504

REVIEWING ENGINEER: Christian G. Norman 

DATE OF REVIEW: September 30, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Where will the water enter the pond and how will the bank be protected against scouring? Evaluate the need for erosion control at the water inlet.
2. Provide more detail on the disposal of solids. Where will the solids be stored and where will the solids ultimately be disposed of?

9-20



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality  
Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

September 19, 1985

Mr. Charles E. Bartlett  
Robert, Jack, Smith & Associates, Inc.  
P.O. Box 1104  
1015 Harshman  
Rawlins, WY 82301

RE: Town of Sinclair, Ninth Street Waterline Replacement, DEQ/WQD Ref. No. 85-505

Dear Mr. Bartlett:

The above-referenced project is considered routine maintenance and does not require a permit to construct. This replacement is considered routine maintenance because the pipe is the same size and will be placed in the same location. The construction should be done in accordance with the Wyoming Public Works standard specifications.

If you have any questions, please contact this office.

Sincerely,

Christian G. Norman  
Engineering Evaluator

CGN/nc

cc: Town of Sinclair  
P.O. Box 247  
Sinclair, WY 82334



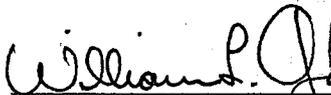
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

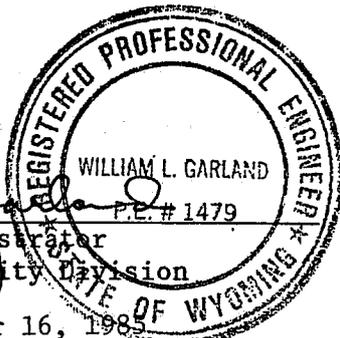
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

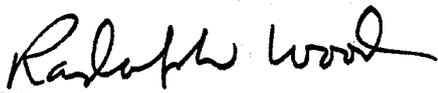
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The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal,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

AUTHORIZED BY:

  
\_\_\_\_\_  
Administrator  
Water Quality Division  
October 16, 1985  
\_\_\_\_\_  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

xc: John B. Wesnitzer  
R.G. Stuckert & Associates  
55 Western Avenue  
Buffalo, WY 82834



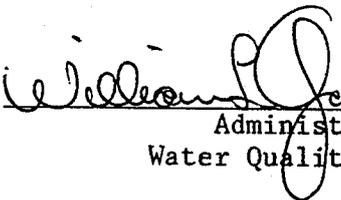
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

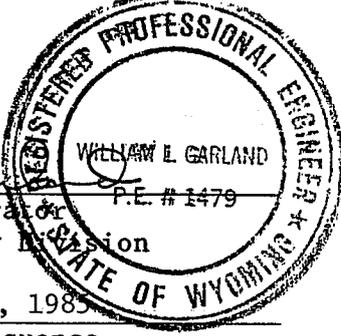
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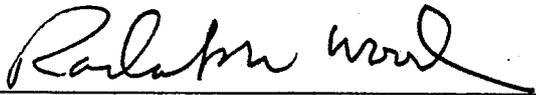
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AUTHORIZED BY:

  
\_\_\_\_\_  
Administrator  
Water Quality Division  
October 3, 1985  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

xc: Engineering, Inc. of Wyoming  
45 East Loucks, Suite 301  
Sheridan, WY 82801

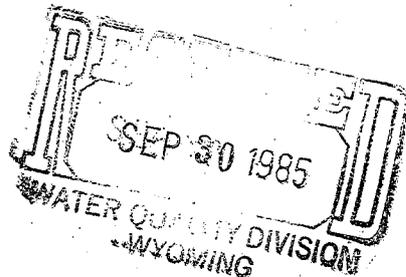
NORMA

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
2161 COFFEEN AVE., SUITE 601  
SHERIDAN, WYOMING 82801

PROJECT: Wyoming Sawmill, Inc.  
Water Transmission Line

ARCHITECT OR ENGINEER: Dennis Randall  
Engineering, Inc. of Wyoming  
45 East Loucks, Suite 301  
Sheridan, Wyoming 82801



WATER QUALITY DIVISION  
REFERENCE NUMBER: 85-507

REVIEWING ENGINEER: Rich Ruyle *RR*

DATE OF REVIEW: September 25, 1985

ACTION: Not Authorized

COMMENTS:

- 1.) Please provide actual calculations used to verify that adequate pressure is maintained at the end of the loop during fireflow. Or, at a minimum, provide the existing static water pressure near the points of connections to the existing lines.
- 2.) Chapter XII (Section 14) requires that fire sprinkler systems be provided with a double check valve for cross connection protection. Please verify this. Any residential service connections should have a single check valve at the meter or in the service line.
- 3.) There is a 250 foot limit on the length of six-inch waterlines that serve fire hydrants from one direction. This applies to the waterline which branches off from the end of the loop at the mill site.
- 4.) Chapter XII requires that leakage testing be in accordance with AWWA Standard C600. That standard lists the allowable leakage in gph as  $L = \frac{SD\sqrt{P}}{133,200}$  where S = the length of pipe tested in feet. For 18 foot pipe sections, this leakage rate is about one half of that determined from the leakage formula in your specifications. If I have failed to mention this in previous reviews, it is because I compared the leakage rate with what is allowed in the Wyoming Public Works Standard Specifications Table I which contains the higher leakage rate. Chapter XII takes precedence.

Wyoming Sawmills, Inc.  
Water Transmission Line  
September 25, 1985  
Page Two

- 5.) After speaking to Roger, I realized that Chapter XII states that where minimum vertical and/or vertical cannot be maintained between sewer and water lines, the sewer or water line shall be placed in a separate conduit pipe. I will not require it in this case since the reduced separation is not considered significant. However, for future reference, a separate conduit for waterlines may be required if deemed necessary and is the only alternative available.

xc: Doyle Miller

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-508  
 SEE CONDITIONS ATTACHED  
 MA 14542

Telephone Pass Unit  
 (Name of Facility)

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

Exxon Corp.

P.O. Box 230

Midland, TX 79702

to construct, install, or modify a drilling fluids reserve pit facility according to the procedures and conditions of the application No. 85-508. The facility is located in Section 25, T35N, R116W in the County of Lincoln, in the State of Wyoming. This permit shall be effective for a period of one (1) year (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.

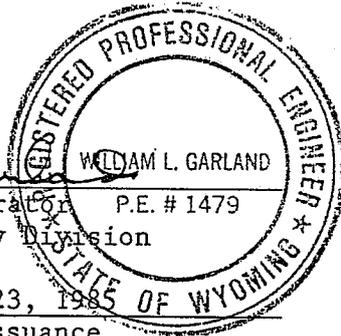
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division

  
REGISTERED PROFESSIONAL ENGINEER  
WILLIAM L. GARLAND  
P.E. # 1479  
STATE OF WYOMING

\_\_\_\_\_  
September 23, 1985  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

This permit authorizes you to dispose of 504,000 gallons of drilling fluid wastewater on the surrounding 18.6 acres, a total liquid application of 1.0 inches.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-508

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application or 15% for spray irrigation or irrigation by gated pipe on the contour. Vegetated areas of the site shall not be spray-irrigated where possible plant leaf injury may result from salt residue.
3. Wastewater application shall be terminated within 300 feet of the defineable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
4. To assess the long term effects of the wastewater application on the soil and its relation to revegetation success on denuded areas, the seed mix (% of selected species), seed rate (lbs. of bulk seed/acre and % pure live seed), mulch and fertilizer preferred by the landowner-lessee or land management agency should be forwarded to E. J. Fanning, Department of Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002, within 30 days of receipt of this permit.
5. Before backfilling the pit sludges will be sampled, with an analysis of a composited sample for the following constituents or parameters:

pH	Lead
EC (electrical conductivity, mmhos/cm @ 25°C)	Mercury
SAR	Nickel
Oil and grease	Selenium
Aluminum	Silver
Arsenic	Zinc
Barium	
Cadmium	
Chromium	
Copper	
Iron	

The metals analysis is for total metals. The EP Toxicity test should also be performed on the mud samples for the eight included metals, i.e. arsenic, barium, cadmium, chromium, lead, mercury, selenium, and silver. The presence of hazardous constituents, as determined by the EP Toxicity test constitutes a basis for excavation of the pit sludges, especially in the presence of groundwater intrusion by springflow.

85-509  
MA 14542



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 18, 1985

Mr. Michael Hammer  
Spring Creek Ranch Co.  
P.O. Box 3154  
Jackson, WY 83001

RE: "As Built" Plans for Modifications Made to Water and Sewer Systems  
for Harvest Dance Lodges Phase I Permitted Under Number 85-14R  
(Permit Number - 85-509)

Dear Mr. Hammer:

This letter is in response to the letter sent to our office by Robert Farnsworth on September 18, 1985. Although the changes made to the water and sewer system were minor in nature a "Permit to Modify" should have been obtained from this office prior to making the changes. I would suggest that in the future, before any changes are made to a facility which has been permitted, that a call be made to our office to determine if a Permit to Modify is required.

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

SPG/jw  
copy: Mr. Robert Farnsworth  
File (2)



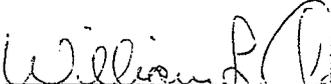
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

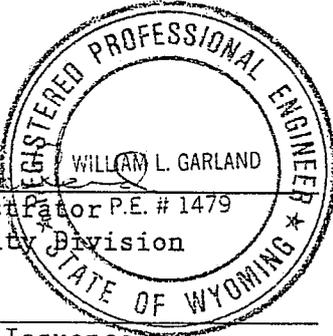
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

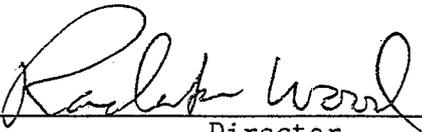
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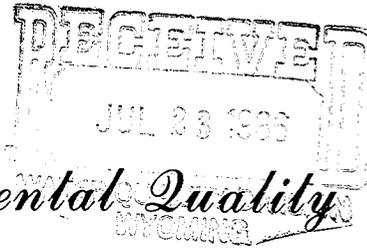
AUTHORIZED BY:

  
Adminisistrator P.E. #1479  
Water Quality Division  
08-29-86  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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



Department of Environmental Quality
Water Quality Division

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

July 18, 1986

Gros Ventre Utility
ATTN: Mr. McKee
P.O. Box 250
Moran, WY 83013

Dear Mr. McKee:

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 this proposed project is:

Facility Name: Gros Ventre Utility WWTP
DEQ/WQD Reference Number: 85-511
Engineering Consultant: Jorgensen Engineering
DEQ/WQD Review Engineer: Jeff Hermansky
Date of DEQ/WQD Review: 3-13-86

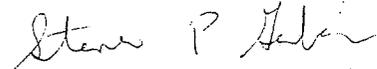
According to Chapter III of the Water Quality Rules and Regulations, Section 7 b. (2), "If an application is denied because of incompleteness necessitating a request for additional information, the applicant shall have a maximum of six months to comply with the request. If the applicant fails to provide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

Please indicate below the status of 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,



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

SG/jw

REVIEW OF PLANS AND SPECIFICATIONS

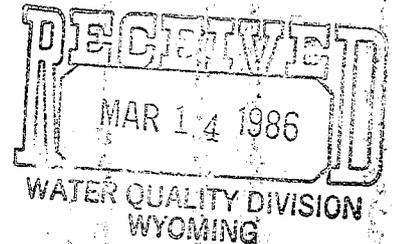
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: Gros Ventre Utility Wastewater Treatment Plant -  
Aeration System As-Built

ENGINEER: Jorgensen Engineering  
P.O. Box 1142  
Jackson, WY 83001

OWNER: Gros Ventre Utility  
P.O. Box 250  
Moran, WY 83013



WATER QUALITY DIVISION REFERENCE NUMBER: 85-511RR

REVIEWING EVALUATOR: Jeff Hermansky

DATE OF REVIEW: March 13, 1986

ACTION: Not authorized.

COMMENTS:

Thank you for submitting the aeration basin dimensions and wastewater flows for the wastewater treatment facility.

Our review of the as-built aeration system indicates that the 3 hp blower currently in use, along with the piping and diffusers installed, should be able to provide for sufficient aeration of the one aeration basin. One basin is designed to handle slightly more than 30,000 gpd which is close to your current peak summer time flow.

However, before this office can authorize the as-built construction, the aeration system must meet the requirements of Chapter XI of the Water Quality Rules and Regulations. Section 11d(iv) required that, "Mechanical process equipment shall be provided in multiple units." Furthermore, "blowers and mechanical aerators for process aeration shall include sufficient capacity that the maximum day design capacity can be delivered with the largest single unit not in service."

Therefore, it looks like the facility must be equipped with another 3 hp blower for the 2nd aeration basin, plus a spare 3 hp blower to serve as standby. The piping and valves must be designed to provide for maximum flexibility. The blowers must meet the requirements of Section 14(i) of the regulations.

Please complete the design for the additional modifications that must be made to meet the requirements of the regulation. Thank you for your cooperation.

JH/jw

REVIEW OF PLANS AND SPECIFICATIONS

1-21  
po

hanna

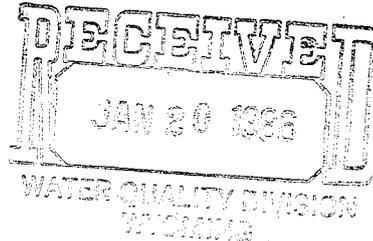
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: Gros Ventre Utility Wastewater Treatment Plant,  
Aeration System As-Built

ENGINEER: Jorgensen Engineering  
P.O. Box 1142  
Jackson, WY 83001

OWNER: Gros Ventre Utility  
P.O. Box 250  
Teton Village, WY 83025



WATER QUALITY DIVISION REFERENCE NUMBER: 85-511R

REVIEWING EVALUATOR: Jeff Hermansky

DATE OF REVIEW: January 14, 1986

ACTION: Not authorized.

COMMENTS:

This office agrees with your request to review the as-built aeration system modifications as submitted and to consider the overall plant design and sludge handling facilities plan in the future.

In order to evaluate the aeration system, we will need dimensions of the aeration basins as well as actual and projected flows into the plant. Please submit this information in a timely manner since we need to resolve the construction without a permit violation.

During my December 30, 1985 visit to the Gros Ventre Utility sewage plant, Rohn McKee, the plant operator, asked me if composting of the digested sludge with vegetative wastes from the golf course would be an acceptable method of sludge disposal. Such disposal would be acceptable if done in accordance with Part E of Chapter XI of the Water Quality Regulations.

As you know, the City of Jackson will be accepting sludge for only a limited time so your sludge management plan must be completed soon.

Please resubmit the required information to this office in triplicate. Be sure to include the Water Quality Reference Number that appears on this review sheet in a cover letter or transmittal sheet. Feel free to contact either Steve Gerber or me if you have any questions.

JH/jw  
copy: File

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: Gros Ventre Utility Wastewater Treatment Plant

ENGINEER: Jorgensen Engineering  
P.O. Box 1142  
Jackson, WY 83001

OWNER: Gros Ventre Utility  
P.O. Box 250  
Teton Village, WY 83025

WATER QUALITY DIVISION REFERENCE NUMBER: 85-511

REVIEWING ENGINEER: Steven P. Gerber, P.E. *SPG*

DATE OF REVIEW: October 30, 1985

ACTION: **Not authorized.**

COMMENTS:

A review of these plans will not be completed for the following reasons:

First, this WWTP must be modified to incorporate sludge handling facilities. Second, a recent inspection showed that the entire plant was not operating efficiently. A study may be required to show whether the problem is operational or whether the plant was improperly designed. Therefore, since further study may show this air system to be inadequate I recommend that you withdraw this application until the other studies have been completed. This application can be withdrawn by sending a letter requesting we do so. If you have any questions do not hesitate to contact me.

1-19

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-512  
 SEE CONDITIONS ON BACK  
 MA 14542

Picnic Pavilion (FAMCAMP)  
 (Name of Facility)

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

Jordon C. Holland

90 CES/DEE

F.E. Warren AFB, WY 82005

to construct, install, or modify a septic tank/leach field and sewage lift station facility according to the procedures and conditions of the application No. 85-512. The facility is located in Section 27, 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.

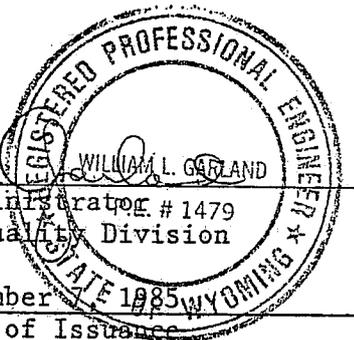
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

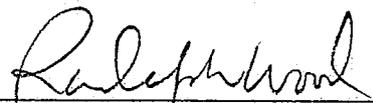
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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  
Administrator # 1479  
Water Quality Division  
November 1985  
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 #85-512

1. Two sewage pumps shall be installed in the self-contained sewage lift station.
2. The permittee shall notify Don Pack, Laramie County Environmental Health, 1700 Snyder Ave., Cheyenne, Wyoming 82001, phone number 638-8545, 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.



*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

May 16, 1986

Terra Resources, Inc.  
P.O. Box 2500  
Casper, WY 82602

To whom it may concern:

Your statewide permit number 85-513, for small wastewater facilities, contains a condition requiring the notification of the appropriate county or state agency prior to the installation or abandonment of facilities authorized by the permit.

A review of state and county records indicates that very few of these facilities are being reported. It is important that these facilities be reported on a regular basis. County governments have agreed to the use of statewide permits on the condition that they be properly notified. If the statewide permitting system is not responsive to the needs of the counties, the state will not be able to issue statewide permits and it will be necessary to obtain permits for such facilities with the individual counties.

In order to address this problem you are requested to do the following:

1. Provide this office a list and location of all facilities constructed under your statewide permit.
2. Indicate the present status of each facility, i.e., operational or abandoned.
3. Indicate whether or not you wish to maintain the statewide permit in an active status.
4. Provide the required notification to both the appropriate county and state agency for all future facilities.

Sincerely yours,

A handwritten signature in cursive script that reads "Lawrence Robinson".

Lawrence Robinson  
Engineering Supervisor

LR/nc

10-20

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-513  
 SEE CONDITIONS ON BACK  
 MA 14542

Terra Resources Inc. Statewide Rig Toilet  
 (Name of Facility)

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

Terra Resources, Inc.

P.O. Box 2500

Casper, WY 82602

to construct, install, or modify a sewage hole or holding tank facility according to the procedures and conditions of the application No. 85-513. The facility is located Statewide 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.

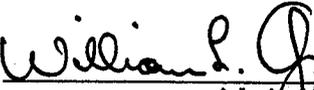
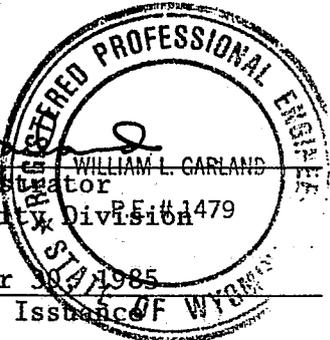
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

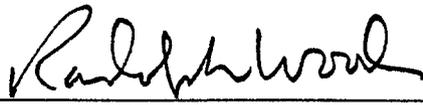
Environmental Quality, Water Quality Division, Herschler Building, 122 W. 25th, Cheyenne, Wyoming 82002; telephone, 777-7781.

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:

  
\_\_\_\_\_  
Admin. Director  
Water Quality Division #1479  
September 30, 1985  
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 #85-513

1. The permittee shall notify the appropriate county or state agency prior to the installation, removal or abandonment of any facility authorized by this permit. The appropriate agency for each county is indicated in the attached list. Notification shall be by phone with a follow-up written notice. Upon abandoning the site, the facility will be removed, disposed of, or left in place in a condition rendering the site safe for the public. Any waste from the facility shall be disposed of only in areas and in a manner approved by the appropriate agency. Upon request, the permittee shall allow authorized representatives of the local agency or the State to have access to the authorized facility for the purpose of conducting an inspection to determine compliance with the provisions of this permit.
2. Sewage holes may only be installed if the depth to groundwater is 40 feet or more. The sewage hole may be no greater than 20 feet deep.
3. The soils types and depth to groundwater shall be reported to appropriate agency for each county prior to installation.
4. Soils with percolation rates less than 1 minute/inch and greater than 60 minutes/inch are not acceptable.
5. These facilities are approved for domestic waste only. Introduction of wastes other than domestic waste shall not be allowed and will be considered a violation.

cc: E.R. Haymaker, Haymaker & Assoc., 1709 S. Boxelder, Casper, WY 82601  
Jake Strohman

AGENCIES RESPONSIBLE FOR SMALL WASTEWATER PERMITS

1. Albany County  
Albany County Planning Office  
405 Grand Avenue  
Laramie, WY 82070  
Phone: (307) 721-5188
2. Big Horn County  
Big Horn County Engineer  
P.O. Box 31  
County Courthouse  
Basin, WY 82410  
Phone: (307) 568-2358
3. Campbell County  
Campbell County Engineer  
500 South Gillette Avenue  
Gillette, WY 82716  
Phone: (307) 682-1970
4. Carbon County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
Herschler Bldg. - 4th West  
Cheyenne, WY 82002  
Phone: (307) 777-7781
5. Converse County  
Converse County Sanitarian  
County Health Department  
530 Oak  
Douglas, WY 82633  
Phone: (307) 358-2536
6. Crook County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457
7. Fremont County  
Fremont County Planner  
Room 200, County Courthouse  
Lander, WY 82520  
Phone: (307) 332-5371
8. Goshen County  
Goshen County Sanitarian  
P.O. Box 1132  
County Courthouse  
Torrington, WY 82240  
Phone: (307) 532-5002
9. Hot Springs County  
Hot Springs County Planner  
County Courthouse  
Thermopolis, WY 82443  
Phone: (307) 864-2732
10. Johnson County  
Johnson County Sanitarian  
County Courthouse  
Buffalo, WY 82834  
Phone: (307) 684-7555
11. Laramie County  
Laramie County Environmental Health  
1700 Snyder Avenue  
Cheyenne, WY 82001  
Phone: (307) 638-8545
12. Lincoln County  
Office of Planning and Development  
P.O. Box 414  
Afton, WY 83110  
Phone: (307) 886-3825
13. Natrona County  
Environmental Health Division  
Natrona County Health Department  
1200 East 3rd  
Casper, WY 82601-2990  
Phone: (307) 235-9316
14. Niobrara County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457

15. Park County  
Park County Planning Coordinator  
P.O. Box 160  
Cody, WY 82414  
Phone: (307) 587-2204
16. Platte County  
Platte County Sanitarian  
P.O. Box 55  
Wheatland, WY 82210  
Phone: (307) 322-9571
17. Sheridan County  
Sheridan County Engineer  
P.O. Box 612  
Sheridan, WY 82801  
Phone: (307) 672-3426
18. Sublette County  
Sublette County Planner  
P.O. Box 506  
Pinedale, WY 82941  
Phone: (307) 367-4375
19. Sweetwater County  
Sweetwater County Sanitarian  
205 East Railroad Ave.  
Green River, WY 82935  
Phone: (307) 875-2611 Ext. 278
20. Teton County  
Teton County Sanitarian  
P.O. Box 1727  
Jackson, WY 83001  
Phone: (307) 733-3959
21. Uinta County  
Uinta County Engineer  
225 9th Street  
Evanston, WY 82930  
Phone: (307) 789-1780 ext. 318
22. Washakie County  
Washakie County Planner  
County Courthouse  
Worland, WY 82401  
Phone: (307) 347-2741
23. Weston County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

May 16, 1986

Exxon Company, USA  
P.O. Box 1600  
Midland, TX 79702

To whom it may concern:

Your statewide permit number 85-514R, for small wastewater facilities, contains a condition requiring the notification of the appropriate county or state agency prior to the installation or abandonment of facilities authorized by the permit.

A review of state and county records indicates that very few of these facilities are being reported. It is important that these facilities be reported on a regular basis. County governments have agreed to the use of statewide permits on the condition that they be properly notified. If the statewide permitting system is not responsive to the needs of the counties, the state will not be able to issue statewide permits and it will be necessary to obtain permits for such facilities with the individual counties.

In order to address this problem you are requested to do the following:

1. Provide this office a list and location of all facilities constructed under your statewide permit.
2. Indicate the present status of each facility, i.e., operational or abandoned.
3. Indicate whether or not you wish to maintain the statewide permit in an active status.
4. Provide the required notification to both the appropriate county and state agency for all future facilities.

Sincerely yours,

*Lawrence Robinson*

Lawrence Robinson  
Engineering Supervisor

LR/nc



85-514R

MA

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

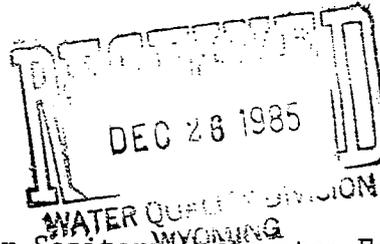
210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

December 23, 1985

Exxon Company, USA  
ATTN: T.J. Tibbitts  
P.O. Box 1600  
Midland, TX 79702



RE: Statewide Permits for Temporary Sanitary Wastewater Facilities

Dear Mr. Tibbitts:

In an effort to clarify the permitting of Exxon temporary sanitary wastewater facilities in the State of Wyoming, I felt it necessary to draft this letter. Exxon's permit for temporary sanitary facilities at drilling sites no. 83-330R expired September 14, 1985. Exxon's permit no. 84-33 for temporary wastewater disposal facilities has been replaced by permit no. 85-514R at your request. Therefore, the only active permit for temporary construction of wastewater disposal facilities in Wyoming is no. 85-514R. Please be advised that this permit is active only until October 29, 1987 and may be renewed before that date.

Sincerely,

Bill Locke, P.E.  
Water Quality Engineer

BL/jw

copy: Norma Coulson, DEQ/WQD, Cheyenne

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-514R  
 \* CONDITIONS ON PERMIT \*  
 MA 14542

Exxon Temporary Wastewater Disposal Facilities  
 (Name of Facility)

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

Exxon Company, USA  
P.O. Box 1600  
Midland, TX 79702

to construct, install, or modify a temporary sanitary wastewater facilities at  
drill locations and off-site associated construction camps

facility according to the procedures and conditions of the  
 application No. 85-514R. The facility is located in

STATEWIDE  
in the County of STATEWIDE,

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-

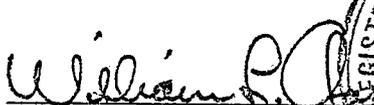
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

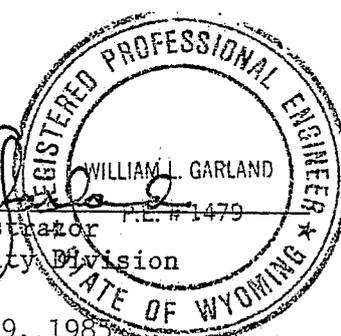
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

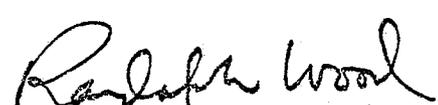
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division  
October 29, 1985  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

\* CONDITIONS ON PERMIT \*

1. This permit is valid for temporary sanitary wastewater disposal facilities only. Temporary being defined as one (1) year or less. If the proposed facility is to be operated for more than one year, the permittee must obtain authorization from this department.

The permittee shall notify the appropriate county or state agency prior to the installation, removal or abandonment of any facility authorized by this permit. The appropriate agency for each county is indicated in the attached list. Notification shall be by phone with a follow-up written notice. Upon abandoning the site, the facility will be removed, disposed of, or left in place in a condition rendering the site safe for the public. Any waste from the facility shall be disposed of only in areas and in a manner approved by the appropriate agency. Upon request, the permittee shall allow authorized representatives of the local agency or the State to have access to the authorized facility for the purpose of conducting an inspection to determine compliance with the provisions of this permit.

AGENCIES RESPONSIBLE FOR SMALL WASTEWATER PERMITS

1. Albany County  
Albany County Planning Office  
405 Grand Avenue  
Laramie, WY 82070  
Phone: (307) 721-5188
2. Big Horn County  
Big Horn County Engineer  
P.O. Box 31  
County Courthouse  
Basin, WY 82410  
Phone: (307) 568-2358
3. Campbell County  
Campbell County Engineer  
500 South Gillette Avenue  
Gillette, WY 82716  
Phone: (307) 682-1970
4. Carbon County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
Herschler Bldg. - 4th West  
Cheyenne, WY 82002  
Phone: (307) 777-7781
5. Converse County  
Converse County Sanitarian  
County Health Department  
530 Oak  
Douglas, WY 82633  
Phone: (307) 358-2536
6. Crook County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457
7. Fremont County  
Fremont County Planner  
Room 200, County Courthouse  
Lander, WY 82520  
Phone: (307) 332-5371
8. Goshen County  
Goshen County Sanitarian  
P.O. Box 1132  
County Courthouse  
Torrington, WY 82240  
Phone: (307) 532-5002
9. Hot Springs County  
Hot Springs County Planner  
County Courthouse  
Thermopolis, WY 82443  
Phone: (307) 864-2732
10. Johnson County  
Johnson County Sanitarian  
County Courthouse  
Buffalo, WY 82834  
Phone: (307) 684-7555
11. Laramie County  
Laramie County Environmental Health  
1700 Snyder Avenue  
Cheyenne, WY 82001  
Phone: (307) 638-8545
12. Lincoln County  
Office of Planning and Development  
P.O. Box 414  
Afton, WY 83110  
Phone: (307) 886-3825
13. Natrona County  
Environmental Health Division  
Natrona County Health Department  
1200 East 3rd  
Casper, WY 82601-2990  
Phone: (307) 235-9316
14. Niobrara County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457

15. Park County  
Park County Planning Coordinator  
P.O. Box 160  
Cody, WY 82414  
Phone: (307) 587-2204
16. Platte County  
Platte County Sanitarian  
P.O. Box 55  
Wheatland, WY 82210  
Phone: (307) 322-9571
17. Sheridan County  
Sheridan County Engineer  
P.O. Box 612  
Sheridan, WY 82801  
Phone: (307) 672-3426
18. Sublette County  
Sublette County Planner  
P.O. Box 506  
Pinedale, WY 82941  
Phone: (307) 367-4375
19. Sweetwater County  
Sweetwater County Sanitarian  
205 East Railroad Ave.  
Green River, WY 82935  
Phone: (307) 875-2611 Ext. 278
20. Teton County  
Teton County Sanitarian  
P.O. Box 1727  
Jackson, WY 83001  
Phone: (307) 733-3959
21. Uinta County  
Uinta County Engineer  
225 9th Street  
Evanston, WY 82930  
Phone: (307) 789-1780 ext. 318
22. Washakie County  
Washakie County Planner  
County Courthouse  
Worland, WY 82401  
Phone: (307) 347-2741
23. Weston County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457

167

PERMIT TO CONSTRUCT

New  
 Renewal  
 Modified

Permit No. 85-515  
MA 14689

Bitter Creek Rest Areas  
(Name of Facility)

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

Wyoming Highway Department

P.O. Box 1708

Cheyenne, WY 82002

to construct, install, or modify two (2) new rest areas tied into existing water and wastewater systems facility according to the procedures and conditions of the application No. 85-515. The facility is located in Sections 10 and 11, T19N, R99W 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.

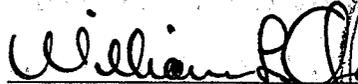
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

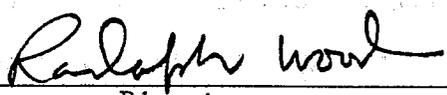
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
\_\_\_\_\_  
REGISTERED PROFESSIONAL ENGINEER  
WILLIAM L. GARLAND  
P.E. # 1479  
Water Quality Division  
STATE OF WYOMING  
October 24, 1985  
\_\_\_\_\_  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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



*Department of Environmental Quality*  
*Water Quality Division*

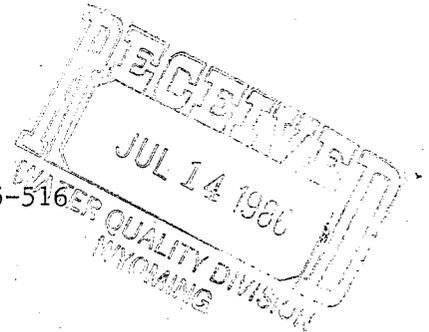
210 LINCOLN STREET

LANDER, WYOMING 82520  
July 10, 1986

TELEPHONE 307-332-3144

FMC Coke Plant  
P.O. Box 431  
Kemmerer, Wyoming 83101

RE: Sedimentation Basin and Cooling/Evaporation Pond 85-516



Dear Mr. Miller:

FMC Coke Plant "Permit to Construct" 85-516 authorized the above mentioned facility to be doubled lined with 60 mil HDPE over 40 mil material. During my April 30, 1986 construction inspection it was noted that 100 mil HDPE was being utilized in place of the 60 mil material.

The increased liner thickness still meets with the minimum design standards as defined by the State of Wyoming. By your letter dated June 20, 1986, this change will be incorporated into "Permit to Construct" 85-516 as change order No. 1.

Note that construction which is not consistent with the terms and conditions of the issued permit is a violation of Water Quality Rules and Regulations. To alleviate future problems please refer to Water Quality Rules and Regulations Chapter III Section 9.

If you have any questions please feel free to contact me.

Sincerely,

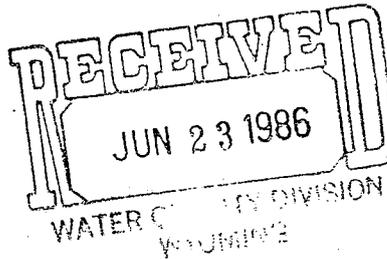
A handwritten signature in cursive script, appearing to read "Jack Bedessem".

Jack Bedessem  
Area III Supervisor

cc. Larry Robinson  
Kate Lincoln  
Plans (3)  
File (3)

FMC Corporation

Phosphorus Chemical Division  
Box 431  
Kemmerer Wyoming 83101  
307 877 4475



**FMC**

June 20, 1986

Mr. Jack Bedessem  
Area III Supervisor  
Wyoming DEQ, WQD  
210 Lincoln Street  
Lander, Wy 82520

*Log in as  
Change Order  
Copy of letter  
w/ Lander &  
Change Plans.*

Re: Construction Details of Catalyzer Pond

Dear Mr. Bedessem:

*85-516  
~~Lincoln Co.~~*

As noted on your "Construction Inspection Report" for the FMC Coke Plant catalyzer ponds on your May 16, 1986, letter, our "Permit to Construct" called for 60 mil over 40 mil high density polyethylene liners for both the settling and evaporation ponds. After permit approval, Gundle Lining Construction Corporation recommended that we use 100 mil over 40 mil high density polyethylene liner on the side walls of the evaporation pond to reduce the likelihood of ice damaging the liners.

FMC decided to follow Gundle's advice and 100 mil polyethylene is being used for the side walls (but not bottom) of the evaporation pond. Our "Permit to Construct" should be revised to reflect this modification. If you require additional information or document submission, please advise us.

Sincerely,

Dennis C. Miller  
Resident Plant Manager

DCM:dds

10-25

PERMIT TO CONSTRUCT

Permit No. 85-516

MA 14542

- New
- Renewal
- Modified

FMC Coke Plant Sedimentation Basin & Cooling/Evaporation Pond  
(Name of Facility)

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

FMC Corp.-Phosphorous Chemical Division

P.O. Box 431

Kemmerer, WY 83101

to construct, install, or modify a double-lined sedimentation basin and cooling/evaporation pond with leak detection system facility according to the procedures and conditions of the application No. 85-516. The facility is located in Section 12, T20N, R117W in the County of Lincoln, 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.

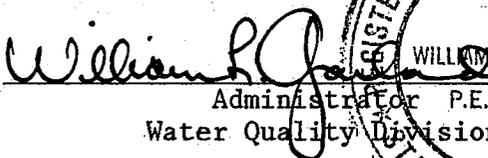
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

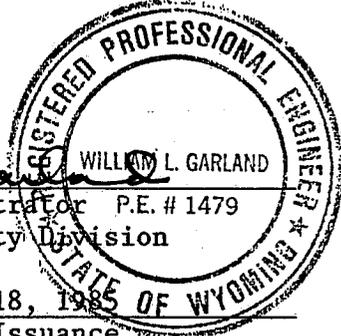
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division

  
REGISTERED PROFESSIONAL ENGINEER  
WILLIAM L. GARLAND  
STATE OF WYOMING

October 18, 1985  
\_\_\_\_\_  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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



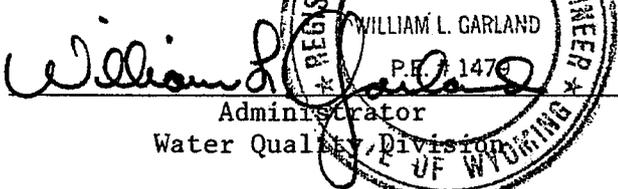
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

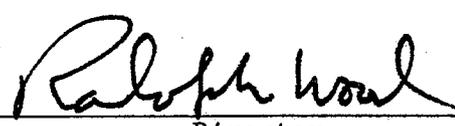
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
P.E. # 1470  
\* REGISTERED PROFESSIONAL ENGINEER \*  
\* OF WYOMING \*  
Administrator  
Water Quality Division

  
Director  
Dept. of Environmental Quality

November 15, 1985  
Date of Issuance

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: South Park Improvements - Riverton

ENGINEER: Bradley J. Nelson  
City of Riverton  
P.O. Box 1700  
Riverton, WY 82501

OWNER: City of Riverton  
P.O. Box 1700  
Riverton, WY 82501

WATER QUALITY DIVISION REFERENCE NUMBER: 85-517

REVIEWING ENGINEER: Steven P. Gerber, P.E. *JPG*

DATE OF REVIEW: October 18, 1985

ACTION: Not authorized.

COMMENTS:

A review of the above referenced project has been completed. The following items must be addressed and/or resolved before a permit can be issued:

1. Provide vertical scale on all profiles.
2. Watermain on South First Street must be encased at station 3 + 20 if drain line is within 18 inches.
3. All sewer lines, including service connections, must be shown on the profiles at the approximate location and elevation.
4. It appears burial of the watermain on South Second Street west at station 2 + 25 is marginal, making the line susceptible to freezing. Please verify.
5. Profile the waterline on sheet 4.
6. The waterline on sheet 4 appears to be very close to the sewer main. Verify that there is room to maintain the required ten foot separation.
7. I would recommend installing a butterfly valve in the existing ten inch waterline on South Second Street East where the new line connects.

view of Plans & Specs.  
Ref. No. 85-517  
Page Two

Please resubmit the required information to this office in triplicate. Be sure to include the Water Quality Reference Number that appears on this review sheet in a cover letter or transmittal sheet. Should you have any questions or comments, please contact this office.

SG/jw  
copy: Plans (3)  
File (2)

10-22

PERMIT TO CONSTRUCT

New  
 Renewal  
 Modified

Permit No. 85-518R

MA 14542

Game and Fish Water Line Expansion  
(Name of Facility)

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

Cheyenne Board of Public Utilities

P.O. Box 1469

Cheyenne, WY 82003

to construct, install, or modify a water distribution facility according to the procedures and conditions of the application No. 85-518R. The facility is located in Section 23 & 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.

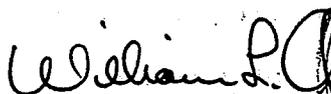
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

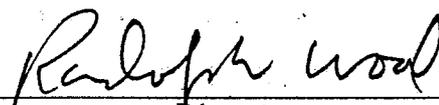
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division  
October 11, 1985  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: Kim M. Lobdell  
Jack Noblitt & Associates  
1920 Thomes Avenue, Suite 620  
Cheyenne, WY 82001

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Game and Fish Water Line Expansion, Laramie Co.

ARCHITECT OR ENGINEER: Kim M. Lobdell, Jack Noblitt and Assoc.  
1920 Thomes Ave., Suite 620, Cheyenne, WY 82001

APPLICANT: Cheyenne Board of Public Utilities  
P.O. Box 1469, Cheyenne, WY 82003

WATER QUALITY DIVISION REFERENCE NUMBER: 85-518

REVIEWING ENGINEER: Christian G. Norman 

DATE OF REVIEW: October 8, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Minimum valve separation on water mains shall be 800 feet or less. Two more valves are required for this project.



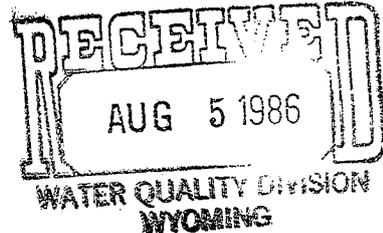
*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

August 4, 1986



A.C. Supply  
ATTN: Mr. Anderson  
P.O. Box 742  
Basin, WY 82410

RE: A.C. Supply Containment Facility, DEQ/WQD Ref. No. 85-519

Dear Mr. Anderson:

Your application is considered inactive and is being returned since you have indicated that you do 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,

A handwritten signature in cursive script that reads "William L. Garland".

William L. Garland  
Administrator

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



*Department of Environmental Quality*  
*Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

July 18, 1986

A.C. Supply  
ATTN: Mr. Anderson  
P.O. Box 742  
Basin, WY 82410

Dear Mr. Anderson:

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 this proposed project is:

Facility Name: A.C. Supply Containment Facility  
 DEQ/WQD Reference Number: 85-519  
 Engineering Consultant: Basin Associated Engineers  
 DEQ/WQD Review Engineer: Steve Gerber  
 Date of DEQ/WQD Review: 11-1-85

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 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,



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

SG/jw

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

210 LINCOLN

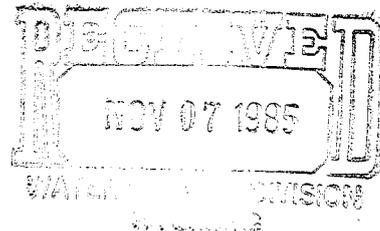
LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: A.C. Supply Containment Facility

ENGINEER: Basin Associated Engineers  
P.O. Box 351  
Basin, WY 82410  
ATTN: W. Kirk Miller

OWNER: A.C. Supply  
P.O. Box 742  
Basin, WY 82410



WATER QUALITY DIVISION REFERENCE NUMBER: 85-519

REVIEWING ENGINEER: Steven P. Gerber, P.E. *SPG*

DATE OF REVIEW: November 1, 1985

ACTION: Not authorized.

COMMENTS:

A preliminary review of the above referenced project has been completed. Before a final review can be completed we must have the following information:

1. Identify the base and all varieties of the 2,4-D family to be disposed of in this facility. If possible estimate the percentages of each.

2. Obtain a determination from EPA whether or not this will be a hazardous waste facility. If it is, a permit must be obtained from EPA prior to the issuance of a permit by our office. Contact Margo Anderson with EPA at the following address: EPA 8HWM-WM

999 18 St., Suite 1300  
Denver, CO 80202-2413  
(303) 293-1665

C



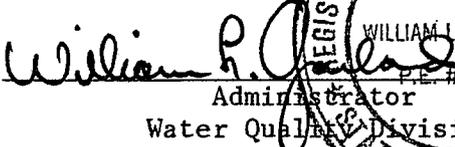
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

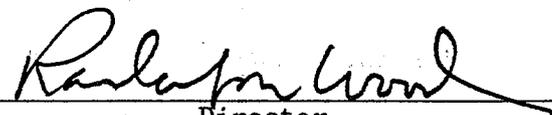
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

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  
October 25, 1985  
Date of Issuance

  
Director  
Dept. of Environmental Quality

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

\* CONDITIONS ON PERMIT \*

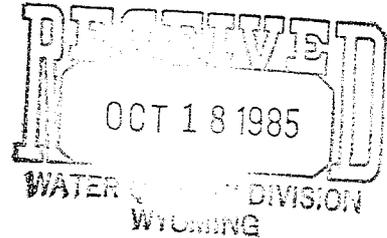
This permit is issued with the requirement that the following conditions be met:

1. The tank must pass a leakage test observed by the engineer with the results reported to the Lander distrsict office.
2. The tank must be retested as noted above before any other season the tank is to be utilized.
3. At least 12 inches of freeboard must be maintained at all times. Wastewater removed from the tank must be disposed of in a manner acceptable to the Water Quality Division.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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



PROJECT: Big Horn Ski Area Sewage Holding Tank

ENGINEER: Sherman Allred, P.E.  
John Donnell & Associates, Inc.  
P.O. Box 638  
Worland, WY 82401

OWNER: Big Horn Ski Area  
c/o Jim Collopy  
1142 Lewis St.  
heridan, WY 82801

WATER QUALITY DIVISION REFERENCE NUMBER: 85-520

REVIEWING EVALUATOR: Jeff Hermansky

DATE OF REVIEW: October 11, 1985

ACTION: **Not authorized.**

COMMENTS:

This office has conducted a review of your proposal to once again use the old oxidation ditch at the Big Horn Ski Area as a sewage holding pond. As you know, last year this office issued a permit to use the ditch as a holding pond for 6 months or basically the 1984-1985 ski season. The understanding this department had was that a permanent solution to sewage disposal was to be addressed in the spring of 1985.

On September 12, 1985, Jim Collopy, Ken Mazur of the Forest Service and I met at the ski area and agreed that it is possible to once again consider using the ditch as a holding pond.

However, we discussed a few conditions that must be met before authorization could be granted:

1. A licensed engineer must submit plans for upgrading or replacement of the ditch.
2. If the ditch is proposed for use as a holding tank, the engineer must certify that the tank is water tight.
3. The engineer must submit a report that addresses the actual, estimated, and/or projected flows generated at the ski area.

Based upon the preceding background information, I would like to offer the following comments in review of the proposed project:

1. No flow data was submitted with the application. It is not possible for this office to permit a holding tank without data to substantiate a design.

C

Review of Plans & Specs.

Ref. No. 85-520

October 11, 1985

2. I am very concerned that even if the ditch can be successfully patched and coated to produce a water tight basin, winter freezing of the holding tank's contents would likely cause leakage to reoccur.

I suspect that the ditch which was repaired to be waterproof, may have failed due to freeze induced cracking.

3. Any repair proposal must be clearly specified by the engineer. I don't feel that the application as presented is sufficient to ensure that the modifications required would protect the basin from failure for the season.

Please note that before a permit can be issued, you must show with reasonable certainty that the ditch will hold water for the entire season. Review of this project has lead me to believe that the only way we may be able to be reasonably sure that the basin does not fail, is to line it with a continuous flexible liner that would be able to resist the forces of ice.

Please submit the required information to this office in triplicate. Be sure to include the Water Quality Reference Number that appears on this review sheet in a cover letter or transmittal sheet. Feel free to contact either Steve Gerber or me if you have any questions.

JH/jw



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Herschler Building • 122 West 25th Street • Cheyenne, Wyoming 82002

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

March 22, 1989

Robert L. Duprey, Director  
Hazardous Waste Management Division  
EPA Region VIII  
Denver Place, Suite 500  
999 18th Street  
Denver, Colorado 80202-2405

RE: Powell Monitor Wells, Department of Environmental Quality/Water Quality  
Division Reference No. 85-521

Dear Mr. Duprey:

Your submittal for the monitor wells installed at the Powell hydrocarbon contamination site (DEQ/WQD Ref. No. 85-521) have been reviewed and are hereby accepted for the record. Please note that when the monitor wells are no longer necessary they must be abandoned properly. Presently the department is using the wells to aid in source determination.

Since the wells have already been installed, a "permit to construct" cannot be issued. However, this letter of approval serves essentially the same purpose.

Thank you for your cooperation in this matter. If you have any questions, please contact me.

Sincerely,

William L. Garland  
Administrator  
Water Quality Division

WLG/MML/jt



MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
----------------------------------	----------------------------------------	-----------------------------------------	--------------------------------------------------	------------------------------------------

November 18, 1987

Mr. C. Jay Silvernale  
US EPA, Region VIII  
One Denver Place  
999 18th Street, Suite 1300 (8 HWM-WM)  
Denver, CO 80207-2413

RE: Application for monitor wells #85-521

Dear Mr. Silvernale:

Enclosed is a copy of a letter sent to you on October 18, 1985. The Department of Environmental Quality, Water Quality Division has not received a response to date and the requested information has not been submitted. Please submit the legal description of the wells, i.e., section, township, range and the final construction details for each well. This permit cannot be issued and our records cleared up until this information is properly submitted.

Your immediate attention in this matter would be greatly appreciated. Please provide this information at your earliest convenience.

Sincerely,

William L. Garland  
Administrator  
Water Quality Division

WLG/MML/nc

Enclosure

cc: Jake Strohman  
Matthew M. Langenfeld (w/encl)

10-18-85



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

October 18, 1985

C. Jay Silvernale  
US EPA, Region VIII  
One Denver Place  
999 18th Street, Suite 1300 (8 HWM-WM)  
Denver, CO 80207-2413

RE: Application for Monitor Wells, #85-521

Dear Mr. Silvernale:

The Department of Environmental Quality, Water Quality Division, has reviewed your application for the permitting of monitor wells at the City of Powell gasoline spill site. Please provide the Department with the legal description of the wells, i.e., section, township, range, and with the final construction details.

If you have any questions, feel free to call the undersigned at (307) 777-7084.

Sincerely,

Matthew M. Langenfeld  
Groundwater Compliance Specialist

MML/nc

cc: A. J. Mancini

PERMIT TO CONSTRUCT

New  
 Renewal  
 Modified

Permit No. 85-522  
 SEE CONDITION ON BACK  
 MA 14542

Amoco Painter Project Septic System  
 (Name of Facility)

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

Amoco Production Company

P.O. Box 829

Evanston, WY 82930

to construct, install, or modify a sewer service lines, septic tanks and leachfield for an oil field process site facility according to the procedures and conditions of the application No. 85-522. The facility is located in Section 32, T16N, R119W 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.

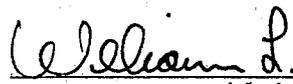
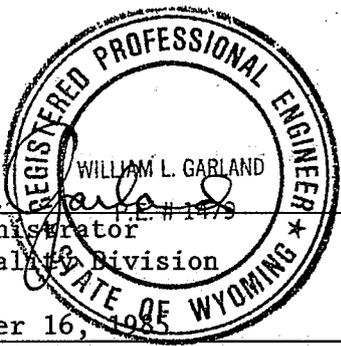
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

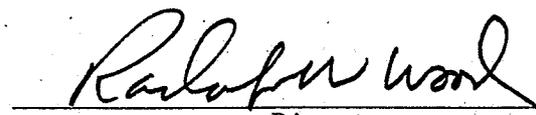
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
E. # 1479  
Administrator  
Water Quality Division  
  
October 16, 1985  
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 #85-522

The permittee shall notify Marion Malnar, Uinta County Engineer, 225 9th Street, Evanston, WY 82930, phone number 789-1780 extension 318, 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.



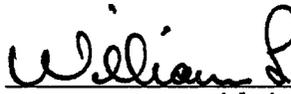
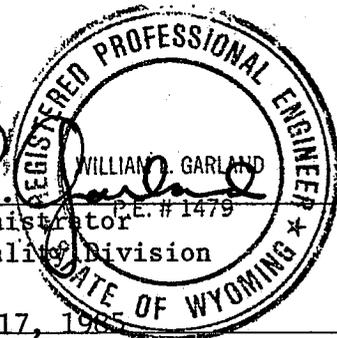
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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  
P.E. # 1479  
Administrator  
Water Quality Division  
  
October 17, 1965  
Date of Issuance

  
Director  
Dept. of Environmental Quality

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

PERMIT TO CONSTRUCT

Permit No. 85-524R

MA 14542

- New
- Renewal
- Modified

Town of Glenrock  
(Name of Facility)

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

Town of Glenrock

219 South 3rd

Glenrock, WY 82637

to construct, install, or modify a water distribution facility according to the procedures and conditions of the application No. 85-524R. The facility is located in Section 3, T33N, R25W in the County of Converse, 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.

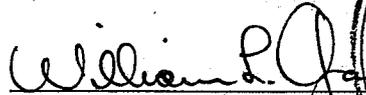
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

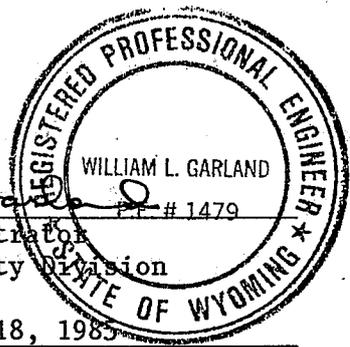
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
\_\_\_\_\_  
Administrator  
Water Quality Division



October 18, 1985  
\_\_\_\_\_  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: Robert C. Hartley  
R.C.H. & Associates  
Box 1659  
Glenrock, WY 82637

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Town of Glenrock, Converse Co.

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

APPLICANT: Town of Glenrock  
219 S. 3rd, Glenrock, WY 82637

WATER QUALITY DIVISION REFERENCE NUMBER: 85-524

REVIEWING ENGINEER: Christian G. Norman *Christian G. Norman*

DATE OF REVIEW: October 7, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Valves, tees, P.R.V.'s, etc. shall be shown on the profile of the water lines.
2. Section 301.07.3 requires that certain disinfection information to be submitted. Please submit the procedure to be used for review.
3. No scale has been indicated on the plan/profile sheets.
4. How will the manholes continuing the P.R.V.'s drain? Show a cross-section of the manhole.
5. Provide an engineering design report, as outlined in Chapter XII, Section 6 of the Wyoming Water Quality Rules and Regulations.
6. Where the vertical separation between sanitary sewers and water mains is less than 1.5 feet, the special construction required should be indicated on the plan/profile sheets.
7. Air relief valves are required at all high points.

CGN/nc

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Doug Dowlin Septic System, Carbon Co.

ARCHITECT OR ENGINEER: Charles E. Bartlett, RJS & Associates, Inc.  
P.O. Box 1104, Rawlins, WY 82301

APPLICANT: Doug Dowlin  
316 LaPaloma Drive, Rawlins, WY 82301

WATER QUALITY DIVISION REFERENCE NUMBER: 85-525, Ref. No. 85-415R

REVIEWING ENGINEER: Christian G. Norman



DATE OF REVIEW: October 8, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. The submittal should be accompanied by an application for a permit to construct, install or modify. The application should be signed by Mr. Dowlin.
2. A letter of verification is required from the receiving agency denoting acceptance of the waste.
3. The septic tanks should be pumped once/day to prevent solids carryover into the leachfield. With the flows expected only 12.5 hours of detention time is provided. The Wyoming Water Quality Rules and Regulations require at least 36 hours. Due to the insufficient detention time, the tanks should be pumped daily.

CGN/nc

*This application was resolved  
under NOV #1622-85 and the  
expansion to wastewater system was  
deleted. Application can be closed.  
TEN 7/15/86*

**ROBERT JACK SMITH**  
CONSULTING ENGINEERS

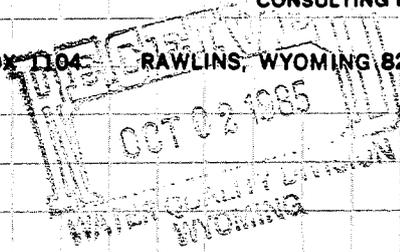


**& ASSOCIATES, INC.**  
AND LAND SURVEYORS

P.O. BOX 1104 RAWLINS, WYOMING 82301

1015 HARSHMAN PHONE (307) 324-5262

JOB NO. \_\_\_\_\_



September 30, 1985

85-525  
Ref. No.  
85-415R

Department of Environmental Quality  
Water Quality Division  
Attn: Mr. Christian G. Norman  
Herschler Building  
Cheyenne, WY 82002

Re: Water Quality Division Reference No. 85-415R

Dear Mr. Norman,

In reference to DEQ/WQD Ref. No. 85-415R, Mr. Dowlin requests that he be allowed to park up to 15 trailers at his man-camp in the SW1/4 NW1/4, Section 5, T17N, R83W.

As explained in the original wastewater facility design, the system was designed for 20 men with an estimated usage of 75 gallons per person per day. According to Table 1, Part D of Chapter XI, the usage rate of a motel is 40 gallons per day per single bed. Using this usage rate and assuming 4 men per trailer the flow rate for the 15 trailers would be 2400 gallons per day.

The original system is designed for handling 1500 gallons per day. This yields a surplus wastewater flow of 900 gpd. The existing septic tanks have a capacity of 2500 gallons.

Therefore, the existing system should be able to handle the flows if Mr. Dowlin will pump out the septic tanks every 2 to 3 days and dispose of this material at a suitable site.

If this meets with your satisfaction please contact me.

Sincerely,  
Robert Jack Smith & Associates, Inc.

Charles E. Bartlett, P.E.

cc: Doug Dowlin

Principals:  
MARTIN PEDERSEN

REGISTERED PROFESSIONAL ENGINEERS AND LAND SURVEYORS IN WYOMING, COLORADO,  
NEW MEXICO, ARIZONA, UTAH, NEVADA, MONTANA, IDAHO, SOUTH DAKOTA AND NORTH DAKOTA

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Doug Dowlin Septic System, Carbon Co.

ARCHITECT OR ENGINEER: Charles E. Bartlett, RJS & Associates, Inc.  
P.O. Box 1104, Rawlins, WY 82301

APPLICANT: Doug Dowlin  
316 LaPaloma Drive, Rawlins, WY 82301

WATER QUALITY DIVISION REFERENCE NUMBER: 85-525, Ref. No. 85-415R

REVIEWING ENGINEER: Christian G. Norman *Christian G. Norman*

DATE OF REVIEW: October 8, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. The submittal should be accompanied by an application for a permit to construct, install or modify. The application should be signed by Mr. Dowlin.
2. A letter of verification is required from the receiving agency denoting acceptance of the waste.
3. The septic tanks should be pumped once/day to prevent solids carryover into the leachfield. With the flows expected only 12.5 hours of detention time is provided. The Wyoming Water Quality Rules and Regulations require at least 36 hours. Due to the insufficient detention time, the tanks should be pumped daily.

CGN/nc



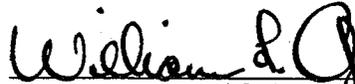
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

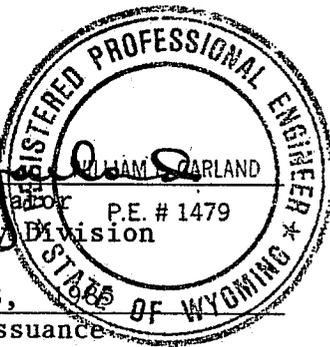
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division  
October 28,  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

xc: James T. Fletcher  
High Plains of Wyoming  
P.O. Box 727  
Newcastle, WY 82701

PERMIT TO CONSTRUCT

- New  
 Renewal  
 Modified

Permit No. 85-527RR

MA 14542

Town of Upton Water Storage Facility  
(Name of Facility)

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

Town of Upton

P.O. Box 203

Upton, WY 82730

to construct, install, or modify a water storage facility according to the procedures and conditions of the application No. 85-527RR. The facility is located in Section 25, T47N, R65W in the County of Weston, 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.

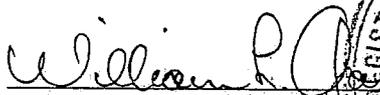
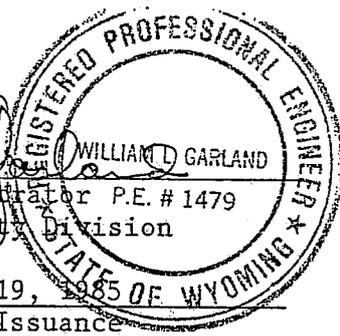
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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, 2161 Coffeen Avenue, Suite 601, 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  
Administrator P.E. # 1479  
Water Quality Division  
  
November 19, 1985  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

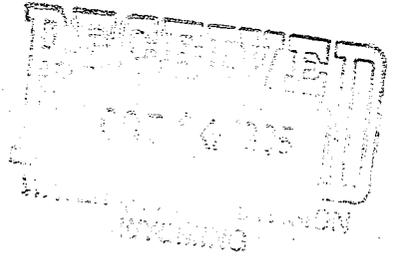
This permit does not supercede the requirements for obtaining any permit from local agencies.

xc: James T. Fletcher  
High Plains of Wyoming  
P.O. Box 727  
Newcastle, WY 82701

NORMA

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
2161 COFFEEN AVE., SUITE 601  
SHERIDAN, WYOMING 82801



PROJECT: Welded Steel Water Storage  
Tank, Upton, Wyoming

ARCHITECT OR ENGINEER: James T. Fletcher  
High Plains of Wyoming  
P.O. Box 727  
Newcastle, Wyoming 82701

WATER QUALITY DIVISION  
REFERENCE NUMBER: 85-527

REVIEWING ENGINEER: Susan Fields *SJ*

DATE OF REVIEW: October 22, 1985

ACTION: Not Authorized

COMMENTS:

1. An engineering design report must be submitted with the application.  
Specific points to be discussed should include the following.
  - a. How does the change in the tank overflow elevation affect system operation?
  - b. Is the water storage capacity sufficient for the Town of Upton? Refer to Section 13 of Chapter XII of the Water Quality Rules and Regulations for water storage capacity requirements.
  - c. Why are the two existing underground tanks being abandoned and replaced with one above ground tank?
2. Please submit calculations that demonstrate that the overflow piping is of sufficient size to provide overflow in excess of the tank filling rate. Also, the overflow pipe needs to be located in the access tube.
3. Disinfection of the tank should be specified in accordance with AWWA D105. A sampling procedure should also be specified.
4. For future reference, please note that the application for a permit to construct should be signed by the applicant, not by the engineer. Also, the specifications should be signed by a professional engineering registered in Wyoming.

PERMIT TO CONSTRUCT

- [X] New  
[ ] Renewal  
[ ] Modified

Permit No. 85-528R  
SEE CONDITION

U.S. Air Force Strategic Training Range Complex, Site IV  
(Name of Facility)

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

U.S. Army Corps of Engineers, Attention: MROED-E

67014 USPO & Courthouse

Omaha, Nebraska 68102-4978

to construct, install, or modify a water and wastewater treatment facility according to the procedures and conditions of the application No. 85-528R. The facility is located in Section 33, T.57N., R.61W., in the County of Crook, 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.

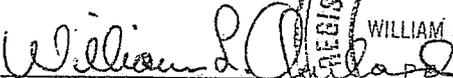
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

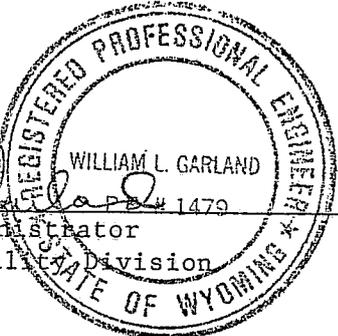
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 601, Sheridan, Wyoming 82801; telephone, 672-6457.

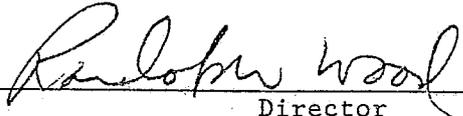
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
\_\_\_\_\_  
Adminstrator  
Water Quality Division  
STATE OF WYOMING



  
\_\_\_\_\_  
Director  
Department of Environmental Quality

March 17, 1986  
\_\_\_\_\_  
Date of Issuance

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

CONDITION

All compaction testing results for the wastewater lagoon construction shall be submitted to this office on a periodic basis. The moisture-density curves for the embankment material shall also be submitted. The testing results will be evaluated and retained on file as a means of verifying adequate construction of the lagoons.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
2161 COFFEEN AVE., SUITE 601  
SHERIDAN, WYOMING 82801

PROJECT: Strategic Trailing Range Complex  
Site Four, U.S. Air Force,  
Colony, Wyoming

ARCHITECT OR ENGINEER: John V. Nicolini  
U.S. Army Corps of Engineers  
Attention: MROED-DF  
6014 U.S.P.O. and Courthouse  
Omaha, Nebraska 68102-4978

WATER QUALITY DIVISION  
REFERENCE NUMBER:

85-528

REVIEWING ENGINEER: Susan Fields *SF*

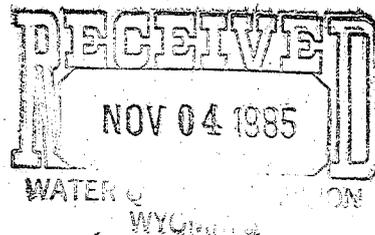
DATE OF REVIEW: November 1, 1985

ACTION: Not Authorized

COMMENTS:

This review is for utilities associated with the technical operations building only.

1. The estimated flow rate of 35 gallons per person per day is appropriate for an office building type facility. It is unclear as to if the technical operations building is this type of facility.
2. Sewage lagoons are normally placed a minimum of 500 feet from buildings. The 140 foot separation from the technical operation building is satisfactory if you are willing to tolerate odors. If possible, it may be a good idea to locate the lagoons downwind of the building. The lagoons must be situated at least 500 feet from any other buildings outside of your property.
3. The detail of the control manhole is unclear as to how flows will be split between cell 1 and cell 2. The invert must be constructed such that equal flow distribution is obtained.
4. The sewer lines from the control manhole to the cells should be laid on a uniform grade.
5. The sewer lagoon design is being reviewed by our Groundwater Section in Cheyenne. Their comments, if necessary, will be forwarded to you.



WATER QUALITY DIVISION  
GROUNDWATER SECTION  
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 85-528

DATE SUBMITTED FOR REVIEW 10/23/85

NAME AND LOCATION OF FACILITY U.S. AF Training Range  
Complex Containment Pond  
Crook Co.

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 [Signature]  
TITLE Engr. Eval  
DATE 11/18/85

APPROVED 11/18/85  
(Date)

[Signature]  
Groundwater Control Supervisor



*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

MEMORANDUM

TO: Susan Fields

FROM: Tim Holbrook, Engineering Evaluator/TH

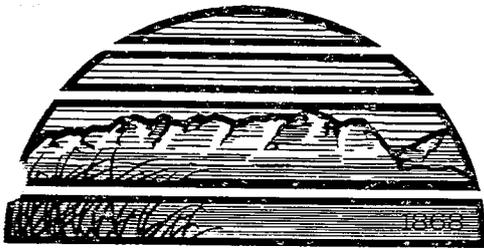
DATE: November 18, 1985

SUBJECT: U.S. Air Force Training Range Complex Containment Pond, Crook County,  
Application No. 85-528

Confirming our phone conversation of November 12, 1985, I offer the following comments after reviewing the above referenced plans:

1. Depth to groundwater at hole BF 84-28 was not indicated and should be provided. Water table depth at some nearby location is needed.
2. Lagoon plans are approved contingent that waste stream in only domestic <sup>type</sup> sewage.
3. The distance to the nearest dwelling was not indicated and should be at least 500 feet from the lagoons.
4. The loading rate was not found and should be less than 14 lb/ac/day BOD5.
5. The applicant must obtain a permit from the State Engineers Office for the water supply well shown on the plans.

TH/nc

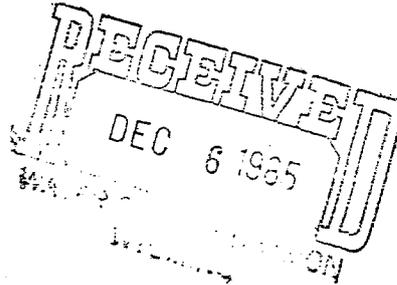


**LARAMIE**

CITY OF LARAMIE P. O. Box C - Laramie, Wyoming 82070 - 307/721-5200

5 December 1985

Thomas S. Norman  
Water Quality Engineer  
Department of Environmental Quality  
Water Quality Division  
Herschler Building  
Cheyenne, WY 82002



85-529

Dear Tom:

On November 14 and December 5, 1985, on-site inspections were made of the installation of the septic system at the Woodslanding Bar, by the City of Laramie Health Department.

The system was installed as per the specifications submitted with one exception. This was the installation of two - 1,000 gallon septic tanks instead of one 2,000 gallon tank as proposed. This was done for two proposed 2,000 gallon tanks.

Sincerely,

*Donald L. Forcum*  
Donald L. Forcum  
City Sanitarian

TBN

file w/ plans

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-529R  
 SEE CONDITION ON BACK  
 m# 14542

Woods Landing Resort  
 (Name of Facility)

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

Mayme Lestum  
c/o Pat Cissell  
1101 Prairie Ave.  
Cheyenne, WY 82009

to construct, install, or modify a commercial subsurface wastewater treatment and disposal facility with pumping station facility according to the procedures and conditions of the application No. 85-529R. The facility is located in Section 11, T13N, R77W in the County of Albany, in the State of Wyoming. This permit shall be effective until December 31, 1985.

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.

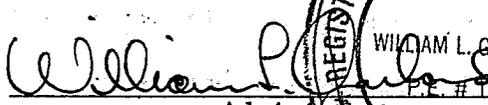
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

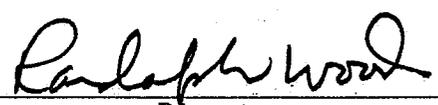
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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  
October 18, 1985  
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 #85-529R

The permittee shall notify the Albany County Planning Office, 405 Grand Avenue, Laramie, Wyoming 82070, phone number 721-5288, 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.

cc: Theodore D. Coyer  
Probity Engineering, P.C.  
1111 E. Lincolnway  
Cheyenne, WY 82001

WATER QUALITY DIVISION  
GROUNDWATER SECTION  
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 85-529

DATE SUBMITTED FOR REVIEW 10-9-85

NAME AND LOCATION OF FACILITY Woods Landing  
Albany Co.

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 Phil Pucef  
TITLE Eng  
DATE 10-16-85

ACCEPTED FOR RECORD 10/16/85  
(Date)

AGM  
Groundwater Control Supervisor

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-530RRR  
 SEE CONDITION ON BACK  
 MA 14542

Snowy Range Ski Area  
 (Name of Facility)

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

Key Associates Recreation Inc.

P.O. Box 138

Centennial, WY 82055

to construct, install, or modify a subsurface wastewater collection and disposal facility according to the procedures and conditions of the application No. 85-530RRR.

The facility is located in Section 20, T16N, R78W in the County of Albany, 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.

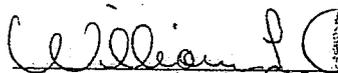
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

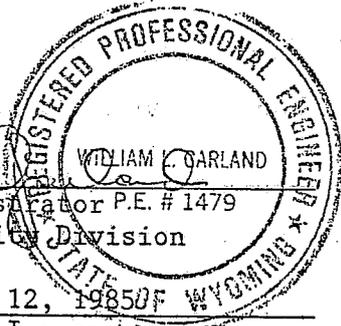
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

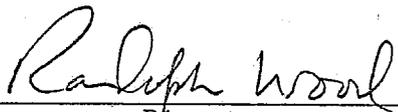
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
Adminisrator P.E. # 1479  
Water Quality Division  
November 12, 1985  
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 #85-530RRR

The permittee shall notify the Albany County Planning Director, 405 Grand Avenue, Laramie, Wyoming 82070, phone number 721-5288, 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.

cc: Lloyd Baker  
Gertsch/Baker and Associates  
307 Grand Avenue  
Laramie, WY 82070

11-6

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

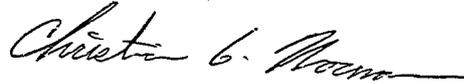
PROJECT: Snowy Range Ski Area, Albany Co.

ARCHITECT OR ENGINEER: Lloyd H. Baker, Gertsch/Baker and Assoc.  
307 Grand Ave., Laramie, WY 82070

APPLICANT: Key Associates Recreation, Inc.  
P.O. Box 138, Centennial, WY 82055

WATER QUALITY DIVISION REFERENCE NUMBER: 85-530RR

REVIEWING ENGINEER: Christian G. Norman



DATE OF REVIEW: November 5, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. A cleanout is required for each chamber of the septic tank. It is recommended that risers be used on each access way to bring the access to the ground level.
2. What is the distance from the absorption field to the stream?
3. The depth to seasonally high groundwater shall be indicated. This may be determined by inspection of the soils for mottling.

CGN/nc

10-11

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Snowy Range Ski Area, Albany Co.

ARCHITECT OR ENGINEER: Lloyd H. Baker, Gertsch/Baker and Assoc.  
307 Grand Ave., Laramie, WY 82070

APPLICANT:

WATER QUALITY DIVISION REFERENCE NUMBER: 85-530

REVIEWING ENGINEER: Christian G. Norman *Christian G Norman*

DATE OF REVIEW: October 10, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. An application for a permit to construct is required.
2. Three (3) copies of the plans and specifications are required. Only two were submitted.
3. Provide an area map so that the location of the facility can be determined.
4. A replacement area for the drainfield should be indicated on the plan sheet.
5. What is the distance between the seasonally high groundwater and the underlying impervious layer?
6. Document when and where the depth to groundwater was determined. Show the location of the test area on the plan sheet.
7. Show the locations of the percolation tests on the plan sheet. Provide the data from the percolation tests.
8. The overflow lines between serial leach systems shall be set no higher than the midpoint of the upstream distribution pipe.
9. What are the slopes of the building sewer lines?
10. Provide a septic tank detail.
11. Show any water lines in the area on the plan sheet.
12. A cleanout is required on the sewer line from proposed homesite #1. A cleanout is required every 100 feet maximum.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-531  
SEE CONDITIONS ATTACHED

LaBarge Project - Shute Creek GPP  
(Name of Facility)

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

Exxon Company, USA  
P.O. Box 1600  
Midland, TX 79702

to construct, install, or modify a road dust control facility according to the procedures and conditions of the application No. 85-531. The facility is located in Sections 13 and 14, T22N, R112W and Sections 18 and 19, T22N, R111W in the Counties of Lincoln and Sweetwater, in the State of Wyoming. This permit shall be effective for a period of one (1) year (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.

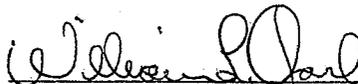
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

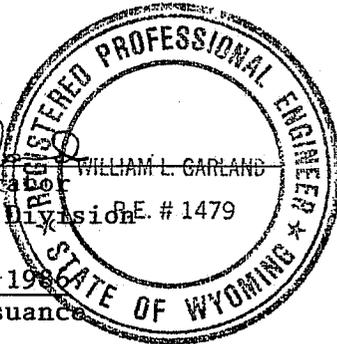
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

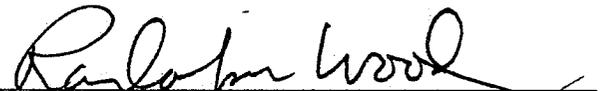
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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 WILLIAM L. GARLAND  
Water Quality Division E. # 1479  
April 7, 1986  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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

This permit authorizes you to dispose of 200,000 gallons of hydrostatic test wastewater on the adjoining roads as needed during construction.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-531

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application or 15% for spray irrigation or irrigation by gated pipe on the contour. Vegetated areas of the site shall not be spray-irrigated where possible plant leaf injury may result from salt residue.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-532  
SEE CONDITIONS ATTACHED

LaBarge Project - Dehydration Facility  
(Name of Facility)

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

Exxon Company, USA

P.O. Box 1600

Midland, TX 79702

to construct, install, or modify a road dust control facility according to the procedures and conditions of the application No. 85-532. The facility is located in Section 35, T28N, R114W in the County of Sublette, in the State of Wyoming. This permit shall be effective for a period of one (1) year (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.

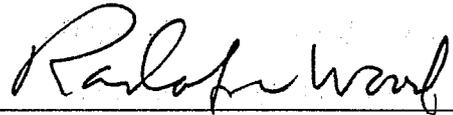
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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  
PE # 1479  
Administrator  
Water Quality Division  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF WYOMING

April 7, 1986  
Date of Issuance



Director  
Dept. of Environmental Quality

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

This permit authorizes you to dispose of 160,000 gallons of hydrostatic test wastewater on the adjoining roads as needed during construction.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-532

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application or 15% for spray irrigation or irrigation by gated pipe on the contour. Vegetated areas of the site shall not be spray-irrigated where possible plant leaf injury may result from salt residue.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.



THE STATE OF WYOMING

10-10  
85-533  
MA 14542  
ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

October 9, 1985

Edward Haak, President  
Star Aggregates, Inc.  
P.O. Box 1437  
Cheyenne, WY 82003

RE: Wastewater Application 85-533, TREK Wash Ponds

Dear Mr. Haak:

The Water Quality Division has reviewed your construction permit application for three gravel wash ponds located in Section 11 and 14, T13N, R66W, Laramie County. The Water Quality Division has found that the application meets minimum State of Wyoming standards. Since a permit cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final authorization document.

Sincerely,

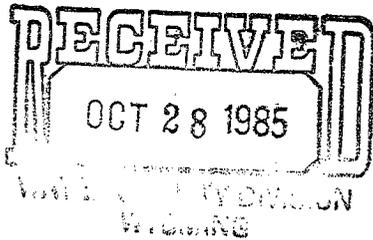
William L. Garland  
Administrator

- WLG/TSN/nc

cc: Cindy Bosco, DEQ/LQD

# PATHFINDER

Pathfinder Mines Corporation  
Shirley Basin Mine  
Shirley Basin, Wyoming 82615  
(307) 356-4312



October 24, 1985

TON

Mr. Thomas Norman  
Department of Environmental Quality  
Water Quality Division  
Herschler Building  
122 W. 25th  
Cheyenne, Wyoming 82002

Dear Sir:

Construction started on sediment control structures with permit numbers 85-536R, 85-534R, and 85-535R on October 23, 1985. These ponds will be completed by November 30, 1985. If you have any questions please call.

Sincerely,

A handwritten signature in dark ink, appearing to read "S. Murdock".

Strat Murdock  
Environmental Coordinator

ESM/jar

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-534R  
 Ref. No. 78-17R  
 MA 14542

Shirley Basin Mine - Reservoir 7W4  
 (Name of Facility)

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

Pathfinder Mines Corporation

Shirley Basin Mine

Shirley Basin, WY 82615

to construct, install, or modify a sedimentation control structure facility according to the procedures and conditions of the application No. 85-534R and 78-17R. The facility is located in Section 26, T28N, R78W 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.

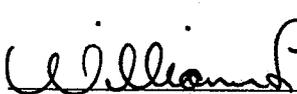
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

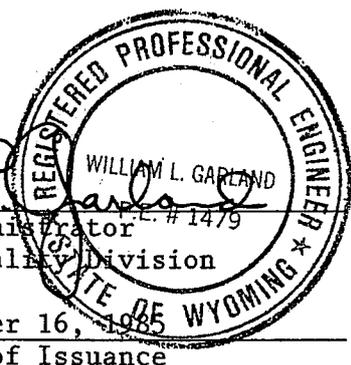
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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.

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  
October 16, 1985  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: George Hoffman  
Hydro Engineering  
770 East Magnolia  
Casper, WY 82604

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-535R  
 Ref. No. 78-18R

MA 14542

Shirley Basin Mine - Reservoir 3N1  
 (Name of Facility)

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

Pathfinder Mines Corporation

Shirley Basin Mine

Shirley Basin, WY 82615

to construct, install, or modify a sedimentation control structure facility according to the procedures and conditions of the application No. 85-535R and 78-18R. The facility is located in Section 26, T28N, R78W 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.

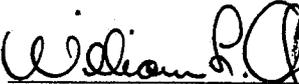
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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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 D. GARLAND  
REGISTERED PROFESSIONAL ENGINEER  
ADMINISTRATOR # 1479  
WATER QUALITY DIVISION  
STATE OF WYOMING  
OCTOBER 16 1985  
DATE OF ISSUANCE

  
Director  
Dept. of Environmental Quality

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

cc: George Hoffman  
Hydro Engineering  
770 East Magnolia  
Casper, WY 82604

10-22

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-536R  
 Ref. No. 78-20R

MA 14542

Shirley Basin Mine - Reservoir 7W5  
 (Name of Facility)

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

Pathfinder Mines Corporation

Shirley Basin Mine

Shirley Basin, WY 82615

to construct, install, or modify a sedimentation control structure facility according to the procedures and conditions of the application No. 85-536R and 78-20R. The facility is located in Section 26, T28N, R78W 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.

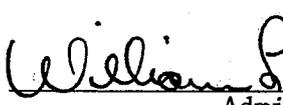
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Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
\_\_\_\_\_  
WILLIAM L. GARAND  
Administrator # 1479  
Water Quality Division  
  
October 16, 1985  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: George Hoffman  
Hydro Engineering  
770 East Magnolia  
Casper, WY 82604

10-22

PERMIT TO CONSTRUCT

- New  
 Renewal  
 Modified

Permit No. 85-537R  
Ref. No. 78-21R

MA 14542

Shirley Basin Mine - Reservoir 7W2  
(Name of Facility)

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

Pathfinder Mines Corporation

Shirley Basin Mine

Shirley Basin, WY 82615

to construct, install, or modify a sedimentation control structure facility according to the procedures and conditions of the application No. 85-537R and 78-21R. The facility is located in Section 23, T28N, R78W 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.

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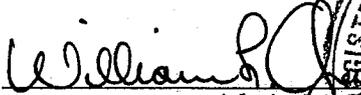
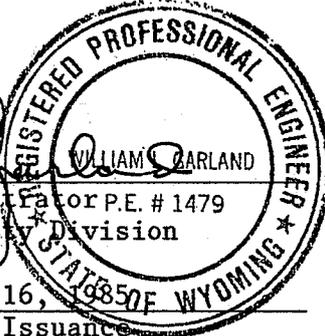
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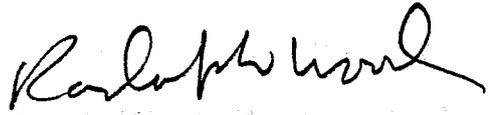
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AUTHORIZED BY:

  
\_\_\_\_\_  
Adminis.   
Water Quality Division  
October 16, 1985  
Date of Issuance

  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: George Hoffman  
Hydro Engineering  
770 East Magnolia  
Casper, WY 82604

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-538R

Ref. No. 78-22R

MA 14542

Shirley Basin Mine - Reservoir 7W3  
(Name of Facility)

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

Pathfinder Mines Corporation

Shirley Basin Mine

Shirley Basin, WY 82615

to construct, install, or modify a sedimentation control structure facility according to the procedures and conditions of the application No. 85-538R and 78-22R. The facility is located in Section 23, T28N, R78W 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.

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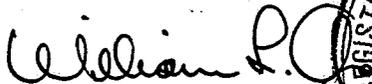
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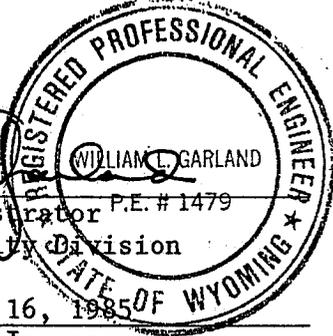
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AUTHORIZED BY:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division  
October 16, 1985  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

cc: George Hoffman  
Hydro Engineering  
770 East Magnolia  
Casper, WY 82604

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Pathfinder Sedimentation Ponds, Carbon Co.

ARCHITECT OR ENGINEER: George Hoffman  
770 East Magnolia, Casper, WY 82604

APPLICANT: Pathfinder Mines Corp., Shirley Basin Mine  
Shirley Basin, WY 82615

WATER QUALITY DIVISION REFERENCE NUMBER: 85-534 thru 85-538 (Ref. No. 78-17R,  
78-18R, 78-20R, 78-21R, 78-22R)

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

DATE OF REVIEW: October 8, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Application forms were not submitted for the above projects.
2. No specifications were submitted for the riprap required on the spillway (i.e., size, location, depth, gradation).
3. More detail is needed for the erosion control blankets which are located on the pond bottom. What is the material? Where will it be placed? How will it be held in place? Detailed drawings would help to explain this for each pond.

TSN/nc

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-539R  
MA 14542

Skyline Camp Wastewater System  
(Name of Facility)

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

Presbytery of Wyoming  
c/o Michael A. McNamee  
408 South 11th Street  
Laramie, WY 82070

to construct, install, or modify a commercial wastewater collection lines and total containment 2-cell lagoon facility according to the procedures and conditions of the application No. 85-539R. The facility is located in Section 10, T13N, R82W 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.

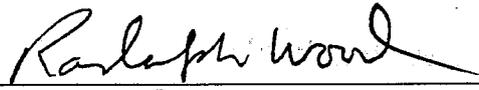
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Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
WILLIAM L. GARLAND  
#2479  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF WYOMING  
Administrator  
Water Quality Division

  
Director  
Dept. of Environmental Quality

October 30, 1985  
Date of Issuance

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

cc: Donald R. Lamb  
Associated Engineers  
609 South 2nd Street  
Laramie, WY 82070

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Skyline Camp Wastewater System, Carbon Co.

ARCHITECT OR ENGINEER: Don Lamb, Associated Engineers  
609 S. 2nd Street, Laramie, WY 82070

APPLICANT: Michael A. McNamee  
408 S. 11th Street, Laramie, WY 82070

WATER QUALITY DIVISION REFERENCE NUMBER: 85-539

REVIEWING ENGINEER: Thomas S. Norman

DATE OF REVIEW: October 10, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. The calculations for the last equation on page 1 are incorrect. The lagoon area should be 18,515 square feet.
2. An operation and maintenance manual is required for this facility in accordance with Chapter XI, Part B, Water Quality Rules and Regulations. A draft is required at 50% completion and a final copy required prior to start-up.
3. Inlet piping to the ponds must discharge onto the bottom and onto a concrete apron.
4. A manhole is required prior to the first cell with an air gap of at least six inches above the normal operating level of the pond.
5. The ability to fluctuate water levels in the pond is required. The proposed interconnecting piping does not allow this.
6. I have concerns over the lack of subsurface information in the area of the ponds. If the ponds intercept those gravel lenses that bear water, it is doubtful that the pond could be constructed because of continuous groundwater infiltration. Another factor is that groundwater would fill up the lagoons and use the capacity intended for the wastewater. It is very difficult to seal off those gravel lenses as the hydraulic head (especially when the ponds are empty) will create seepage and possibly a 'quick' condition in the pond.

TSN/nc

WATER QUALITY DIVISION  
GROUNDWATER SECTION  
PERMIT APPLICATION REVIEW

APPLICATION NUMBER 85-539

DATE SUBMITTED FOR REVIEW 10-9-85

NAME AND LOCATION OF FACILITY SKYLINE CAMP  
Carbon Co.

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 Phil Pucek

TITLE Engr

DATE 10-18-85

ACCEPTED FOR RECORD 10/18/85  
(Date)

ajm  
Groundwater Control Supervisor

1-29-86

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-540R  
\*SEE CONDITION

ROBERTS' TRAILER PARK SEPTIC SYSTEM  
(Name of Facility)

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

Robert's Trailer Park  
P.O. Box 186  
Hulett, Wyoming 82720

to construct, install, or modify a small wastewater treatment facility according to the procedures and conditions of the application No. 85-540R. The facility is located in Section 6, T.54N., R.64W., in the County of Crook, 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.

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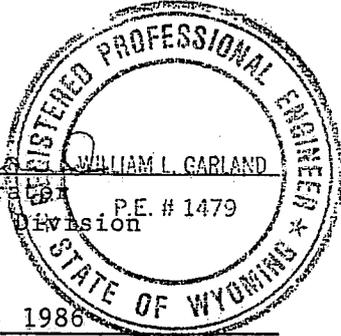
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 601, 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.

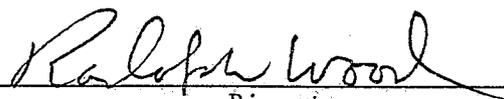
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:

  
Administrative  
Water Quality Division



REGISTERED PROFESSIONAL ENGINEER  
WILLIAM L. GARLAND  
P.E. # 1479  
STATE OF WYOMING

  
Director  
Department of Environmental Quality

January 16, 1986  
Date of Issuance

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

Conditions

The groundwater level at the leach field site will be monitored in the spring prior to beginning construction of the expanded leach field. If the water level is higher than 87', the Sheridan DEQ office will be notified for instructions on how to proceed.

xc: Ralph Goodson  
Bearlodge Engineering  
P.O. Box 130  
Sundance, WY 82729

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
2161 COFFEEN AVE., SUITE 601  
SHERIDAN, WYOMING 82801

PROJECT: Roberts' Trailer Park Septic System

ARCHITECT OR ENGINEER: Ralph W. Goodson  
Bearlodge Engineering  
P.O. Box 130  
Sundance, Wyoming 82729

WATER QUALITY DIVISION  
REFERENCE NUMBER: 85-540

REVIEWING ENGINEER: Rich Ruyle *RR*

DATE OF REVIEW: November 18, 1985

ACTION: Not Authorized

COMMENTS:

- 1.) A drawing showing the grade and depth of the four inch collection line and a detail drawing of the service connection are needed.
- 2.) Even though the septic tanks are upstream of the collection line, I would ask that a cleanout be installed at the change in direction of the pipe. There should be some way to access the line.
- 3.) Roberts uses a well to serve the trailers. How close is it to the leach field? How deep is the well?
- 4.) Can you provide better verification that the seasonal high ground-water level is actually at elevation 87?
- 5.) There is concern that groundwater mounding may prohibit a three foot separation between the bottom of the leach field and groundwater. If possible, the depth of the trenches should be two feet instead of three feet to provide additional separation. The gravel in the trenches would then have one foot of cover.

11-20-85

WATER QUALITY DIVISION  
GROUNDWATER SECTION  
PERMIT APPLICATION REVIEW

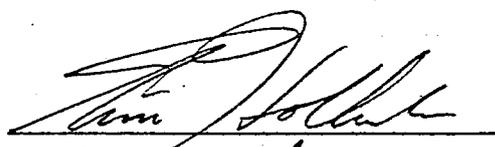
APPLICATION NUMBER 85-540

DATE SUBMITTED FOR REVIEW 10/23/85

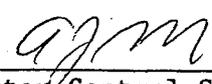
NAME AND LOCATION OF FACILITY Roberts Trailer Park Septoe  
System Expansion  
Crook, CO

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   
TITLE Engr. Eval.  
DATE 11/18/85

APPROVED 11/19/85  
(Date)

  
Groundwater Control Supervisor



*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

MEMORANDUM

TO: Rich Ruyle, Northeast District Supervisor

FROM: Tim Holbrook, Groundwater Engineering Evaluator *TH*

DATE: November 18, 1985

SUBJECT: Review of Roberts Trailer Park Septic System Expansion, Crook County, Application No. 85-540

The following comments are provided as discussed in our phone conversation of November 12, 1985.

1. Only one of the percolation tests was performed in the area of the proposed leach field. At least three such tests are required (Water Quality Division, Rules and Regulations, Chapter XI, page 94). Further water level monitoring data is needed to support the applicant's claim that 87 feet elevation is a seasonal high.
2. Groundwater level appears to have been measured in September. This could represent a seasonal low. It is possible that the system will not function during high groundwater levels.
3. WQD regulations require soil exploration to a depth of 4 feet below the bottom of the proposed absorption system (Water Quality Division, Rules and Regulations, Chapter XI, page 94). Percolation test hole #1 was only 40 inches deep, only 6 inches below the absorption system.
4. The engineering report states there are no wells "in the vicinity". It is likely the residents utilize groundwater. The nearest well locations are needed.

The leach field expansion plans do not adequately address groundwater concerns. It appears that the location may be unsuitable due to groundwater conditions.

TH/nc

cc: A. J. Mancini

PERMIT TO CONSTRUCT

Permit No. 85-541R

MA 14689

- New
- Renewal
- Modified

Rattlesnake Pipeline  
(Name of Facility)

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

Town of Hanna

P.O. Box 99

Hanna, WY 82327

to construct, install, or modify a water source development facility according to the procedures and conditions of the application No. 85-541R. The facility is located in T20, 21, 22N, R82W 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.

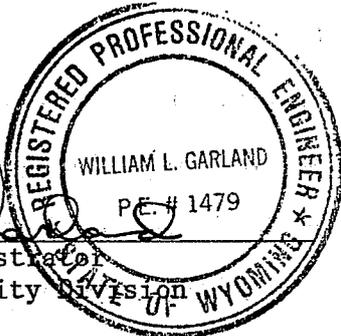
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

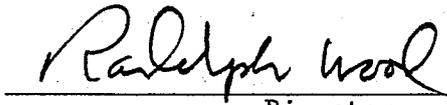
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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



  
Director  
Dept. of Environmental Quality

October 24, 1985  
Date of Issuance

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

cc: James W. Nollenberger  
Black & Veatch  
1400 South Potomac Street, Suite 200  
Aurora, CO 80012

10-16

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: Rattlesnake Pipeline, Carbon Co.

ARCHITECT OR ENGINEER: James W. Nollenberger, Black & Veatch  
1400 S. Potomac St., Suite 200, Aurora, CO 80012

APPLICANT: Town of Hanna  
P.O. Box 99, Hanna, WY 82327

WATER QUALITY DIVISION REFERENCE NUMBER: 85-541

REVIEWING ENGINEER: Christian G. Norman *Christian G. Norman*

DATE OF REVIEW: October 11, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Three (3) copies of the plans and specifications are required. Only two (2) were submitted.
2. No service connections shall be provided from the raw water transmission line, unless there are provisions to treat the water, or the sole purpose of the service is for irrigation or agricultural use. Document the use of water from the service connections (STA 54+45, STA 58+10, STA 64+10) and how the water will be treated if it is for human consumptive use.

CGN/nc



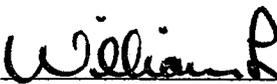
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

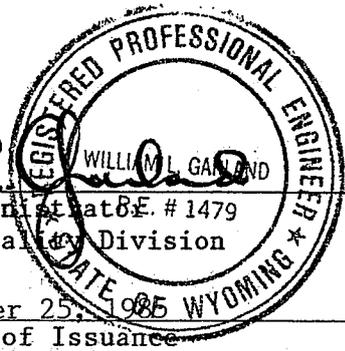
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

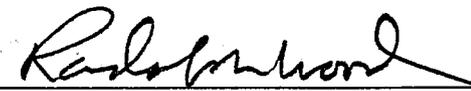
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
AdministatBE # 1479  
Water Quality Division  
October 25, 1985  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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



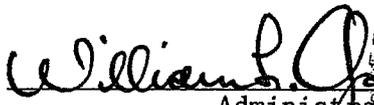
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

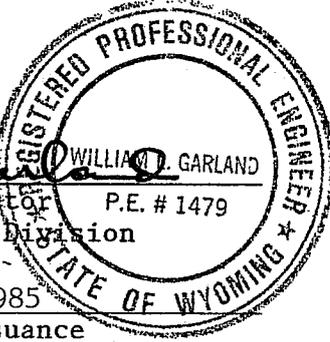
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

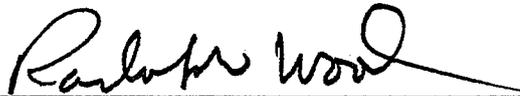
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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  
October 28, 1985  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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



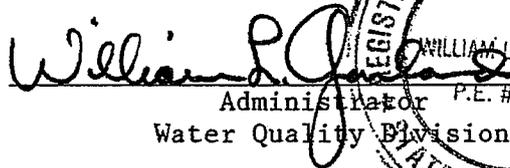
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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.

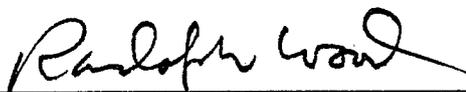
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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 P.E. # 1479  
Water Quality Division  
November 5, 1985  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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



*Department of Environmental Quality*  
*Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

October 30, 1985

Kevin D. Jones, P.E.  
516 Sage Street  
Evanston, WY 82930

RE: Calder's Gas-N-Go Restaurant, Wastewater Disposal Facility  
No. 85-544

Dear Kevin:

I am in receipt of your letter dated October 9, 1985 and permit application for the above project. Your letter offers three treatment options, of which you endorse two: oversizing the septic tank to allow for grease storage and separating the kitchen line from the remainder of the waste lines to allow for a proper grease trap.

The only option which will meet Wyoming Water Quality Rules and Regulations is the option where the kitchen line is separated from all other waste lines and a trap is provided for removal of grease prior to the septic tank.

Sincerely,

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

Bill Locke, P.E.  
Water Quality Engineer

BL/jw

copy: Calder Bros. Co., Inc.  
P.O. Box 101  
Lyman, WY 82937

C



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 3, 1986

UPRR  
1416 Dodge Street  
Omaha, NE 68179

RE: UPRR Permits to Construct Numbers 85-365RR, 85-545R and 85-546R

Gentlemen:

Enclosed are the permits to construct the water treatment system, the water management system, and the soil-bentonite cut-off wall. The construction of the facilities covered by these permits does not fulfill the requirements for the final remedial measures and is considered as an interim measure only. The recovery of free oil, in-situ treatment of soils and groundwater, the ultimate rehabilitation of the affected aquifers and/or the removal and destruction of all wastes are required by Wyoming law. Under the Litigation Suspension Agreement, final remedial measures will be established consistent with available technology and may even result in the development of new technologies. Proven technologies, such as the recovery of free oil, are expected to proceed as soon as practical. Subsequent measures such as enhanced recovery may require some effort in research and development. However, if these efforts afford no hope for a complete clean-up within a reasonable time-frame (2 years), then excavation, landfilling, and incineration will once again be considered as the final remedial measures.

Sincerely,

William L. Garland  
Administrator

WLG/PP/nc  
Enclosures

PERMIT TO CONSTRUCT

- New  
 Renewal  
 Modified

Permit No. 85-545R  
SEE CONDITIONS ATTACHED  
MA 14689

Industrial Water Treatment System  
(Name of Facility)

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

Union Pacific Railroad

1416 Dodge Street

Omaha, NE 68179

to construct, install, or modify a industrial water treatment facility according to the procedures and conditions of the application No. 85-545R. The facility is located in Section 5, T15N, R73W in the County of Albany, 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.

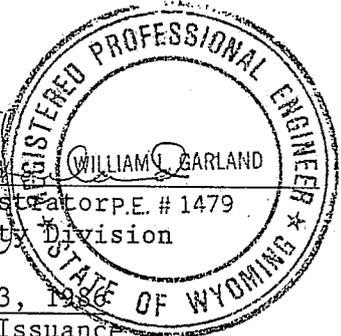
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

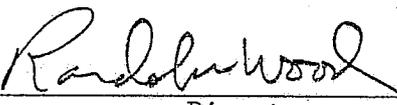
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
March 3, 1986  
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 #85-545R

1. A draft O & M manual for the water treatment system, the water management system, the groundwater monitoring system and the soil-bentonite wall shall be submitted to DEQ before slurry wall construction is 50% complete and finalized when construction is 75% complete. The O & M manual shall be considered an operational condition of this permit.

The O & M manual at a minimum will include:

- a. Modifications to the monitoring system as discussed in the February 5, 1986 meeting with UPRR and CH2M Hill will be included in the O & M manual. These modifications include:
  - (1) The installation of two additional shallow piezometers along the western segment and near the northwest corner of the soil-bentonite wall.
  - (2) The addition of BR-19 into the water quality monitoring network.
  - (3) Contingency monitoring plans for the alluvial and bedrock aquifers in case of system upset or as warranted by evaluation of the static water level and water quality monitoring data.

A system upset includes:

- (a) Changes in the flow regime resulting in vertically downward gradients or outward alluvial gradients.
  - (b) The release of oil or dissolved contaminants into, through or beneath the wall.
  - (c) The migration of oil or dissolved contaminants in the bedrock.
  - (d) Plugging in the internal or external drain systems.
  - (e) Interrupted or discontinued operation of:
    - (i) the water treatment plant;
    - (ii) the sumps;
    - (iii) pumps used in the operation of the water management and water treatment systems.
  - (f) Flooding or heavy precipitation.
  - (g) Breakdown, washing out, breaching or any damage to the wall.
  - (h) The presence of oil or dissolved contaminants in the external drains.
- (4) A description of data reporting dates and system evaluation reporting dates.
- (5) A description of reporting formats, including maps and graphs.
- (6) Inspection for sheen in all alluvial wells along the western wall and in P-106 will be performed when static water levels are measured.

Unless shown to be redundant, further modifications to the Morrison monitoring plan will include monitoring of contaminant intrusion of the wall and monitoring of contaminant release from the isolation system. These monitoring points will be installed in close proximity to the wall. These modifications will be implemented within three months of completion of the soil-bentonite wall.

Modifications in any portion of the monitoring program will be made as necessary to assure that the water management system, the water treatment system, and the cut-off wall are performing satisfactorily.

- b. A complete description of groundwater, surface water and discharge point sampling protocol.
- c. Standard forms for the recording of all field notes related to routine sampling as well as unusual occurrences.
- d. A description of the schedule for all monitoring activities.
- e. A description of the proper procedures for recording, maintaining, interpreting, and reporting monitoring data.

- f. Contingency plans for all system upsets. These plans include changes in monitoring schedules, chain of responsibility, Water Quality Division notification requirements, and emergency phone numbers.
  - g. Items on Attachment A.
2. The soil-bentonite cut-off wall shall be constructed using the Quality Control Program specified by the U.S. EPA, Region VIII.
  3. Construction and operation of the facilities covered by the enclosed permits does not relieve the Union Pacific Railroad of U.S. EPA requirements. U.S. EPA requirements may be more stringent or exceed those established by the Wyoming Department of Environmental Quality, Water Quality Division.
  4. Logs and completion details of all new wells, well development procedures, and well location maps must be submitted within 30 days after well installation.

ATTACHMENT A

O & M Manuals

1. Manual Introduction
  - a. Manual user guide
  - b. Table of contents
  - c. Plant description and flow pattern
  - d. Operation and managerial responsibilities
2. NPDES Permit Information
  - a. Permit effluent requirements
  - b. Reporting procedures for spills (Chapter IV, Wyoming Water Quality Rules and Regulations)
  - c. Self-monitoring requirements
  - d. Renewal date for permit
3. Description, Operation and Control of Wastewater Treatment Facilities
  - a. General plant operation
    - (1) Unit/process description (to include individual design efficiencies)
    - (2) Relationship to other units
    - (3) Control procedures
    - (4) Major equipment involved
    - (5) Common operation problems
  - b. Specific plant operation
    - (1) Normal operation (to include sludge management and ultimate disposal)
    - (2) Alternate operation
    - (3) Emergency operations and fail-safe procedures
    - (4) Procedures for bypass of individual units

4. Laboratory Testing

- a. Purpose
- b. Sampling program
- c. Operator/laboratory references
- d. Daily operational control testing
- e. Interpretation of results
- f. Sample lab work sheets
- g. Quality assurance program

5. Records

- a. Daily operating records (log)
- b. Laboratory records
- c. Maintenance records
- d. Personnel records
- e. O & M costs records
- f. Annual report

6. Maintenance

- a. Why - importance
- b. Maintenance schedule for all equipment
- c. Storeroom/inventory system
- d. Housekeeping
- e. Tools and special equipment
- f. Lubrication schedules
- g. Warranty provisions

7. Safety

- a. General
- b. Sewer/lift station hazards
- c. Electrical hazards
- d. Mechanical equipment hazards

- e. Fire, explosions
- f. Health hazards
- g. Laboratory safety
- h. Safety references
- i. Emergency operating response program

8. Utilities

- a. General
- b. Electrical
- c. Telephone
- d. Natural gas
- e. Water
- f. Standby power operation

11-18

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: UPRR, Water Treatment System, Albany Co.

ARCHITECT OR ENGINEER: CH2M Hill, P.O. Box 22508  
Denver, CO 80222

APPLICANT: UPRR, ATTN: S. J. McLaughlin  
1416 Dodge St., Omaha, NE 68179

WATER QUALITY DIVISION REFERENCE NUMBER: 85-545 & 85-546

REVIEWING ENGINEER: *Christian G. Norman* and *LeRoy Feusner*, P.E.

DATE OF REVIEW: November 15, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

The Water Quality Division is awaiting information concerning the issuance of the NPDES permit prior to the recommendation of the issuance of a permit to construct.

PERMIT TO CONSTRUCT

- New  
 Renewal  
 Modified

Permit No. 85-546R  
SEE CONDITIONS ATTACHED  
MA 14689

Union Pacific Tie Treating Plant Water Management System  
(Name of Facility)

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

Union Pacific Railroad

1416 Dodge Street

Omaha, NE 68179

to construct, install, or modify a groundwater management system facility according to the procedures and conditions of the application No. 85-546R. The facility is located in Section 5, T15N, R73W in the County of Albany, 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.

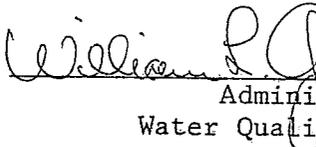
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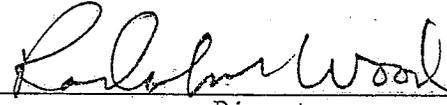
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
ADMINISTERED PROFESSIONAL ENGINEER  
WILLIAM L. GARLAND  
P.E. # 1479  
Administrator  
Water Quality Division  
STATE OF WYOMING  
March 3, 1986  
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 #85-546R

1. A draft O & M manual for the water treatment system, the water management system, the groundwater monitoring system and the soil-bentonite wall shall be submitted to DEQ before slurry wall construction is 50% complete and finalized when construction is 75% complete. The O & M manual shall be considered an operational condition of this permit.

The O & M manual at a minimum will include:

- a. Modifications to the monitoring system as discussed in the February 5, 1986 meeting with UPRR and CH2M Hill will be included in the O & M manual. These modifications include:
  - (1) The installation of two additional shallow piezometers along the western segment and near the northwest corner of the soil-bentonite wall.
  - (2) The addition of BR-19 into the water quality monitoring network.
  - (3) Contingency monitoring plans for the alluvial and bedrock aquifers in case of system upset or as warranted by evaluation of the static water level and water quality monitoring data.

A system upset includes:

- (a) Changes in the flow regime resulting in vertically downward gradients or outward alluvial gradients.
  - (b) The release of oil or dissolved contaminants into, through or beneath the wall.
  - (c) The migration of oil or dissolved contaminants in the bedrock.
  - (d) Plugging in the internal or external drain systems.
  - (e) Interrupted or discontinued operation of:
    - (i) the water treatment plant;
    - (ii) the sumps;
    - (iii) pumps used in the operation of the water management and water treatment systems.
  - (f) Flooding or heavy precipitation.
  - (g) Breakdown, washing out, breaching or any damage to the wall.
  - (h) The presence of oil or dissolved contaminants in the external drains.
- (4) A description of data reporting dates and system evaluation reporting dates.
- (5) A description of reporting formats, including maps and graphs.
- (6) Inspection for sheen in all alluvial wells along the western wall and in P-106 will be performed when static water levels are measured.

Unless shown to be redundant, further modifications to the Morrison monitoring plan will include monitoring of contaminant intrusion of the wall and monitoring of contaminant release from the isolation system. These monitoring points will be installed in close proximity to the wall. These modifications will be implemented within three months of completion of the soil-bentonite wall.

Modifications in any portion of the monitoring program will be made as necessary to assure that the water management system, the water treatment system, and the cut-off wall are performing satisfactorily.

- b. A complete description of groundwater, surface water and discharge point sampling protocol.
- c. Standard forms for the recording of all field notes related to routine sampling as well as unusual occurrences.
- d. A description of the schedule for all monitoring activities.
- e. A description of the proper procedures for recording, maintaining, interpreting, and reporting monitoring data.

f. Contingency plans for all system upsets. These plans include changes in monitoring schedules, chain of responsibility, Water Quality Division notification requirements, and emergency phone numbers.

g. Items on Attachment A.

2. The soil-bentonite cut-off wall shall be constructed using the Quality Control Program specified by the U.S. EPA, Region VIII.
3. Construction and operation of the facilities covered by the enclosed permits does not relieve the Union Pacific Railroad of U.S. EPA requirements. U.S. EPA requirements may be more stringent or exceed those established by the Wyoming Department of Environmental Quality, Water Quality Division.
4. Logs and completion details of all new wells, well development procedures, and well location maps must be submitted within 30 days after well installation.

ATTACHMENT A

O & M Manuals

1. Manual Introduction
  - a. Manual user guide
  - b. Table of contents
  - c. Plant description and flow pattern
  - d. Operation and managerial responsibilities
2. NPDES Permit Information
  - a. Permit effluent requirements
  - b. Reporting procedures for spills (Chapter IV, Wyoming Water Quality Rules and Regulations)
  - c. Self-monitoring requirements
  - d. Renewal date for permit
3. Description, Operation and Control of Wastewater Treatment Facilities
  - a. General plant operation
    - (1) Unit/process description (to include individual design efficiencies)
    - (2) Relationship to other units
    - (3) Control procedures
    - (4) Major equipment involved
    - (5) Common operation problems
  - b. Specific plant operation
    - (1) Normal operation (to include sludge management and ultimate disposal)
    - (2) Alternate operation
    - (3) Emergency operations and fail-safe procedures
    - (4) Procedures for bypass of individual units

4. Laboratory Testing

- a. Purpose
- b. Sampling program
- c. Operator/laboratory references
- d. Daily operational control testing
- e. Interpretation of results
- f. Sample lab work sheets
- g. Quality assurance program

5. Records

- a. Daily operating records (log)
- b. Laboratory records
- c. Maintenance records
- d. Personnel records
- e. O & M costs records
- f. Annual report

6. Maintenance

- a. Why - importance
- b. Maintenance schedule for all equipment
- c. Storeroom/inventory system
- d. Housekeeping
- e. Tools and special equipment
- f. Lubrication schedules
- g. Warranty provisions

7. Safety

- a. General
- b. Sewer/lift station hazards
- c. Electrical hazards
- d. Mechanical equipment hazards

- e. Fire, explosions
- f. Health hazards
- g. Laboratory safety
- h. Safety references
- i. Emergency operating response program

8. Utilities

- a. General
- b. Electrical
- c. Telephone
- d. Natural gas
- e. Water
- f. Standby power operation

85-546



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

MEMORANDUM

TO: File: Laramie Tie Plant

FROM: Phil Pucel *Phil*

DATE: December 16, 1985

SUBJECT: December 4, 1985 meeting with CH2M Hill regarding the November 15, 1985 review of plans and specifications for the Slurry Wall (#85-365R) and the Water Management System (#85-546)

Introduction

This meeting was convened at the EPA Region VIII offices pursuant to a request by Mr. Bob Kuhn of the Union Pacific Railroad. The attendees were Rick Marotte, Paul Kunkel, and Tom Sayle of CH2M Hill and me, representing DEQ/WQD.

Water Management System

Several comments by Chris Norman of DEQ pertained to abandoned water lines and the fact that they were not shown on the plans. See number 1, 3, and 4 below.

1. On sheet WM-5 a 6 inch water line is identified. This line is not shown on the plan sheet. Is this line to be abandoned?
2. How are the pumps controlled in pump station A?
3. At STA D33+00 it is shown that an 8 inch CIP is to be abandoned. This is not shown on the plan sheet.
4. How are the water lines to be abandoned?

Apparently the UPRR decided to maintain these lines rather than abandon them. Prior to construction of the soil-bentonite wall, the lines will be capped off or re-routed through hoses on the ground surface. After construction of the wall, trenches will be re-excavated to allow replacement of the lines through the wall. Sleeves will be used to prevent seepage along the lines through the wall. This process will be described in greater detail in the next submittal.

5. The following comments relate to both the Water Management System (WQD reference number 85-546) and the soil-bentonite cutoff wall (WQD reference number 85-365R) and are included in both reviews.

- a. Abandonment and construction of replacement wells should be documented and permitted according to Chapter XI of the Water Quality Rules and Regulations. Wells which were abandoned during the Laramie River relocation were not documented according to Chapter XI.

As referenced in comment 5.a. above, the notification procedure for well abandonment has not been followed. Earlier in the year, UPRR personnel said that the paperwork would be coming from CH2M Hill; it was not received. Apparently, this information is now in the hands of Gary Hill (UPRR) who will be forwarding it to DEQ/WQD. The plans for the construction of the soil-bentonite wall do not foresee the destruction of any more wells.

- b. On page 5 of the "Response" document, response #11 is incorrect. Detailed plans and specifications for the monitoring system are incomplete.

With respect to the monitor network, the following concerns must be addressed in detail and submitted for approval prior to permit issuance:

- Few water level monitoring points were specified along the river and none were specified in the northwest corner of the site.
- A water level monitoring program is absent for both the alluvium and bedrock aquifers.
- A groundwater quality monitoring program is absent for all aquifers.
- Submit a comprehensive list of onsite and offsite monitor wells, which have been constructed for the site investigation and/or for the proposed monitor network. This information should be organized according to the formation which is monitored and should include basic information such as date of completion, perforation or open-hole interval, total depth, measuring point datum (mean sea level), and references where drilling and geophysical logs and water quality data are found.
- Well construction must be implemented according to Chapter XI, Part G of the Department of Environmental Quality, Water Quality Division, Rules and Regulations. Any deviations from these Rules and Regulations, such as the depth of the surface seal on shallow monitor wells, must be obtained prior to construction.
- It is recommended that a gravel pack rather than cuttings be used around well screens.
- Screened, perforated or open hole intervals must be limited to reasonable lengths in order to assure that discrete

intervals are being monitored. The detection of contaminants may be hindered when a screened interval spans several distinct permeable strata. This consideration is particularly important in the design of bedrock monitor wells which will be used to detect changes in gradient and the movement of contaminants into the bedrock.

- Monitor well design specifications must be submitted and approved by the Water Quality Division prior to construction.
- As built construction details, including well logs, must be submitted to the Water Quality Division within 30 days of well installation.
- Well BR-26 has not been constructed as agreed upon. Consult WQD for location of this well.

A lengthy discussion was held on the monitoring network because the plans and description contained in both the permit applications and in the Phase III Feasibility Study were inadequate.

It was agreed that at least 3 more shallow dual monitoring points would be installed along the Laramie River including one dual point on the northwest corner of the facility.

The monitoring frequency would be spelled out in more detail in the next submittal with special provisions for increased monitoring frequency in the event of system interruption. Water level monitoring frequency would be reduced if and when the flow regime reaches equilibrium.

The proposed bedrock monitoring system is composed of six wells. WQD recommended an additional monitoring point for both the Morrison and the Sundance. The new Morrison point would be located just north of the northwest corner of the facility; while the additional Sundance well would be located west of the Laramie River, several hundred feet south of the BR-8, -9, -10 cluster and clustered with an existing Morrison well. This Sundance well could be designated as BR-26, originally proposed in an October 30, 1984 letter to UPRR. Refer to that letter for the rationale for this well installation. CH2M Hill made no commitment on additional bedrock monitor points, but indicated that the expense was not warranted.

The comprehensive list of onsite and offsite monitor wells is required to comply with WQD Rules and Regulations, Chapter III, permitting procedures. While it is recognized that these wells were installed without the normal permits, it is now appropriate to include them as part of the site monitor network.

A gravel pack is recommended around well screens in order to assure that good hydraulic communication is established. Previous problems with poorly-producing wells and information from the GZA report on permeabilities are sufficient reason to attempt to provide a gravel pack. GZA reported that on-site materials could be expected to achieve a permeability of  $10 \text{ E-7 cm/sec}$ .

- c. The following questions have been raised concerning the response document.

- On page 7, response 17 mentions that "Inflows to the site were obtained from the technical memorandum on the plan view groundwater computer model, July 3, 1985." The information offered in that document is not useful without a presentation of the cell system.
- On page 13, response 5, the last paragraph is unclear. Please rephrase.
- On page 7, response 15 of the "Response" document states that the pumping and piping systems have been sized for flows in excess of the peak flows predicted by the computer model of the site. It appears that great emphasis has been placed on the computer model as a basis for the water management system design. However, the model documentation gives rise to a series of questions concerning the basic assumptions and the conclusions drawn from the model. The questions which follow may be answered by expanding upon the narrative which accompanies the presentation of the model's results.

(1) Plan View Groundwater Computer Model

- (a) Calibration criteria should include heads and either aquifer characteristics or flow. In the calibration, the transmissivity values of the nodes should be comparable to the transmissivity values obtained from pumping tests.
- (b) How close is the calibration? Some analysis should be done on the differences in head and transmissivity values. What is the standard deviation?
- (c) The set of values reached through the calibration effort are not necessarily unique. Many sets of different values for transmissivity, boundary conditions, and injection well flow rates can produce the same calibrated results. Parameters which have uncertain values due to lack of data and spatial variability, should be included in sensitivity analysis. Limiting the sensitivity analysis to the slurry wall hydraulic conductivity does not provide a thorough examination of the system.

(2) Cross-Section Groundwater Model

- (a) Were reasonable boundaries used? The justification of boundary conditions is not presented in adequate detail.
  - (i) How was the head of 139 feet determined to be the neutral level at which no inflow or outflow to the rock aquifer exists?

- (ii) "The lateral boundaries of the rock aquifer were taken as no flow boundaries because upward flow is noted to be more important than lateral flow." What is the basis for this assumption?
  - (iii) The sensitivity analysis should include varying hydraulic conductivities and boundary conditions.
- (b) In the sensitivity analysis, the hydraulic conductivity of the alluvium should be adjusted for relative saturation where oil is present.
  - (c) The saturated thickness of the alluvium should be adjusted where oil is present, and the oil body is assumed to be immobile.
  - (d) Are the recommendations based upon the cross-section reliable?
    - (i) Calibration was not performed.
    - (ii) Sensitivity analysis should include varying hydraulic conductivities and constant head boundaries. Some of the contour maps derived from the limited analyses done on 5 scenarios indicate that the migration of creosote into the Sundance may occur as flow paths are altered. Considering the fact that upward hydraulic gradients are very slight, only a small change in these gradients would alter the flow regime. Inducement of downward migration of creosote would not require a complete gradient change, but rather only the elimination of upward buoyant forces could initiate creosote migration. Further sensitivity analyses should be performed on hydraulic conductivities in the Sundance. These analyses should pay particular attention to the resultant head distribution due to low hydraulic conductivities assigned to the site interior (or left-hand side of Run SA7). In the instance where K is reduced on the site interior, gradients would steepen and induce downward flow from the alluvium.
  - (e) Referring to the contour maps in the "response" document of October 8, 1985, the "no-flow" lateral boundaries are inconsistent with the contours which indicate lateral flow in the bedrock.
  - (f) Since gradient changes are a possibility, a water level monitor network should be designed which will adequately monitor gradients in both the bedrock and alluvial aquifers. Given the potentially large spatial

variability in hydraulic conductivities, the pattern of piezometers should have a density which will detect localized gradient changes.

The cell system apparently consists of a flow net contained in the Phase II revised draft. A more detailed explanation of the procedures used in estimating flows, including calculations and a copy of the actual cell system used, will be submitted.

Due to the previous lengthy discussions, insufficient time was allotted to discuss in detail the questions raised concerning the computer models used to evaluate the design of the water management system. The limited level of detail used in the computer models and the subsequent concerns raised in evaluating these models have resulted in a very limited level of applicability of the model's results. However, several observations can be made from the results of the models. It is believed that a more thorough sensitivity analysis of hydraulic conductivities, heads, and boundary conditions would provide more information on the potential for downward flow in areas where hydraulic conductivities and saturated thickness are reduced in the alluvium due to the oil body. This situation is expected to result in flow patterns far different than those shown in the model results because flow in the alluvium will be restricted. The lower hydraulic conductivities in the alluvium may result in steeper downward gradients. As an alternative to running more computer models, a more direct measurement of the flow regime is recommended. A dense pattern of monitoring points in the alluvium and in the Sundance will probably be necessary, particularly within the main oil body, to measure gradients. It is very important to be able to detect the spread of contamination in the Sundance as early as possible.

During phone conversations on December 12 and 13, 1985, additional recommendations were made to Paul Kunkel of CH2M Hill regarding the monitor network as follows:

1. Several dual monitoring points within the oil body boundaries should be constructed to measure the gradient between the alluvial aquifer and the top of the Sundance.
2. The shallow monitoring points along the river and outside the wall should be used both for water quality monitoring as well as static water levels.
3. The Morrison groundwater quality monitor network should include wells BR-28, -29, -17, -35, and an additional well just off the northwest corner of the proposed soil-bentonite wall.
4. The Sundance groundwater quality monitor network should include wells BR-23, -27, -1, -2, -3, -24, -25, -9, -10, -4, -5, -11, -12 and -26.
5. The Chugwater groundwater quality monitor network should include BR-18, -19, -22.
6. Monitoring frequency will vary for each well depending upon distance from the source, and may range from semi-annual to triennial.

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
Herschler Building, 4 West, 122 West 25th  
Cheyenne, Wyoming 82002

PROJECT: UPRR Laramie Tie Treatment Plant, Water Management System, Albany Co.

ARCHITECT OR ENGINEER: CH2M Hill  
P.O. Box 22508, Denver, CO 80222

APPLICANT: UPRR  
1416 Dodge Street, Omaha, NE 68179

WATER QUALITY DIVISION REFERENCE NUMBER: 85-546

REVIEWING ENGINEER: *LeRoy C. Feusner*, P.E., *Phil Pucel*, and *Christian G. Norman*

DATE OF REVIEW: November 15, 1985

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. On sheet WM-5 a 6 inch water line is identified. This line is not shown on the plan sheet. It this line to be abandoned?
2. How are the pumps controlled in pump station A?
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- (e) Referring to the contour maps in the "response" document of October 8, 1985, the "no-flow" lateral boundaries are inconsistent with the contours which indicate lateral flow in the bedrock.
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THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

December 19, 1985

Mr. Thomas McCormick  
Senior Vice President/Engineering  
Northern Improvement Company  
P.O. Box 2846  
Fargo, ND 58108

RE: Permit GPC 85-547, Backfilling of Mine Voids in Glenrock, Converse Co., WY

Dear Mr. McCormick:

Enclosed is a copy of permit GPC 85-547 which is an authorization to backfill abandoned underground mine voids in Glenrock, Wyoming, by injecting recirculated mine water mixed with inert sand.

Also enclosed is a copy of Form GPC 7 which should accompany any written reports. You may reproduce the form as you need it.

Please contact this office if you have any questions concerning the permit.

Sincerely,

William L. Garland  
Administrator

WLG/PP/nc  
Enclosures

cc: A. J. Mancini, DEQ/WQD  
LeRoy Feusner, DEQ/WQD  
Stan Barnard, DEQ/LQD

MA 14542

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 85-547

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),

Thomas McCormick, Sr. Vice President/Engineering  
Northern Improvement Co.  
P.O. Box 2846  
Fargo, ND 58108

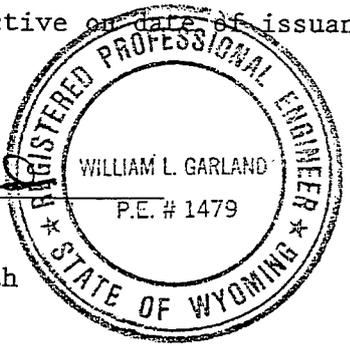
is authorized to operate

backfilling of abandoned underground mine voids in Glenrock, Wyoming, by injecting recirculated mine water mixed with inert sand. Project is in Section 4 and 5, T33N, R75W, in Converse County, Wyoming

according to procedures and conditions of the application GPC 85-547 and requirements and other conditions of this permit.

This permit shall become effective on ~~date~~ of issuance.

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



12-18-85  
Date

Ralph Wood  
Director  
Department of Environmental Quality  
Herschler Building, 122 W. 25th  
Cheyenne, WY 82002

12-18-85  
Date

A. Discharge (Injection) Zone and Area of Review

The injection zone is comprised of the mine voids of the McDonald and Glenrock mines in the Upper Cretaceous Lance Formation. At the McDonald Mine, the injection wells will be 20 to 80 feet deep. At the Glenrock Mine, the injection wells will be as much as 140 feet deep, as determined by the dip of the mine voids. The mined coal stratum lines 280 to 300 feet above the base of the Lance Formation. The area of review includes:

1. The south one-half of Sections 32, 33 and 34, T34N, R75W;
2. All of Sections 3, 4, and 5, T33N, R75W;
3. The north one-half of Sections 8, 9 and 10, T33N, R75W; and
4. The North Platte alluvium, the Deer Creek Alluvium, the Upper Lance, Lower Lance, and Upper Fox Hills.

B. Groundwater Classification

Due to reported SO<sub>4</sub> concentrations of 370 and 690 mg/l in the Glenrock Mine and McDonald Mine, respectively, the groundwater in the mine voids is Class III. Based upon existing uses, the groundwater in the aquifers overlying and underlying the mine voids is Class I. These aquifers include the North Platte alluvium, the Deer Creek alluvium, the Lance Formation, and the Fox Hills Sandstone.

C. Authorized Operations

The permittee is authorized to backfill abandoned underground mine voids in Glenrock, Wyoming, as described in application GPC 85-547. The backfill slurry will consist of recirculated mine water mixed with inert sand. The backfill material will be free of toxic and hazardous substances and will not contain any other constituents which will result in degradation of the water quality. The backfill operation is authorized in accordance with the preliminary hydrogeologic report submitted with the application. Any alteration of groundwater quality or quantity from existing wells is cause for cessation of the backfill operation.

To accomplish the objectives of this project, approximately 340,000 tons of solids will be introduced into the flooded and dry coal mine voids beneath areas shown in application GPC 85-547 at an injection rate of 280 tons per hour. Injection pressures entering the mine voids will be less than atmospheric due to the sudden drop into the mine. Gauges will be used to monitor these pressures and when positive pressure begins to build, the slurry will be transferred into another injection hole. Since there are no excessive positive pressures, potential for fracturing will be virtually nonexistent.

The injection fluid will consist of mine water with the qualities given in the submitted analysis of the mine water samples mixed with inert sand to form a slurry.

The procedure for injection requires a mixing tank where water and sand can be mixed in the correct proportions and then pumped to the injection wells. Due to the nature of injecting slurry into mine voids, there may be varying negative pressures at the top of the borehole during operation. If the mine void is not filled, the slurry going down the boreholes accelerates due to gravity. This causes a vacuum at the top of the borehole. A vacuum relief valve is required at the top of the borehole to insure that the pipeline is not subjected to a negative pressure at the borehole. As the void fills, the pressure will rise above atmospheric. At this time, the slurry pumping will be changed to another borehole.

The injection wells will be drilled approximately 4 inches in diameter down to the coal seam. Holes that end in the mine voids will be reamed out to accept a 16 inch diameter pipe down to bedrock. This portion of the casing will be cemented in place. The balance of the hole will be reamed out to accept a 10 inch diameter pipe to the top of the mine void. The wells can be inspected by lowering a television camera. Approximately 20 injection wells will be installed at the McDonald Mine; approximately 75 injection well will be installed at the Glenrock Mine.

All initial exploratory drilling for monitoring and injection holes will be done to accommodate 3-1/2 inch I.D. casing. Injection boreholes will be completed by enlarging the exploratory holes or by drilling next to them and installing a casing. Injection holes will be constructed in accordance with the details submitted with the application. All completed injection holes and boreholes deemed likely to be affected during backfill operation will have an engineer approved standpipe to relieve the possibility of entrained air becoming trapped under pressure in the mine during backfilling.

If migration of fluids threatens to contaminate a water source, the injection borehole will be abandoned and plugged.

The slurry mixing plant and slurry pumps will be connected to a computer that will continuously monitor the pumping pressures, rate of flow and volume of inert sand. The computer will also keep running totals on the material and print them on a daily basis. The pressure at the head of the injection casing will at all times be monitored by the owner's representative.

During the injection process, the pumped slurry system is a low pressure, high volume, high velocity system which uses the imported pumping energy to maintain the fill in suspension. The system is completely closed from the mixing tank to the injection hole. Pressures in the slurry line will be monitored at the pumps and at the fill nozzle. Due to the sudden drop into the mine, pressures at the nozzle will normally be less than atmospheric. An increase in nozzle pressure indicates that the flow channels for the slurry are being shut off and the hole is close to refusal. Water alone will be pumped at this point to see if additional flow channels can be opened. As complete filling is approached, alternate pumping of slurry and water

until positive pressures can no longer be reduced will ensure that voids are filled as completely as possible. The temperature of the water should remain virtually the same at all times as it will be drawn from abandoned mines and pumped into other abandoned mines in the same geologic formation. Danger of fracture in the abandoned coal mines to be used as a receiver should be virtually nonexistent as the fluid pressure at the point of injection will normally be less than atmospheric.

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. The 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.

No other use for or by the injection wells is authorized by this permit.

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 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:

In the event of a claim of interference in production or of water quality degradation, the applicant will obtain samples and conduct investigations to delineate the effects of the backfill operation on existing wells, and commence remedial action if required.

G. Requirements for Monitoring the Discharge

Discharge (injection) volume and/or pressure shall be controlled and monitored to prevent fracturing of confining strata.

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 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.

Permittee shall notify the Administrator or his representative 48 hours before injection is to start. Written notification shall be provided within 7 days after injection commences of the date and time of commencement.

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 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 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 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.

Item I.10 is not applicable to this permit.

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

A final report on the project shall be submitted to the Water Quality Division within 30 days of completion of the project. This report should include:

- (1) A tabulation of all boreholes completed, including total depth and abandonment procedures.
- (2) The total volume of grout injected.
- (3) Any unanticipated conditions encountered.

#### 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 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 10 years by the Administrator.

Public notice prior to the issuance of this permit is not required.

Existing regulations do not require public notice of the permit review and request for public comment every 10 years for this discharge.

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:

Documentation of adequate well construction as specified in the plans and specifications, in the form of "as built".

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.

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

The 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 wells be permanently secured against the injection or disposal of anything after abandonment.

All wells will be plugged and abandoned upon completion of the project according to standards included in Chapter XI, Part G of the Water

Quality Division Rules and Regulations. A final report documenting plugging and abandonment will be submitted within 30 days of completion of the project.

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.

Not applicable.

O. Special measures the Director finds necessary:

The operations authorized by this permit must commence within one year of permit issuance date, or the permit is 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.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 85-548  
 SEE CONDITIONS ATTACHED  
 MA 14542

Glenrock Subsidence Control, AML #8-A  
 (Name of Facility)

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

Northern Improvement Co.

Box 2846

Fargo, ND 58108

to construct, install, or modify a mine reclamation dust control facility according to the procedures and conditions of the application No. 85-548. The facility is located in SW1/4 NE1/4 Section 4, T33N, R75W in the County of Converse, in the State of Wyoming. This permit shall be effective for a period of one (1) year (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.

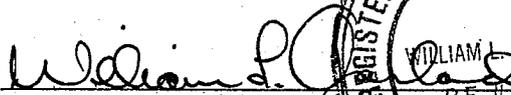
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

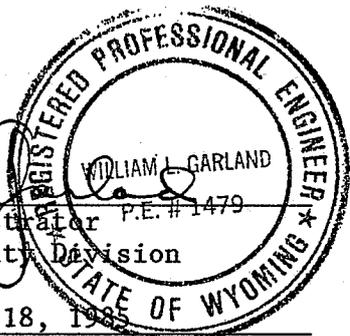
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

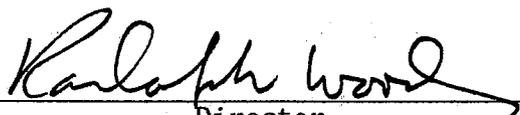
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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 P.E. # 1479  
Water Quality Division  
October 18, 1985  
\_\_\_\_\_  
Date of Issuance



  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

This permit authorizes you to dispose of 190,092 gallons of mine pit water on the surrounding 7 acres, a total liquid application of 1.0 inches.

CONDITIONS TO PERMIT TO CONSTRUCT NO. 85-548

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8% for vehicular application or 15% for spray irrigation or irrigation by gated pipe on the contour. Vegetated areas of the site shall not be spray-irrigated where possible plant leaf injury may result from salt residue.
3. Wastewater application shall be terminated within 300 feet of the defineable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
4. Pit water will be applied as needed for dust control for the life of the project including site revegetation.



*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

May 16, 1986

Marathon Oil Company  
P.O. Box 2659  
Casper, WY 82602

To whom it may concern:

Your statewide permit number 85-549, for small wastewater facilities, contains a condition requiring the notification of the appropriate county or state agency prior to the installation or abandonment of facilities authorized by the permit.

A review of state and county records indicates that very few of these facilities are being reported. It is important that these facilities be reported on a regular basis. County governments have agreed to the use of statewide permits on the condition that they be properly notified. If the statewide permitting system is not responsive to the needs of the counties, the state will not be able to issue statewide permits and it will be necessary to obtain permits for such facilities with the individual counties.

In order to address this problem you are requested to do the following:

1. Provide this office a list and location of all facilities constructed under your statewide permit.
2. Indicate the present status of each facility, i.e., operational or abandoned.
3. Indicate whether or not you wish to maintain the statewide permit in an active status.
4. Provide the required notification to both the appropriate county and state agency for all future facilities.

Sincerely yours,

*Lawrence Robinson*  
Lawrence Robinson  
Engineering Supervisor

LR/nc



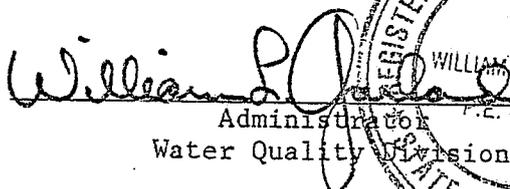
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

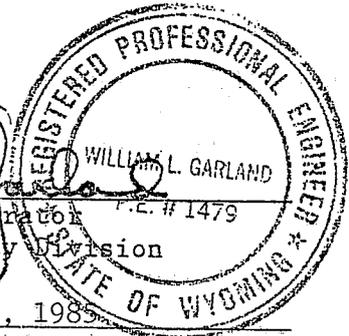
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
November 19, 1985  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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

\* CONDITIONS ON PERMIT \*

1. This permit is valid for temporary sanitary wastewater disposal facilities only. Temporary being defined as one (1) year or less. If the proposed facility is to be operated for more than one year, the permittee must obtain authorization from this department.

The permittee shall notify the appropriate county or state agency prior to the installation, removal or abandonment of any facility authorized by this permit. The appropriate agency for each county is indicated in the attached list. Notification shall be by phone with a follow-up written notice. Upon abandoning the site, the facility will be removed, disposed of, or left in place in a condition rendering the site safe for the public. Any waste from the facility shall be disposed of only in areas and in a manner approved by the appropriate agency. Upon request, the permittee shall allow authorized representatives of the local agency or the State to have access to the authorized facility for the purpose of conducting an inspection to determine compliance with the provisions of this permit.

AGENCIES RESPONSIBLE FOR SMALL WASTEWATER PERMITS

1. Albany County  
Albany County Planning Office  
405 Grand Avenue  
Laramie, WY 82070  
Phone: (307) 721-5188
2. Big Horn County  
Big Horn County Engineer  
P.O. Box 31  
County Courthouse  
Basin, WY 82410  
Phone: (307) 568-2358
3. Campbell County  
Campbell County Engineer  
500 South Gillette Avenue  
Gillette, WY 82716  
Phone: (307) 682-1970
4. Carbon County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
Herschler Bldg. - 4th West  
Cheyenne, WY 82002  
Phone: (307) 777-7781
5. Converse County  
Converse County Sanitarian  
County Health Department  
530 Oak  
Douglas, WY 82633  
Phone: (307) 358-2536
6. Crook County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457
7. Fremont County  
Fremont County Planner  
Room 200, County Courthouse  
Lander, WY 82520  
Phone: (307) 332-5371
8. Goshen County  
Goshen County Sanitarian  
P.O. Box 1132  
County Courthouse  
Torrington, WY 82240  
Phone: (307) 532-5002
9. Hot Springs County  
Hot Springs County Planner  
County Courthouse  
Thermopolis, WY 82443  
Phone: (307) 864-2732
10. Johnson County  
Johnson County Sanitarian  
County Courthouse  
Buffalo, WY 82834  
Phone: (307) 684-7555
11. Laramie County  
Laramie County Environmental Health  
1700 Snyder Avenue  
Cheyenne, WY 82001  
Phone: (307) 638-8545
12. Lincoln County  
Office of Planning and Development  
P.O. Box 414  
Afton, WY 83110  
Phone: (307) 886-3825
13. Natrona County  
Environmental Health Division  
Natrona County Health Department  
1200 East 3rd  
Casper, WY 82601-2990  
Phone: (307) 235-9316
14. Niobrara County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457

15. Park County  
Park County Planning Coordinator  
P.O. Box 160  
Cody, WY 82414  
Phone: (307) 587-2204
16. Platte County  
Platte County Sanitarian  
P.O. Box 55  
Wheatland, WY 82210  
Phone: (307) 322-9571
17. Sheridan County  
Sheridan County Engineer  
P.O. Box 612  
Sheridan, WY 82801  
Phone: (307) 672-3426
18. Sublette County  
Sublette County Planner  
P.O. Box 506  
Pinedale, WY 82941  
Phone: (307) 367-4375
19. Sweetwater County  
Sweetwater County Sanitarian  
205 East Railroad Ave.  
Green River, WY 82935  
Phone: (307) 875-2611 Ext. 278
20. Teton County  
Teton County Sanitarian  
P.O. Box 1727  
Jackson, WY 83001  
Phone: (307) 733-3959
21. Uinta County  
Uinta County Engineer  
225 9th Street  
Evanston, WY 82930  
Phone: (307) 789-1780 ext. 318
22. Washakie County  
Washakie County Planner  
County Courthouse  
Worland, WY 82401  
Phone: (307) 347-2741
23. Weston County  
District Supervisor  
Water Quality Division  
Department of Environmental Quality  
2161 Coffeen Avenue  
Sheridan, WY 82801  
Phone: (307) 672-6457

REVIEW OF PLANS AND SPECIFICATIONS

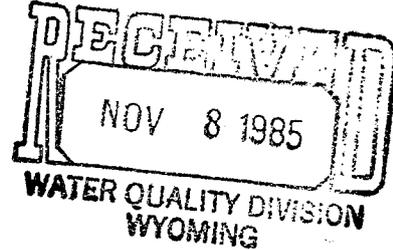
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: Marathon Oil Co., Statewide Wastewater  
Disposal Facilities

ENGINEER: Phillip D. Essington  
Rio Verde Engineering  
P.O. Box 67  
Pinedale, WY 82941

OWNER: Marathon Oil Co.  
P.O. Box 2659  
Casper, WY 82602



WATER QUALITY DIVISION REFERENCE NUMBER: 85-549

REVIEWING ENGINEER: Bill Locke, P.E. *BL*

DATE OF REVIEW: November 5, 1985

ACTION: Not authorized.

COMMENTS:

A preliminary review of the above plans and specifications has been completed. The following items must be addressed before a permit to construct will be issued:

1. Sizing of these facilities should be based on 150 gallons per day per bedroom or 350 gallons per day per trailer as specified in the Water Quality Rules and Regulations, Chapter XI, Part D, Section 34.
2. Sloping ground installations should be addressed in accordance with Chapter XI, Part D, Section 36e.
3. The pump-out on the septic tank should be 6" instead of 4" diameter.

BL/jw

C

*Department of Environmental Quality**Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

June 5, 1986

Union Pacific Railroad Co.  
ATTN: S.J. McLaughlin  
1416 Dodge Street  
Omaha, NE 69179

RE: Opal Section House Sewer, WQD No. 85-55ORRR

Dear Mr. McLaughlin:

The plans and specifications for the above referenced project have been reviewed by this office and found to be in reasonable compliance with the minimum design standards for the State of Wyoming with one exception. A four inch collection line has been installed where minimum design and construction standards require a six inch collection line.

This system is conditionally accepted by this department on the basis that it has operated properly and without incidence for several months. It is understood that the entire system (force main, lift station and collection lines) will be maintained and operated by Union Pacific. However, should this system fail or become inoperable due to sub-standard design or construction practices, this department must be notified immediately and steps taken to bring the system into compliance with the Wyoming Water Quality Standards. Please maintain a copy of this letter in your file as proof that this system has been conditionally accepted.

Sincerely,

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

Bill Locke, P.E.  
Water Quality Engineer

BL/jw  
cc: Town of Opal



*Norma*

ED HERSCHLER  
GOVERNOR

# Department of Environmental Quality

## Water Quality Division

210 LINCOLN STREET

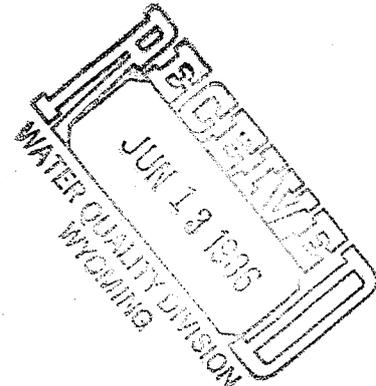
LANDER, WYOMING 82520

TELEPHONE 307-332-3144

May 28, 1986

CERTIFIED P 399 271 426

Union Pacific Railroad  
ATTN: S.J. McLaughlin  
1416 Dodge Street  
Omaha, NE 68179



RE: Opal Section House Sewer - WQD No. 85-550 RR

Dear Mr. McLaughlin:

I am in receipt of your letter dated May 21, 1986 requesting that the reference project be exempt from the Wyoming Water Quality Rules and Regulations (WWQRR), Design and Construction Standards. This is contrary to your letter dated December 3, 1985 stating that plans and specifications meeting these requirements would be submitted to this office by June 1, 1986. The WWQRR, Chapter III, Section 4 prohibits the construction, installation or modification of any public water supply, sewerage system, treatment work, disposal system or other facility capable of causing or contributing to pollution except when authorized by a permit to construct. A permit to construct will only be issued when the system design meets the minimum design standards for the State of Wyoming. Your request for exemption is therefore denied.

In an effort to mitigate this problem and avoid future action by this department, I would strongly suggest that you resubmit plans and specifications meeting our minimum design standards at your earliest convenience. It is obvious that you will not meet the original June 1, 1986 deadline. Therefore, please respond in writing with a new schedule that will mitigate this problem in an expedient manner. If you have any questions or comments, please contact Jack Bedessem or myself.

Sincerely,

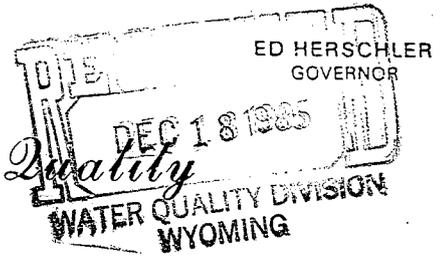
Bill Locke, P.E.  
Water Quality Engineer

BL/jw

cc: Larry Robinson, DEQ/WQD, Cheyenne  
Town of Opal



*None*



*Department of Environmental Quality  
Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

December 13, 1985

Union Pacific Railroad Co.  
1416 Dodge Street  
Omaha, NE 68179

Attention: S. J. McLaughlin, Chief Engineer

RE: Opal Section House Sewer - WQD No. 85-550

Dear Mr. McLaughlin:

I am in receipt of your letter dated December 3, 1985 requesting temporary approval to connect the four inch diameter CISP to the Town of Opal sewer system. It is my understanding that this will be a temporary connection that will be utilized until June 1, 1986. At that time, you will have constructed and have in service a collection system and lift station that has been approved by this department.

I agree that it would be impractical to try and reconstruct this system during the winter. Therefore, temporary approval to utilize the system in place is hereby granted. I would caution you to submit your plans and specifications for review at your earliest convenience so that the June 1, 1986 deadline can be met.

Sincerely,

Bill Locke  
Water Quality Engineer

BL:mm

xc: Town of Opal

C

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: U.P.R.R. Section House Sewer

ENGINEER: Robert C. Kuhn  
Union Pacific Railroad  
1416 Dodge Street  
Omaha, NE 68179

OWNER: Union Pacific Railroad  
ATTN: R.W. Gerle  
P.O. Box 790  
Pocatello, ID 83204

WATER QUALITY DIVISION REFERENCE NUMBER: 85-550

REVIEWING ENGINEER: Bill Locke, P.E. *BL*

DATE OF REVIEW: October 28, 1985

ACTION: Not authorized.

COMMENTS:

A preliminary review of the above plans and specifications has been completed. A permit to construct will not be issued until the following items have been addressed:

1. Any waterlines within 30 feet horizontally should be shown on the plans. A profile of any waterlines intersecting the sewer should also be included.

2. A detail of the duplex pump station and a specification should be included.

3. A sewer collection line must be 6 inch diameter or larger. A sewer collection line is defined as any conduit that carries wastewater from two or more separate buildings. A manhole should be located at the termination of the collection line.

4. The minimum slope for a 4 inch diameter line is 2%.

5. A detail of the service connection to this collection line should be included.

6. Material specification should be included for all equipment and materials.

7. Enclosed is a copy of the Water Quality Rules and Regulation, Chapter XI for your reference. Special attention should be paid to Part A, Section 7 and Part B, Sections 9 and 10.

C

Review of Plans & Specs.

Ref. No. 85-550

Page Two

8. Please resubmit the required information to this office in triplicate. Be sure to include the Water Quality Reference Number that appears on this review sheet in a cover letter or transmittal sheet. Should you have any questions or comments, please contact this office.

BL/jw

