



THE STATE

OF WYOMING



Department of Environmental Quality

Air Quality Division
(307) 672-6457

Water Quality Division
(307) 672-6457

October 27, 1988

OCT 31 1988

Fred Oedekoven
Oedekoven Water and Hot Oil Service
Post Office
Recluse, Wyoming 82725

Dear Fred:

As per your request, Water Quality Land Application Permits 88-096 through 88-101, 88-265 and 87-275 have been extended until January 1, 1989. All other conditions contained in the original permits still apply.

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

Sincerely,

Susan Fields
NE District Supervisor
Water Quality Division

SF:jj

xc: Tom Clayson, BLM
Archives File
Sheridan Plan File

27

LAND APPLICATION PERMIT

Permit No. 88-101
SEE SPECIAL CONDITIONS

WESTON ROAD DUST CONTROL
(Name of Facility)

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

Fred L. Oedekoven

481 Recluse Road

Recluse, Wyoming 82725

to land apply produced water to Weston Road for dust control. The application site is located in Section 24, T.54N. R.70W., and Section 30, T.54N., R. 71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of six (6) months 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 standards. The authority to land apply granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures that the disposal method will meet applicable state requirements.

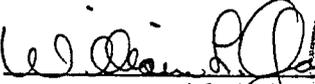
Nothing in this permit constitutes an endorsement of the disposal method described herein. This permit indicates only that standards required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the 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 disposal method described herein. By the issuance of this permit, the state does not in any way waive its sovereign immunity.

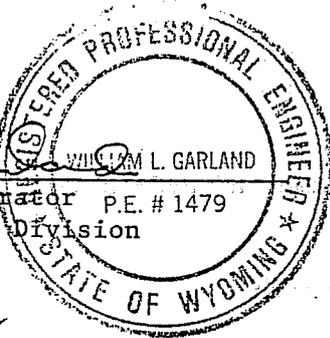
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the application site at the above location, for the purpose of compliance with the provisions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

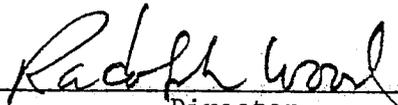
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulations.

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




Director
Department of Environmental Quality

4-12-88

Date of Issuance

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

ROAD APPLICATION SPECIAL CONDITIONS

1. Produced water 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. Produced water application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
3. This permit shall be in effect for a period of six months from the date of issuance. Any produced water application after that six month period must be reauthorized by the Water Quality office.

RF ✓

PERMIT TO CONSTRUCT

PERMIT NO. 88-102
See Special Conditions

X New
Renewal
Modified

SMITH ENERGY SERVICES

This permit hereby authorizes the applicant:

Craig D. Thompson
Western Wyoming College
P. O. Box 428
Rock Springs, WY 82901

to construct, install or modify a monitoring facility according to the procedures and conditions of the application number 88-102. The facility is located in N $\frac{1}{2}$, S $\frac{1}{2}$, S4, T18N, R105W in the county of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (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 ensures 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: Groundwater Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307)

777-7781.

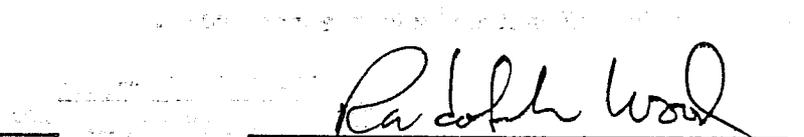
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

5/4/88
Date of Issuance

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

Conditions to Permit to Construct 88-102

1. The groundwater monitoring wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 88-102. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below ground surface as detailed in Chapter XI, Part G. However a sufficient seal shall be installed according to normal engineering practice.
3. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the WQD.
4. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly numbered.
5. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial actions which may be required. Depending on the results of the subsurface contamination investigation, additional site investigations or remedial measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of contamination of product layers and dissolved constituents.

Conditions to Permit 88-102 (continued)

6. In addition to the well construction information submitted with the permit application, the following items relating to well construction must be addressed when the wells are installed:
 - a. After the bentonite has been placed in the annular space, it shall be hydrated to ensure a proper seal;
 - b. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;
 - c. The screened interval shall extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level;
 - d. If PVC casing is used, only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack shall be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval;
 - f. Factory slotted casing is recommended for the perforated interval. Slotted casing shall extend 1-2 feet above highest expected groundwater table;
 - g. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - h. A protective casing and locking cap is strongly recommended;
 - i. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - j. A seal of bentonite or bentonite grout is required from the surface to a foot or two above the top perforation. Protective casing shall be cemented into a sloping concrete cap; and
 - k. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
8. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
 - a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;

Conditions to Permit 88-102 (continued)

- e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
10. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
11. All monitor wells initially will be sampled for EP Toxicity metals, TDS, BETX, TOC, TOX, pH, and EC. From these initial results, Water Quality Division will determine if additional testing is required.

cc: Jake Strohman

PERMIT TO CONSTRUCT

PERMIT NO. 88-103
SEE SPECIAL CONDITION

X New
Renewal
Modified

Sewage Disposal System for Rollar, Inc.

This permit hereby authorizes the applicant:

Rollar, Inc., Ray Fertig/Pres.
1603 Capitol, Suite 311
Cheyenne, WY 82001

to construct, install or modify sewage disposal septic system according to the procedures and conditions of the application number 88-103. The facility is located in S35, T15N, R65W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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.

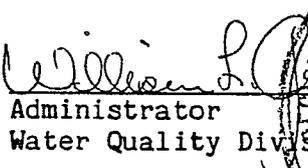
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

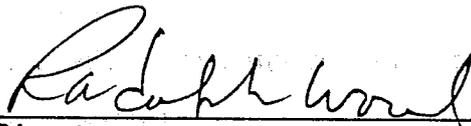
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:


Administrator
Water Quality Division P.E. # 1479




Director
Department of Environmental Quality

4-21-88

Date of Issuance

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

CONDITION TO PERMIT TO CONSTRUCT #88-103

The permittee shall notify Don Pack, Laramie County Environmental Health, 1700 Snyder Avenue, Cheyenne, Wyoming 82001, phone number (307) 638-8545 of the estimated day of completion of this project. Inspection of the installed system is required prior to backfilling.

cc: Don Pack, Laramie County Environmental Health
Rick Johnston, Gust & Johnston, 2232 Del Range #203, Cheyenne, WY 82009

RF

PERMIT TO CONSTRUCT

PERMIT NO. 88-104

X New
Renewal
Modified

Johnson #6 Small Wastewater System

This permit hereby authorizes the applicant:

E. Duane Johnson
907 W Walnut
Rawlins, WY 82301

to construct, install or modify small septic system according to the procedures and conditions of the application number 88-104. The facility is located in S24, T21N, R87W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two (2) (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Laurence Robinson

Administrator
Water Quality Division

R. J. ...

Director
Department of Environmental Quality

4/28/88

Date of Issuance

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

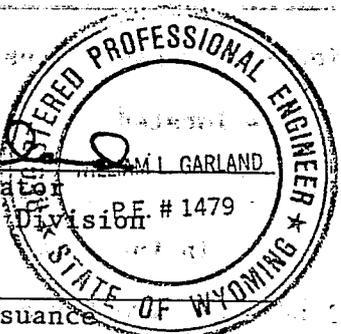
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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
Administrator
Water Quality Division
PE # 1479
4-18-88
Date of Issuance

Ralph Wood
Director
Dept. of Environmental Quality

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



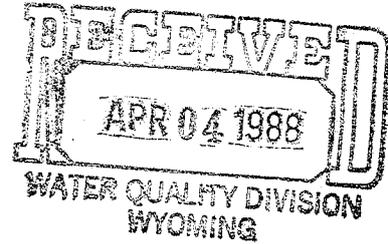
Department of Environmental Quality

Air Quality Division
(307) 672-6457

Water Quality Division
(307) 672-6457

March 31, 1988

Ernest Kenyon
P. O. Box 1051
Sundance, Wyoming 82729



RE: Septic Tank/Leachfield As-Built Plans & Specifications,
DEQ/WQD Ref. No. 88-106

Dear Mr. Kenyon:

On March 28, 1988, I inspected your residential septic system located just west of Sundance, Wyoming. In addition, I assisted you in completing a Water Quality application form for as-built approval of your system. Based on my inspection and information I obtained from the installer of the system, it appears that the facility meets Water Quality design and construction standards.

Because the system is already installed, a permit to construct can not be issued. This letter serves essentially the same purpose and will be your only notification of Department approval of the system. I suggest you maintain a copy of this letter for future reference.

I appreciate your concern in completing the permitting process. Please feel free to contact me if you have any questions or comments.

Sincerely,

A handwritten signature in cursive script that reads "Susan Fields".

Susan Fields
NE District Supervisor
Water Quality Division

SF:jj

xc: Norma Coulson, DEQ/WQD, Cheyenne
88-106 Archives File

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

April 6, 1988

Date of Issuance



Director
Dept. of Environmental Quality

ARCHIVE 2

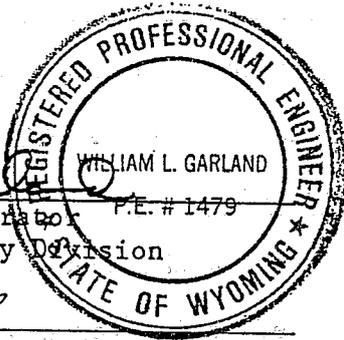
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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.

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
5-31-88
Date of Issuance

Ralph Wool
Director
Dept. of Environmental Quality

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

PERMIT TO CONSTRUCT

New

Permit No. 88-110

Renewal

Modified

Black Butte Coal Company SP-I6
(Name of Facility)

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

Black Butte Coal Company

P.O. Box 98

Point of Rocks, WY 82942

to construct, install, or modify a sedimentation pond (min. 13.80 ac.ft.) to

intercept runoff from Pit 8 disturbance

facility according to the procedures and conditions of the

application No. 88-110. The facility is located in

Sec. 7, T18N, R100W

in the County of Sweetwater,

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

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

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

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

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

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

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

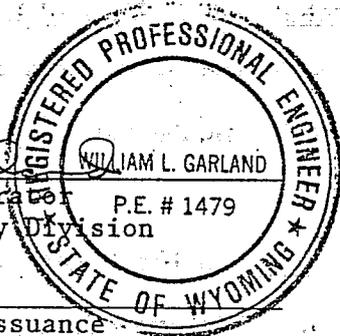
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

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

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

AUTHORIZED BY:

William L. Garland
Administrator
Water Quality Division



4-21-88

Date of Issuance

R. D. Wood

Director
Dept. of Environmental Quality

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

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 88-111

Black Butte Coal Company SP-I7
(Name of Facility)

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

Black Butte Coal Co.
P.O. Box 98
Point of Rocks, WY 82942

to construct, install, or modify a sedimentation pond (min. 14.63 ac.ft.) to
intercept runoff from Pit 8 disturbance

facility according to the procedures and conditions of the
application No. 88-111. The facility is located in

Sec. 18, T18n, R100W
in the County of Sweetwater,

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

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

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

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

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

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

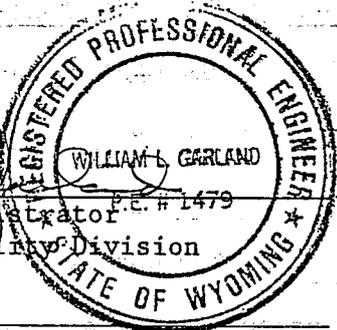
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

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

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

AUTHORIZED BY:

William L. Garland
 Administrator
 Water Quality Division
 4-21-88
 Date of Issuance



R. D. H. Wood
 Director
 Dept. of Environmental Quality

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

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 88-112

Black Butte Coal Company SP-I4
(Name of Facility)

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

Black Butte Coal Company
P.O. Box 98
Point of Rocks, WY 82942

to construct, install, or modify a sedimentation pond (min. 6.75 ac.ft.) to
intercept runoff from Pit 8 disturbance

facility according to the procedures and conditions of the
application No. 88-112. The facility is located in
Sec. 13, T18N, R101W

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

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

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

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

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

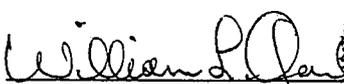
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

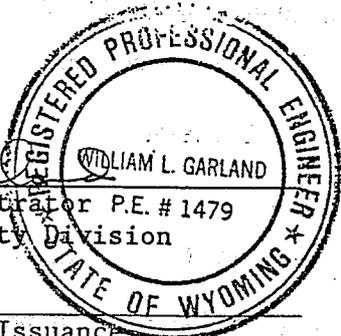
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

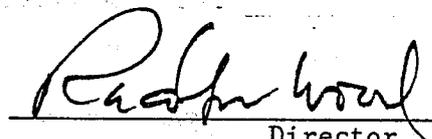
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
4-21-88
Date of Issuance




Director
Dept. of Environmental Quality

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

RE

PERMIT TO CONSTRUCT

PERMIT NO. 88-113

- X New
- Renewal
- Modified

ROUNDTOP LINE #2, PHASE III, CHEYENNE

This permit hereby authorizes the applicant:

Cheyenne Board of Public Utilities
P. O. Box 1469
Cheyenne, WY 82009-1469

to construct, install or modify a 24" water transmission line according to the procedures and conditions of the application number 88-113. The facility is located in S20, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Laurence Robinson
Administrator
Water Quality Division

Radford Wood
Director
Department of Environmental Quality

5/4/88
Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-114

X New
Renewal
Modified

Medicine Bow Coal Mine Containment Ditches 26 Through 45

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify containment ditches for sedimentation control according to the procedures and conditions of the application number 88-114. The facility is located in S19, T23N, R83W and S11, 12, 14, 24, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Lawrence Robinson
Administrator
Water Quality Division

Richard Wood
Director
Department of Environmental Quality

5-6-88
Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-115

X New
Renewal
Modified

Medicine Bow Coal Mine Pond 11-24-1

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-115. The facility is located in S11, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for
Lawrence Robinson
Administrator
Water Quality Division

Ralph Woul
Director
Department of Environmental Quality

5-6-88

Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-116

X New
Renewal
Modified

Medicine Bow Coal Mine Pond 11-24-2

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-116. The facility is located in S11, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Laurena Redmon
Administrator
Water Quality Division

Ralph Wood
Director
Department of Environmental Quality

5-6-88
Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-117

X New
Renewal
Modified

Medicine Bow Coal Mine Pond 14-38-1

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-117. The facility is located in S14, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

Lawrence Robinson

br
Administrator
Water Quality Division

Ralph Wood

Director
Department of Environmental Quality

5-6-88

Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-118

X New
Renewal
Modified

Medicine Bow Coal Mine Pond No. 13-38-1

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-118. The facility is located in S13, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Lawrence Reardon
Administrator
Water Quality Division

Ralph Crowl
Director
Department of Environmental Quality

5-6-88
Date of Issuance

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

✓

PERMIT TO CONSTRUCT

PERMIT NO. 88-119

X New
Renewal
Modified

Medicine Bow Coal Mine Pond No. 24-46-2

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-119. The facility is located in S24, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

Lawrence Plevin

Administrator
Water Quality Division

Richard Wood

Director
Department of Environmental Quality

5-6-88

Date of Issuance

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

PERMIT TO CONSTRUCT

PERMIT NO. 88-120

X New
Renewal
Modified

Medicine Bow Coal Mine Pond 24-46-1

This permit hereby authorizes the applicant:

ARCH Mineral Corp
c/o Eric Sundberg
P O Box 460
Hanna, WY 82327

to construct, install or modify sedimentation control pond according to the procedures and conditions of the application number 88-120. The facility is located in S24, T23N, R84W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Laurena Polovina
Administrator
Water Quality Division

Ralph Wood
Director
Department of Environmental Quality

5-6-88
Date of Issuance

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

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 88-121
(Ref. 83-382)
SEE SPECIAL CONDITIONS

SIERRA CONSTRUCTION WASTEWATER POND NO. 1
MONITOR WELLS
(Name of Facility)

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

Ron Lynch

P. O. Box 210

Lynch, Wyoming 82640

to construct, install, or modify groundwater monitoring wells according to the procedures and conditions of the application No. 88-121. The facility is located in Section 14, T.42N., R.78W., in the County of Johnson, in the State of Wyoming. This permit shall be effective for a period of two (2) years 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 ensures 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.

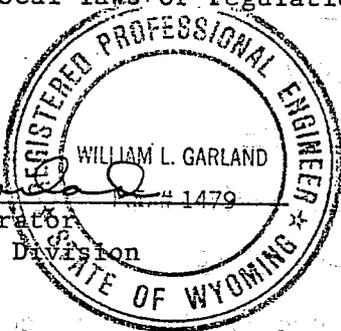
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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 501, 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
Water Quality Division


Director
Department of Environmental Quality

4-12-88

Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT 88-121

1. Additional wells meeting the requirements of the application may be installed under this permit if prior approval is received from the Water Quality Division.
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depth of seal below ground surface as detailed in Chapter XI, Part G. However, a sufficient seal should be installed according to normal engineering practice.
3. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
4. In addition to the well construction information submitted with the permit application, the following items relating to well construction must be addressed when the wells are installed:

Conditions to Permit 88-121 (continued)

- a. After the bentonite has been placed in the annular space, it should be hydrated to ensure a proper seal;
 - b. The borehole diameter must be at least four inches larger in diameter than the casing diameter;
 - c. The screened intervals must extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level;
 - d. Only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack should be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval;
 - f. Factory slotted casing is recommended for the perforated interval;
 - g. A top and bottom cap should be installed to prevent sediment and surface water from entering the well;
 - h. A protective casing and locking cap is strongly recommended;
 - i. The monitoring well should be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
5. The wells are to be installed to a maximum depth of 200 feet. If water is encountered at a shallower depth, the wells may be completed into this uppermost aquifer. If water is encountered proper well evacuation, sample collection, preservation, transportation and analytical procedures shall be followed to retrieve samples from each well. Laboratory analysis shall include a minimum of two rounds of analysis for all parameters listed in Chapter VIII of the Water Quality Rules and Regulations. Revised monitoring requirements will be specified as permit conditions in the anticipated Permit to Modify the disposal facility.
6. Within 120 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the Water Quality Division, Sheridan District Office. This report shall contain at a minimum:
- a. A site map showing physical features, well locations and elevations;
 - b. Final construction details and a lithologic log of all monitoring wells;
 - c. Water level measurements, if encountered;
 - d. Sample collection procedures;
 - e. Sampling analytical results.

xc: Jake Strohman, DEQ/WQD, Cheyenne
Bob Lucht, DEQ/WQD, Cheyenne, with approved plans
Doyle Fritz, Western Water Consultants, Sheridan, with approved plans

fills ✓

PERMIT TO CONSTRUCT

PERMIT NO. 88-122
See Conditions

X New
Renewal
Modified

Vaughns Plumbing

This permit hereby authorizes the applicant:

Vaughn Plumbing and Heating
1015 Elk Street
Rock Springs, WY 82901

to construct, install or modify monitoring well according to the procedures and conditions of the application number 88-122. The facility is located in S26, T19N, R105W in the county of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) (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 ensures 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.

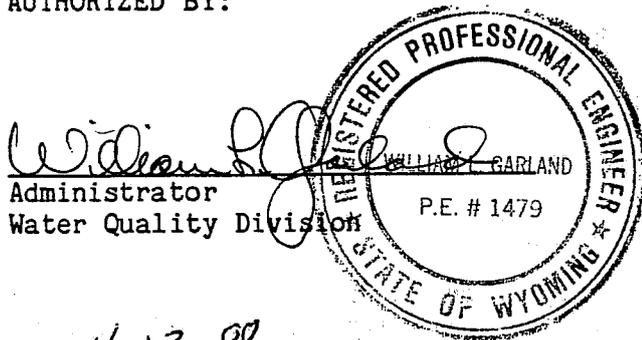
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

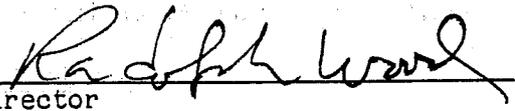
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:




Director
Department of Environmental Quality

4-13-88
Date of Issuance

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

Conditions for Permit 88-122

1. The groundwater monitoring wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 88-122. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below ground surface as detailed in Chapter XI, Part G. However a sufficient seal shall be installed according to normal engineering practice.
3. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the WQD.
4. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly numbered.
5. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial actions which may be required. Depending on the results of the subsurface contamination investigation, additional site investigations or remedial measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of contamination of product layers and dissolved constituents.
6. In addition to the well construction information submitted with the permit

Conditions to Permit 88-122 (continued)

application, the following items relating to well construction must be addressed when the wells are installed:

- a. After the bentonite has been placed in the annular space, it shall be hydrated to ensure a proper seal;
 - b. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;
 - c. The screened interval shall extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level;
 - d. If PVC casing is used, only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack shall be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval;
 - f. Factory slotted casing is recommended for the perforated interval. Slotted casing shall extend 1-2 feet above highest expected groundwater table;
 - g. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - h. A protective casing and locking cap is strongly recommended;
 - i. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - j. A seal of bentonite or bentonite grout is required from the surface to a foot or two above the top perforation. Protective casing shall be cemented into a sloping concrete cap; and
 - k. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
8. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
- a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;

Conditions to Permit 88-122 (continued)

- f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
10. All monitoring wells will be sampled and water tested by gas chromatograph using USGS method number 0-3109-83, identifying all peaks. Product to thin to measure shall be noted and reported (i.e. film, sheen, odor, iridescence, etc.) When measureable product layers exist, they are to be measured and the above parameters need not be sampled for. The results of these analyses are due in the Cheyenne office by the last day of the month following the end of each quarter in January, April, July, and October. Samples should be collected during the first week of the last month of each quarter to ensure timely submittal. The first set of quarterly results are due by the last day of April, 1988. Along with the first set of monitoring results, a schedule including time frames for any further remedial action will be sent to DEQ.
11. All inventory records for a year prior to the report of a spill shall be submitted to the DEQ/WQD within 15 days of receipt of this permit. Reconciled inventory records with the volume of the spill specified shall be submitted to the DEQ/WQD within 45 days of receipt of this permit.
12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
13. The locations and approximate depths to water bearing formations of any wells within $\frac{1}{4}$ mile will be submitted with the first quarterly report. If there is a possibility of contamination of any well, the well(s) will be sampled as outlined above.

cc: Jake Strohman
Jack Bedessem

✓
tu
xe

LAND APPLICATION PERMIT

Permit No. 88-129

* CONDITIONS ON PERMIT *

Beaver Creek Plant Land Application

(Name of Facility)

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

Amoco Production

P.O. Box 1400

Riverton, WY 82501

to land apply approximately 20 cubic yards of amine stained gravel

to plant roads.

The application site is located in Sec. 10, T33N, R96W

in the County of Fremont, 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 standards. The authority to land apply granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures that the disposal method will meet applicable state requirements.

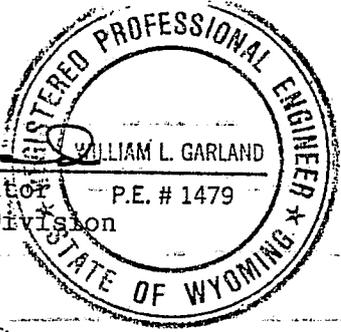
Nothing in this permit constitutes an endorsement of the disposal method described herein. This permit indicates only that standards required by the Environmental Quality Act have been met. The state assumes no liability for, and does not in any way guarantee the performance of, the permittee in the 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 disposal method 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 application site at the above location, for the purpose of compliance with the provisions of this permit.

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  R. L. ...
Administrator P.E. # 1479 Director
Water Quality Division Dept. of Environmental Quality

4-18-88
Date of Issuance

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

* CONDITIONS ON PERMIT *

1. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditins exist.
2. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Steve Gerber, phone number 332-3144, to arrange a field inspection prior to initiation of work. The district engineer should be notified at least 48 hours in advance of application.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 88-123

EAST REVLON RESERVOIR
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood control and sedimentation facility according to the procedures and conditions of the application No. 88-123. The facility is located in Section 27, T.51N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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.

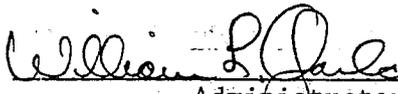
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

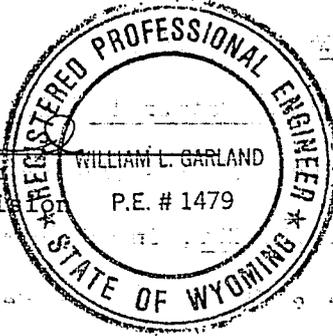
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 501, Sheridan, Wyoming 82801; telephone, 672-6457.

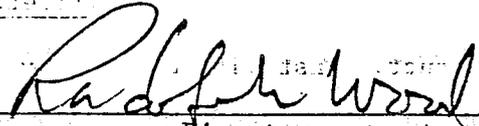
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
Water Quality Division




Director
Department of Environmental Quality

4-21-88
Date of Issuance

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

[Faint, mostly illegible text follows, likely bleed-through from the reverse side of the page.]

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 88-124

SOUTH REVLON RESERVOIR
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood control and sedimentation facility according to the procedures and conditions of the application No. 88-124. The facility is located in Section 28, T.51N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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 501, Sheridan, Wyoming 82801; telephone, 672-6457.

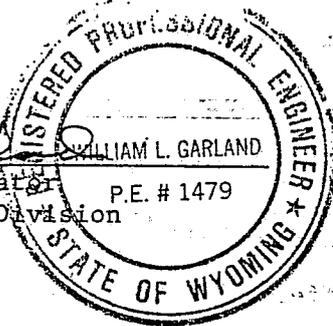
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
Water Quality Division



Robert Wood

Director
Department of Environmental Quality

4-21-88

Date of Issuance

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

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 88-125

SEDIMENT EB109 RESERVOIR
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood control and sedimentation facility according to the procedures and conditions of the application No. 88-125. The facility is located in Section 27, T.51N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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.

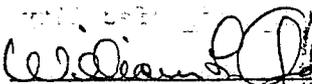
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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 501, Sheridan, Wyoming 82801; telephone, 672-6457.

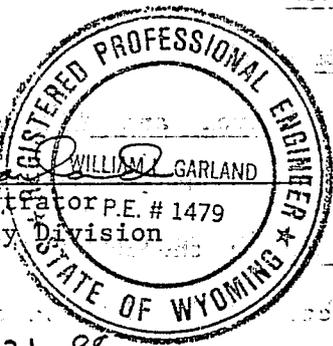
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

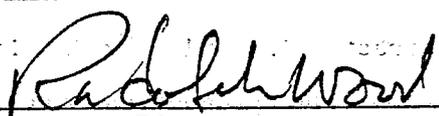
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

AUTHORIZED BY:



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





Robert Wood
Director
Department of Environmental Quality

4-21-88

Date of Issuance

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

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 88-126

DIVERSION RESERVOIR
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood control and sedimentation facility according to the procedures and conditions of the application No. 88-126. The facility is located in Section 22, T.51N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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.

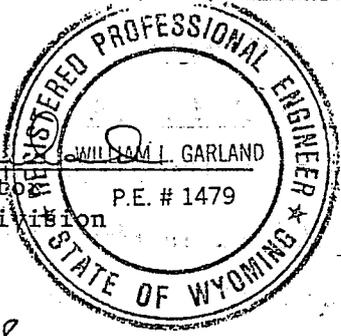
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 501, 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
Water Quality Division



Rudolph Wood
Director
Department of Environmental Quality

4-21-88
Date of Issuance

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
Administrator
Water Quality Division
STATE OF WYOMING
8-4-88
Date of Issuance


Director
Dept. of Environmental Quality

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



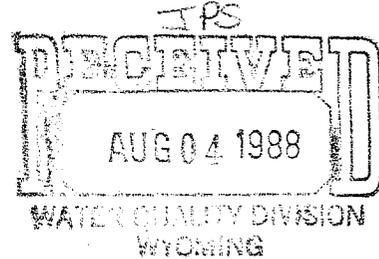
MIKE SULLIVAN
GOVERNOR

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
----------------------------------	--	---	--	--

August 4, 1988



Mr. Lyle Randen
Thunder Basin Coal Company
P.O. Box 406
Wright, WY 82732

RE: Approval to conduct the Land Farming Operation at the Rocky Hill UCG Site, LE79

Dear Lyle:

Based upon the District III staff's review of information presented in,

- 1987-88 Annual Report for LE79
- WQD Land Application Permit No. 88-130
- 1984-85 Annual Report for LE79
- February 1985 study by Engineering Science entitled "Process Water Pond Waste Field Study for the Evaluation of Land Farming",

and the recommendation of the District III staff, I formally approve the Thunder Basin Coal Company's Land Farming Operation. As you are aware the Water Quality Division previously granted their approval. Mark Taylor and Dean Roberts have worked closely on the project to date; if you have any questions, please contact Mark. Mark will continue to monitor the progress of the operation and subsequent reclamation of the Process Water Waste Pond site as outlined in the 1987-88 Annual Report.

Sincerely,

Roger Shaffer
Administrator
Land Quality Division

RS:BG:km:gd
xc: Rick Engelmann
District III
Water Quality Division

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 88-130
SEE CONDITIONS ATTACHED

X New
Renewal
Modified

Rocky Hill Landfarm

This permit hereby authorizes the applicant:

Thunder Basin Coal Company
P O Box 406
Wright, WY 82732

to construct, install or modify land farming according to the procedures and conditions of the application number 88-130. The facility is located in S16, T44N, R71W in the county of Cambell, in the State of Wyoming. This permit shall be effective for a period of 2 years (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 ensures 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: Groundwater Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

Nothing in this permit shall be construed to preclude the institution of any action or relieve the permittee from any responsibilities, liabilities 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

5-9-88
Date of Issuance

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

Conditions to Permit to Construct #88-130

1. The land farm construction and process shall be in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 88-130.
2. Only process water pond (PWP) sludge is to be treated. Any sludges or wastes spilled on route or released must be recovered and returned to the PWP or to the treatment area as applicable.
3. The PWP sludge will be land applied at a ratio or no more than 1 part waste to 15 parts soils, or an actual application of no more than 0.80 inches over 21 acres.
4. The application will be accomplished twice during the growing season for a total maximum application of 1-6 inches incorporated to the 1 foot depth.
5. The second waste application may occur only after an average Microtox EC₅₀ value of 60% is achieved. This value is to be derived according to the sampling scheme discussed in a letter dated October 14, 1987 from Thunder Basin Coal Company to the Land Quality Division. This is estimated to require 45 days after the initial waste application.
6. Waste degradation (detoxification) will be determined by achievement of an average Microtox EC₅₀ value of 100% from the sampling interval during the growing season in 1989. Site reclamation will proceed on the accomplishment of this goal.
7. The attached table entitled "Site Management Plan" establishes absolute time frames for completion of previously described requirements and related agricultural operations.

Conditions to Permit 88-130 (continued)

n the event that surface water from precipitation, runoff, or other sources collects in the landfarm area, the applicant will take the following actions:

- a. Notify the Water Quality Division (WQD) of the event immediately so that a WQD representative may be on-site to obtain samples if deemed necessary.
 - b. The applicant shall, as soon as reasonably possible, obtain samples of the collected water for analysis. Sampling protocol, preservation techniques, and retention times shall be observed to assure reliable analytical results.
 - c. The samples will be analyzed for PNA's and total phenols. The analytical results shall be submitted to the WQD within 15 days after they are received from the laboratory.
9. The analytical results of the Microtox testing or any other surface water, soil water, or groundwater sample obtained from the landfarm area shall be submitted to the WQD in Cheyenne.
10. The issuance of this permit does not relieve the applicant from any extent of contamination study or groundwater monitoring system that may be required. This requirement will be determined on the basis of samples obtained by condition number 8 above or by information indicating a failure in the land treatment process.

/nc

cc: Jake Strohman, DEQ/WQD, Cheyenne
E. J. Fanning, DEQ/WQD, Cheyenne
Susan Fields, DEQ/WQD, Sheridan
Kim Clarkin, DEQ/LQD, Cheyenne

PERMIT TO CONSTRUCT

PERMIT NO. 88-131
See Conditions

X New
Renewal
Modified

CHEVRON SERVICE STATION NO. 157

This permit hereby authorizes the applicant:

Chevron USA, Inc.
P. R. Briggs
P O Box 220
Seattle, WA 98111

to construct, install or modify test holes and/or monitoring wells according to the procedures and conditions of the application number 88-131. The facility is located in the City of Jackson at 401 N. Cache Avenue in the county of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years (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 ensures 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.

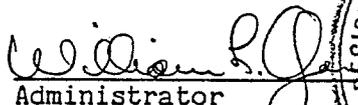
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

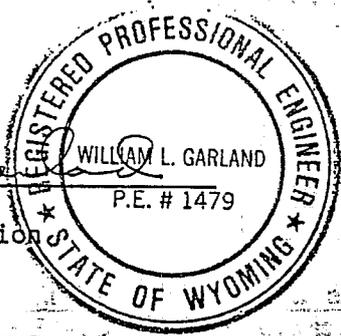
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

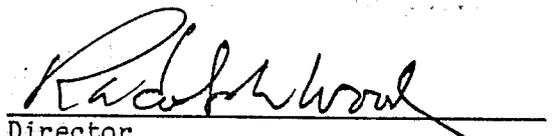
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:


Administrator
Water Quality Division




Director
Department of Environmental Quality

4-21-88

Date of Issuance

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

Conditions to Permit to Construct 88-131

1. The groundwater monitoring wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 88-131. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below ground surface as detailed in Chapter XI, Part G. However a sufficient seal shall be installed according to normal engineering practice.
3. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the WQD.
4. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly numbered.

5. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial actions which may be required. Depending on the results of the subsurface contamination investigation, additional site investigations or remedial measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of contamination of product layers and dissolved constituents.
6. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
7. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
 - a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
8. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
9. All monitor wells associated with this facility including the domestic well shall be sampled and the wastewater analyzed quarterly for benzene, ethylbenzene, toluene, xylene, total hydrocarbons and lead until other monitoring operations are allowed by the DEQ/WQD. Product too thin to measure shall be noted and reported (i.e., film, sheen, odor, iridescence, etc.). When measureable product layers exist, they are to be measured and the above parameters need not be sampled for. The results of these analyses are due in the Cheyenne office by the last day of the month following the end of each

Conditions to Permit 88-131 (continued)

quarter in January, April, July, and October. Samples should be collected during the first week of the last month of each quarter to ensure timely submittal.

10. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
11. A sampling protocol shall be submitted to the division prior to sampling any monitor wells. This will prevent repeating the sampling because of a faulty protocol. The protocol shall contain the following:
 - a. Sampling procedures;
 - b. Decontamination procedures;
 - c. Chain of custody;
 - d. Analytical procedures (EPA 602 method is required for BETX, USGS 0-3109-83 is requested if diesel is a suspect contaminant).
12. The issuance of this permit allows Chevron USA, Inc. to investigate the subsurface conditions near the 12,000 gallon unleaded storage tank only. Additional investigation at this site shall be submitted to the division prior to implementation.

cc: Jake Strohman, DEQ/WQD, Cheyenne
Steve Gerber, DEQ/WQD, Lander
West Corp., P. O. Box 505, Casper, WY 82602

PERMIT TO CONSTRUCT

PERMIT NO. 88-132

- X New
- Renewal
- Modified

GREEN RIVER ADDITION COLLECTION SYSTEM - CHEYENNE

This permit hereby authorizes the applicant:

City of Cheyenne, Board of Public Utilities
2100 Pioneer Avenue
Cheyenne, WY 82001

to construct, install or modify a public sewage collection system according to the procedures and conditions of the application number 88-132. The facility is located in S26 & 27, T14N, R66W, NW & N½ in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

for Lawrence Robinson

Administrator
Water Quality Division

Rudolph Wood

Director
Department of Environmental Quality

5-12-88

Date of Issuance

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



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
----------------------------------	--	---	--	--

August 18, 1988

CERTIFIED

Robert C. Kuhn
Union Pacific Railroad
1416 Dodge Street
Omaha, Nebraska 68179

RE: Union Pacific Laramie Tie Plant
Permit UIC 88-133 class 5X26
Albany County, Wyoming

Dear Mr. Kuhn:

Enclosed please find the approved UIC permit to allow the implementation of 1988 and 1989 test work at the Tie Plant. You will find that this permit will allow you to discharge the injection stream exactly as you proposed in the approved workplan submitted and approved by EPA. Union Pacific Railroad must be aware that the alluvial aquifer will have to meet, at a minimum, State of Wyoming class III aquifer standards for inorganic parameters. Should this discharge result in parameters that do not meet this standard at the conclusion of all remedial work for the organic contamination, then UPRR will be responsible to insure that work is done to bring the inorganic parameters to this standard. UPRR SHOULD ALSO BE AWARE THAT ISSUANCE OF THIS PERMIT COVERS ONLY THE 1988 AND 1989 TEST WORK. WATER QUALITY DIVISION DOES NOT BELIEVE THAT THIS METHOD OF WASTE DISPOSAL WILL BE ACCEPTABLE FOR THE FINAL, FULL SCALE WORK.

Sincerely,

Robert F. Lucht, P.E.
Groundwater Quality Supervisor
Water Quality Division

RFL/nc

Enclosures: Signed copy of permit UIC 88-133
Copy of memo to file dated August 16, 1988 by R. Lucht

xc: Gary Honeyman, UPRR Tie Treatment Plant, P.O. Box B, Laramie, WY 82070
Keith Piontek, CH2M Hill, P.O. Box 22508, Denver, CO 80222

TO: File

FROM: Robert F. Lucht 

DATE: August 12, 1988

SUBJECT: UPRR Laramie Tie Treatment Plant
Permit UIC 88-133
Albany County, Wyoming

Union Pacific has responded to the draft UIC permit with a report by CH2M Hill entitled UPRR Laramie Tie Plant, Inorganic Water Quality Issues, August 15, 1988. This memo addresses the responses to various permit limitations which UPRR has proposed. The permit limitations which UPRR objects to are all based on the concentrations that are allowable in the injection stream at the conclusion of the test for disposal only.

ALUMINUM - UPRR objects to the limitation of 5.0 mg/l in the injection stream because of the presence of aluminum hydroxide as a suspended solid. My response to this concern is to require that the samples be filtered before being preserved in the field.

AMMONIA - The objection to the ammonia standard is that, while it may be exceeded in the injection stream on a temporary basis, the final remedial step of bioreclamation should remove this. My response to this concern is to remove the ammonia limitation, but still require that ammonia be analyzed for. One of the interesting points made in this report is that the injection of ammonium nitrate during biological treatment will introduce ammonia anyway. If Union Pacific will read the proposed permit, they will find that injection of ammonium nitrate is specifically not allowed.

BARIUM - The objection to the barium standard is that barium carbonate and barium sulfate are both so insoluble that they should not be found in the groundwaters after the test, regardless of the value that is injected. While I find this to be a fairly weak argument, barium should not be a critical issue in this permit. For this reason, my response to this concern is to remove the barium limitation, but still require that barium be analyzed for.

BORON - There has not been any major objection to boron standards raised, but a fairly good argument has been advanced that this standard is unnecessary. For this reason, my response to this concern is to remove the boron limitation, but still require that boron be analyzed for.

FLUORIDE - The objection to fluoride is that the standard set is more restrictive than the federal standard. Available evidence suggests that fluoride may be slightly enriched in the spent solutions, but it will not exceed 4.0 mg/l. Because the 4.0 mg/l limit will indeed be protective of the environment, and because there will be sufficient dilution of this effluent within the aquifer to insure that the state standard of 2.4mg/l will not be exceeded in the aquifer, my response is to raise this standard to 4.0 mg/l.

IRON - The objection to iron is that it naturally precipitates when aerobic conditions are present. Since further work will involve aerobic conditions, the iron should precipitate. UPRR wishes to overlook the possibility that high iron

levels in these beds may cause plugging of the aquifer. For this test, I don't see iron concentrations as a critical issue. For this reason, my response to this concern is to remove the iron limitation, but still require that iron be analyzed for.

MANGANESE - The objection to the manganese standard is that it is present in concentrations of 6.1 mg/l in one bedrock well (BR-12). Checking the tables where manganese is listed for well BR-12, I find that the value is .12 mg/l. Because manganese standards are based on such non-health related issues as taste and color, my response to this concern is to remove the manganese limitation, but still require that manganese be analyzed for.

SULFATE - Union Pacific Railroad has proposed that sulfate values in the injection stream of up to 10,000 mg/l are considered reasonable on the basis of one isolated well in the Sundance Formation. Two other wells in the Sundance contain waters of 4,500 and 5,200 mg/l in sulfate. All other Sundance Wells average 1022 mg/l. Morrison wells average 895 mg/l in sulfate. The Chugwater group averages 1344 mg/l. The alluvial wells average 1367 mg/l sulfate. Water Quality Division therefore sees no reason that the proposed limit of 5000 mg/l should not stand. A good case could be made in fact to lower this standard to the 1400 mg/l that the alluvial wells presently average.

TOTAL DISSOLVED SOLIDS - Union Pacific Railroad has also proposed to use one isolated Sundance well as a justification for discharging waters containing as much as 14,000 mg/l TDS to the alluvial aquifer. Water Quality Division has been concerned that this level would not be protective of the environment in the full scale soil washing program. UNION PACIFIC, THROUGH ITS CONSULTANT CH2M HILL HAS PLEDGED THAT THIS PERMIT WILL NOT BE USED AS A PRECEDENCE TO ALLOW THIS TYPE OF DISPOSAL IN THE MAIN REMEDIAL EFFORT. In the interest of getting this test program underway, Water Quality Division will allow up to 14,000 mg/l solutions to be injected from the test work alone. Union Pacific will have to understand that for the final, full scale operation, a better solution to this problem must be found. Water Quality Division considers this test vital to the final cleanup of the Laramie Tie Treatment plant. Due to the short duration of the test, and the fact that very small volumes of high TDS water will be discharged, and because the discharged water will be drawn into the interior drainlines in a very short time, diluted and ultimately discharged to the Laramie River as a very small increase in the TDS of the total discharge stream; Water Quality Division considers that this practice will be protective of the environment.

BICARBONATE - Union Pacific has stated that bicarbonate values will exceed the proposed permit by an order of magnitude. The only justification for this seems to be that UPRR has not planned on treating this discharge further. Water Quality Division sees no reason that the bicarbonate standard should be raised.

VANADIUM - Union Pacific has stated that it cannot operate without exceeding the class III standard for vanadium in the discharge stream. UPRR has shown, by the bench scale test work, that vanadium at concentrations of .14 mg/l can be expected. Vanadium can be recovered fairly easily by ion exchange. The Water Quality Division believes that a standard of .14 mg/l will be protective of the environment in light of the small volume of this discharge and the very large dilution that will occur in the alluvial aquifer. The permit will be amended to reflect a .14 mg/l standard for vanadium.

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

UIC 88-133

UIC CLASS 5X26

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),

Union Pacific Corporation
P. O. Box B
Laramie, WY 82070

is authorized to operate

Union Pacific, Laramie In-situ pilot recovery system

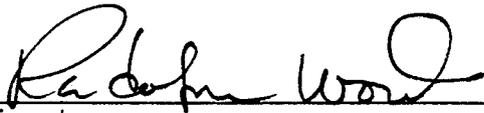
according to procedures and conditions of the application UIC 88-133 and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.



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

Aug 19, 1988
Date



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

8-22-88
Date

A. Discharge (Injection) Zone and Area of Review

The injection zone for this permit includes the alluvial aquifer along the Laramie River in Section 5 and 8, T15N, R73W in Albany County, Wyoming. Incidental to this, injections may be made into the Chugwater, Sundance and Morrison Formations within this same legal description. The injection zone is, however, limited to the area within the contaminated isolation system.

B. Groundwater Classification

The groundwater within the alluvial aquifer is class III under Chapter VIII Wyoming Water Quality Rules and Regulations, except for the organic contamination present which makes the water unusable at the present time. All metals meet class I standards, but TDS, sulfate and chloride make this water class III.

The Morrison Formation within this area is a class I aquifer in that it is being used for class I purposes. The Morrison does not meet class I standards for TDS and sulfate among other parameters.

The Chugwater and Sundance Formation within this permit area is class VI under Chapter VIII of Water Quality Rules and Regulations. Both of these formations contain high TDS, sulfate and chlorides.

C. Authorized Operations

The permittee is authorized to inject certain fluids on a pilot basis for the express purpose of cleaning up the aquifer. The aquifer is presently contaminated with polynuclear aromatics, phenols and various other organic compounds. In brief the permittee is authorized to inject several classes of compounds; A/P/S solutions, bioreclamation solutions, spent fluids and natural groundwaters. The volumes injected are limited to those envisioned in the approved work plan for 1988 and 1989 test work at the "T-4" area and the main pilot facility.

A/P/S Solutions

These solutions are composed of alkaline, polymers, and surfactants to help break the bonding of creosote, residual oil and pentachlorophenol to the soil matrix within the alluvial aquifer. These solutions will contain approximately 1600 mg/l of xanthene gum, 2.5% sodium carbonate, and an industrial surfactant such as tergetol. These chemicals may be present in the above concentrations or any other concentration and may be substituted with other chemicals of the same general type.

Bioreclamation Solutions

These solutions are near neutral in pH with various organic nutrients added. The chemicals which may be added include various ammonium nitrates and phosphates. The total ammonia content when

assayed as "ammonia as N" shall not exceed 3 mg/l in any injected solution. These solutions will contain various bacteria which are presently on site but which have been cultured to a high state of activity.

Disposal of Spent Solutions

This permit covers the pilot scale work at the T-4 site and the Main Pilot Facility. As part of this process, various solutions will be produced that will require on site disposal. Each of these fluids will be sampled and approval requested under this permit before any fluid is disposed of in any drainline.

The water quality of all spent fluids disposed of under this permit by injection into a drainline shall meet the following criteria:

<u>Parameter</u>	<u>Maximum Disposal Value</u>
Aluminum	5.0
Arsenic	.22
Cadmium	.05
Chromium	.10
Cobalt	1.0
Copper	1.0
Fluoride	4.0
Lead	5.0
Magnesium	2500
Mercury	.0013
Nickel	.20
Potassium	100
Selenium	.05
Silver	.05
Sulfate	5000
TDS	14,000
Zinc	25.0
Carbonate	1560
Bicarbonate	5000
Beryllium	.1
Vanadium	.14

Union Pacific shall analyze for all of the above tests and submit the results to Water Quality Division prior to discharge for disposal of any fluid. Union Pacific shall filter all samples prior to preservation and analysis thus the above standards apply to dissolved parameters. The quality of liquids disposed of under this permit is limited to 1,000,000 gallons.

Natural Groundwaters

As part of the preliminary work at each of the two sites, "natural" groundwaters will be pumped out of an upper drainline, run through an API oil/water separator and reinjected into the aquifer. This activity is authorized at any time on this entire site. Natural groundwaters whose chemical, bacteriological, or physical makeup has

not been altered by any process other than pumping may be reinjected. It is recognized that many of these groundwaters are contaminated.

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:

The monitoring program as described in the workplan submitted with the UIC application is sufficient except that:

- a. On page 4-10 of the workplan where it discusses the analysis of water samples from the WTDD's, these drainlines shall be sampled monthly and analyzed for a complete list of inorganic parameters as listed in part F-5 below.
- b. These analyses shall be done monthly as long as any fluid is being circulated through the test cells for any purpose. This includes test cells at the T-4 test and at the MPF test.
- c. These analyses are in addition to the organic analysis that were spelled out in detail in the workplan.

5. Water samples shall be analyzed for the following listed inorganic parameters in addition to the organic analysis listed in the approved work plan:

Field Measurements:

pH (reported to nearest .1 ph units)
Temperature (degrees C)
Conductivity (micromhos/cm corrected to 25 degrees C)
Water Level (for wells)
Pumping Time (for wells)

Laboratory Measurements:

Ammonia (NH ₃ as N)	Total Alkalinity
Aluminum (Al)	Arsenic (As)
Boron (B)	Cobalt (Co)
Barium (Ba)	Cadmium (Cd)
Chromium (Cr)	Copper (Cu)
Iron (Fe)	Lead (Pb)
Manganese (Mn)	Mercury (Hg)

Molybdenum (Mo)	Nickel (Ni)
Selenium (Se)	Zinc (Zn)
Vanadium (V)	Uranium (U) (Radiometric pCi/l)
Uranium (U308) (Fluorometric)	Radium (Ra) (Radiometric pCi/l)
Bicarbonate (HCO3)	Magnesium (Mg)
Carbonate (CO3)	Potassium (K)
Calcium (Ca)	Sodium (Na)
Chloride (Cl)	Sulfate (SO4)
Total Dissolved Solids (TDS)	

Whenever the approved workplan refers to "A Complete List of Inorganic Parameters", or "A long list of Inorganic Parameters" the above list shall be analyzed for. This list includes several parameters that were not included in Appendix B of the approved workplan, but which shall be analyzed whenever inorganic parameters as listed in Table B-2 of Appendix B of the workplan are called for.

G. Requirements for Monitoring the Discharge

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

The injected volume shall be monitored using a continuous recording meter which will show the volume being delivered to any drainline. A totalizer shall be installed that will show the total volume injected to date for each drainline. A continuous recording pH meter shall also be installed on each drainline during all operations under this permit. Due to the nature of this operation, pressure monitoring will not be meaningful and is not required. Records shall be kept of all reagents used in this pilot facility and submitted with the final report on the project.

For each calendar quarter that this facility is operated, a quarterly report shall be submitted. This report shall show the volumes of all flows injected for any purpose as well as the average pH of these flows. An approximate estimate of the chemical makeup of all flows shall also be submitted. This need not be an exact time-weighted average, but can be an approximation based on chemicals added. The quarterly reports shall show typical water levels at the end of each week's operation on all monitor wells and pH and conductivity for all monitor wells at the same times. Volume of oil in place initially, volume recovered, and volume remaining in place shall be submitted for each cell operated, and shall be presented for each week's operation during each calendar quarter. Quarterly reports shall be due 30 days after the conclusion of each quarter.

It is the intent of this clause to allow these quarterly reports to be combined with quarterly reports for all other WQD permits, at the discretion of UPRR. Further, all of these reports can be compiled into similar reports required by EPA if this is possible. Reports required by EPA on a more frequent basis can be used to satisfy

these requirements if this is more convenient for UPRR. Without amending this permit, UPRR can also propose to use less frequent reports required by EPA as long as those reports include all of the above data. Written acceptance by WQD of a reporting schedule is required prior to implementation if less than quarterly. The intent is to allow one set of reports to satisfy both EPA and WDEQ requirements.

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.
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 in Section C and/or Section G of this 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.
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.

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.

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:

This section is not applicable to this permit.

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:

This injection will be done by means of shallow trenches using drainlines laid in gravel or by gravel-less drainlines if preferred by the permittee. Abandonment will require only removal of the lines leading to the drainlines down to the connection with the horizontal drainline itself. This includes the vertical drop pipe from the surface.

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.

Union Pacific Railroad as a corporation has shown financial responsibility and has committed to reclamation as required.

O. Special Measures the Director Finds Necessary:

If the sheet pile walls around these two pilot facilities should prove ineffective in containing injected fluids as shown by pH and conductivity monitoring right outside the wall, UPRR will pump-out and treat sufficient water to bring these wells back to their initial condition at the conclusion of the test.

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.

THE STATE



OF WYOMING

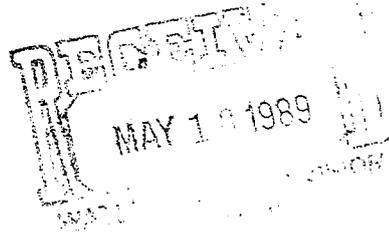


Department of Environmental Quality

Air Quality Division
(307) 672-6457

Water Quality Division
(307) 672-6457

May 16, 1989



Mr. Ed Schicktanz
Conoco, Inc.
851 Werner Court
Casper, Wyoming 82601

Dear Ed:

I am in receipt of Conoco's request to extend the term of Water Quality Permit 88-135 for application of waste oil in the Reno area. The extension is authorized. Permit 88-135 will be effective until November 15, 1989. The application site has also been changed to consist of County Road No. 178.

Please note that the same permit conditions stated in Permit 88-135 apply to this extension. In particular, that notification to this office is required before any oil is applied.

Please contact me if you have any comments or questions.

Sincerely,

Susan Fields

Susan Fields
NE District Supervisor
Water Quality Division

SF:jj

xc: Archives and Sheridan File 88-135

LAND APPLICATION PERMIT

Permit No. 88-135
SEE SPECIAL CONDITIONS

RENO UNIT & RENO EAST ROAD APPLICATION
(Name of Facility)

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

Conoco, Inc.

851 Werner Court

Casper, Wyoming 82601

to land apply waste oil to roads for dust control. The application site is located in Sections 19, 20, 21, 22, T.45N., R.79W. and Section 24, T.45N., R.80W., in the County of Johnson, in the State of Wyoming. This permit shall be effective for a period of six (6) months 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 standards. The authority to land apply granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures that the disposal method will meet applicable state requirements.

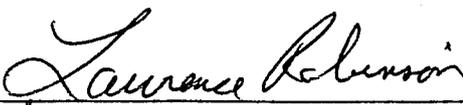
Nothing in this permit constitutes an endorsement of the disposal method described herein. This permit indicates only that standards required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the 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 disposal method 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 application site at the above location, for the purpose of compliance with the provisions of this permit.

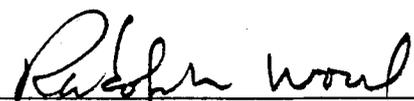
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulations.

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
for Water Quality Division



Director
Department of Environmental Quality

4/28/88

Date of Issuance

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

LAND APPLICATION STANDARD CONDITIONS

1. Waste oil 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. Waste oil application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
3. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Susan Fields, 2161 Coffeen Avenue, Suite 501, telephone number 307/672-6457, to arrange a field inspection prior to initiation of work. The District Engineer should be notified at least 48 hours in advance of discharges and must be informed how much waste oil will be applied (number of truckloads), the specific site of application (to the nearest 1/4 section) and time of application.
4. Waste oil and sludges applied to a road will be mechanically incorporated into the road bed as it is applied. Wastes will not be applied during the period from November 1 to April 30.

84
✓

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 88-136R
Ref. 85-481

EAGLE BUTTE MINE EBNPDES 019 RESERVOIR
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood/sediment control and process water treatment facility according to the procedures and conditions of the application No. 88-136R (Ref. 85-481). The facility is located in Section 22, T.51N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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.

norma

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
2161 Coffeen Avenue, Suite 501
Sheridan, Wyoming 82801

PROJECT: AMAX Coal Company
EBNPDES 019 Reservoir

ARCHITECT OR ENGINEER: Frank Ferris
AMAX Coal Company
P. O. Box 3005
Gillette, Wyoming 82716

WATER QUALITY DIVISION
REFERENCE NUMBER: 88-136
Ref. 85-481

REVIEWING ENGINEER: *SF* Susan Fields

DATE OF REVIEW: April 25, 1988

ACTION: Not authorized.

COMMENTS:

1. I am assuming that the actual point of discharge for this reservoir is the north end of the "long culvert". A permitted discharge point can have only a single point source discharge, therefore, the two 10-inch poly pipe arrangement can not be used. You can either route the dewatering well water into the reservoir and then through a single discharge pipe or install a wye to provide a common pipe for flow measurement and sampling.

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 88-137
(Ref. 83-387R)

SEDIMENT BA49 RESERVOIR
BELLE AYR MINE
(Name of Facility)

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

AMAX Coal Company

P. O. Box 3005

Gillette, Wyoming 82716

to construct, install, or modify a flood and sediment control facility according to the procedures and conditions of the application No. 88-137 (Ref. 83-387R). The facility is located in Section 22, T.48N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures 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 501, 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.

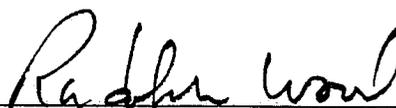
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations.

AUTHORIZED BY:



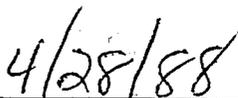
Administrator

for Water Quality Division



Director

Department of Environmental Quality



Date of Issuance

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

RA ✓

LAND APPLICATION PERMIT

Permit No. 88-138

* CONDITIONS ON PERMIT *

Placer/Rathvon Sludge Disposal
(Name of Facility)

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

Arco Oil & Gas Co. U.S. Bureau of Land Mgmt.

P.O. Box 72 and P.O. Box 119

Hamilton Dome, WY 82427 Worland, WY 82401

to land apply about 2300 yd³ of oilfield disposal pond sludges on
Placer Lease roads

The application site is located in sections 13 and 14, T44N, R98W

in the County of Hot Springs, 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
standards. The authority to land apply granted by this permit does not mean or
imply that the Wyoming Department of Environmental Quality guarantees or ensures
that the disposal method will meet applicable state requirements.

Nothing in this permit constitutes an endorsement of the disposal method described
herein. This permit indicates only that standards 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 disposal
method 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 application
site at the above location, for the purpose of compliance with the provisions of
this permit.

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:

for Laurence Robinson
Administrator
Water Quality Division

Rad Shou
Director
Dept. of Environmental Quality

5-12-88
Date of Issuance

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

CONDITIONS ON PERMIT

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 percent for vehicular application or 15 percent 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.
4. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Steve Gerber, 210 Lincoln St., Lander, Wyoming, 82520, phone number 332-3144, to arrange a field inspection prior to initiation of work. The district engineer should be notified at least 48 hours in advance of discharges and must be informed how much wastewater will be applied (number of truckloads), the specific site of application (to the nearest $\frac{1}{4}$ section) and time of application.
5. Waste oil and sludges applied to a road will be mechanically incorporated into the road bed. Wastes will not be applied during the period from November 1 to April 30.

R2 ✓

PERMIT TO CONSTRUCT

PERMIT NO. 88-139
SEE SPECIAL CONDITIONS

New
Renewal
X Modified

Teton Pines - Greens Water & Sewer Extension

This permit hereby authorizes the applicant:

Teton Pines Development Co.
Star Route Box 362A
Jackson, Wyoming 83001

to construct, install or modify a water distribution system and wastewater collection system extension according to the procedures and conditions of the application number 88-139. The facility is located in Section 11, T41N, R117W in the county of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years (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 ensures 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, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

Laurence Robinson

for Administrator
Water Quality Division

Richard Wood

Director
Department of Environmental Quality

5-12-88

Date of Issuance

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

SPECIAL CONDITIONS FOR PERMIT 88-139

1. Connections to the sewer line cannot be made once the maximum flow of 20,000 gpd for the entire system has been reached. This condition remains in effect until a new wastewater treatment facility is operational.

R.F.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 88-140R

* Conditions on Permit *

Brooks Lake Lodge WWTP Modifications
 (Name of Facility)

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

Richard P. Carlsberg
2800 28th St., Suite 200
Santa Monica, CA 90405

to ~~construct, install, or~~ modify the WWTP lagoons to include aeration
and UV disinfection

facility according to the procedures and conditions of the
 application No. 88-140. The facility is located in T44N, R110W

in the County of Fremont,
 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-

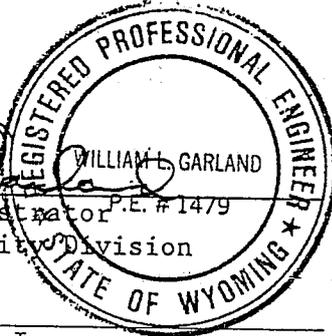
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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:


William L. Garland
Administrator P.E. #1479
Water Quality Division
7-15-88
Date of Issuance

Ralph Wood
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 only for the addition of aeration equipment and UV disinfection to the already existing WWTP.
2. An O&M Manual must be submitted before modifications are 50% complete. O&M Manual must be approved by the DEQ before modifications are completed. O&M Manual must conform to the requirements set forth in Section 24 of Water Quality Rules and Regulations, Chapter XI.

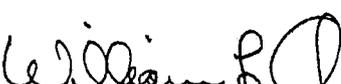
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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.

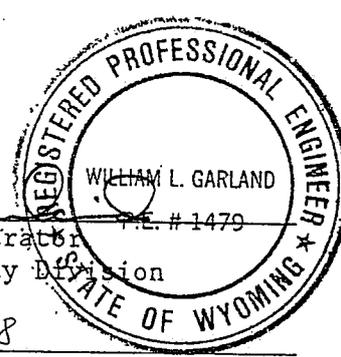
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

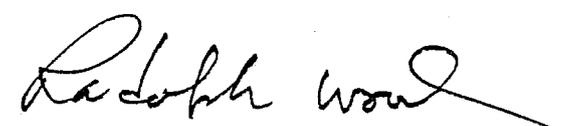
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



Administrator
Water Quality Division
7-7-88
Date of Issuance





Director
Dept. of Environmental Quality

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

CONDITION ON PERMIT

1. Connections to the sewer line cannot be made once the maximum flow of 20,000 gpd for the entire system has been reached. This condition remains in effect until a new wastewater treatment facility is operational.

PERMIT TO CONSTRUCT

PERMIT NO. 88-142

X New
Renewal
Modified

Dickinson Addition Sewage System

This permit hereby authorizes the applicant:

City of Riverton
P O Box 1700
Riverton, WY 82501

to construct, install or modify sewage collection system according to the procedures and conditions of the application number 88-142. The facility is located in SW $\frac{1}{4}$, SE $\frac{1}{4}$, Sec. 23, T1N, R4E, WRM in the county of Fremont, in the State of Wyoming. This permit shall be effective for a period of five (5) (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 ensures 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 (307) 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 invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

William L. Garland

Administrator
Water Quality Division



Ralph Wond

Director
Department of Environmental Quality

6-9-88

Date of Issuance

This permit does not supersede 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:

Laurence Reinson
Administrator
for Water Quality Division
4/28/88
Date of Issuance

Re Lohk wood
Director
Dept. of Environmental Quality

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

PERMIT TO CONSTRUCT

New

Permit No. 88-143

Renewal

Modified

Clissold/Jackson Water Transmission Line Upgrade
(Name of Facility)

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

Town of Jackson
P.O. Box 1687
Jackson, WY 83001

to construct, install, or modify a new 8" water distribution main, appurtenances
and service connections plus 2 new manholes in existing sewer
facility according to the procedures and conditions of the
application No. 88-143. The facility is located in NE $\frac{1}{4}$, NE $\frac{1}{4}$, Sec. 33, T41N, R116W

in the County of Teton,
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-

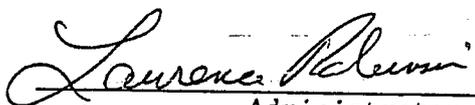
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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.

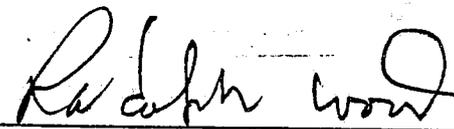
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
for Water Quality Division
4/28/88
Date of Issuance



Director
Dept. of Environmental Quality

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

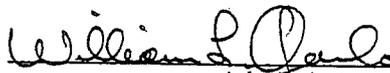
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

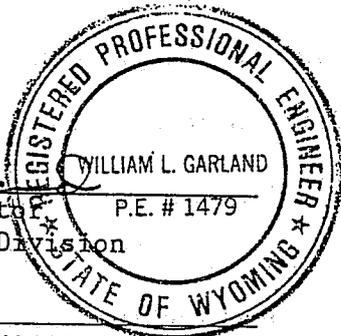
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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


Administrative
Water Quality Division
5-31-88
Date of Issuance




Director
Dept. of Environmental Quality

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

RF



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
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

Water Quality Division
(307) 777-7781
FAX (307) 777-5973

February 27, 1992

Mr. Ray Beevers
Quadco
P O Box 5340
Farmington, NM 87499

RE: Quadco, 2278 North Clover Road, UIC Permit 88-145, Natrona County, Wyoming

Dear Mr. Beevers:

Your application is considered inactive and is being returned under the assumption that the applicant does not wish to proceed with the underground injection control permitting process.

This project has not been permitted. Operation 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 operation of this facility, then application procedures pursuant to Chapter IX, Water Quality Rules & Regulations, must be followed.

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/RL/nc
20608.LTR

FARMINGTON

For Running File

ANCHORAGE RECEIVED CASPER

FEB 19 1992

MAIN OFFICE: FARMINGTON • PHONE: (505) 327-0400

P.O. BOX 5340 • FARMINGTON, NM 87499

WATER QUALITY DIVISION

February 14, 1992

*2/3
19
AW letter
20608*

Robert Lucht, P.E.
UIC Program Supervisor
Water Quality Division
Herschler Building
122 West 25th Street
Cheyenne, Wyoming 82002

RE: Quadco, 2278 North Clover Road, Permit UIC 88-145,
Natrona County, Wyoming

Dear Mr. Lucht:

Per our conversation on 2-14-92 Quadco wishes at this time to withdraw their application for an Underground Injection Control permit on the above referenced property.

This is in reply to your letter dated 2-5-92. If you have any questions please feel free to give me a call.

Sincerely,



Ray Heevers
Manager, Quadco Casper District
Casper, Wyoming

Plans



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
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

Water Quality Division
(307) 777-7781
FAX (307) 777-5973

February 5, 1992

Ray Beevers
Manager, Quadco Casper District
P O Box 2060
Farmington, NM 87499

RE: Quadco, 2278 North Clover Road, Permit UIC 88-145, Natrona County, Wyoming

Dear Mr. Beevers:

According to this department's records, Quadco applied for an Underground Injection Control permit on the above referenced property on April 12, 1988. This permit was reviewed, a draft permit was issued, and one or two outstanding items were identified. A review letter was issued on December 6, 1988 listing certain additional submittals which would be required prior to issuance of the permit. Since that date, this department has received no reply from Quadco.

At this time, the application is considered incomplete as outlined by Chapter IX, Section 7(a)(2). If Quadco wishes to pursue the granting of an Underground Injection Control permit, Quadco must take steps to answer the review letter issued on December 6, 1988 within 30 days. If a response is not received within 30 days of the date of this letter, the above referenced application will be denied.

Sincerely,

Robert Lucht, P.E.
UIC Program Supervisor
Water Quality Division

RL/nc 20373.LTR

Enclosure: Copy of the December 6, 1988 review letter

xc: Jake Strohman

R7



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 FAX (307) 634-0799	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781 FAX (307) 777-5973
----------------------------------	--	---	--	--

February 5, 1992

Ray Beevers
Manager, Quadco Casper District
P O Box 2060
Farmington, NM 87499

RE: Quadco, 2278 North Clover Road, Permit UIC 88-145, Natrona County, Wyoming

Dear Mr. Beevers:

According to this department's records, Quadco applied for an Underground Injection Control permit on the above referenced property on April 12, 1988. This permit was reviewed, a draft permit was issued, and one or two outstanding items were identified. A review letter was issued on December 6, 1988 listing certain additional submittals which would be required prior to issuance of the permit. Since that date, this department has received no reply from Quadco.

At this time, the application is considered incomplete as outlined by Chapter IX, Section 7(a)(2). If Quadco wishes to pursue the granting of an Underground Injection Control permit, Quadco must take steps to answer the review letter issued on December 6, 1988 within 30 days. If a response is not received within 30 days of the date of this letter, the above referenced application will be denied.

Sincerely,

Robert Lucht, P.E.
UIC Program Supervisor
Water Quality Division

RL/nc 20373.LTR
Enclosure: Copy of the December 6, 1988 review letter
xc: Jake Strohman



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

December 6, 1988

Ray Beevers, Manager
Quadco - Casper District
2278 North Clover Road
Casper, Wyoming 82601

RE: UIC Permit 88-145 class 5x26
Casper, Natrona County, Wyoming

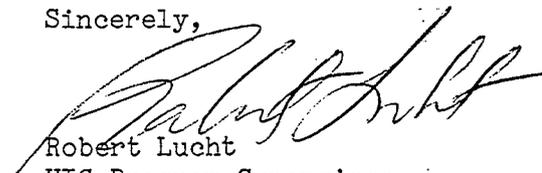
Dear Mr. Beevers:

In your original permit application, you did not show the exact legal description on the property in question. On July 25, 1988, I requested that you submit analytical results on the effluent from the drainfield and a map showing the facility and all water wells within 1/4 mile. The printout that you provided shows that there are 72 water wells in the same section where this facility is located.

You must submit a map as originally requested showing this facility and all water wells within 1/4 mile before I can finish the review of this application. Because of the large number of wells near this injection site, a public comment period will be required. This public notification will include certified letters to all water well owners within 1/4 mile of the site as well as publication in the newspapers.

I should point out that Water Quality Division has not necessarily committed to the eventual granting of this permit, close attention will be given to the monitoring requirements to insure that no downgradient water well is adversely impacted by the continued operation of this drainfield. A monitor well network will be required as part of any permit granted, with periodic monitoring for specific indicator species.

Sincerely,


Robert Lucht
UIC Program Supervisor
Water Quality Division

RL/jn

xc: Jake Strohman

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 88-146
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

MOUNTAIN CEMENT COMPANY RED BUTTES MINE

This permit hereby authorizes the applicant:

Mountain Cement Company
P O Box 339
Laramie, WY 82070

to construct, install or modify a monitoring well according to the procedures and conditions of the application number 88-146. The facility is located in NE SE S20 and NW SW S21, T14N, R73W in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two (2) years (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 ensures 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.

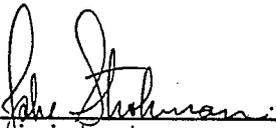
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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: Groundwater Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

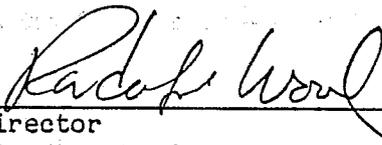
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

5-9-88
Date of Issuance

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

Conditions to Permit to Construct 88-146

1. The groundwater monitoring wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 88-146. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below ground surface as detailed in Chapter XI, Part G. However a sufficient seal shall be installed according to normal engineering practice.
3. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the WQD.
4. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly numbered.
5. The issuance of this permit does not relieve the permittee from obligations to complete an extent of contamination study and any further remedial actions which may be required. Depending on the results of the monitoring, additional monitoring wells, site investigations, or remedial measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of any contamination, including product layers and dissolved constituents.

Conditions to Permit 88-146 (continued)

In addition to the well construction information submitted with the permit application, the following items relating to well construction must be addressed when the wells are installed:

- a. After the bentonite has been placed in the annular space, it shall be hydrated to ensure a proper seal. The surface cement seal shall be sloped to promote drainage away from the well;
 - b. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;
 - c. The screened interval shall extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level if immiscible, lighter phase organic materials are present;
 - d. If PVC casing is used, only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack shall be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval. Factory slotted casing is recommended for the perforated interval;
 - f. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - g. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
8. Within 30 days of completion of these or any other wells, the following shall be submitted to the Water Quality Division:
- A site map showing physical features; final well locations and elevations; as-built construction details; logs of all monitoring wells; and water levels observed during drilling and after post-development stabilization;
9. The monitoring schedule shall be as follows:
- a. Parameters for chemical analysis shall include calcium, sodium, magnesium, potassium, carbonate, bicarbonate, sulfate, chloride, nitrate (N), TDS, pH, specific conductance, and temperature.
 - b. The first sampling shall be accomplished no more than 30 days after well completion and prior to mining activities. Subsequent analyses will be conducted no less frequently than annually and submitted to the Water Quality Division by the end of July each year.

Conditions to Permit 88-146 (continued)

- c. Field parameters such as pH, temperature, specific conductivity and static water levels should be monitored on a quarterly basis. These may be submitted annually with the chemical analyses.
 - d. In the event that chemical or field parameters indicate a significant change in groundwater quality, the Water Quality Division shall be notified immediately.
10. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
 11. The results of any other analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.

cc: Jake Strohman



THE STATE

OF WYOMING



Department of Environmental Quality

Air Quality Division
(307) 672-6457

Water Quality Division
(307) 672-6457

October 13, 1989

RECEIVED

OCT 16 1989

Mr. Charles E. Quigley
Tanks Away, Inc.
9037 Mandel Street
Denver, Colorado 80321

WATER QUALITY DIV.
WYOMING

RE: Permit Application No. 88-147

Dear Mr. Quigley:

The permit application 88-147 has been reviewed by the Department of Environmental Quality, Water Quality Division. The permit has been denied due to the lack of necessary information. Because you have not responded to the letter sent to you August 10, 1988, the permit application has been returned as denied. In addition, a copy of the August 10, 1988 letter has been enclosed for your reference.

If you have additional questions regarding this permit, please feel free to contact me at (307) 672-6457.

Sincerely,

Bill H. Johnson For

Edith L. Johnson
Groundwater Engineering Specialist
Water Quality Division

ELJ:jj

xc: Patti Burns, WQD IPS Supervisor



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
----------------------------------	--	---	--	--

August 10, 1988

CERTIFIED

Mr. Charles Quigley
Tanks Away, Inc.
9037 Mandel Street
Denver, Colorado 80221

Re: Application for permit to construct 88-147

Dear Mr. Quigley:

The referenced application is for a proposed tank disposal facility in Niobrara County, Wyoming. During a telephone review on the morning of April 21, 1988 I explained that more information would be needed prior to processing the application. This included submitting three sets of plans and specifications signed by an engineer professionally registered in the State of Wyoming. You stated that you were uncertain the facility would be constructed, at least at that location. We agreed that you could withdraw the application by letter and resubmit it later if desired.

In a follow up call on May 5, 1988, I learned that it was unlikely that the referenced facility would be built as planned. An alternate location had been chosen. As of the date of this letter, the Water Quality Division (WQD) has not received a request to withdraw the application.

The WQD requests a written response describing Tanks Away's intentions regarding the facility within 15 days of your receipt of this letter. This response should refer specifically to application number 88-147. Please call this office at (307) 777-7781 if you have any questions or comments. Thank you for your time and attention.

Sincerely,

Robert Stites
Groundwater Engineering Evaluator
Water Quality Division

RS/jn

cc: Jake Strohman, DEQ/WQD



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

August 10, 1988

CERTIFIED

Mr. Charles Quigley
Tanks Away, Inc.
9037 Mandel Street
Denver, Colorado 80221

Re: Application for permit to construct 88-147

Dear Mr. Quigley:

The referenced application is for a proposed tank disposal facility in Niobrara County, Wyoming. During a telephone review on the morning of April 21, 1988 I explained that more information would be needed prior to processing the application. This included submitting three sets of plans and specifications signed by an engineer professionally registered in the State of Wyoming. You stated that you were uncertain the facility would be constructed, at least at that location. We agreed that you could withdraw the application by letter and resubmit it later if desired.

In a follow up call on May 5, 1988, I learned that it was unlikely that the referenced facility would be built as planned. An alternate location had been chosen. As of the date of this letter, the Water Quality Division (WQD) has not received a request to withdraw the application.

The WQD requests a written response describing Tanks Away's intentions regarding the facility within 15 days of your receipt of this letter. This response should refer specifically to application number 88-147. Please call this office at (307) 777-7781 if you have any questions or comments. Thank you for your time and attention.

Sincerely,

Robert Stites
Groundwater Engineering Evaluator
Water Quality Division

RS/jn

cc: Jake Strohman, DEQ/WQD

R.F

LAND APPLICATION PERMIT

PERMIT NO. 88-148
SEE CONDITIONS

Hamilton Dome Pump Station Spill Clean-Up

This permit hereby authorizes the applicant:

Marathon Pipe Line Co.
P O Box 120
Casper, WY 82602

to land apply crude oil/soil mix from spill cleanup to lease and Hot Springs County Roads. The application site is located in Sections 21 and 22, T45N, R96W in the county of Hot Springs, in the State of Wyoming. This permit shall be effective for a period of 4 months (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 standards. The authority to land apply granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures that the disposal method will meet applicable state requirements.

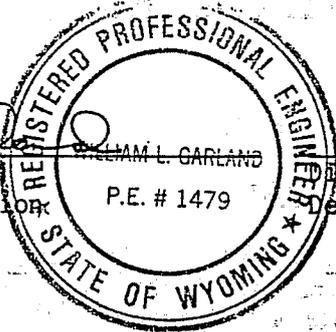
Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The state assumes no liability for, and does not in any way 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 application site at the above location, for the purpose of compliance with the provisions of this permit.

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

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

AUTHORIZED BY:

 *William L. Garland*
Administrator
Water Quality Division

Rabbin Wood
Director
Department of Environmental Quality

5-19-88
Date of Issuance

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

CONDITIONS TO LAND APPLICATION PERMIT #88-148

1. The waste oil/sludge 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. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
3. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Steve Gerber, 210 Lincoln Street, Lander, Wyoming 82520, phone number 332-3144, to arrange a field inspection prior to initiation of work. The district engineer should be notified at least 48 hours in advance of discharges.
4. Waste oil and sludges applied to a road will be mechanically incorporated into the road bed at the rate listed on the information sheet.

/nc

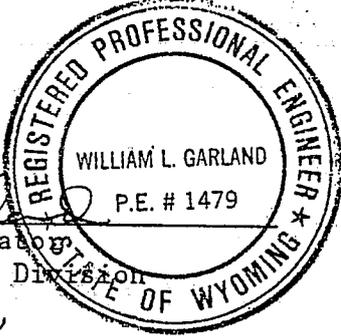
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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:


William L. Garland
Administrator
Water Quality Division

Racahn Wood
Director
Dept. of Environmental Quality

5-31-88
Date of Issuance

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

RF ✓

PERMIT TO CONSTRUCT

PERMIT NO. 88-150

- X New
- Renewal
- Modified

Phase II Utility Improvements, Downey Addition, Laramie

This permit hereby authorizes the applicant:

Bob Blake
 101 McConnell
Laramie, WY 82070

to construct, install or modify public water distribution system and a public wastewater collection system according to the procedures and conditions of the application number 88-150. The facility is located in S28, T16, R73, 1/4SW in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two years (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 ensures 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.

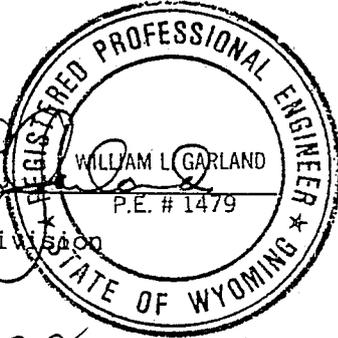
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, Herschler Building, 4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

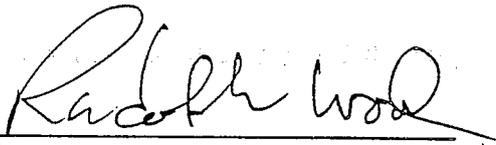
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:


Administrator
Water Quality Division




Director
Department of Environmental Quality

6-30-88
Date of Issuance

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

cc: Lloyd H. Baker
Gertsch/Baker & Associates
307 Grand Avenue
Laramie, WY 82070

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: Phase II Utility Improvements, Downey Addition, Laramie

ENGINEER: Lloyd H. Baker, Gertsch/Baker & Associates
307 Grand Avenue
Laramie, Wyoming 82070

APPLICANT: Bob Blake
101 McConnell
Laramie, Wyoming 82070

WATER QUALITY DIVISION REFERENCE NUMBER: 88-150

REVIEWING ENGINEER: *DM* Dave Montague, Engineering Specialist

DATE OF REVIEW: May 20, 1988

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:

1. An air relief valve needs to be located at the 12" Cross in the water main. The Department of Environmental Quality Water Quality Rules and Regulations state that in all transmission lines at high points (where the water pipe crown elevation falls below the pipe invert elevation), provisions shall be made for air relief. (Chapter XII, Section 14).
2. The minimum vertical separation shall be 1.5' at the crossing of a sewer main and a water main. Joints in sewers at crossings shall be located at least 10 feet from water mains. The plans submitted shows a crossing to occur approximately 10 feet south of manhole #1. The vertical separation is only about 0.78'. Where the vertical separation distance of 1.5' cannot be maintained, the sewer or water line must be placed in a separate conduit pipe.

Please indicate on the plan view that the 10' horizontal separation distance from the manhole to the water main will be maintained. Also indicate more precisely on the profile view the location of the crossing, and whether the 1.5' separation will be maintained, or one of the mains will be placed in a separate conduit pipe at this location.

