

RF  
JW

PERMIT TO CONSTRUCT

PERMIT NO. 88-001

New  
 Renewal  
 Modified

Paradise Valley Recreation Site Water & Sewer

This permit hereby authorizes the applicant:

Casper Board of Public Utilities  
200 North David Street  
Casper, WY 82601

to construct, install or modify water and sewer main extensions according to the procedures and conditions of the application number 88-001. The facility is located in Section 23, T33N, R80W in the county of Natrona, 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.



R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 88-002  
SEE SPECIAL CONDITIONS

- X New
- Renewal
- Modified

Valley Fuel Company

This permit hereby authorizes the applicant:

Valley Fuel Company  
Chevron Station  
Baggs, Wyoming 82321

to construct, install or modify monitoring wells according to the procedures and conditions of the application number 88-002. The facility is located in Section 5, T12N, R91W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of 5 (five) 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.

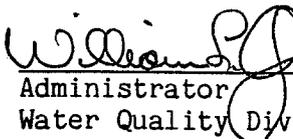
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

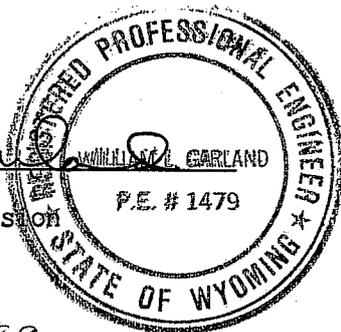
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

10-13-88  
Date of Issuance

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

#### Conditions for Monitoring Wells

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 88-002. 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.

Conditions to Permit 88-002 (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 88-002 (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. All monitor wells associated with this facility shall be sampled and the wastewater analyzed quarterly (schedule) for the parameters listed below:  
Benzene, Toluene, Total Xylenes, Ethylbenzene, Total Purgeable Hydrocarbons (EPA Methods 601/602).
- The results of these analyses shall be submitted to the Cheyenne office by the last day of the month following the end of each quarter (each quarter, the year, sampling due date, etc). The first set of results are due by the last day of January 1989.
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. For diesel fuels, as gas chromatograph shall be run to identify peaks and distinguish from diesel/gas.

cc: Jake Strohman

RF.

PERMIT TO CONSTRUCT

PERMIT NO. 88-004  
See Conditions

X New  
Renewal  
Modified

Shelter Park Wastewater Collection System

This permit hereby authorizes the applicant:

Shelter Park Improvement & Service District  
P O Box 394  
Pinedale, WY 82941

to construct, install or modify sanitary sewer collection system according to the procedures and conditions of the application number 88-004. The facility is located in NW $\frac{1}{4}$ , Section 34, T34N, R109W in the county of Sublette, 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, 210 Lincoln Street, 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:

*for* Lawrence Robinson  
Administrator  
Water Quality Division

Richard Wood  
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.

87



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

May 12, 1988

Mr. Roland Duffy  
Box 39  
Centennial, WY 82055

RE: Permit to Construct Application Number 88-005

Dear Mr. Duffy:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-005) concerning the septic system at Section 35, T16N, R78W, 1/4 NW, Albany County. The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. Since the septic tank and drain-field size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on eight years of actual operating experience, the system appears to be adequately sized for current conditions of two people on year round usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its soverign immunity.

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,

William L. Garland  
Administrator  
Water Quality Division

WLG/DM/nc



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR

88-006 ✓  
R7JW  
1890-1990  
**WYOMING**  
**CENTENNIAL**  
A LASTING LEGACY

## Department of Environmental Quality

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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January 20, 1988

CERTIFIED

Lisa Helms  
Chevron USA Inc.  
P O Box 220  
Seattle, WA 98111

RE: As-Built Authorization

Dear Mr. Helms:

Your submittal for the testholes and monitoring wells at the Chevron Service Station 575 in Casper has been reviewed and are accepted for record (DEQ/WQD Ref. No. 88-006). Since the preliminary investigation took place prior to submitting an application to construct the testholes and monitoring wells, a permit to construct cannot be issued. However, this letter of approval serves essentially the same purpose and the additional investigation needs to be accomplished to fulfill the as-built permit requirements.

The findings of this initial investigation has shown that a discharge has taken place at the Chevron Service Station 575. Under W.S. 35-11-103 of the Wyoming Water Quality Act, it is a violation to discharge pollution to any waters of the state. In order to abate this violation an extent of contamination investigation and/or remediation, if necessary, needs to be proposed. The first step is to submit the extent of contamination investigation to the division prior to implementing the investigation. A recommended contents for extent of contamination plan is attached for your use. The plan does not have to be followed in its entirety.

Some of the pertinent type information needed is as follows:

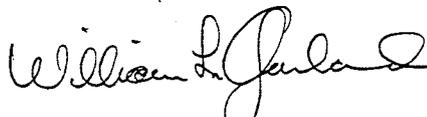
1. Install enough monitoring wells, upgradient and downgradient, radially outward until the contamination plume is defined. (Free product and/or dissolved constituent plume.)
2. Determine groundwater gradient in order to determine the plume movement.
3. If monitoring wells don't contain free product, analyze for BETX by EPA 602 method. If diesel tanks have existed at the site, the USGS 0-3109-83, Gas Chromatograph Method for TPH, shall also be run on the samples.

4. If free product exists within the well, measure product thickness.
5. Sampling protocol. How are samples taken and how is equipment decontaminated?
6. Locate and possibly sample any downgradient domestic wells within  $\frac{1}{2}$  mile radius of the site.
7. Submit all sampling results conducted in the previous investigation.
8. State Engineer's application must be submitted to the State Engineer's office. The previous submitted applications will be hand delivered, this time only, to the State Engineer's office by Water Quality Division personnel.
9. Background water quality shall be established by analyzing an upgradient well for parameters listed in Chapter VIII of the Wyoming Water Quality Rules and Regulations (excluding radiological parameters).

This letter does not constitute an order, but merely gives Chevron USA a chance to resolve the violation of groundwater contamination or show good faith efforts in resolving the problem. The division, at this time, is attempting to resolve the problem through conference and conciliation. The division requests a proposal to determine the extent of contamination to be submitted within 15 days after receipt of this letter.

If you have questions, contact us at (307) 777-7781.

Sincerely,



William L. Garland  
Administrator  
Water Quality Division

WLG/TP/nc

cc: Henry W. Brenniman, Rittenhouse-Zeman & Assoc., Inc.,  
1400 - 140th Avenue N.E., Bellevue, WA 98005

R7 76.



THE STATE OF WYOMING



MIKE SULLIVAN  
GOVERNOR

## Department of Environmental Quality

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

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

March 10, 1988

Horace and Ann Sheldon  
6395 Wing Lake Road  
Birmingham, MI 48010

RE: Permit to Construct Application Number 88-007, Albany County

Dear Mr. and Ms. Sheldon:

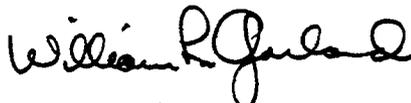
The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-007) concerning the septic system for/at Lot 26, North Fork Subdivision, S34, T16N, R78W, E $\frac{1}{2}$  NE $\frac{1}{4}$ . The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. and that the septic tank is adequately sized. Since the drainfield size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on 8 years of actual operating experience, the system appears to be adequately sized for current conditions of 2 people on seasonal usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its sovereign immunity.

Horace and Ann Sheldon  
March 10, 1988  
Page 2

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,

A handwritten signature in black ink, appearing to read "William L. Garland". The signature is written in a cursive style with a large, prominent initial "W".

William L. Garland  
Administrator  
Water Quality Division

WLG/DM/nc



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

May 26, 1988

Jim and Vicki Jairell  
Box 428  
Centennial, WY 82055

RE: Permit to Construct Application Number 88-008

Dear Mr. and Mrs. Jairell:

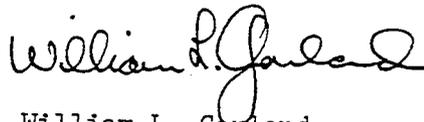
The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-008) concerning the septic system at S35, T16N, R78W, NW $\frac{1}{4}$ , Albany County. The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. and that the septic tank is adequately sized. Since the septic tank and drainfield size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on 6 years of actual operating experience, the system appears to be adequately sized for current conditions of 2 people on year round usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its soverign immunity.

Jim and Vicki Jairell  
May 26, 1988  
Page 2

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,



William L. Garland  
Administrator  
Water Quality Division

WLG/DM/nc

cc: Mike Casey  
Albany County Planning Office  
405 Grand Avenue  
Laramie, WY 82070

R7

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: Jairell - Small Wastewater System

ENGINEER:

APPLICANT: Jim & Vicki Jairell  
Box 428  
Centennial, Wyoming 82055

WATER QUALITY DIVISION REFERENCE NUMBER: 88-008

REVIEWING ENGINEER: Dave Montague, <sup>DM</sup> Water Quality Engineer

DATE OF REVIEW: May 10, 1988

ACTION: AS-BUILTS NOT APPROVED.

COMMENTS:

Please send us a letter with the following information:

1. How long you have lived at the site.
2. When the septic system was installed.
3. Whether there has been any problems with the septic system.

/jn

88-008



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
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April 25, 1988

Jim & Vicki Jairell  
Box 428  
Centennial, Wyoming 82055

Re: Reply to telephone conversation of April 21, 1988

Dear Mr. & Mrs. Jairell:

I am sending you a copy of the pages you had filled out in your original permit application package for your septic system. Except for what I had listed in my letter of February 16, 1988, the application has been filled out satisfactorily.

When you respond to the February 16, 1988 letter, you may answer the first two comments with the results I found in my inspection of your backhoe cut:

1. Depth to seasonally high groundwater table is 8 feet;
2. Depth to bedrock is greater than 12 feet.

Your willingness to work with the Department in getting the permit requirements completed is appreciated. You should now be able to complete the application package and resubmit it.

Please call if you have any questions.

Sincerely,

David Montague  
Engineering Specialist  
Water Quality Division

DM/jn

Enclosure

RF  
JTW

PERMIT TO CONSTRUCT

PERMIT NO. 88-009  
SEE SPECIAL CONDITIONS

X New  
Renewal  
Modified

Mainline Transfer Station

This permit hereby authorizes the applicant:

WYCO Pipeline Co.  
5200 East Yellowstone Highway  
Evansville, Wyoming 82636

to construct, install or modify monitoring wells according to the procedures and conditions of the application number 88-009. The facility is located in Section 6, SE $\frac{1}{4}$ , T33N, R78W in the county of Natrona, 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.

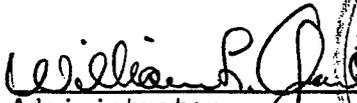
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

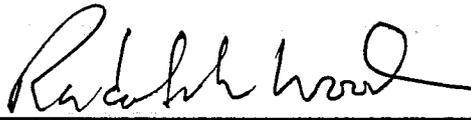
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

1-22-88  
Date of Issuance

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

#### SPECIAL CONDITIONS FOR PERMIT 88-009

1. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division.
2. All monitor wells and soil borings will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division Rules and Regulations.
3. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
4. Keys for all monitoring wells shall be provided to the department within 30 days of completion of the project. Caps shall be kept locked at all times other than sampling. Any tampering with the monitor wells shall be reported immediately to the division.
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.
6. The requirement in Chapter XI, Part G, Section 65(a) is waived and a seal less than 20 feet is allowed.
7. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in Permit to Construct application number 88-009.
8. 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

Conditions to Permit 88-009 (continued)

ground surface as detailed in Chapter XI, Part G. However, a sufficient seal should be installed according to normal engineering practice.

9. After the bentonite has been placed in the annular space of the monitoring well, it should be hydrated to insure a proper seal.
10. Depending on the results of subsurface contamination investigation, additional site investigations or remedial measures may be required by the Water Quality Division.
11. Provisions shall be made for the development of all monitor wells prior to sampling.
12. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
13. State Engineers applications must be submitted to the State Engineers Office.
14. BETX analysis shall follow EPA 602 procedures.
15. If the mainline station contains diesel within the system, TPH analysis shall also be run on the water samples. If diesel is detected in the TPH analysis a gas chromatograph needs to be run. USGS 0-3109-83 is requested.
16. Soil samples shall be taken while drilling monitoring wells to determine if contamination exists.
17. A final report shall be submitted to the division within 15 days after analyses are available and shall contain the following:
  - a. Borehole logs
  - b. Final monitoring well construction details
  - c. All water and soil analyses
  - d. Site map showing monitoring well locations, groundwater gradient and/or free product thickness (if present).

/jt



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

June 14, 1988

E. Douglas O'Dell  
2057 N. 17th  
Laramie, Wyoming 82070

RE: Permit to Construct Application Number 88-010

Dear Mr. O'Dell:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-010) concerning the septic system at S27, T16N, R78W, 1/4 SWSE, Albany County. The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. and that the septic tank is adequately sized. Since the septic tank and drainfield size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on 10 years of actual operating experience, the system appears to be adequately sized for current conditions of 1 person on seasonal usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its sovereign immunity.

Thomas O'Dell  
June 14, 1988  
Page 2

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,



William L. Garland  
Administrator  
Water Quality Division

WLG/DM/jn

cc: Mike Casey, Albany County Planning



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

June 14, 1988

Mr. George Pryich  
P. O. Box 9968  
Casper, Wyoming 82609

RE: Permit to Construct Application Number 88-011

Dear Mr. Pryich:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-011) concerning the septic system at S27, T16N, R78W, SWSE, Albany County. The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. and that the septic tank is adequately sized. Since the septic tank and drainfield size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on 8 years of actual operating experience, the system appears to be adequately sized for current conditions of 2 people on seasonal usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its sovereign immunity.

. George Pryich  
June 14, 1988  
Page 2

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,

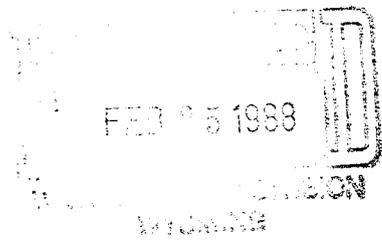
A handwritten signature in cursive script, appearing to read "William L. Garland".

William L. Garland  
Administrator  
Water Quality Division

WLG/DM/jn

cc: Mike Casey, Albany County Planning

Permit # 82-012



# BANNER

February 24, 1988

Department of Environmental Quality  
Water Quality Division  
Herschler Building  
122 West 25th  
Cheyenne, WY 82002

Re: Casper Water Treatment Plant  
Modifications W-87-5  
Project Number: 2322-30

Subject: Variance for Required Gauges

Attention: Mr. Larry Robinson

Dear Mr. Robinson:

This letter is to document our phone conversations concerning the requirement for pressure gauges on chlorine solution lines. The Wyoming DEQ regulations, Chapter XII, page 39, state that gauges shall be provided for chlorine solution pressure, feed water pressure and chlorine gas pressure, or vacuum. Gauges for feed water pressure and chlorine gas pressure, or vacuum, shall be installed. Gauges for nine of the eleven chlorine solution lines are required to have a low range to be accurate but could be exposed to pressures many times the range if downstream valves are closed. For this reason, a variance was requested and granted for the chlorine solution locations. A total of three gauges of various pressure ranges will be furnished for the eleven chlorine solution lines but they will not be installed. Connections for the gauges shall be installed in each of the eleven lines. Each connection shall have an isolation valve to permit the temporary installation of the gauge without shutting down the system.

If you have any questions or comments, please do not hesitate to contact me.

Sincerely,

BANNER ASSOCIATES, INC.

*Edward P. Nowak*

Edward P. Nowak  
Project Engineer

EPN/rb

cc: Mr. David W. Hill, Assistant Director  
Casper Board of Public Utilities

*2/26/88 - proposed pressure gauge system accepted. Ed Nowak agreed that the O&M manual provided prior to startup would address procedures and schedule for reading pressure gauges*

BANNER ASSOCIATES, INC.  
CONSULTING ENGINEERS & ARCHITECTS  
620 PLAZA COURT • P.O. BOX 550  
LARAMIE, WY 82070-0550 • (307) 745-7366

*Larry Robinson*

T  
re

PERMIT TO CONSTRUCT

PERMIT NO. 88-012  
SEE CONDITIONS

X New  
Renewal  
Modified

Casper Water Treatment Plant Modification W-87-5

This permit hereby authorizes the applicant:

Casper Board of Public Utilities  
200 North David Street  
Casper, WY 82601

to construct, install or modify modification to polymer feed and chlorine feed systems. construct underground chlorine solution line and polymer addition to backwash system according to the procedures and conditions of the application number 88-012. The facility is located in S7, T39N, R79W in the county of Natrona, 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.

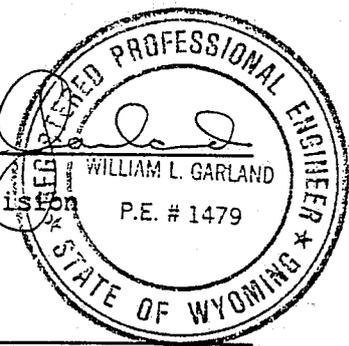
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

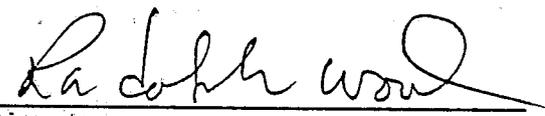
The issuance of this permit does not convey any property rights in either real or personal property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations.

AUTHORIZED BY:

  
Administrator  
Water Quality Division



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

  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

Conditions to Permit to Construct #88-012

1. The applicant shall provide an Operation and Maintenance manual for DEQ acceptance prior to plant startup. The manual will provide the information required in Section 16, Chapter XII, Wyoming Water Quality Rules and Regulations.

cc: Banner and Association  
P O Box 550  
Casper, WY 82070-0550



## Department of Environmental Quality

Air Quality Division  
(307) 672-6457

Water Quality Division  
(307) 672-6457

November 18, 1988

Mr. Gary Darland  
Town of Sundance  
Box 542  
Sundance, Wyoming 82729



RE: As-Built Approval 88-013R

Dear Gary:

On November 9, 1988, you notified me by phone that surface seals had been installed on the four groundwater monitoring wells adjacent to the Town's wastewater treatment lagoon. This fulfills our requirements for the well construction. This letter, therefore, provides notification of Water Quality's As-Built Approval of the wells. Since the wells are already installed, a Permit to Construct can not be issued. This letter serves essentially the same purpose and will be your only notification of authorization.

Based on the monitoring data submitted with your application, it does not appear that groundwater contamination has occurred at this time. I would request, however, that you conduct quarterly monitoring of each well for static water level, total dissolved solids, nitrate, ammonia and fecal coliform. The Department will begin conducting annual compliance monitoring of the wells, also. Please submit monitoring data to this office for evaluation.

Thank you for the information. Please contact me if you have any comments or questions.

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  
Kurt King, DEQ/WQD, Sheridan  
File: Town of Sundance



THE STATE

OF WYOMING

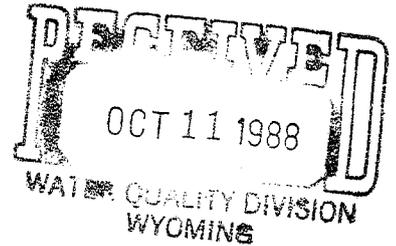


## Department of Environmental Quality

Air Quality Division  
(307) 672-6457

Water Quality Division  
(307) 672-6457

October 7, 1988



Mr. Gary Darland  
Town of Sundance  
Box 542  
Sundance, Wyoming 82729

Dear Gary:

On March 2, 1988, review comments of your request for as-built approval for groundwater monitor wells was sent to you. The specific project information is as follows:

Facility: Wastewater Lagoon Monitor Wells  
Water Quality Reference No.: 88-013  
Date of Review: March 2, 1988

Our records indicate that you have not responded to this review.

Please conduct the work requested in the review and notify this office so that the permit process may be completed. Thank you.

Please contact me if you have questions.

Sincerely,

Susan Fields  
NE District Supervisor  
Water Quality Division

SF:jj

xc: Norma Coulson, DEQ/WQD, Cheyenne  
Review File: 88-013

*norma*

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: Town of Sundance  
Wastewater Lagoon Monitor Wells

APPLICANT: Town of Sundance  
Gary Darland  
P. O. Box 542  
Sundance, Wyoming 82729

WATER QUALITY DIVISION  
REFERENCE NUMBER: 88-013

REVIEWING ENGINEER: *SF* Susan Fields

DATE OF REVIEW: March 2, 1988

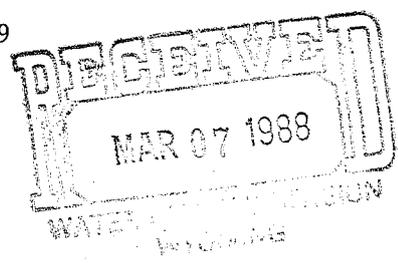
ACTION: Not Authorized

COMMENTS:

The wells must have a surface seal to prevent surface water from contaminating the wells. A concrete collar about one foot thick should be poured around the well casing and sloped away from the casing so surface water will not pond at the well.

Let me know when this improvement is made and an as-built approval will then be issued.

Please call if you have questions.



RF  
JK

LAND APPLICATION PERMIT

PERMIT NO. 88-016  
Ref. No. 87-011, 82-588  
See Special Conditions

Natrona County Land Application Facility

This permit hereby authorizes the applicant:

Natrona County Government  
200 N Center Street  
Casper, WY 82601

to land apply service station sump land application facility. The application site is located in SE1/4, S16, T34N, R80W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of 1 year (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.

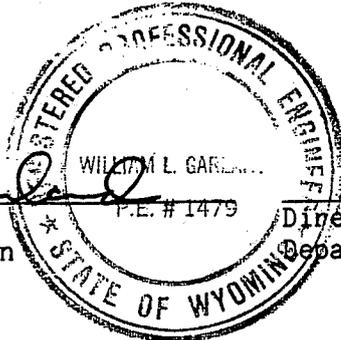
Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met. The state assumes no liability for, and does not in any way 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. Garfield*  
Administrator  
Water Quality Division

*Rudolph Woul*  
Director  
Department of Environmental Quality

2-3-88

Date of Issuance

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

Conditions to Land Application Permit #88-016

1. The fenced land area of approximately 57 acres in the center of the SE1/4, S16, T34N, R80W is permitted as a land application site for the receipt of non-hazardous service station sump wastes only.
2. The site is intended to serve as a temporary facility until a permanent receptor is constructed at the Casper Regional wastewater treatment plant. The maximum duration of this permit is, therefore, 2 years from the date of issuance, renewable once annually, at which time assessment of the operation and progress towards a permanent facility will be made.
3. The site will be utilized only by waste haulers licensed by Natrona County, and only according to the schedule established by the Natrona County Health Department in the presence of an authorized city/county employee who will inspect the required manifest document, perform the hazardous waste screening procedure as indicated in Schedule #2, and log the pertinent information.
4. Each truck seeking entry to the land application site must be accompanied by a manifest, signed by the generator and hauler, stating the type, quantity and origin of the waste material.
5. The waste application rate will be derived from Schedule #1 (originally derived for permit application #82-588) for 100% service station sump wastes; i.e. a 1,500 gallon truck will distribute its' wastes over a 744 year linear distance, or slightly over 0.4 miles on the odometer. A 2,000 gallon truck will distribute its' wastes over 922 yards of travel, or approximately 0.55 miles as measured on the odometer. To achieve this, each truck will be equipped with spreader bars and in-cab flow control devices. Each hauler will

Conditions to Land Application Permit 88-016 (Continued)

be required to demonstrate capability to meet these application rate requirements prior to official opening of the site, by a trial run with potable water.

6. Trucks will not be admitted to the site after significant storm events resulting in saturated soil conditions.
7. Monitoring of wastes, soils, plants, groundwater and soil water will be at the frequency indicated in Schedule #II. Analytical results are to be submitted to the Department of Environmental Quality on receipt from the laboratory. Department of Environmental Quality personnel will assist with plant, soil and soil water sampling. Plant sampling and analysis is minimal, and is imposed only in the event that the site is inadvertently grazed after closure.

cc: J. Ellis, Chairman, Natrona Co. Commissioners  
200 N Center Street  
Casper, WY 82601  
Ken Hoff, Natrona Co Dept of Health  
1200 E 3rd Street  
Casper, WY 82601-2990  
Thomas Norman  
E. J. Fanning

RF 3

PERMIT TO CONSTRUCT

PERMIT NO. 88-014  
SEE SPECIAL CONDITIONS

- X New
- Renewal
- Modified

Laramie Chutes Inn

This permit hereby authorizes the applicant:

First Interstate Bank  
221 Ivinson Avenue  
Laramie, WY 82070

to construct, install or modify groundwater monitoring well according to the procedures and conditions of the application number 88-014. The facility is located in S4, T15N, R73W in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of one year (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.

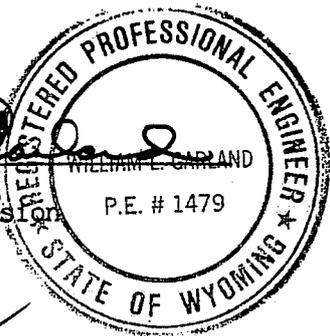
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

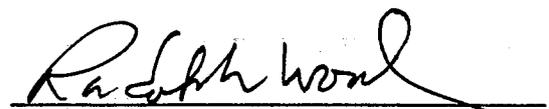
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

2-3-88  
Date of Issuance

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

#### Conditions to Permit to Construct #88-014

1. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in permit to construct application number 88-014. Additional wells meeting the requirements of the application and this permit may be installed 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 depths 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:
  - 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;

Conditions to Permit 88-014 (continued)

- c. The screened interval 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. The monitoring well should be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
5. The well shall be sampled for EPA Method 602 parameters. The analytical results shall be submitted to the Water Quality Division as soon as they are available.
  6. A report on the follow-up investigation shall be submitted to the Water Quality Division within 90 days following issuance of this permit to construct.
  7. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with Water Quality Division standard procedures.
  8. Depending on the results of the subsurface contamination investigation, additional site investigations or remedial measures may be required by the Water Quality Division.

cc: Jake Strohman, DEQ/WQD  
Paul Rechard, Western Water Consultants, 611 Skyline Dr, Laramie, WY 82070

RF  
JN

PERMIT TO CONSTRUCT

PERMIT NO. 88-015  
SEE SPECIAL CONDITIONS

X New  
Renewal  
Modified

Trailside General Store

This permit hereby authorizes the applicant:

Wyoming Alaska Leasing Co., Inc.  
dba Trailside General Store  
P O Box 667  
Centerville, UT 84014

to construct, install or modify monitoring well according to the procedures and conditions of the application number 88-015. The facility is located in the SW<sub>1/4</sub> of S8, T32N, R63W in the county of Niobrara, 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.

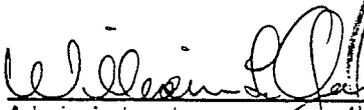
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

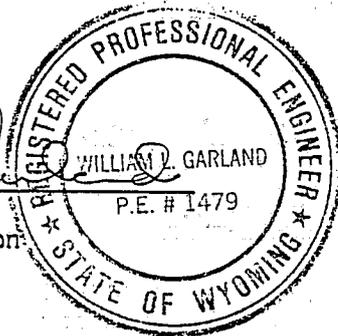
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

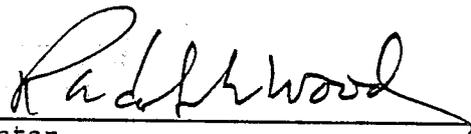
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

1-28-88

Date of Issuance

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

#### Conditions to Permit to Construct #88-015

1. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in permit to construct application number 88-015. Additional wells meeting the requirements of the application and this permit may be installed 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 depths 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:
  - 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;

Conditions to Permit 88-015 (continued)

- c. The screened interval 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. Within 120 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the Water Quality Division. 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 and product thickness measurements;
  - d. Sample collection procedures;
  - e. Sampling analytical results;
6. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with Water Quality Division standard procedures.
7. Monitoring wells constructed under this permit are subject to the same monitoring requirements as other wells at Trailside General Store. This consists of quarterly monitoring of static water levels, product thickness, and total petroleum hydrocarbon analyses with semi-annual reporting. The existence of product too thin to measure must be indicated (sheen, film). Annual analyses of dissolved constituents, primarily benzene, ethylbenzene, toluene, and xylene (BETX) are also required. The semi-annual reports will be due the last day of January and July, respectively. Results of the annual analyses for dissolved constituents will be due by the last day of January each year, beginning in January 1989.
8. The issuance of this permit does not relieve the permittee from obligations to complete any future remedial actions or to extend the extent of contamination study which may be required.

cc: Jake Strohman, DEQ/WQD, Cheyenne  
Susan Fields, DEQ/WQD, Sheridan



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR

88-017



# 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
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May 10, 1988

Steve Morzenti  
Everest Minerals  
P O Box 1210  
Glenrock, WY 82637

RE: Injection Well Morton 1-20 Permit UIC ~~88-010~~ Class I, Converse  
County, Wyoming

Dear Mr. Morzenti:

The above referenced permit is hereby amended to allow injection up to 60 GPM.

Sincerely,

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

RL/jt



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR

88-017



## Department of Environmental Quality

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

April 22, 1988

Steven Morzenti, General Manager  
Everest Minerals, Highland Uranium Operations  
Box 1210  
Glenrock, Wyoming 82637

RE: Morton 1-20, UIC ~~88-010~~ Class I, Converse County, Wyoming

Dear Mr. Morzenti:

The Water Quality Division is in receipt of your first monthly report for the above referenced permit. This report indicates that the volume disposed of exceeded your permit limit of 50 GPM. The Water Quality Division had classed this exceedance as a NSNC, (Non-Significant Non Compliance) in that the pressure limitation was not exceeded. Even though this is a NSNC, you should take steps to see that a pattern of exceedances is not established. The injection pressure, injection volume and annulus pressure are considered as absolute controls that are not to be violated.

This permit requires the annulus to be pressurized to 400 psi on a permanent basis. This should be accomplished before the next monthly report is filed.

Sincerely,

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

RL/jt

cc: Jake Strohman, WQD  
Mike Strieby, U.S. EPA, Region VIII  
File



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration  
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Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

January 26, 1988

Mike Strieby  
U.S. EPA, Region VIII  
One Denver Place  
999 18th Street, Suite 500  
Denver, Colorado 80202-2405

Re: Morton Ranch 1-20  
GPC 88-017, Ref. 86-128  
Converse County, Wyoming

Dear Mike:

Everest Minerals has requested a change in the permit to delete the requirement for a negative pressure recording device. The reason for this request is that they have been unable to locate a device that can read vacuum and still read the maximum pressure.

Instead of this requirement I will substitute a requirement that the annulus pressure be held at a constant 400 psi.

A worst case calculation is attached showing the maximum pressure fluctuation due to temperature effects.

The following is a proposed permit condition to be substituted for the fourth paragraph on page 3 of the permit:

"Permittee shall install a system for continuous monitoring of the injection rate and pressure and the annulus pressure, before waste injection commences. The device for monitoring the annulus pressure shall be capable of recording from 0 psi to 2500 psi. In order to insure that negative annulus pressure never occurs, the operator shall maintain 400 psi on the annulus during normal operating conditions. Instantaneous fluctuations of less than 400 psi are permissible, but at no time shall the annulus pressure drop below 30 psi. This will require that the water level in the annulus be maintained below 30 feet of depth at ambient temperature."

Everest needs to begin injection this week. I have therefore amended the permit as shown as a temporary amendment to become final in 90 days.

Mike Strieby  
88-017, Ref. 86-128  
January 26, 1988  
Page 2

This will allow us 90 days in which to review this requirement if there is some reason to return to the previous wording.

Sincerely,

A handwritten signature in cursive script that reads "Robert Lucht". The signature is written in dark ink and is positioned above the typed name.

Robert Lucht  
UIC Program Supervisor  
Water Quality Division

RL/jn

Enclosure



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

January 26, 1988

Stephen Morzenti, Project Manager  
Everest Minerals Corporation  
P. O. Box 1210  
Glenrock, Wyoming 82637

Re: Morton Ranch 1-20  
GPC 88-017, Ref. No. GPC 86-128  
Converse County, Wyoming

Dear Mr. Morzenti:

The above referenced permit is hereby amended as follows:

Substitute the following for the 4th paragraph on page 3:

"Permittee shall install a system for continuous monitoring of the injection rate and pressure and the annulus pressure, before waste injection commences. The device for monitoring the annulus pressure shall be capable of recording from 0 psi to 2500 psi. In order to insure that negative annulus pressure never occurs, the operator shall maintain 400 psi on the annulus during normal operating conditions. Instantaneous fluctuations of less than 400 psi are permissible, but at no time shall the annulus pressure drop below 30 psi. This will require that the water level in the annulus be maintained below 30 feet of depth at ambient temperature."

The above amendment will become effective immediately on an interim basis. In order to allow comments from other agencies, this amendment will become final April 18, 1988 unless changed by this agency before that time.

Enclosed find a copy of the amended permit.

Sincerely,

William L. Garland  
Administrator  
Water Quality Division

WLG/RL/jn

cc: Jake Strohman, DEQ/WQD  
Susan Hogg, DEQ/LQD

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

CALCULATION OF THE MAXIMUM PRESSURE DROP DUE TO TEMPERATURE CHANGES  
MORTON 1-20 INJECTION WELL

Assumptions

1. That the Maximum Temperature Shown on the Injection Profile log is indicative of the Formation Temperature. Use 180°F.
2. That the Minimum Temperature of the injected fluid is 40°F.
3. That pressure effects will be virtually the same at the well bottom regardless of the temperature i.e. the density of water due to hydrostatic pressure can be neglected.
4. That the corrosion inhibited brine will behave the same as water.

Input Data

180°F = 82.2°C  $\cong$  80°C  
Density of water at 80°C = 8.1015 #/gal  
40°F = 4.44°C  $\cong$  0°C  
Density of water at 0°C = 8.33467 #/gal

From: Handbook of Chemistry and Physics  
1986-1987 67th Edition, Page F-2

Volume of Annulus

5½" Diameter pipe

$$\begin{aligned}\pi D^2/4 &= A \\ 23.75 \text{ sq. in.} &= A \\ .16498 \text{ sq. ft.} &= A \\ A \times L &= V_1 \\ .16498 \text{ sq. ft.} \times 8550' &= V_1 \\ &1410.57 \text{ cu. ft.} = V_1\end{aligned}$$

2 7/8" Diameter Pipe

$$\begin{aligned}\pi D^2/4 &= A \\ 6.4917 \text{ sq. in.} &= A \\ .04508 \text{ sq. ft.} &= A \\ A \times L &= V_2 \\ .04508 \text{ sq. ft.} \times 8550 \text{ ft.} &= V_2 \\ &385.44 \text{ cu. ft.} = V_2\end{aligned}$$

Annulus Volume

$$\begin{aligned}V_1 - V_2 &= 1025.13 \text{ cu. ft.} \\ &= 8621.36 \text{ gal.}\end{aligned}$$

Weight at 80°C =

$$8621.36 \text{ gal} \times 8.1015 \text{ \#/gal} = 69,845.9\#$$

Volume at 0°C of 69,845.9#

$$\begin{aligned} 69,845.9 / 8.33467 &= 8380.17 \text{ gal} \\ V &= 8621.36 - 8380.17 = 241 \text{ gal} \\ &= 28.67 \text{ cu ft} \\ H &= .16498 - .04508 = .11990 \text{ sq ft (annulus)} \\ H &= 239 \text{ ft} \end{aligned}$$

Pressure necessary to overcome 239 ft of level change in the annulus

$$\begin{aligned} \frac{P_1 V_1}{T_1} &= \frac{W R T_1}{T_1} \\ \frac{P_2 V_2}{T_2} &= \frac{W R T_2}{T_2} \\ \frac{P_1 V_1}{T_1} &= \frac{P_2 V_2}{T_2} \end{aligned} \quad (\text{ideal gas law})$$

Since the answer varies with the initial volume of gas in the annulus, I will solve several assumptions:

$$V_1 = 5 \text{ cu ft, } 10 \text{ cu ft, } 15 \text{ cu ft, } 20 \text{ cu ft, } 25 \text{ cu ft and } 30 \text{ cu ft}$$

example:

$$\begin{aligned} P_1 &= 400 \text{ psi} & P_2 &= \\ V_1 &= 10 \text{ cu ft} & V_2 &= 38.62 \text{ cu ft} \\ T_1 &= 180^\circ\text{F} & T_2 &= 40^\circ\text{F} \end{aligned}$$

$$\frac{(400)(10)}{180^\circ\text{F}} = \frac{P_2 (38.62)}{40^\circ\text{F}}$$

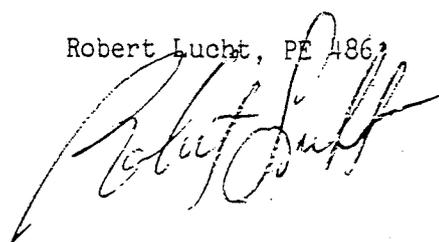
$$23.01 = P_2$$

<u>V<sub>1</sub> cu ft</u>	<u>P<sub>2</sub> (psi)</u>
1	.74
2	5.79
5	13.21
10	23.01
15	30.56
20	36.56
25	41.44

↑ vacuum  
↓ + PRESSURE

Please note that all of the above calculations represent the absolute worst case. In fact, the annulus temperature will never be uniformly the same as the bottom hole temperature, and it will never cool uniformly to the injection temperature no matter how long the system is operated or remains idle.

Robert Lucht, PE 4862



Weight of 1 gallon of water

0°C	8.33467 #
10°C	8.33383 #
20°C	8.32167 #
30°C	8.30063 #
40°C	8.27230 #
50°C	8.2369 #
60°C	8.1966 #
70°C	8.1270 #
80°C	8.1015 #
90°C	8.0474 #
100°C	7.9894 #

From: Handbook of Chemistry and Physics  
1986-1987 67th Edition  
Page F-2

$$\begin{array}{r} 212^{\circ}\text{F} = 100^{\circ}\text{C} \\ \hline 32^{\circ}\text{F} = 0^{\circ}\text{C} \\ \hline 180^{\circ}\text{F} = 100 \end{array}$$

$$1.8^{\circ}\text{F} = 1^{\circ}\text{C}$$

$$^{\circ}\text{C} / 1.8 (^{\circ}\text{C}/^{\circ}\text{F}) + 32^{\circ}\text{F} = ^{\circ}\text{F}$$



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



# Department of Environmental Quality

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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February 1, 1988

## STATE OF WYOMING PUBLIC NOTICE

### PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO INDICATE THE STATE OF WYOMING'S INTENTION TO ISSUE AN UNDERGROUND INJECTION CONTROL (UIC) PERMIT AND TO CLASSIFY THE RECEIVING GROUNDWATER OF THE STATE IN THE VICINITY OF THE PERMITTED INJECTION, UNDER THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 ET. SEQ. WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973), AND DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY RULES AND REGULATIONS CHAPTERS VIII AND IX (SEPTEMBER, 1980).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE AN UNDERGROUND INJECTION CONTROL PERMIT FOR THE DISPOSAL OF INDUSTRIAL WASTES.

### APPLICANT INFORMATION

APPLICANT NAME: Everest Minerals Corporation

MAILING ADDRESS: Box 1210  
Glenrock, Wyoming 82637

FACILITY NAME AND LOCATION: Morton 1-20 Injection Well, NW1/4 NW1/4  
S20, T36N, R72W, Converse County, Wyoming

PERMIT NUMBER: 88-017, Ref. 86-128

This is a re-issue of a permit issued May 22, 1987. This amended permit allows for the substitution of a constant 400 psi annulus pressure for the original permit requirement to monitor both positive and negative gauge pressures. It has been determined that a continuous recording device capable of recording both vacuum and 3000 psig is not available. In addition holding 400 psi on the annulus will make it physically impossible to draw a vacuum on the annulus because of temperature fluctuations.

Everest Minerals Corporation intends to operate a disposal well for the injection of brine, from a commercial in situ solution uranium mining project process plant, into the subsurface interval 8630-9000 feet in the Teapot sandstone and the interval 9015-9141 feet in the Parkman sandstone.

The brine is an industrial waste generated by the in situ solution mining and processing of uranium. The injection waste stream contains radionuclides and is considered untreatable by the applicant/permittee due to the high concentration of total dissolved solids. The design waste stream is 50 gallons per minute and consists of calcium 50 mg/l, sodium 31,700 mg/l, potassium 50 mg/l, magnesium 25 mg/l, sulfate 5,797 mg/l, chloride 60,000 mg/l, TDS 93,300 mg/l, radium 314 pCi/l, uranium 5.52 mg/l.

Maximum injection pressure is limited to 2,000 psi at the surface.

#### PERMIT REQUIREMENTS

The permit is issued for the life of the operation but is reviewed at least once every five years and may be reviewed more frequently. Public notice of the permit review and request for public comment will be made every ten years.

The proposed permit requires the permittee to monitor the injection and submit periodic reports.

Permittee proposes to convert and recomplete the existing (abandoned) Morton 1-20 well drilled by Southport Exploration in 1981 and abandoned in 1983, for use as a disposal well for the injection of industrial wastes. The well will be recompleted with perforations at 8630-9000 and 9015-9141 feet, four shots per foot; 2-7/8 inch injection tubing from the surface to the top of the perforations; a tubing-casing packer set at 8625 feet.

Mechanical integrity of the well will be demonstrated before injection is authorized. The procedure will consist of a pressure test of the casing-tubing-packer and a radioactive tracer survey to verify cement integrity. At a minimum of once every five years and more frequently if required, the permittee must demonstrate the continued sound and unimpaired condition of all components of the injection well, by mechanical integrity testing.

#### STATE TENTATIVE DETERMINATIONS

The water in the injection zones within a five-mile radius of the proposed disposal well is designated Class VI (unsuitable for use) because (1) groundwater is located so as to make normal use economically and technologically impractical, and (2) groundwater in the receivers has concentrations of 15,650-16,482 mg/l TDS.

Applicant/permittee has reported that the radiation exposure hazards from the injection waste stream are below current and proposed standards and has submitted information in support of this contention.

Other tentative determinations have been made by the State of Wyoming relative to conditions to be imposed on the permit. These conditions will assure that usable groundwaters of the state will be protected and applicable provisions of state statutes and regulations will be followed.

## PUBLIC COMMENTS

Public comments on the proposed operation, the proposed groundwater classification, and the state's intent, are invited prior to March 1, 1988. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Groundwater Section, Herschler Building, 4th Floor West, Cheyenne, Wyoming 82002. All comments received prior to March 1, 1988 will be considered.

Any interested person may request, in writing prior to March 1, 1988 a public hearing. The request should indicate the interest of the requesting party and reasons why a hearing is warranted.

If a hearing is not warranted, the final permit will be issued at the end of the comment period.

## ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or by writing to the aforementioned address.

The complete application, draft permit, and related documents are available for review and inspection at the same aforementioned address.

Public Notice No. UIC 88-017

RF

DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE OF WYOMING  
GROUNDWATER POLLUTION CONTROL PERMIT  
AUTHORIZATION TO DISCHARGE INTO UNDERGROUND RECEIVERS  
(Permit to Inject)

( ) New

Permit Number:

(X) Modified

88-017 (Ref # 86-128)  
UIC CLASS I

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

Everest Minerals Corporation  
P O Box 1210  
Glenrock, WY 82637

ATTN: Stephen P Morzenti

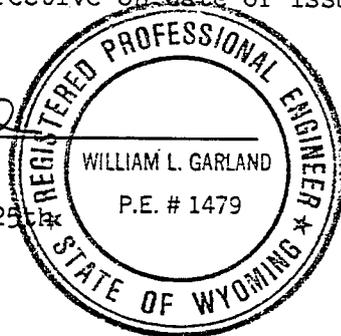
is authorized to operate

the Morton 1-20 injection well, NW NW S20, T36N, R72W, Converse County, for the disposal of brine from a commercial in situ solution uranium mining project process plant

according to procedures and conditions of the application 88-017 (Ref # 86-128) and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.

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



March 8, 1988  
Date

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

March 8, 1988  
Date



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

May 29, 1991

Jo Kissack  
Kissack Water and Oil Service, Inc.  
P.O. Box 9  
Rozet, Wyoming 82727

RE: Horse Creek Federal 1-8  
Permit UIC (88-018), Class I  
Weston County, Wyoming

RE: Kissack WDW Well #1  
Permit UIC 91-046, Class I  
Campbell County, Wyoming

Dear Mrs. Kissack:

This letter authorizes Kissack Water and Oil Service to accept and dispose of groundwaters contaminated with gasoline and/or diesel from leaking underground storage tank sites. This authorization covers only waters which must be removed from these sites, and will run until rescinded by this department. Disposal of this waste does not require analyses. Wastewater generated in conjunction with a leaking underground storage tank site is presently in a deferred status and may be considered to be temporarily exempt from regulation as hazardous waste as defined by 40 CFR 261. This material is not covered by the petroleum exemption to RCRA. Volumes of waste from underground storage tanks should be accounted for on your quarterly reports as a single line entry for all such waste.

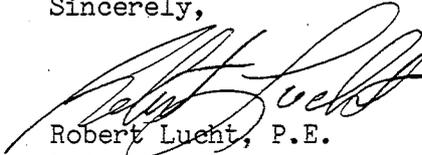
This approval does not cover the disposal of UST tank bottom sludges from underground storage tanks. Sludges from these tanks is considered to be hazardous waste under RCRA.

This approval does not cover direct disposal of diesel or gasoline from an abandoned tank. Your company can take diesel or gasoline to your recycling facility in Gillette and recover the product for resale. Because the product would be recycled, this would be a RCRA exempt activity.

Jo Kissack  
May 29, 1991  
Page 2

This letter also authorizes water accumulated at your recycling facility in Gillette to be injected into either one of the class I injection wells. This water should be accounted for separately, and should be analyzed at least once a year by EPA Methods 624 and the RCRA regulated metals.

Sincerely,



Robert Lucht, P.E.  
UIC Program Supervisor

RL/jt

xc: Jake Strohman  
Leroy Feusner  
Donald McKenzie



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

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

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FAX (307) 634-0799

Solid Waste Management Program  
(307) 777-7752

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

May 17, 1991

Jo Kissack  
Kissack Water and Oil Service, Inc.  
P.O. Box 9  
Rozet, Wyoming 82727

RE: Horse Creek Federal 1-8  
Permit UIC 88-018, Class I  
Weston County, Wyoming

Dear Mrs. Kissack:

Enclosed please find one copy of the annual inspection report for the inspection conducted on May 7, 1991. During this inspection, no permit violations were noted, and no improvements are required.

It was noted that this permit does not require an annual pressure falloff test as required by the EPA regulations. During the next six months, this department will issue a new permit to cover this well and the Federal Jessen 1-5N. This new permit is necessary in order to include the required tests.

Sincerely,

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

RL/jt

Enclosure

xc: Jake Strohman  
Barb Conklin, EPA Region VIII

STATE OF WYOMING  
DEPARTMENT OF ENVIRONMENTAL QUALITY/WATER QUALITY DIVISIONUIC Class I Wastewater Disposal Well  
Well Inspection ReportWDEQ Inspector Robert F. Lucht, P.E. Title UIC Program SupervisorName of Facility Kissack Water and Oil Service  
Horse Creek Federal 1-8  
P.O. Box 46  
Rozet, Wyoming 82727  
(307) 682-9026Inspection Date May 7, 1991Well Name/Number Horse Creek Federal 1-8 UIC Permit Number: UIC 88-018

Well Site Inspection The well site is clean with no evidence of spillage. The only change since the last inspection is the installation of a pressure chamber plumbed into the annulus to hold a nitrogen blanket. This dampens the pressure swings in the annulus caused by temperature changes and the slight swelling in the tubing caused by the injection pressure.

Flow Measurement

## Injection Rate:

Type of Device: Standard turbine meterManufacturers Name/ Model Number: Halliburton Model LO-II, Serial Number LO 32040

Description of Measurement: The flow in the injection line turns a turbine which is mechanically connected to a small generator. This converts the signal to a varying voltage which drives a digital counter and a totalizer. Readout is a digital LED which is read and recorded manually on a daily basis.

Remarks There has been no change in meter since last inspection.

## Injection Pressure:

Type of Device: Standard helical coil tube pressure recorderManufacturers Name/ Model Number: Barton Model 242E, Serial Number 242E-40309

Description of Measurement: The injection line is connected hydraulically to the chart recorder by means of a small diameter stainless steel tube. This tube ends in a coiled tube which tends to unwind as the pressure increases. This very slight movement in the coiled tube is mechanically amplified and provides the movement for a pen on the chart recorder. This chart is a standard 30 day chart which is calibrated from 0 to 3000 psig. Charts are regularly changed and kept in the Rozet office.

Remarks The injection pressure is also governed by a murphy kill switch which will shut in the well prior to any permit exceedance. The pressure recorder is located on the well head and is a two pen recorder with the annulus pressure. There has been no change in recorder since the last inspection.

#### Annulus Pressure

Type of Device: Standard helical coil tube pressure recorder

Manufacturers Name/ Model Number: Barton Model 242E, Serial Number 242E-40309

Description of Measurement: The annulus is connected hydraulically to the chart recorder by means of a small diameter stainless steel tube. This tube ends in a coiled tube which tends to unwind as the pressure increases. This very slight movement in the coiled tube is mechanically amplified and provides the movement for a pen on the chart recorder. This chart is a standard 30 day chart which is calibrated from 0 to 1000 psig. Charts are regularly changed and kept in the Rozet office.

Remarks This pressure recorder is located on the well head and is a two pen recorder with the annulus pressure. This well has a very small annulus between the casing and tubing. Kissack had a mixed string of tubing in this well last year, with 2-3/8 on bottom and 2-7/8 above. A problem developed in this lined tubing, apparently either part of the liner or one of the gaskets between joints partially obstructed the flow. This caused so very high injection pressure readings. Kissack worked over the well and installed 2-7/8 inch PVC lined tubing from top to bottom. This very small annulus caused some fairly large pressure swings when the injection water was unusually hot. Kissack installed, at the request of this department, a nitrogen blanket to dampen out these pressure swings. There has been no change in recorders since last year.

#### Record Review

Injection Rate:

Records Reviewed

From June Month 90 Year Through May Month 91 Year

Remarks: Injection rate records were in good order with no permit violations in evidence. The flow meter was not working from March 9, 1991 to March 13, 1991. Kissack reported zero disposal during this time frame, even though the pressure charts for this same time indicate that disposal was going on. Kissack was told to make sure to report if the meter is not working rather than showing zero disposal. From the pressure records, it was determined that no volume limitation was exceeded during this time.

Injection Pressure:

Records Reviewed

From May Month 90 Year Through May Month 91 Year

Remarks: Well is limited to 2,000 psig as measured at the surface. Chart for January, 1991 shows apparent permit violation. This was determined to be caused by the the small steel tube connecting the chart recorder to the injection line freezing during extremely cold weather. Various methods of keeping this from happening again were discussed with the Kissacks. The chart record for May, 1990 showed that the well pressured up several times to the maximum reading on the chart recorder. This was caused by a partial blockage in the injection tubing and was corrected with a workover. After the well workover, the injection pressure has returned to normal. The high readings shown in May were not accompanied by high injection volumes.

Annulus Pressure:

Records Reviewed

From May Month 90 Year Through May Month 91 Year

Remarks: Annulus pressure responds to injection pressure because of temperature affects and the effect of tubing swell. Kissack has partially eliminated these swings by installation of a nitrogen blanket on the annulus. Annulus pressure records do not indicate any leakage.

Maintenance Records:

Remarks: Maintenance records show that the well is being maintained in a professional manner.

Calibration Records:

Remarks: The chart recorders have been maintained and recalibrated when needed.

Sample Collection Quality Assurance:

Sample Collection Procedure No samples were taken during this inspection.

Sample Analysis Procedure \_\_\_\_\_

Water Quality Analytical Results:

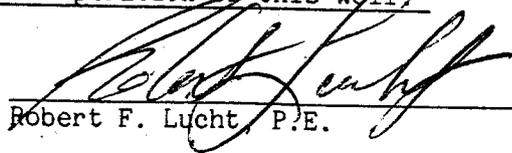
Parameter Exceeding Permit Limits There are no permit limits on this well except that they cannot exceed RCRA hazardous waste characteristics for industrial waste. No violations found.

Explanation \_\_\_\_\_

Remedial Action \_\_\_\_\_

Additional Comments: This permit does not, at present require the annual shut-in test. The permit will have to be re-written to include this requirement before the new regulations become effective. Horse Creek Federal 1-8 has been found to be in compliance on all permit requirements. I forgot the camera this morning, no pictures were taken during this inspection. Kissack uses Tretolite SP-200 GR 593 NT541 Scale Inhibitor and Tretolite NC 370 GR 463 Biocide as required for the operation of this well.

WDEQ Inspector Signature

  
\_\_\_\_\_  
Robert F. Lucht, P.E.



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

January 8, 1991

Doug Kissack  
Kissack Water and Oil Service, Inc.  
P.O. Box 9  
Rozet, Wyoming 82727

RE: Horse Creek Federal 1-8  
Permit UIC 88-018, Class I  
Weston County, Wyoming

RE: Shell Fox #1  
Permit UIC 87-370, Class I  
Campbell County, Wyoming

Dear Mr. Kissack:

Enclosed please find one copy of the analyses on the injected wastewater taken during the last annual inspection on 6/27/90. These analyses show that the wastewater contains the components which one would expect in oilfield produced water, namely Benzene, Ethylbenzene, Toluene, Xylenes, and Phenols. These waste streams also contained traces of silver on the day sampled.

The unexpected result of this analyses is that both lead and cadmium were detected at levels high enough to be worth monitoring. Until further notice, please have the injectate at the Horse Creek Federal 1-8 analyzed quarterly for both cadmium and lead. Cadmium would be considered hazardous waste at a level of 1.0 mg/l and lead would be considered hazardous waste at a level of 5.0 mg/l. You may substitute these analyses for the routine water analyses that you have been performing. Due to the lead time required for these analyses, samples should be taken no later than the end of the first month of each calendar quarter.

Sincerely,

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

RL/jt

xc: Jake Strohmman



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

November 28, 1990

CERTIFIED

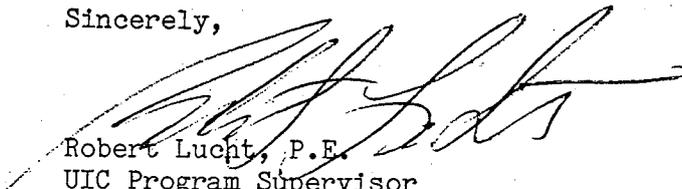
Jo Kissack  
Kissack Water and Oil Service, Inc.  
P.O. Box 9  
Rozet, Wyoming 82727

RE: Horse Creek Federal 1-8  
Permit UIC 88-018 class I  
Weston County, Wyoming

Dear Mrs. Kissack:

This department has received a request from you to authorize disposal of sump wastes from Champion Spring and Brake Company located at 1604 Wagon Hammer, in Gillette, Wyoming. The analyses submitted, represented by certificate number G90-26785 from Energy Laboratories in Gillette indicates that this waste is not characteristic hazardous waste as defined by RCRA. For this reason, you are hereby authorized to accept this waste for disposal at your convenience.

Sincerely,

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

RL/jt

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  
FAX (307) 634-0799

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

June 6, 1990

Jo Kissack  
Kissack Water and Oil Service, Inc.  
Box 46  
Rozet, Wyoming 82727

RE: ~~Horse Creek Federal 1-8~~  
Permit ~~UIC 88-018 class I~~  
Weston County, Wyoming

Dear Mrs. Kissack:

This letter will serve to document this Department's approval of your continued disposal of water from Energy Brothers Technology Inc. near Gillette. This water is represented by Energy Laboratories sample W1K-00517-0845/W001WC-0-04 which shows that this waste has none of the characteristics of hazardous waste. This waste can be injected as soon as you are able. This approval will apply to all such wastes generated within one year of the date of this letter.

Sincerely,

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

RL/jt

xc: Jake Strohmman



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

May 30, 1990

Jo Kissack  
Kissack Water and Oil Service, Inc.  
Box 46  
Rozet, Wyoming 82727

RE: Shell Fox #1  
Permit UIC 87-380 class I  
Campbell County, Wyoming

Horse Creek Federal 1-8  
Permit UIC 88-018 class I  
Weston County, Wyoming

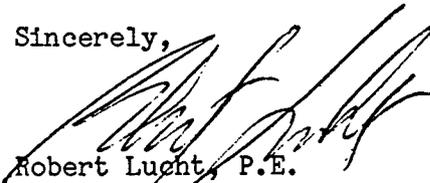
Federal Jessen 1-5  
Permit UIC 87-279 class I  
Weston County, Wyoming

Dear Mrs. Kissack:

I would like to schedule an annual inspection of the above mentioned facilities on Wednesday, June 27, 1990. I will meet Doug at your offices on June 27 at 08:00 AM. This inspection will cover all aspects of the operation of this well. During this inspection, I will want to see records of the pressure fall off curve required by the permits. I will also want to see all required instrumentation in place and operating. If at all possible, I want to see these wells actually injecting fluid so that tests can be made of the various devices on the well. I will also need to sample the injectate at that time for compliance with the permit. Provision needs to be made to take samples of the injectate.

An annual inspection of a class I well also requires that we observe the records being kept on this well. Records of injection volume, pressures, and annulus pressures as well as required analyses should be available for inspection.

Sincerely,

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

RL/jt  
xc: Jake Strohmman

25

DEPARTMENT OF ENVIRONMENTAL QUALITY  
STATE OF WYOMING  
GROUNDWATER POLLUTION CONTROL PERMIT  
AUTHORIZATION TO DISCHARGE INTO UNDERGROUND RECEIVERS  
(Permit to Inject)

( ) New (Existing well)

Permit Number:

(X) Modified

88-018 (Ref.No. 86-402)  
UIC CLASS I

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

Kissack Water and Oil Service, Inc.  
P. O. Box 46  
Rozet, Wyoming 82727

ATTN: Doug Kissack

is authorized to operate

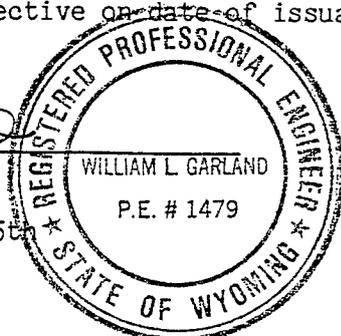
the Horse Creek Federal #1-8 disposal well, in the NW $\frac{1}{4}$  NE $\frac{1}{4}$ , S8, T47N, R68W, Weston County, Wyoming as a commercial well for the disposal of oil field produced water and other industrial wastes

according to procedures and conditions of the application 88-018 (Ref.No. 86-402) and requirements and other conditions of this permit.

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

*William L. Garland*

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



*March 8, 1988*  
Date

*Rudolph Wood*

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

*3-8-88*  
Date

R7



THE STATE OF WYOMING



MIKE SULLIVAN  
GOVERNOR

## Department of Environmental Quality

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

January 26, 1988

Mr. Doug Kissack  
Kissack Water and Oil Service, Inc.  
P O Box 46  
Rozet, WY 82727

RE: Horse Creek Federal #1-8  
88-018 (Ref. No. 86-402)  
Weston County, Wyoming

Dear Mr. Kissack:

Enclosed please find a draft copy of the amended permit 88-018 (Ref. No. 86-402). I have established a public comment period from February 1, 1988 until March 1, 1988 on this amendment. Until this amended permit is issued, all terms of your existing permit remain in force except that you are limited to 2000 psi pressure at the surface.

Enclosed also find a copy of the Public Notice which will be published February 1, 1988.

Sincerely,

Robert Lucht  
UIC Program Supervisor  
Water Quality Division

RL/nc

cc: EPA  
OGCC  
State Engineer's Office



THE STATE OF WYOMING



MIKE SULLIVAN  
GOVERNOR

# Department of Environmental Quality

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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February 1, 1988

## STATE OF WYOMING PUBLIC NOTICE

### PURPOSE OF PUBLIC NOTICE

THE PURPOSE OF THIS PUBLIC NOTICE IS TO INDICATE THE STATE OF WYOMING'S INTENTION TO ISSUE AN UNDERGROUND INJECTION CONTROL (UIC) PERMIT AND TO CLASSIFY THE RECEIVING GROUNDWATER OF THE STATE IN THE VICINITY OF THE PERMITTED INJECTION, UNDER THE WYOMING ENVIRONMENTAL QUALITY ACT (35-11-101 ET. SEQ. WYOMING STATUTES 1957, CUMULATIVE SUPPLEMENT 1973), AND DEPARTMENT OF ENVIRONMENTAL QUALITY WATER QUALITY RULES AND REGULATIONS CHAPTERS VIII AND IX (SEPTEMBER, 1980).

IT IS THE STATE OF WYOMING'S INTENTION TO ISSUE AN UNDERGROUND INJECTION CONTROL PERMIT FOR THE DISPOSAL OF INDUSTRIAL WASTES.

### APPLICANT INFORMATION

APPLICANT NAME: KISSACK WATER AND OIL SERVICE, INC.

MAILING ADDRESS: BOX 46  
ROZET, WYOMING 82727

FACILITY NAME AND LOCATION: HORSE CREEK FEDERAL #1-8 DISPOSAL WELL; NW $\frac{1}{4}$  NE $\frac{1}{4}$  S8, T47N, R68W, WESTON COUNTY, WYOMING

PERMIT NUMBER: 88-018 (Ref. No. 86-402)

This is a re-issue of a permit originally issued May 22, 1987 to correct technical errors in the permit. The amended permit limits the injection pressure to 2000 psig instead of the originally issued limit of 2500 psig. It also calls for quarterly reporting of data instead of monthly. This change was made, along with certain changes to the monitoring program to facilitate administration of the permit in conjunction with a backup well, the Federal Jessen 1-5.

Kissack Water and Oil Service, Inc. intends to operate a commercial disposal well for the subsurface injection of oil-field produced waters and other industrial wastes into the Minnelusa Formation through perforations 8572-8584 and 8595-8596 feet.

The wastes to be injected consist mainly of water brought to the surface in association with oil produced from numerous oil wells. The composition of this waste water varies, with the concentration of total dissolved solids in the range of from less than 10,000 to more than 200,000 mg/l.

The applicant has also requested approval to inject varying amounts of other wastes generated by industrial activities at the surface, such as from steam cleaning and boiling out car and truck radiators, from sump wastes, and from the cleaning of bulk-chemical containers. These wastes may include concentrations of zinc, chromium, boron and other constituents.

Maximum injection pressure is limited to 2000 psig at the surface. The injection rate will vary. Prior approval must be obtained from the Water Quality Division if the total injection rate for produced water will be in excess of 2,000 barrels (42 gallons/barrel) per day, and for other wastes in excess of 100 barrels per day.

#### PERMIT REQUIREMENTS

The permit is issued for the life of the operation but is reviewed at least once every five (5) years and may be reviewed more frequently. Public notice of the permit review and request for public comment will be made every ten (10) years.

The proposed permit requires the permittee to monitor the injection and submit periodic reports. Prior to commencing injection of any wastes other than oil-field produced water, the permittee must submit a complete organic and inorganic chemical analysis for each waste to be injected. Injection of such wastes may not commence without authorization of the Administrator.

The applicant has submitted information which documents the mechanical integrity of the disposal well. At a minimum of once every five (5) years and more frequently if required, the permittee must demonstrate the continued sound and unimpaired condition of all components of the injection well, by mechanical integrity testing.

#### STATE TENTATIVE DETERMINATIONS

The water in the injection zone within a one-mile radius of the disposal well is designated Class VI (unsuitable for use) because (1) groundwater is located so as to make normal use economically and technologically impractical, (2) groundwater in the receiving formation is associated with accumulations of hydrocarbons, and (3) the Horse Creek Federal #1-8 has been used for the injection of oil-field produced water into the Minnelusa Formation since 1982 as previously authorized by the Wyoming Oil and Gas Conservation Commission.

Other tentative determinations have been made by the State of Wyoming relative to conditions to be imposed on the permit. These conditions will assure that usable groundwaters of the State will be protected and applicable provisions of State statutes and regulations will be followed.

## PUBLIC COMMENTS

Public comments on the proposed operation, the proposed groundwater classification, and the State's intent, are invited prior to March 1, 1988. Comments may be directed to the Wyoming Department of Environmental Quality, Water Quality Division, Groundwater Section, Herschler Building, 4th Floor West, Cheyenne, Wyoming 82002. All comments received prior to March 1, 1988 will be considered.

Any interested person may request, in writing prior to March 1, 1988 a public hearing. The request should indicate the interest of the requesting party and reasons why a hearing is warranted.

If a hearing is not warranted, the final permit will be issued at the end of the comment period.

## ADDITIONAL INFORMATION

Additional information may be obtained upon request by calling the State of Wyoming, (307) 777-7781, or by writing to the aforementioned address.

The complete application, draft permit, and related documents are available for review and inspection at the same aforementioned address.

Public Notice No. UIC 88-018

RF  
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re

PERMIT TO CONSTRUCT

PERMIT NO. 88-019

- X New
- Renewal
- Modified

Louisiana Pacific Water Line

This permit hereby authorizes the applicant:

Louisiana Pacific  
P O Box 809  
Saratoga, WY 82331

to construct, install or modify municipal water distribution system according to the procedures and conditions of the application number 88-019. The facility is located in S12, T17N, R84W, 1/4 SW SW 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.

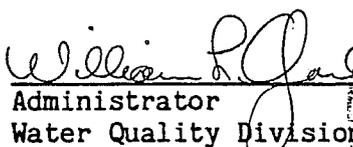
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

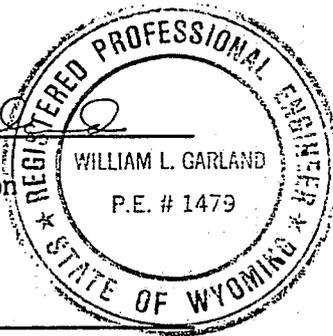
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

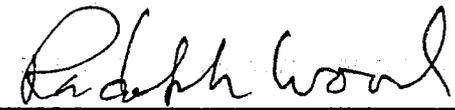
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

3-1-88  
Date of Issuance

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

cc: Paul McCarthy, PMPC Consulting Engineers, P O Box 370, Saratoga, WY 82331



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
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April 26, 1988

Mr. & Mrs. Richard L. Bierman  
Box 140  
Centennial, Wyoming 82055

RE: Permit to Construct Application Number 88-020

Dear Mr. & Mrs. Bierman:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (# 88-020) concerning the septic system at Lot 3, North Fork Subdivision, S35, T16N, R78W, NE $\frac{1}{4}$  SW $\frac{1}{4}$ .

The Water Quality Division has determined that the septic system meets the minimum state standards for isolation distances to wells, property lines, seasonal high groundwater, etc. Since the septic tank and drainfield size cannot be determined without digging up the entire system, the department cannot evaluate if the system is sized correctly. However, based on 10 years of actual operating experience, the system appears to be adequately sized for current conditions of 3 people on year round usage. The affect of any increased wastewater quantity or quality or improper maintenance cannot be determined.

Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter 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 the activities allowed under this letter. 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 letter, the state does not in any way waive its sovereign immunity.

Mrs. Richard L. Bierman  
April 26, 1988  
Page 2

Since a permit to construct cannot be issued for as-built wastewater treatment facilities, this letter will serve as your final approval document.

Sincerely,

*for*   
William L. Garland  
Administrator  
Water Quality Division

WLG/DM/jn

cc: Albany County Planning Office

TLL  
✓  
me

LAND APPLICATION PERMIT

Permit No. 88-021  
SEE SPECIAL CONDITIONS

NAVAL PETROLEUM RESERVE NO. 3 ROAD APPLICATION  
(Name of Facility)

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

U. S. Department of Energy  
800 Werner Court, Suite 342  
Casper, Wyoming 82601

to land apply produced water, waste oil and sludge to roads for dust control. The application site is located in Section 2, T.38N., R.78W., in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of one (1) year 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.

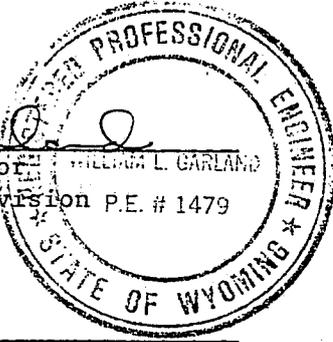
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the application site at the above location, for the purpose of compliance with the provisions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

William L. Garland  
Administrator  
Water Quality Division P.E. # 1479



Robert Wood  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

SPECIAL CONDITIONS

1. Application shall not occur at a rate which will produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods of saturated or frozen soil conditions.
2. Waste oil and sludges shall be mechanically incorporated into the road bed as they are applied.
3. Application shall be terminated within 300 feet of the definable high water mark of perennial or intermittent drainages, irrigation canals, lakes and reservoirs.
4. The appropriate Water Quality office shall be notified 48 hours prior to any application. Notification shall be made to NE District Supervisor, 2161 Coffeen Avenue, Suite 501, Sheridan, Wyoming 82801, 307/672-6457.
5. This permit is in effect for a period of one year following the date of issuance. Any activity after that time must be repermited.

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me R7

PERMIT TO CONSTRUCT

PERMIT NO. 88-022

X New  
Renewal  
Modified

Alley Sewer Replacement from Black Ct. to 2nd Ave

This permit hereby authorizes the applicant:

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

to construct, install or modify 8" sanitary sewer main according to the procedures and conditions of the application number 88-022. The facility is located in S29, T14N, R66W 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.

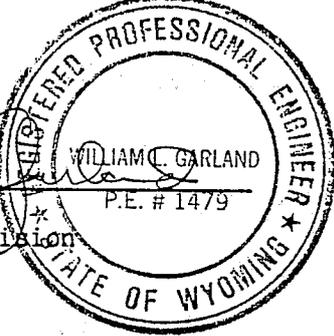
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

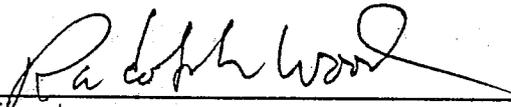
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
W. C. Garland  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

5-18-88  
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.

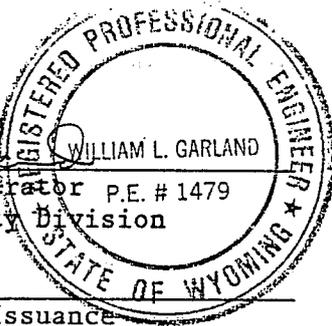
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

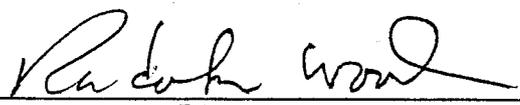
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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:

  
\_\_\_\_\_  
Administrator P.E. # 1479  
Water Quality Division  
2-18-88  
Date of Issuance



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

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

\* CONDITIONS ON PERMIT \*

1. Initially, one boring/well may be drilled. This boring/well is to be located as close to the sulfuric acid spill as possible.
2. The well(s) is to be constructed in accordance with Wyoming Water Quality Rules and Regulations, Chapter XI, Part G and the attached Typical Shallow Monitor Well Construction Schematic.
3. Additional wells may be installed if prior approval is received from the Water Quality Division.
4. Once the soil borings and monitor wells have been completed, the owner will provide the Wyoming Department of Environmental Quality, Water Quality Division with a report that details the logs, locations and construction specifications of the completed wells.
5. The results of any analyses conducted on soil or water removed from these wells shall be provided to the department as soon as they are available.
6. All monitor wells and soil borings will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division Rules and Regulations.
7. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
8. Drilling shall commence as soon as weather permits.
9. 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.

cc: Jake Strohmman, DEQ/WQD, Cheyenne  
Tom Pilch, DEQ/WQD, Cheyenne



THE STATE OF WYOMING



## Department of Environmental Quality

Air Quality Division  
(307) 332-3144

Land Quality Division  
(307) 332-3047

Solid Waste Management Program  
(307) 332-3144

Water Quality Division  
(307) 332-3144

July 1, 1988

Gary and Kathy Ray  
P.O. Box 883  
Basin, WY 82410

RE: Septic Tank/Leach Field, 88-024

Dear Gary and Kathy:

After my June 21, 1988 meeting with Kathy, I now have enough information regarding the modification to your sewage disposal system to resolve the letter of violation that was issued.

As a summary, the violation was issued since you modified your system without first getting a permit. A new 1000 gallon septic tank was installed and the gray water piping which was discharging on the ground was connected to the system which already served the toilets.

This office can't issue a permit to construct since the modifications are already made nor can we issue a letter of approval of the as-built construction since your sewage treatment facility does not meet the requirements of the regulations. We can't approve the facility for the following reasons:

1. The leach field is not on your property. Although we realize that the leach field was located off your land prior to your ownership, septic tank/leach fields serving individual homes must be located on the property they serve. In this case you don't even have a legal easement for the field.

2. Since the leach field was only serving the bathroom prior to the installation of the new septic tank and connection of the remainder of the plumbing, we have no way of knowing if the field is sized sufficiently to dispose of all the wastewater flow. We can't approve a disposal system if its capacity is unknown.

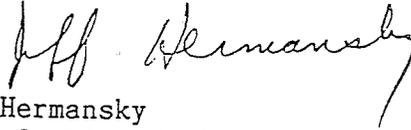
Although the Water Quality Division can't approve your septic tank/leach field installation, we can allow you to continue to operate since the system appears to be working. Please be aware that if the system fails, that is, sewage

Gary and Kathy Ray  
July 1, 1988  
Page Two

begins to surface or backup and spill, a new system permitted to meet the regulations, must be constructed. Furthermore, if your neighbor requires that you stop using the existing leach field, a new field must be permitted for installation on your land.

Please contact either Steve Gerber or me if you have questions or if you need to apply for a permit to construct in the future.

Sincerely,



Jeff Hermansky  
Water Quality Evaluator

JH/jw

cc: Plans, 88-024

Larry Robinson, DEQ/WQD, Cheyenne  
File (2)

R7  
TH  
✓  
nc

PERMIT TO CONSTRUCT

PERMIT NO. 88-025  
SEE SPECIAL CONDITION

X New  
Renewal  
Modified

MEDICINE BOW MINE - TREATMENT FACILITY NO. 13-46-1

This permit hereby authorizes the applicant:

c/o Eric Sundberg  
Arch Mineral Corporation  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-025. The facility is located in Section 13, T23N. R84W. 1/4SESE in the county of Carbon, 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.

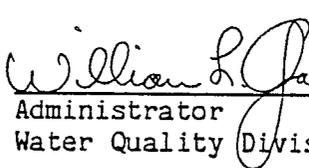
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

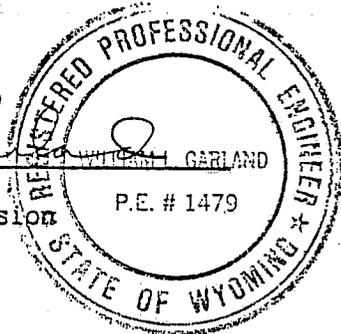
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

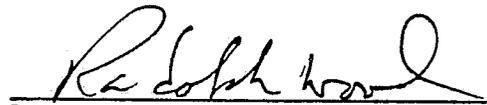
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

2-24-88

Date of Issuance

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

Special Condition for Permit to Construct 88-025

If detention time is not adequate to meet NPDES discharge parameters, the pump pumping pit water into the pond shall be shut off until batch treatment allows the water in the pond to meet discharge parameters.

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PERMIT TO CONSTRUCT

PERMIT NO. 88-026  
SEE SPECIAL CONDITION

X New  
Renewal  
Modified

MEDICINE BOW MINE - TREATMENT FACILITY NO. 26-24

This permit hereby authorizes the applicant:

c/o Eric Sundberg  
Arch Mineral Corporation  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-026. The facility is located in Section 26, T23N, R84W, 1/4 SESW in the county of Carbon, 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:

William L. Garland  
Administrator  
Water Quality Division



La Loph Ward  
Director  
Department of Environmental Quality

2-24-88  
Date of Issuance

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

Special Condition for Permit to Construct 88-026

If detention time is not adequate to meet NPDES discharge parameters, the pump pumping pit water into the pond shall be shut off until batch treatment allows the water in the pond to meet discharge parameters.

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PERMIT TO CONSTRUCT

PERMIT NO. 88-027  
SEE SPECIAL CONDITION

X New  
Renewal  
Modified

MEDICINE BOW MINE - TREATMENT FACILITY NO. 30-62

This permit hereby authorizes the applicant:

c/o Eric Sundberg  
Arch Mineral Corporation  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-027. The facility is located in Section 30, T23N, R83W, 1/4NE in the county of Carbon, 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.

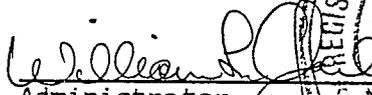
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

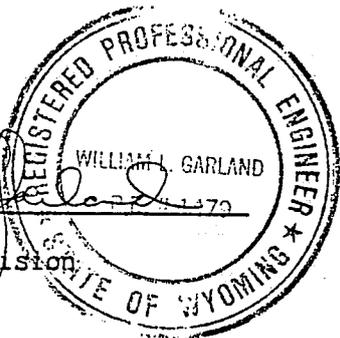
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

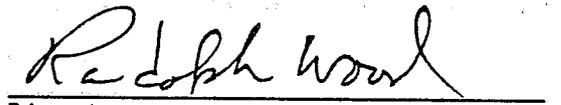
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

2-24-88

Date of Issuance

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

Special Condition for Permit to Construct 88-027

If detention time is not adequate to meet NPDES discharge parameters, the pump pumping pit water into the pond shall be shut off until batch treatment allows the water in the pond to meet discharge parameters.

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PERMIT TO CONSTRUCT

PERMIT NO. 88-028  
SEE SPECIAL CONDITION

X New  
Renewal  
Modified

MEDICINE BOW MINE - TREATMENT FACILITY NO. 11-24

This permit hereby authorizes the applicant:

c/o Eric Sundberg  
Arch Mineral Corporation  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-028. The facility is located in Section 11, T23N, R84W, 1/4SESW in the county of Carbon, 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.

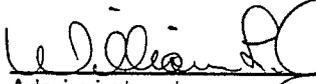
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

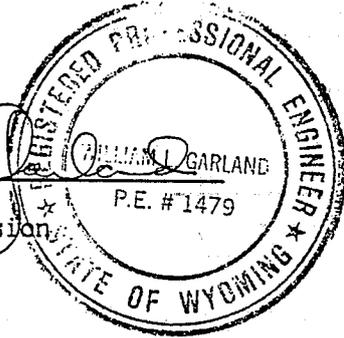
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

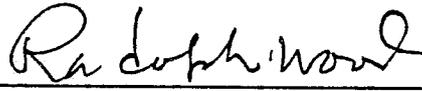
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

2-24-88  
Date of Issuance

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

Special Condition for Permit to Construct 88-028

If detention time is not adequate to meet NPDES discharge parameters, the pump pumping pit water into the pond shall be shut off until batch treatment allows the water in the pond to meet discharge parameters.

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PERMIT TO CONSTRUCT

PERMIT NO. 88-029  
SEE SPECIAL CONDITION

X New  
Renewal  
Modified

MEDICINE BOW MINE - TREATMENT FACILITY NO. 12-38-1

This permit hereby authorizes the applicant:

c/o Eric Sundberg  
Arch Mineral Corporation  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-029. The facility is located in Section 12, T23N, R84W, 1/4SWSW in the county of Carbon, 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.

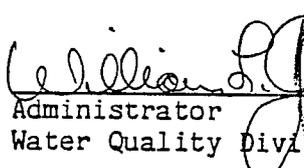
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

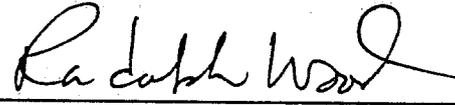
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

2-24-88  
Date of Issuance

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

Special Condition for Permit to Construct 88-029

If detention time is not adequate to meet NPDES discharge parameters, the pump pumping pit water into the pond shall be shut off until batch treatment allows the water in the pond to meet discharge parameters.



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



TP

## Department of Environmental Quality

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

February 22, 1988

Ken Eickoff  
428 Foster Road  
Casper, Wyoming 82601

Dear Mr. Eickoff:

Your submittal for testhole construction in determining the extent of contamination at the Petro-Plus site in Casper has been reviewed and accepted for record. (DEQ/WQD Ref. No. 88-030). The division feels the preliminary investigation hasn't fully accessed the problem and requests that the following work be performed.

1. A monitoring well shall be installed west of SB-5, at the extent of the soil contamination. Hence, additional boreholes in this direction may be needed to determine the extent of soil contamination.
2. A monitoring well shall be installed northwest of SB-9, near the property line. The monitoring wells shall be installed to the bedrock.
3. Locate all wells within a one half mile radius of the site in the north, northwest, and west directions. Determine perforated depths and usage.
4. Sample the monitor wells quarterly for one year to determine the seasonal groundwater fluctuation.
5. Expand the site map so that it shows all buildings/dwellings in the area which may be impacted by vapors. (southwestern direction)
6. Submit monitoring well construction details and a water sampling protocol prior to installing the monitor wells.

Since the investigation took place prior to submitting a application to construct testholes and/or monitoring wells a permit to construct cannot be issued. However, this letter of approval serves essentially the same purpose.

The division is requesting that a proposal outlining the additional work be submitted within 15 days after receipt of this letter. This proposal shall also

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y 22, 1988  
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include a time schedule for plan implementation and final report submittal.

If you have questions, contact Tom Pilch at 777-7781.

Sincerely,



William L. Garland  
Administrator  
Water Quality Division

WLG/jt

cc: ✓ Jake Strohman, DEQ/WQD  
Kenneth Napp, Delta Environmental

tu/nc R7

PERMIT TO CONSTRUCT

PERMIT NO. 88-031  
SEE SPECIAL CONDITIONS

X New  
Renewal  
Modified

Conoco Pipeline

This permit hereby authorizes the applicant:

R. W. Beggs  
P O Box 369  
Evansville. WY 82636

to construct, install or modify monitoring wells according to the procedures and conditions of the application number 88-031. The facility is located in SE1/4 NW1/4 S6. T33N. R78W in the county of Natrona, 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.

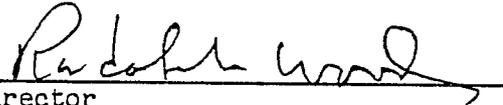
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

  
William L. Garland  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

Conditions to Permit to Construct #88-031

1. If contamination is found in any of these wells, additional monitoring wells will be needed in order to define the source and extent of contamination. The division is requesting additional wells be installed, at this same time, if contamination is detected in the first three wells.
2. Well elevations shall be established with respect to mean sea level.
3. A sampling protocol shall be submitted to the division at least one week prior to the start of drilling. This protocol shall list decontamination procedures, sampling procedures and types of analyses.
4. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division.
5. Once the monitor wells have been completed, the owner will provide the Wyoming Department of Environmental Quality, Water Quality Division with a report that details the logs and locations. If the construction specifications were not included in the application or changes were made, they should be included in the report.
6. The results of any analyses conducted on soil or water removed from these wells shall be provided to the department as soon as they are available.
7. All monitor wells and soil borings will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division 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.

Conditions to Permit 88-031 (continued)

8. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
9. Keys for all monitoring wells shall be provided to the department within 30 days of completion of the project. Caps shall be kept locked at all times other than sampling. Any tampering with the monitor wells shall be reported immediately to the division.
10. 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.
11. 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.
12. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in Permit to Construct application number 88-031.
13. 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 should be installed according to normal engineering practice.
14. Depending on the results of subsurface contamination investigation, additional site investigations or remedial measures may be required by the Water Quality Division.

cc: W. M. McKinnell, West Corp, P O Box 505, Casper, WY 82602  
Jake Strohman

RT  
tel  
2/24/88  
nc

PERMIT TO CONSTRUCT

PERMIT NO. 88-032  
See Conditions

X New  
Renewal  
Modified

S.J.S. CO

This permit hereby authorizes the applicant:

Lander Boyer  
P O Box 3739  
Casper, WY 82602

to construct, install or modify test holes and/or monitoring wells according to the procedures and conditions of the application number 88-032. The facility is located in SW $\frac{1}{4}$ , NE $\frac{1}{4}$ , S6, T33N, R79W in the county of Natrona, 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.

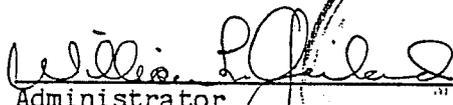
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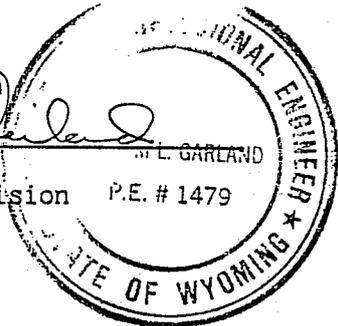
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

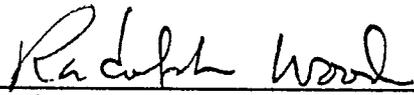
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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 P.E. # 1479



  
Director  
Department of Environmental Quality

2-24-88  
Date of Issuance

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

#### Conditions to Permit to Construct 88-032

1. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division.
2. Once the monitor wells have been completed, the owner will provide the Wyoming Department of Environmental Quality, Water Quality Division with a report that details the logs and locations. If the construction specifications were not included in the application or changes were made, they should be included in the report.
3. The results of any analyses conducted on soil or water removed from these wells shall be provided to the department as soon as they are available.
4. All monitor wells and soil borings will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division 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.
5. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
6. Keys for all monitoring wells shall be provided to the department within 30 days of completion of the project. Caps shall be kept locked at all times other than sampling. Any tampering with the monitor wells shall be reported immediately to the division.
7. 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.

Conditions to Permit 88-032 (continued)

8. 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.
9. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in Permit to Construct application number 88-032.
10. 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 should be installed according to normal engineering practice.
11. Soil samples shall be taken to identify what type(s) of contamination exist(s).
12. A sampling protocol shall be submitted to the division prior to drilling. This protocol shall outline decontamination procedures, sampling procedures and types of analysis being performed for both soil and water samples.

cc: Jake Strohman



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

June 7, 1988



Leon Anderson  
209 Mica  
Kemmerer, WY 83101

RE: Wind River Lodge WWTP; WQD Ref. No. 88-033

Dear Mr. Anderson:

Based on the letter Steve Gerber received from Ernie Mecca on April 18, I understand that Wind River Lodge will not be reopening in the near future. Your application is considered inactive and is being returned. Before reopening, the modifications to the lagoons must be completed.

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

Sincerely,

William L. Garland  
Administrator

WLG/SG/jw

cc: Larry Robinson, DEQ/WQD, Cheyenne  
Patti Burns, DEQ/WQD, Cheyenne



THE STATE

OF WYOMING

*Carroll*  
*W. J.*



## Department of Environmental Quality

Air Quality Division  
(307) 672-6457

Water Quality Division  
(307) 672-6457

July 19, 1988

Mallo Camp Board  
P. O. Box 233  
Newcastle, Wyoming 82701

RE: As-Built Approval: 88-034R

*Mallo Camp Wastewater Treatment  
Fac.  
Western County*

Dear Board Members:

I have completed my review for the as-built approval of the wastewater treatment facilities at Mallo Camp. The most recent submittal by your engineer provides enough information to authorize the system and the land application of effluent provided the following conditions are met:

- 1.) A flow measurement device must be installed in the system. The meter should be properly calibrated and accurate records kept in order to track the actual application rate of effluent.
- 2.) The fence at the sprinkler head should be enlarged to encompass the entire irrigated area plus a 30 foot buffer around the perimeter. The fence shall be posted with signs identifying treated sewage effluent and no trespassing.
- 3.) Quarterly samples of the effluent shall be collected and analyzed for:

biological oxygen demand (BOD)  
total suspended solids (TSS)  
fecal coliform  
total residual chlorine  
pH

The monitoring results and the flow measurement data shall be submitted to the District Water Quality Office, 2161 Coffeen Avenue, Suite 501, Sheridan, Wyoming 82801, within 30 days of the end of the quarter. Reports will, therefore, be due the last day of April, July, October and January. Your compliance monitoring should begin in the third quarter, 1988.

No limits will be set on these parameters now, but further restrictions may be imposed at a later date if a negative impact becomes apparent from operation of the system.

As-Built Approval Letter  
to Mallo Camp Board  
July 19, 1988  
Page Two

- 4.) The operator of the system must become active in the State operator certification program and obtain a level of certification consistent with the level of treatment. That program administrator notified me that he would be in contact with the operator in the near future and establish a compliance schedule for obtaining certification. No further requirements will be made from this office as long as that compliance schedule is adhered to.

This facility will now be placed on our routine inspection list. The engineering staff will inspect it at least once a year to evaluate operation and maintenance. In addition, the technical support staff will collect samples at least once annually to verify your sampling results.

Since this facility is already built, a Permit to Construct can not be issued. This letter documents the Water Quality Division's approval of the facility, however, and serves essentially the same purpose. I suggest you keep this letter with your permanent records.

I appreciate your cooperativeness. Please let me know if you have any questions or will have trouble meeting the conditions contained in this letter.

Sincerely,



Susan Fields  
NE District Supervisor  
Water Quality Division

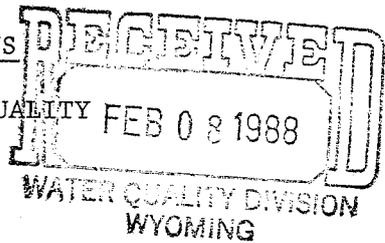
SF/jj

xc: Ben Schultz, High Plains of Wyoming  
Gerald Olson, Wyoming Health & Social Services  
Gary Epperson, Mallo Camp  
88-034R Permit Files  
Mallo Camp, Weston County

*Normal*

REVIEW OF PLANS AND SPECIFICATIONS

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



PROJECT: Mallo Camp; As-Built Approval  
Wastewater Treatment Facility

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

WATER QUALITY DIVISION  
REFERENCE NUMBER: 88-034

REVIEWING ENGINEER: *SZ* Susan Fields

DATE OF REVIEW: February 5, 1988

ACTION: Not authorized.

COMMENTS:

- 1.) The plans submitted do not accurately represent the collection, treatment and disposal system as installed. For example, no details are provided or any mention made of the lift station just prior to the package treatment plant. No details of sizing or design of the treatment plant are provided. The effluent line shows several sprinkler connections which do not exist. The plans must accurately represent the collection, treatment and disposal system as it is currently installed and operated.
- 2.) The design criteria provided is not detailed or accurate enough to evaluate the land application of the wastewater effluent. The following should be included:
  - a.) Better estimate of flow rate and application frequency. I had understood that flow monitoring equipment was going to be installed with the wet well rehabilitation. Was the equipment installed and where? Flow measurement will ultimately be required somewhere in the effluent line.
  - b.) Appropriate evapotranspiration values for soils. 30 inches of evaporation represents losses from an open body of water and does not relate to soil moisture losses through evaporation and plant uptake. My references indicate approximately 22 inches/year as the evapotranspiration rate in the Mallo Camp area. The local Soil Conservation Service office may have more accurate data.
  - c.) Soils and vegetation information. Soils shall be classified and surface infiltration rate and hydraulic conductivity of the soil profile determined. The vegetative cover shall be identified and its compatibility with the treated effluent determined.

Review of Plans and Specifications  
Mallo Camp Wastewater Treatment Facility  
February 5, 1988  
Page Two

- 3.) Depth to groundwater and its quality in the land application area must be identified.
- 4.) As previously stated in correspondence to the Camp, the DEQ will provide sampling services to the Camp this Spring and Summer to help establish existing effluent quality. This data will assist in evaluation of the existing system. In the meantime, the information requested here can be collected and the system hopefully approved by the end of summer.



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.

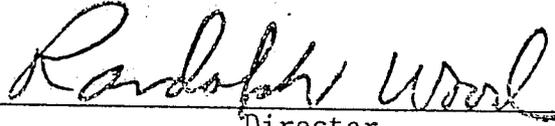
AUTHORIZED BY:



Administrator  
Water Quality Division

2-10-88

Date of Issuance



Director  
Dept. of Environmental Quality

5  
JN

PERMIT TO CONSTRUCT

New

Permit No. 88-036

Renewal

Modified

Emergency Pump Station Inlet Structure  
(Name of Facility)

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

Shoshone Municipal Pipeline Joint Powers Board  
ATTN: Dorse Miller, Chairman  
1338 Rumsey Avenue  
Cody, WY 82414

to construct, install, or modify a water inlet structure including excavation,  
concrete and steel, below elevation 5034.75

facility according to the procedures and conditions of the  
application No. 88-036. The facility is located in   
SE $\frac{1}{4}$ , Sec. 5, T52N, R102W

in the County of Park,

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

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

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

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

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

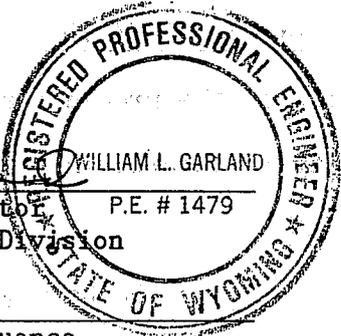
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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  
P.E. # 1479  
2-16-88  
Date of Issuance

Ralph Wood  
Director  
Dept. of Environmental Quality

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

Jfa  
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PERMIT TO CONSTRUCT

PERMIT NO. 88-037

X New  
Renewal  
Modified

POND NO. 1-4A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-037. The facility is located in SW SW, Section 20, T23N, R83W in the county of Carbon, 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.

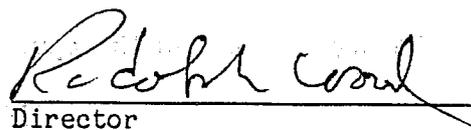
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
*William L. Garland*  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

2-18-88

Date of Issuance

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

cc: Roy Spears, DEQ/LQD

tu  
m

PERMIT TO CONSTRUCT

PERMIT NO. 88-038

X New  
Renewal  
Modified

POND NO. 1-5A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-038. The facility is located in NE SW, Section 20, T23N, R83W in the county of Carbon, 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 the 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:

A circular seal for a Registered Professional Engineer in the State of Wyoming. The seal contains the text "REGISTERED PROFESSIONAL ENGINEER" around the top and "STATE OF WYOMING" around the bottom. In the center, the name "WILLIAM L. GARLAND" is printed. A handwritten signature, "William L. Garland", is written across the seal.

*William L. Garland*  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD

me  
th

PERMIT TO CONSTRUCT

PERMIT NO. 88-039

X New  
Renewal  
Modified

POND NO. 1-7A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-039. The facility is located in NW SE, Section 20, T23N, R83W in the county of Carbon, 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 the 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.

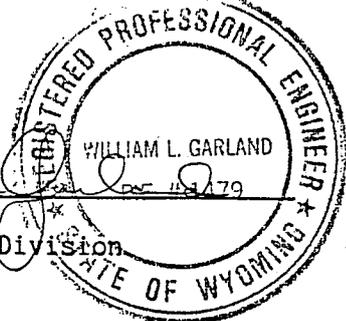
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

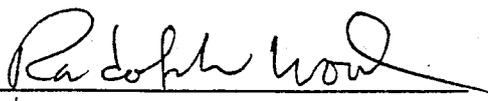
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
*William L. Garland*  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

5-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD

ll  
No

PERMIT TO CONSTRUCT

PERMIT NO. 88-040

X New  
Renewal  
Modified

POND NO. 1-8A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-040. The facility is located in NE SW, Section 20, T23N, R83W in the county of Carbon, 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 the 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.

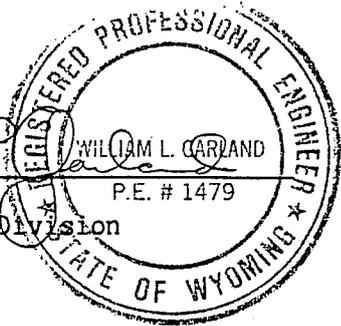
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

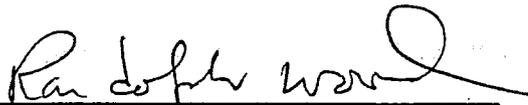
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
William L. Garland  
Administrator  
Water Quality Division

  
Roy Spears  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD

✓  
re  
2-27-88

PERMIT TO CONSTRUCT

PERMIT NO. 88-041

X New  
Renewal  
Modified

POND NO. 1-9A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-041. The facility is located in NE SW, Section 20, T23N, R83W in the county of Carbon, 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 the 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.

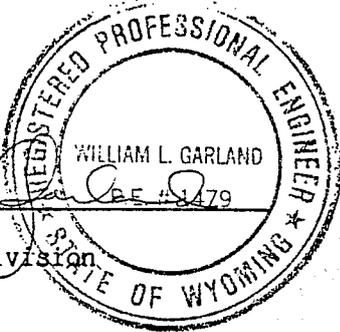
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

  
William L. Garland  
Administrator  
Water Quality Division

R. J. [Signature]  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD

✓  
to  
me

PERMIT TO CONSTRUCT

PERMIT NO. 88-042

X New  
Renewal  
Modified

POND NO. 1-10A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-042. The facility is located in SW NE, Section 20, T23N, R83W in the county of Carbon, 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 the 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 for, and 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.

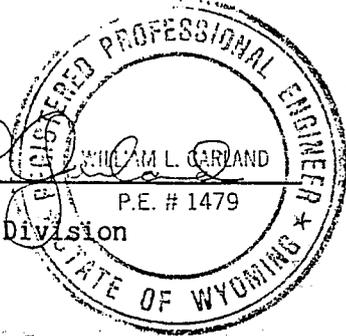
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

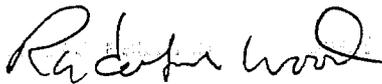
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

  
*William L. Garland*  
Administrator  
Water Quality Division

  
Director  
Department of Environmental Quality

J-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD

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PERMIT TO CONSTRUCT

PERMIT NO. 88-043

X New  
Renewal  
Modified

POND NO. 1-11A

This permit hereby authorizes the applicant:

Eric Sundberg  
P. O. Box 460  
Hanna, Wyoming 82327

to construct, install or modify a sedimentation pond according to the procedures and conditions of the application number 88-043. The facility is located in SE NE, Section 20, T23N, R83W in the county of Carbon, 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 the 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.

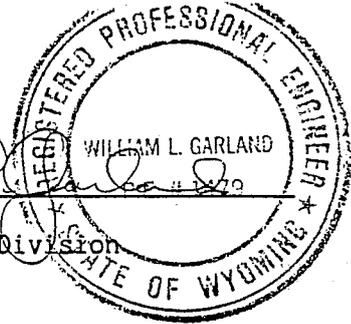
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

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AUTHORIZED BY:

*William R. Garland*  
Administrator  
Water Quality Division



*Rudolph Woul*  
Director  
Department of Environmental Quality

2-18-88  
Date of Issuance

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

cc: Roy Spears, DEQ/LQD



THE STATE OF WYOMING

MIKE SULLIVAN  
GOVERNOR



## Department of Environmental Quality

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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February 22, 1988

Mr. L. Jeffrey Mitros  
Petroleum Geologist  
TriHydro Corporation  
410 Grand Avenue, Suite 213  
Laramie, Wyoming 82070

Dear Mr. Mitros:

Enclosed is a permit to construct groundwater monitoring wells at the Sinclair Oil Refinery in Carbon County, Wyoming. Please note that there are conditions attached to this permit.

It should be made clear that the refinery wide hydrogeological assessment proposed in the comprehensive environmental assessment workplan prepared by TriHydro Corporation does not adequately satisfy the requirements of the Water Quality Division. This permit allows the installation of additional monitoring wells if prior approval is obtained from the Water Quality Division. However, to protect your client from excessive costs, it would be advisable to not proceed with well installation until a revised refinery hydrogeological assessment plan has been authorized by the Water Quality Division.

Yours Truly,

Thomas R. Williams  
Groundwater Engineering Evaluator  
Water Quality Division

TRW/jt

cc: Jake Strohman, DEQ/WQD

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PERMIT TO CONSTRUCT

PERMIT NO. 88-044  
SEE SPECIAL CONDITIONS

X New  
Renewal  
Modified

SINCLAIR OIL REFINERY

This permit hereby authorizes the applicant:

TriHvdro Corporation  
410 Grand Avenue, Suite 213  
Laramie, Wyoming 82070

to construct, install or modify groundwater monitoring well network according to the procedures and conditions of the application number 88-044. The facility is located in Section 15, 16, 17, 20, 21, T21N, R86N in the county of Carbon, 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.

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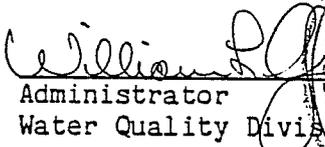
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

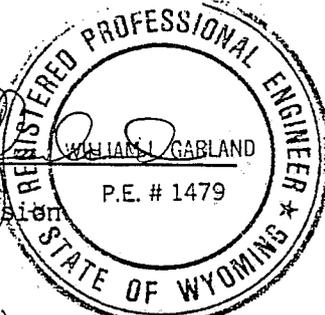
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

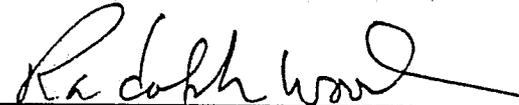
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

2-24-88  
Date of Issuance

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

#### SPECIAL CONDITIONS FOR PERMIT 88-044

1. The groundwater monitoring wells shall be installed in accordance with the plans and specifications submitted in permit to construct application number 88-044. Additional wells meeting the requirements of the application and this permit may be installed 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 depths 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:
  - 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 interval must extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below

Conditions to Permit 88-044 (continued)

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. The monitoring well should be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
5. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with Water Quality Division standard procedures.

cc: Jake Strohman, DEQ/WQD

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PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 88-045

CARTER MINING COMPANY PLAYA RESERVOIR  
 (Name of Facility)

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

Carter Mining Company

P. O. Box 3007

Gillette, Wyoming 82716

to construct, install, or modify a sedimentation facility according to the procedures and conditions of the application No. 88-045. The facility is located in Section 15, 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.

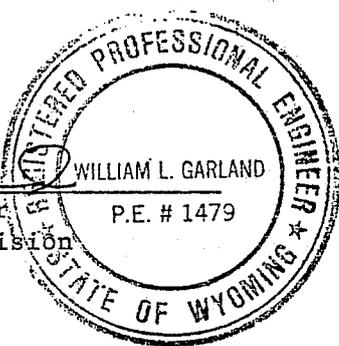
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

*William L. Garland*  
Administrator  
Water Quality Division



*Rudolph Wool*  
Director  
Department of Environmental Quality

3-1-88

Date of Issuance

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

PERMIT TO CONSTRUCT

New

Permit No. 88-046R

Renewal

Modified

ANTELOPE COAL COMPANY POND SP-45  
(Name of Facility)

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

Antelope Coal Company

P. O. Drawer 1450

Douglas, Wyoming 82633

to construct, install, or modify a sedimentation facility according to the procedures and conditions of the application No. 88-046R. The facility is located in Section 11, T.40N., R.71W, in the County of Converse, 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.

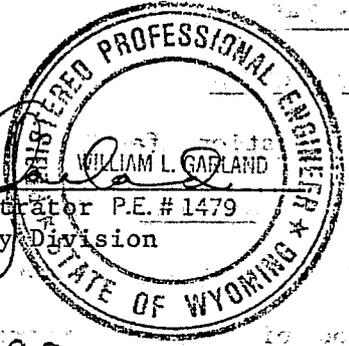
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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*  
District Engineer  
P.E. #1479  
Water Quality Division  
STATE OF WYOMING



*Richard Wood*  
Director  
Department of Environmental Quality

3-8-88  
Date of Issuance

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

[Faint, mostly illegible text follows, likely containing permit conditions and legal disclaimers.]

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

88-047  
UIC CLASS V

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),

PACIFIC POWER  
P O Box 99  
Worland, WY 82401  
(307) 347-2421

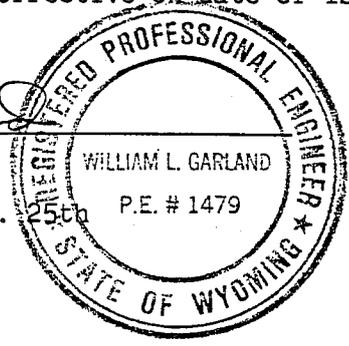
is authorized to operate

A closed loop ground based heat pump at the Pacific Power Division Office in Worland, Wyoming

according to procedures and conditions of the application 88-047 and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.

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



2-23-88  
Date

*Rudolph Wood*  
\_\_\_\_\_  
Director  
Department of Environmental Quality  
Herschler Building, 122 W. 25th  
Cheyenne, WY 82002

2-23-88  
Date

A. Discharge (Injection) Zone and Area of Review

The area of review was limited to T47N, R92½W, Section 5 Lots 3,4,5 and 6 of the Heron addition. The only injection will be waste heat through a heat exchanger. No materials are to be injected through this system. The injection zone is a blue or brown shale of the Wiggins Formation underlying the shallow alluvial aquifer.

B. Groundwater Classification

The shallow alluvial aquifer penetrated by these wells is class I. Pacific Power has not yet submitted an analysis of the water in the receiver. Until this information is received, it will be assumed that all waters are class I.

C. Authorized Operations

The permittee is authorized to operate a closed loop, ground based heat pump system. The circulating fluid in this system shall be non-toxic propylene glycol in a 20% solution in water. Use of any other fluid is not authorized without notification in advance to the Water Quality Division. Use of any toxic agent such as ethylene glycol, or chromium based corrosion inhibitors will not be authorized.

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:

This system shall be continuously monitored for any leakage. Pacific Power has indicated in the application that each loop will be equipped with automatic shutoff valves that will limit any accidental loss of fluid to a maximum of 14 gallons of 20% Propylene Glycol solution. In addition, Pacific Power has cased all of these holes with 6" class 160 PVC casing cemented in place through all of the aquifers on the site. This casing will prevent any of the solution from entering groundwater, even if a leak occurs in one of the loops.

G. Requirements for Monitoring the Discharge

Discharge (injection) volume and/or pressure shall be controlled and monitored

to prevent fracturing of confining strata.

Because of the several layers of control built into this system, No monitoring program is considered necessary. The operator must monitor the operation of the system to insure that no leakage occurs. Should any leakage occur, or any fluid be added, Water Quality Division shall be notified within 24 hours by telephone and this shall be followed by a detailed written report within seven days. To insure that this requirement is met, Pacific Power shall keep a copy of this permit on file in the District Managers files as well as in the building maintenance files. In addition, a Notice shall be posted at the location of the heat pump informing the maintenance personnel of this requirement. This notice shall begin with the phrase "IN CASE OF A LEAK" in letters at least one inch high.

The exact wording of this notice shall be:

"IN CASE OF A LEAK you are required to report this fact immediately upon discovery by telephone to (307)777-7095. This report shall be followed by a written report within seven days addressed to:

Wyoming DEQ-Water Quality Division  
UIC Program Supervisor  
Herschler Building  
122 West 25th Street  
Cheyenne, WY 82002"

#### 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:

Mechanical Integrity will be monitored continuously by the system as installed. Any loss of Mechanical Integrity in any one loop will result in that loop automatically being considered as a leak in the system or loss of Mechanical Integrity.

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:

At the time of abandonment, all fluid shall be flushed from the system and disposed of in an approved manner. All casings and loop piping shall be cutoff 24 inches below grade and the well sealed with a solvent welded PVC cap and a concrete cap 8" thick.

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.

Pacific Power has assured the resources to properly plug this system.

O. Special Measures the Director Finds Necessary:

Should Pacific Power ever sell this building and the system covered by this permit, the new owner shall be bound by all provisions of this permit.

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.



MIKE SULLIVAN  
GOVERNOR

## Department of Environmental Quality

Administration  
(307) 777-7937

Air Quality Division  
(307) 777-7391

Land Quality Division  
(307) 777-7756

Solid Waste Management Program  
(307) 777-7752

Water Quality Division  
(307) 777-7781

February 17, 1988

Bill Savage  
Big Horn Division Manager  
Pacific Power  
P O Box 99  
Worland, WY 82401

RE: Permit GPC 88-047, Class V UIC, Washakie County, Wyoming

Dear Mr. Savage:

Enclosed find the final permit for your closed loop heat pump at the Worland District office. You still need to submit the water quality analysis when you get that information. You also need to obtain a letter from your corporate Vice President authorizing the Big Horn District Manager to sign all reports required by this permit, and submit this letter to us for the record. We have not required reports except in the case of a leak from this system, this makes it necessary that someone locally be authorized to sign those reports.

Thank you for your cooperation in applying for this permit. Water Quality Division recognizes that this type of system should not cause groundwater pollution except under extremely unusual circumstances. For this reason we have tailored our permit to require only the barest minimum in effort to comply with its provisions.

Sincerely,

William L. Garland, P.E.  
Administrator

WLG/RL/mad

cc: Mike Stireby, EPA

L-P

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 88-048RRR

Evanston Water Treatment Plant Expansion  
 (Name of Facility)

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

City of Evanston  
1200 North Main Street  
Evanston, WY 82930

to construct, install, or modify a increase plant capacity from 4 mgd to  
8 mgd through process modification

facility according to the procedures and conditions of the  
application No. 88-048RRR. The facility is located in

SE $\frac{1}{4}$ , Sec. 21, T15N, R120W

in the County of Uinta,

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

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

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

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

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

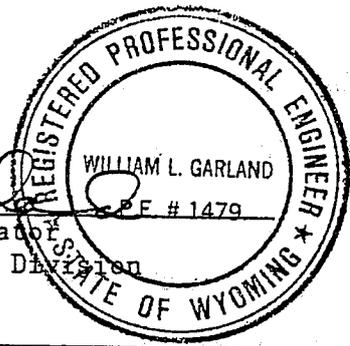
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
*6-29-88*  
\_\_\_\_\_  
Date of Issuance



*Ralph Wood*  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

PERMIT TRANSFER REQUEST

DATE: 11/3/92

Water Quality Division  
Department of Environmental Quality  
122 West 25th Street  
Herschler Building  
Cheyenne, WY 82002

**RECEIVED**

NOV 09 1992

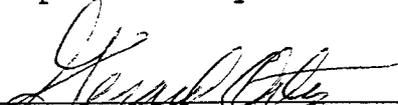
**WATER QUALITY DIVISION  
WYOMING**

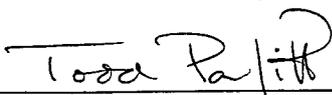
To Whom It Concerns:

Gerard Ortiz intends to transfer ownership of the facility associated with Permit Number 88-049 to WY Department of Environmental Quality on December 4, 1992. It is requested that the said permit be transferred to the new owner in accordance with Section 10 (c) and (d) of Chapter III, Wyoming Water Quality Rules and Regulations. The new owner agrees to accept and be bound by the provisions of the permit and any amendments, agrees to construct and operate the facility in accordance with the approved permit and agrees to accept responsibility for the facility's compliance with applicable standards and permit conditions, including the responsibility to perform any necessary corrective actions.

The original owner shall retain responsibility for the facility according to the terms of the original permit until the application for permit transfer is approved by the Administrator.

Please transfer the permit to the transferee's name and issue a modified permit reflecting the transfer of ownership. Terms and conditions of the original permit are transferred to and become the responsibility of the new owner.

  
\_\_\_\_\_  
Signature Original Owner

  
\_\_\_\_\_  
Signature New Owner

Name Gerard Ortiz

Name WY Dept. of Environmental Quality

Address 202 N. Federal Blvd.

Address 250 Lincoln Street

Riverton, WY 82501

Lander, WY 82520

Telephone 307-856-3770

Telephone 307 - 332 - 3144



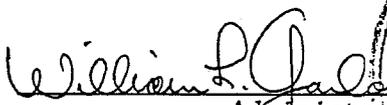
ing working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

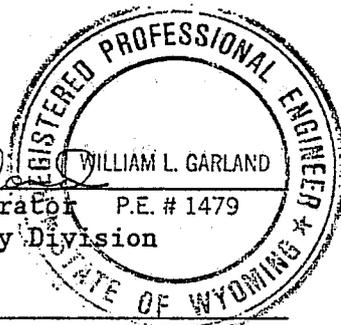
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State 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  
3-1-88  
Date of Issuance



  
Director  
Dept. of Environmental Quality

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

\* CONDITIONS ON PERMIT \*

1. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division.
2. Once the monitor wells have been completed, the owner will provide the Wyoming Department of Environmental Quality, Water Quality Division with a report that details the logs and locations. If the construction specifications were not included in the application or changes were made, they should be included in the report.
3. The results of any analyses conducted on soil or water removed from these wells shall be provided to the department as soon as they are available.
4. All monitor wells and soil borings will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division 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.
5. Caps shall be kept locked at all times other than sampling. Any tampering with the monitor wells shall be reported immediately to the division.
6. Provisions shall be made for the development of all monitor wells prior to sampling unless a product layer is encountered.
7. Department of Environmental Quality, Water Quality Division personnel shall be given sufficient notice prior to the installation of the monitor wells and sample collection so that Department of Environmental Quality, Water Quality Division personnel may be on-site if deemed necessary.

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PERMIT TO CONSTRUCT

PERMIT NO. 88-050  
SEE SPECIAL CONDITIONS

X New  
Renewal  
Modified

ROCKY MOUNTAIN #1, UNDERGROUND COAL GASIFICATION TEST

This permit hereby authorizes the applicant:

United Engineers & Constructors - Sterns-Rogers Division  
c/o M.H. Vardaman  
700 South Ash Street  
Denver, Colorado 80222

to construct, install or modify an industrial groundwater treatment and land application for coal gasification test according to the procedures and conditions of the application number 88-050. The facility is located in SE $\frac{1}{4}$ , SW $\frac{1}{4}$  Section 29, T22N, R81W in the county of Carbon, 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.

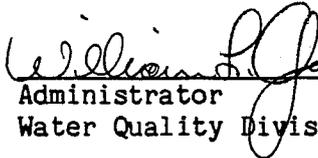
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

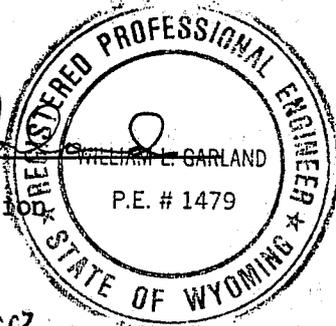
4th Floor West, 122 West 25th, Cheyenne, Wyoming 82002; telephone (307) 777-7781.

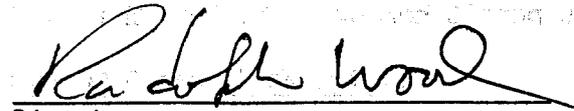
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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:

  
Administrator  
Water Quality Division



  
Director  
Department of Environmental Quality

3-22-88  
Date of Issuance

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

SPECIAL CONDITIONS FOR PERMIT 88-050

1. A final report summary shall be submitted to the Water Quality Division concerning the effectiveness of the treatment process on the groundwater. Pre-treatment, post-treatment, and any intermediate process test results shall be summarized. Parameters shall include those identified in Table 1, page 5 of the application.
2. The results of the soil testing identified on page 3 of the application shall also be submitted.

cc: E.J. Fanning, DEQ/WQD  
Roy Spears, DEQ/LQD  
Bob Lucht, DEQ/WQD