

RF

LAND APPLICATION PERMIT

Permit No. 89-001
*Conditions on Permit

D & B Disposal Facility
(Name of Facility)

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

D & B Services, Inc.

P.O. Box 148

Mountain View, WY 82939

to land apply and road apply oil field wastewater which has been treated to reduce the concentration of total dissolved solids and other parameters. The application site is located in Section 27, 28, T13N, R115W in the County of Uinta, in the State of Wyoming.

This permit shall be effective for a period of One (1) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable standards. The authority to land apply granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or ensures that the disposal method will meet applicable state requirements.

Nothing in this permit constitutes an endorsement of the disposal method described herein. This permit indicates only that standards required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allow 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 constitution 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 infringements of federal, state or local laws or regulations.

AUTHORIZED BY:

William P. Jones
Administrator
Water Quality Division

H. Alan Edwards
Director
Dept. of Environmental Quality

January 10, 1989
Date of Issuance

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

CONDITIONS ON PERMIT

1. Wastewater shall be applied at a rate which will not produce runoff or ponding. Applications shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8 percent for vehicular application or 15 percent for spray irrigation or irrigation by gated pipe on the contour. Vegetated areas of the site shall not be spray-irrigated where possible plant leaf injury may result from salt residue.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainage, irrigation canals, lakes and reservoirs.
4. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Bill Locke or Sterling Roberts, 210 Lincoln St., Lander, WY 82520 phone number 332-3144, to arrange a field inspection prior to initiation of work. The district engineer should be notified at least 48 hours in advance of discharges and must be informed how much wastewater will be applied (number of

truckloads), the specific site of application (to the nearest 1/4 section) and time of application.

5. The application rate shall be limited to 4 inches over the specified roads and 40 acres. A daily log should be kept which documents the quantity applied, surface area and total dissolved solids (field measurement) concentration of the treated wastewater.
6. At least two composite samples shall be collected during this 6 month period and analyzed for the same parameters identified in the application. The results of the analyses shall be submitted to the DEQ/Water Quality Division within 30 days of the sampling.
7. Water Quality Rules and Regulations, Chapter VI, stipulates that the State of Wyoming will cooperate with other states of the Colorado River Basin (Green River) to eliminate the discharge of salts whenever it is economically and technologically practical. To comply with the intent of these regulations, no wastewater which exceeds a total dissolved solids concentration of 600 mg/l may be land applied under this permit.
8. A sludge management plan to handle and dispose of the residue solids from wastewater treatment system must be submitted to the DEQ/Water Quality Division by July, 1988. The plan should include the analytical results of a representative chemical analysis, quantity produced, and method of disposal.

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-002
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

JIM BRIDGER POWER PLANT

This permit hereby authorizes the applicant:

Jim Bridger Power Plant
8 Miles North
Point of Rocks, Wyoming 82942

to construct, install or modify a groundwater pollution control and monitoring well system according to the procedures and conditions of the application number 89-002. The facility is located in Section 3, T20N, R101W in the county of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

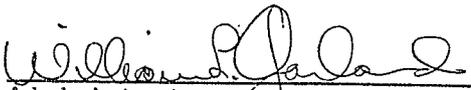
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

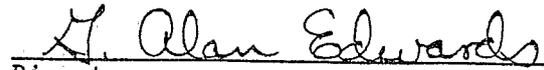
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 18, 1989

Date of Issuance

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

Conditions for Permit to Construct 89-002

1. The recovery well system and 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 89-002. 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. 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.
4. 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.
5. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be implemented when the wells are constructed, installed and developed:

Conditions to Permit 89-002 (continued)

- 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. Factory slotted casing is recommended for the perforated interval;
 - 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. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - g. A protective casing and locking cap is strongly recommended;
 - h. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - i. 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
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
6. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
7. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
- a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;

Conditions to Permit 89-002 (continued)

- h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
8. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
 9. All monitor wells associated with this facility shall be sampled and the wastewater analyzed quarterly for the parameters listed below:

sulfuric acid (H_2SO_4), sulfates, sulfur, pH

The results of these analyses shall be submitted to the Lander office by the last day of the month following the end of each quarter. The first set of results are due by the last day of July.
 10. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
 11. Once the recovery system has been installed, the owner will provide the Department of Environmental Quality, Water Quality Division with a report that details the logs.
 12. The results of any analyses conducted on soil or water removed from this recovery system during the lifetime of the facility shall be provided to the Water Quality Division as soon as they are available.
 13. All wells will be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Water Quality Division Rules and Regulations.
 14. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
 15. The permittee shall notify the division of the name, phone number and address of the on-site operator of the recovery system.
 16. The permittee shall operate the recovery system continuously unless Department of Environmental Quality, Water Quality Division allows other operational plans. The division shall be notified immediately in the event that the recovery system is not operational for more than 24 hours.
 17. Prior to operation of the recovery system, an approved Operation and Maintenance Manual shall be provided to the division and to all operators. The O & M Manual shall contain, at a minimum, a schematic, operations guide, maintenance schedule, troubleshooting guide, discharge requirements and limitations, Department of Environmental Quality contact, provisions in the event of a spill, methods for handling and disposing of product and contaminated water in a proper manner, and safety requirements.
 18. The recovery system shall be "winterized" to prevent freeze-up and breakdown.

19. In the event the system does not operate as planned or effectively recover the product provisions shall be made for correcting the deficiencies. In any event, the product and related dissolved constituents shall be recovered and cleaned up in a timely and diligent manner until released by Department of Environmental Quality, Water Quality Division.

EJ/jn

cc: Jake Strohman, DEQ/WQD

RF

PERMIT TO CONSTRUCT

New

Permit No. 89-003R

Renewal

Modified

TDS Pond - 1
(Name of Facility)

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

Bridger Coal Company

P.O. Box 2068

Rock Springs, WY 82902

to construct a run-off sediment control pond facility according to the procedures and conditions of the application No. 89-003. The facility is located in NW 1/4, SW 1/4, Sec. 28, T21N, R100W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

L. Alan Edwards
Director
Dept. of Environmental Quality

January 31, 1989
Date of Issuance

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

RF

PERMIT TO CONSTRUCT

New

Permit No. 89-004R

Renewal

Modified

TDS Pond - 2
(Name of Facility)

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

Bridger Coal Company

P.O. Box 2068

Rock Springs, WY 82902

to construct a run-off sediment control pond facility according to the procedures and conditions of the application No. 89-004. The facility is located in NE 1/4, SE 1/4, Sec. 19, T21N, R100W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of Two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

G. Alan Edwards
Director
Dept. of Environmental Quality

January 31, 1989
Date of Issuance

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



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



AW

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

February 23, 1989

CERTIFIED

Mr. Jay Kimberly
Williams Natural Gas
P O Box 1529
Rawlins, WY 82301

Dear Mr. Kimberly:

The Water Quality Division has received results from the January 20, 1989 sampling event. The analysis indicates that significant contamination exists in the groundwater as a result of the underground storage tanks. Based on that information this division requests that Williams Natural Gas conduct a study to determine the extent of contamination to soil and groundwater. I have enclosed a document entitled "Recommended Contents for Extent of Contamination Study", this document should aid you in the formulation of a plan to perform this study. I have also included a list of groundwater consultants who are experienced in performing this type of study. The application for permit to construct has been returned and must be resubmitted with the requested plan.

Please respond in writing with your proposal to conduct an extent of contamination study and proposed time schedule within 15 days of receipt of this letter. If you or any representative of Williams Natural Gas have any questions regarding this matter, feel free to call me at 777-7781.

Sincerely,

Scott C. Forister
Environmental Engineering Specialist
Water Quality Division

SCF/jt

Enclosures: Recommended Contents for Extent of Contamination Study
List of groundwater consultants
Application for permit to construct #89-005
Results of January 20, 1989 sampling event

cc: Jake Strohman, DEQ/WQD



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756

Solid Waste Management Program
(307) 777-7752

Water Quality Division
(307) 777-7781

February 8, 1989

Mr. D. Z. Aneiros
Town of Sinclair
300 Lincoln
Sinclair, WY 82334

RE: Permit to Construct Application Number 89-006

Dear Mr. Aneiros:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (#89-006) for a permit to construct a carbon dioxide injection system for your water treatment plant at SE $\frac{1}{4}$, NE $\frac{1}{4}$, Section 6, T21N, R85W, Carbon County, Wyoming. The Water Quality Division has determined that the system meets the minimum design standards.

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 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.

Since your system has already been constructed, a permit to construct cannot be issued. This letter is your record that the carbon dioxide injection system as installed meets minimum state specifications and has been approved by the Wyoming Department of Environmental Quality, Water Quality Division.

In the future if you are to build or modify the water system, you must apply for a permit to construct prior to construction to avoid enforcement action.

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/WK/nc
cc: Paul O'Leary, DEQ/WQD

R7



THE STATE OF WYOMING



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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February 21, 1989

Mr. D. Z. Aneiros
Sinclair Oil Corporation
P O Box 277
Sinclair, WY 82334

RE: Sinclair Water Treatment Plant, Carbon Dioxide Injection System, DEQ/WQD
Ref. No. 89-006

Dear Mr. Aneiros:

Enclosed is an as-built approval of the CO₂ injection system for the Sinclair water treatment plant. Although the drawings have been given "as-built" approval, I have a concern about the location of the pH probe. From the drawing it looks like the probe is so located that it is immersed in water which has not been thoroughly mixed with the CO₂. Would this probe be more useful if it were located within the pipeline between the clear well and the storage tank?

Sincerely,

Wally Koch, P.E.
Southeast District Supervisor
Water Quality Division

WK/nc

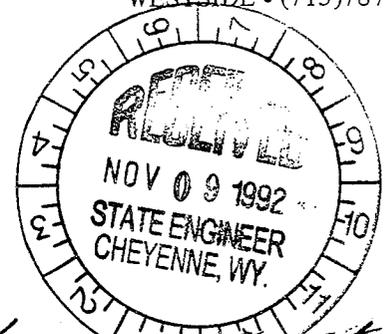
cc: Paul O'Leary, DEQ/WQD (w/encl)



*May -
Check out.
Duke*

SCURLOCK PERMIAN CORPORATION • 333 CLAY • P.O. BOX 4648 • HOUSTON, TEXAS 77210-4648 • (713)739-4100
WESTSIDE • (713)787-2500

October 26, 1992



Office of the State Engineer
Groundwater Division
Herschler Building, 4th Floor, East Wing
Cheyenne, WY 82002

No permit to CA DEC

RE: Scurlock Permian Corporation - Permit No. 89-007 to
Construct, Install, or Modify a Deep Groundbed Anode in
Johnson County, Wyoming

To Whom it May Concern in the Groundwater Division:

Effective November 1, 1992, SCURLOCK PERMIAN CORPORATION has conveyed ownership of certain Wyoming pipeline assets known as the Thunderbird Pipeline to BELLE FOURCHE PIPELINE COMPANY, a Wyoming Corporation. The mailing address of the new owner is:

BELLE FOURCHE PIPELINE COMPANY
P.O. Drawer 2360
Casper, Wyoming 82602
Attention: Manuel Lojo, Esquire

Mr. Lojo may be reached at 307/237-9301.

Please amend your records to reflect the name of the new owner of the above-referenced permit issued by the State of Wyoming pursuant to operation of the Thunderbird Pipeline. Currently, the permit is in the name of SCURLOCK PERMIAN CORPORATION.

BELLE FOURCHE PIPELINE COMPANY has agreed to accept permit responsibility and coverage effective November 1, 1992. Attached is a "Letter of Acceptance" signifying BELLE FOURCHE PIPELINE COMPANY'S acceptance of the permit responsibilities and coverages.



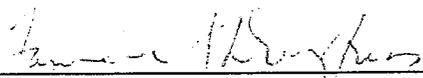
SUBSIDIARY OF ASHLAND OIL, INC.

Office of the State Engineer
October 26, 1992
Page 2

If you have any questions concerning this transfer, please contact Larry Nettles at 713/748-4586 or Larry Pechacek at 713/758-2004, our attorneys at Vinson & Elkins L.L.P.

Very truly yours,

SCURLOCK PERMIAN CORPORATION

By: 
Lawrence J. Dreyfuss
Vice President and General
Counsel

c:\scu500\thndrbrd\st-engr.wy

LETTER OF ACCEPTANCE

BELLE FOURCHE PIPELINE COMPANY, a Wyoming Corporation, hereby acknowledges and agrees to accept responsibility and coverage effective November 1, 1992 for the permit(s) and/or registration(s) identified on the accompanying letter.

BELLE FOURCHE PIPELINE COMPANY
Transferee of Ownership (or on
behalf of Transferee of Ownership)

Date: Nov 2, 1992

By: 
H. A. True, III
Senior Vice President HBL

TRANSFER REQUESTED BY:

SCURLOCK PERMIAN CORPORATION
Transferor of Ownership (or on
behalf of Transferor of Ownership)

Date: Nov 2, 1992

By: 
Lawrence J. Dreyfuss
Vice President and General
Counsel

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-007
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

THUNDERBIRD PIPELINE DEEP GROUNDBED ANODE

This permit hereby authorizes the applicant:

Western Oil Transportation
P O Box 1970
Casper, Wyoming 82601

to construct, install or modify a deep groundbed anode according to the procedures and conditions of the application number 89-007. The facility is located in Section 32, T48N, R76W, NW1 in the county of Johnson, in the State of Wyoming. This permit shall be effective for a period of five (5) 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 J. Jones
Administrator
Water Quality Division

L. Alan Edwards
Director
Department of Environmental Quality

January 10, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-007

1. The cathodic protection deep anode ground bed well shall be installed in accordance with the conditions of this permit and plans and specifications submitted in permit to construct application number 89-007.
2. After the deep anode ground bed well has fulfilled its useful purpose, it 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 the well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
3. In addition to the anode bed construction information submitted with the permit application, the following items relating to well construction must be addressed when the well is installed:
 - a. Bentonite grout seal installed to a depth just above coke breeze.
 - b. The coke breeze backfill has a total organic content no greater than 0.2 percent.
 - c. All aquifers encountered while drilling shall be isolated with polymer mud to prevent co-mingling of different aquifers or each aquifer shall be isolated, sampled and analyzed for all parameters contained in Table I of Chapter VIII of Wyoming Water Quality Rules and Regulations. If aquifers are of the same class of use as determined by the Department of Environmental Quality, intermingling may be allowed.
4. Within 45 days after the well has been installed, as-built construction plans need to be submitted to the Wyoming Department of Environmental Quality, Water Quality Division, detailing that the groundwater was protected during construction.

cc: Jake Strohman, DEQ/WQD
Larry Beil, Corrosion Specialists, Ltd.

rfb

PERMIT TO CONSTRUCT

PERMIT NO. 89-008

X New
Renewal
Modified

Crest Ridge 2nd Filing Phase 1b

This permit hereby authorizes the applicant:

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

to construct, install or modify public water distribution system and public wastewater collection system according to the procedures and conditions of the application number 89-008. The facility is located in S21, T14N, R66W, NE1/4 in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

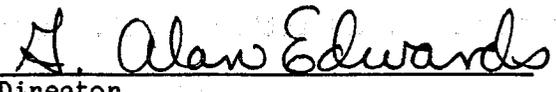
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

January 24, 1989
Date of Issuance

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

DM/nc

cc: Jack Noblitt
Jack Noblitt & Associates
1920 Thomas #620
Cheyenne, WY 82001

RF

PERMIT TO CONSTRUCT

[] New

Permit No. 89-009

[] Renewal

[X] Modified

JB-FP1 Reservoir
(Name of Facility)

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

Bridger Coal Company

P.O. Box 2068

Rock Springs, WY 82920

to modify a run-of-mine coal stockpile runoff sediment control pond facility according to the procedures and conditions of the application No. 88-009 (Ref. 81-916RR). The facility is located in N 1/2, NE 1/4, Sec. 3, T20N, R101W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only hat standards of design and construc-

tion required by the Environmental Quality Act have been met.

The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

G. Alan Edwards
Director
Dept. of Environmental Quality

January 31, 1989
Date of Issuance

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



THE STATE

OF WYOMING

MIKE SULLIVAN
GOVERNOR

RECEIVED



WATER QUALITY DIVISION

Department of Environmental Quality

250 Lincoln Street • Lander, Wyoming 82520

Air Quality Division
(307) 332-3144

Land Quality Division
(307) 332-3047

Solid Waste Management Program
(307) 332-6924

Water Quality Division
(307) 332-6755

April 3, 1991

Mr. Dale Baxter
P. O. Box 901
Basin, WY 82410

RE: Baxter SWTP
WQD Ref. No. 89-010

Dear Mr. Baxter,

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

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

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/jyi

cc: ✓IPS, DEQ/WQD, Cheyenne



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

RECEIVED



FEB 7 1991

Department of Environmental Quality

210 Lincoln Street • Lander, Wyoming 82520

WATER QUALITY DIVISION
WYOMING

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

CERTIFIED P 584 340 669

February 6, 1991

Mr. Dale Baxter
P.O. Box 901
Basin, WY 82410

Dear Mr. Baxter:

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

Facility Name: Baxter SWTF

DEQ/WQD Reference Number: 89-010

Engineering Consultant: N/A

DEQ/WQD Review Engineer: Stever Gerber

Date of DEQ/WQD Review: January 13, 1989

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

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

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

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

_____ Other Remarks: _____

You are reminded that the construction, installation, or modification of any sewage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a permit to Construct is a violation of Wyoming State Statutes, and is punishable with a fine not to exceed \$10,000 for each day of

Mr. Dale Baxter
February 6, 1991
Page 2

violation. Unless the Water Quality Division review engineer receives information concerning the status of this project within fifteen (15) days of the receipt of this letter, follow-up action will be taken.

Sincerely,

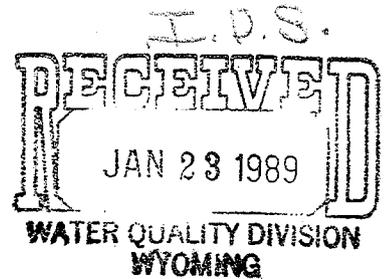


Steve Gerber, P.E.
Northwest District Supervisor

SG/anc

cc: IPS, DEQ/WQD, Cheyenne

REVIEW OF SMALL WASTEWATER FACILITY PLANS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY



WATER QUALITY DIVISION
210 LINCOLN STREET
LANDER, WYOMING 82520

PHONE: (307) 332-3144

OWNER/APPLICANT: Dale Baxter

ADDRESS: P.O. Box 901
Basin, WY 82410

WATER QUALITY DIVISION REFERENCE NUMBER: 89-010

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

DATE OF REVIEW: January 13th, 1989

ACTION: Not Authorized

COMMENTS:

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

1. Provide a map or directions so residence can be located.
2. The trench detail indicates that the bottom of the trench will be about 7 feet from the ground surface. Data from the percolation tests show that the holes were about three feet. The percolation test holes are to be dug to the proposed depth of the absorption field.
3. Provide depth of water table in well. What is the ground elevation difference between well and leachfield? This will give a better determination of groundwater depth. Water table at the residence may not be the same as the creek surface.
4. The following items must be shown on the plan sheet:
 - a. Location and distance to the creek from septic tank and leachfield.
 - b. Location and distance to the water line from septic tank and leachfield.
 - c. Distance from leachfield to property line.
 - d. Location of driveways and parking areas.
5. A new application form is being utilized. Please complete and sign.

Submit the requested information in triplicate. Be sure to include the water quality reference number that appears on this review sheet in a cover letter or transmittal sheet. If you have any questions, do not hesitate to contact me.

25

PERMIT TO CONSTRUCT

PERMIT NO. 89-011
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

ANSCHUTZ RANCH EAST DEEP BED ANODES

This permit hereby authorizes the applicant:

Amoco Production Company
P O Box 829
1013 Cheyenne Drive
Evanston, Wyoming 82930

to construct, install or ~~modify~~ a deep groundbed anode system according to the procedures and conditions of the application number 89-011. The facility is located in Section 35, T12 & 13N, R121W in the county of Uinta, in the State of Wyoming. This permit shall be effective for a period of five (5) 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.

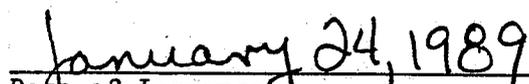
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

Special Conditions for Permit to Construct 89-011

1. The cathodic protection deep anode ground bed well shall be installed in accordance with the conditions of this permit and plans and specifications submitted in permit to construct application number 89-011.
2. After the deep anode ground bed well has fulfilled its useful purpose, it 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 the well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
3. In addition to the anode bed construction information submitted with the permit application, the following items relating to well construction must be addressed when the well is installed:
 - a. Bentonite grout seal installed to a depth just above coke breeze.
 - b. The coke breeze backfill has a total organic content no greater than 0.2 percent.
 - c. All aquifers encountered while drilling shall be isolated with polymer mud to prevent co-mingling of different aquifers or each aquifer shall be isolated, sampled and analyzed for all parameters contained in Table I of Chapter VIII of Wyoming Water Quality Rules and Regulations. If aquifers are of the same class of use as determined by the Department of Environmental Quality, intermingling may be allowed.
4. Within 45 days after the well has been installed, as-built construction plans need to be submitted to the Wyoming Department of Environmental Quality, Water Quality Division, detailing that the groundwater was protected during construction.

Conditions to Permit 89-011 (continued)

5. Up to 50 similar anodes may be installed during the term of this permit and in the two townships covered by this permit. All installations to have similar construction specifications.

RL/jn

cc: Jake Strohman, DEQ/WQD
Kenneth J. Walker, Uinta Engineering
P. O. Box 746, Evanston, WY 82930

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-012
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

WYODAK POWER PLANT

This permit hereby authorizes the applicant:

Wyodak Resources Development Corporation
Rural Route 81, P. O. Box G90
Gillette, Wyoming 82716

to construct, install or modify a series of boreholes and network of monitoring wells according to the procedures and conditions of the application number 89-012. The facility is located in Section 27, T50N, R71W in the county of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (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 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

February 9, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-012

1. Except when otherwise required by conditions of this permit, the boreholes and monitoring wells shall be installed in accordance with the plans and specifications submitted in permit to construct application number 89-012. Additional wells meeting the requirements of the application and this permit may be installed if prior written 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 must be installed according to normal engineering practice.
3. The WQD office in Sheridan [(307) 672-6457] shall be notified a minimum of two weeks before drilling begins so that a WQD representative may be on site as deemed necessary by the WQD.
4. After the monitoring wells have fulfilled their purpose, they shall be abandoned according to procedures and requirements specified in Chapter XI, Part G, Section 70 of the 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.
5. 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 must be hydrated to ensure a proper seal.

Conditions to Permit 89-012 (continued)

- 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 the lowest expected groundwater level.
 - d. Only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic sealing 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 shall be installed to prevent sediment and surface water from entering the well.
 - h. A protective casing and locking cap is required. Keys to the locks shall be kept on site and made available to WQD personnel for inspection or sampling.
 - i. Each monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
6. Each well and borehole shall be lithologically logged with grain-size descriptions, as applicable, based on the Wentworth scale, phi scale, or Unified Soil Classification System.
- a. Contaminated soils as evidenced by visible staining or discoloration, detectable odors, instrument readings, or other field criteria must be recorded in the lithologic logs.
 - b. Contaminated soils recovered must be separated from clean soils and disposed of properly.
 - c. The results of any laboratory chemical analysis on soil samples must be included with the extent of contamination report.
7. The boreholes must be abandoned at the completion of the extent of contamination study. The following criteria must be applied to determine the abandonment method:
- a. In the event that two separate aquifer units are placed in hydrologic communication, the aquifers and intervening units must be sealed by neat cement, bentonite, or similar sealing material acceptable under Chapter XI of the Wyoming Water Quality Rules and Regulations.
 - b. In the event that a boring is to be completed as a monitoring well and has penetrated separate aquifer units, the lowermost unit(s) shall be sealed as above and monitoring well construction requirements will otherwise apply.

Conditions to Permit 89-012 (continued)

- c. In the event that the near surface soils exhibit contamination as evidenced by staining, odor, or instrument measurement criteria, this zone shall be sealed to prevent introduction of contaminants to the groundwater by surface water run-on.
 - d. Drill cuttings may otherwise be placed back into the borings with a minimal surface seal according to normal engineering practice provided that the cuttings exhibit no evidence of contamination.
8. Water from the development of the wells shall not be placed into the wastewater treatment ponds at the facility. Any recoverable free petroleum product should be separated and containerized for proper disposal or recycling. Alternative options to be evaluated by Wyodak may include containment and proper disposal or land disposal options. Discharge to surface waters or drainages to surface waters would require an NPDES permit. Depending on the land disposal option, a land application permit may be required.
9. The decontamination procedures for the interface probe (distilled water rinse) and bailers (acetone and rinses) should be reconsidered. Cross contamination may occur because simple rinsing may not be sufficient. The analysis of one rinsing sample per quarterly monitoring event would be required. An alternative may be cleaning with a biodegradable soap followed by distilled water rinses.
10. A report on the extent of contamination study shall be submitted to the WQD no later than May 1, 1989. This report shall include at a minimum:
- a. A chronological summary of events leading up to the study.
 - b. A topographic site map or maps showing the locations and elevations of physical features, wells and/or boreholes, utility lines and or trenches, boreholes, and wells, potentiometric surface, and groundwater flow direction.
 - c. Map(s) and hydrogeologic cross sections illustrating the magnitude and lateral and vertical extent of subsurface contamination including: any free product layer; soil contamination as evidenced by analytical results; instrumentation readings, and visual/odor criteria; and dissolved contaminant constituents in groundwater.
 - d. A description of sample collection procedures, analytical results, and methods of measurement for free product, vapor, and colorimetric analysis that includes limits of detection.
 - e. As built construction details for each monitoring well; lithologic logs for each monitoring well and each borehole; and a description of borehole abandonment methods and procedures.
 - f. Interpretation of the data and conclusions including contaminant migration pathways, groundwater flow direction and rate, and recommended remedial measures.
11. The following monitoring program shall apply to all monitoring wells installed under this permit. This program may be modified by the WQD depending on the results of the initial extent of contamination study or following a review of data generated through at least one year's time.

Conditions to Permit 89-012 (continued)

- a. Quarterly measurement/analysis of the following field parameters:
 - (1) depth and elevation of the groundwater level.
 - (2) the thickness of any free petroleum product to the nearest 0.01 feet. Any existing free product too thin to measure shall be recorded by description, such as blobs, sheen, film, iridescence, odor, etc...
 - b. Quarterly analysis of groundwater samples from each well for Total Petroleum Hydrocarbons (TPH) by EPA method 418.1 and Benzene, Ethylbenzene, Toluene, and Xylenes (BETX) by EPA method 602. In the event that measurable free product is reported, an analysis for these dissolved constituents will not be required.
 - c. The proposed sampling and analysis of free product to characterize it as gasoline or diesel fuel will be required for the initial phase of the extent of contamination study. Subsequent analyses may be required depending on the results of the extent of contamination study and monitoring results with time.
 - d. The results of any other chemical analyses on water samples from these wells shall be submitted to the WQD in Cheyenne within 30 days of their receipt from the laboratory.
12. The analytical results submitted with the report on the extent of contamination study shall be considered the first quarterly monitoring report. Subsequent reports shall be submitted within 30 days of the end of each calendar quarter, that is, by the end of January, April, July, and October respectively.
 13. The issuance of this permit does not relieve the permittee from any corrective actions or additional work that may be required. Additional investigative work or corrective actions may be required depending on the results of the extent of contamination study.

RS/jn

cc: Jake Strohman, WQD Cheyenne
Loren Leichtnam, WQD Sheridan
Nick Tiffany, Western Water Consultants

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-013
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Husky West

This permit hereby authorizes the applicant:

Elvin Booth
3100 Glacier St.
Casper, WY 82604

to construct, install or modify monitor well system according to the procedures and conditions of the application number 89-013. The facility is located in S12, T33N, R80W in the county of Natrona, 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.

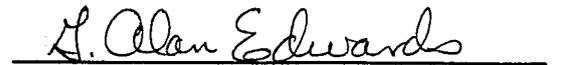
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

February 1, 1989

Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT 89-013

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 89-013. 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

Conditions to Permit 89-013 (continued)

measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of contamination.

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;

Conditions to Permit 89-013 (continued)

- b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
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 one time for the parameters listed below:
- EPA 602 (BTX), EPA 610, EPA 418.2 (TPH), cadmium, chromium, lead and mercury
11. 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.

SCF/nc

cc: Jake Strohman

RA

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

(X) New
() Modified

Permit Number:
UIC 89-014
UIC CLASS 5W12

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),

The Aspens/Teton Pines Water and Sewer District
P.O. Box 25003
Jackson, Wyoming 83001
(307) 733-5518

is authorized to operate

the Aspens/Teton Pines Wastewater Injection System

according to procedures and conditions of the application UIC 89-014 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

July 25, 1989
Date

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

July 25, 1989
Date

A. Discharge (Injection) Zone and Area of Review

The Area of Review for this facility has been established as a fixed Area of Review consisting of a circle of radius 1/2 mile centered around the injection well field located in T41N, R117W, Section 14, SW1/4, SW1/4, 6th P.M. The Area of Review includes all or parts of the following legally described parcels:

Township 41 North, Range 117 West, 6th P.M.

- Section 14: W1/2E1/2; W1/2
- Section 15: E1/2
- Section 22: NE1/4NE1/4
- Section 23: N1/2NW1/4

The above description includes some lands outside of the Area of Review, but it does include all lands within the Area of Review. The permittee has provided public notice to all owners of record within the 1/2 mile fixed Area of Review. The fixed Area of Review is supported by groundwater modeling showing that it is of adequate size.

B. Groundwater Classification

The receiving aquifer is the alluvial aquifer associated with the Snake River. This aquifer is class I under Chapter VIII of Water Quality Rules and Regulations. The permittee has provided data on the baseline water quality in this aquifer as follows:

<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>	<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>
Aluminum	<.01	Ammonia as N	<.03
Arsenic	<.001	Barium	.05
Beryllium	<.001	Bicarbonate	159
Boron	.09	Cadmium	<.001
Calcium	56	Carbonate	<.10
Chloride	14	Chromium	.003
Cobalt	<.01	Copper	<.01
Cyanide	<.001	Fluoride	.23
Iron	13.70	Lead	.008
Magnesium	4.8	Manganese	.10
Mercury	<.0002	Nickel	<.03
Nitrate as N	.28	Nitrite as N	<.02
Oil and Grease	<.1	Phenols	<.001
Potassium	.95	Selenium	<.001
Silver	<.001	Sodium	3.2
Sulfate	15	Total Dissolved Solids	175
Zinc	.05	pH	7.70
Acenaphthene	<.001	Acenaphthylene	<.001
Anthracene	<.001	Benzo(a)anthracene	<.001
Benzo(a)pyrene	<.001	Benzo(b)fluoranthene	<.001
Chrysene	<.001	Benzo(k)fluoranthene	<.001
Fluoranthene	<.001	Benzo(ghi)perylene	<.001
Fluorene	<.001	Dibenzo(a,h)anthracene	<.001
Naphthalene	<.001	Indeno(1,2,3-cd)pyrene	<.001

<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>	<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>
Phenanthrene	<.001	Pyrene	<.001
1,1,1-Trichloroethane	<.001	1,2-Dichloropropane	<.001
1,1,2,2-Tetrachloroethane	<.001	1,1,2-Trichloroethane	<.001
1,1-Dichloroethane	<.001	1,1-Dichloroethylene	<.001
1,2-Dichlorobenzene	<.001	1,2-Dichloroethane	<.001
1,2-Transdichloroethylene	<.001	1,3-Dichlorobenzene	<.001
1,3-CisDichloropropylene	<.001	1,4-Dichlorobenzene	<.001
1,3-TransDichloropropylene	<.001	Benzene	<.001
2,Chloroethylvinyl ether	<.001	Bromoform	<.001
Carbon Tetrachloride	<.001	Chlorobenzene	<.001
Chlorodibromomethane	<.001	Chloroethane	<.001
Chloroform	<.001	Dichlorobromomethane	<.001
Dichlorodifluoromethane	<.001	Ethylbenzene	<.001
Methyl Bromide	<.001	Methyl Chloride	<.001
Methyl Ethyl Ketone	<.001	Methyl Iso Butyl Ketone	<.001
Methylene Chloride	<.001	Tetrachloroethene	<.001
Toluene	<.001	Trichloroethene	<.001
Trichlorofluoromethane	<.001	Vinyl Chloride	<.001
Xylene	<.001	Total Volatile Organics	<.001

All effluents delivered to this aquifer through the injection wells shall meet class I standards. The following is an estimate of the average water quality to be injected:

Total Dissolved Solids	300 mg/l
Biological Oxygen Demand 5	5 mg/l
Total Suspended Solids	3 mg/l
Sulfates	50 mg/l
Chloride	55 mg/l
Ammonia	.5 mg/l
Nitrates	5.0 mg/l

The above data shows the design estimates submitted with the application. The above table does not set a limit on the injectate quality. Limits on injectate quality are discussed under Section C "Authorized Operations" and Section F "Environmental Monitoring".

C. Authorized Operations

The permittee is authorized to operate a system of one to five injection wells to inject treated municipal waste from the Aspens/Teton Pines Wastewater Treatment Plant. These wells shall meet or exceed the following construction standards:

- a. All wells shall be constructed using 12 inch ID .250 inch wall thickness pipe either driven or installed in a borehole and sealed at the surface using concrete grout.
- b. Injectate shall be delivered to the wells using a 10 inch subsurface delivery line equipped with a subsurface control valve.

- c. The top of the well casing shall extend a minimum of 24 inches above grade and be equipped with a locking cap. All injection wells shall be kept locked at all times when measurements are not being made.

This system will also require monitor wells to be installed as shown in Section F4 of this permit. Monitor wells shall meet or exceed the following construction standards:

- a. All wells shall be constructed using 6 inch ID .250 inch wall thickness pipe either driven or installed in a borehole and sealed at the surface using concrete grout.
- b. The top of the well casing shall extend a minimum of 24 inches above grade and be equipped with a locking cap. All monitor wells shall be kept locked at all times when measurements are not being made.
- c. Each of these wells shall be constructed with a concrete pad surrounding the casing on the surface. This concrete pad shall be a minimum of 4 feet long and 4 feet wide by 6 inches thick. Each pad shall contain 1 number 5 rebar hoop 24 inches in diameter. This requirement is intended to insure that a surface seal is obtained around the pipe.

Injection of any biological, hazardous, toxic or potentially toxic materials or substances in concentrations which exceed maximum allowable concentrations based upon information of the EPA in the Federal Register for December 24, 1975 (Part IV), Water Programs, National Interim Primary Drinking Water Regulations and in the Federal Register for March 13, 1978 (Part II), Water Programs, Hazardous Substances is a violation of this permit.

This injection shall not result in a violation of Chapter VIII Water Quality Rules and Regulations Section 4(D)(5).

The injection system shall be controlled so that standing water on the surface does not appear within a radius of 200 feet from the wells. This may require filling around the center of injection to insure that standing water is not formed.

The injectate shall not exceed the following limits at all times:

<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>
TDS	500.0
Sulfates	250.0
Chlorides	250.0
BOD (5 day)	10.0
Ammonia as N	0.5
Nitrate as N	10.0
Cyanide	0.2
Phenols	0.001

<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>
Total Petroleum Hydrocarbon Chlorinated Solvents (Total)	0.5
Base Neutral Compounds (Total)	0.005
TOTAL COLIFORMS	1 #/100 ml

The above table contains absolute permit limitations. Exceedance of any of the parameters shall be reported by telephone to the Water Quality Division within 24 hours of discovery. This telephone report shall be confirmed by letter within 7 days of discovery. The letter report shall contain a description of steps taken to correct the problem and a plan to insure that a recurrence does not occur.

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:

A system of three monitor wells shall be constructed spaced equally across the south side of the plant site. In addition, one well each shall be constructed as a monitor well on the northeast and northwest corners of the plant site. These wells shall penetrate the entire receiver that is open in the injection wells. Additional monitor wells shall be installed if required by the administrator.

Once a calendar quarter, or more often if the administrator requires, each of these monitor wells and all idle injection wells shall be sampled and analyzed for the following list of parameters. The concentrations on this list form a "point of compliance" monitoring system. Exceedance of any domestic use standard as spelled out in Chapter VIII of the Water Quality Rules and Regulations in a monitor well is a violation of this permit. Upon discovering such a violation, the permittee shall report the discovery to the Water Quality Division by telephone and shall resample the well in which the discovery was made within 24 hours. The permittee shall immediately propose a plan, which is acceptable to the Water Quality

Division, to identify and terminate the source of the violation. The permittee shall implement a plan to investigate and determine the source of the exceedance.

The permittee shall then submit a written report to the Water Quality Division within seven days. The report shall reference the telephone report and shall include Water Quality Division approved plans to investigate and remediate the violation and to prevent further violation.

<u>PARAMETER</u>	<u>CONCENTRATION</u> <u>(mg/l)</u>
Total Dissolved Solids	500
Sulfates	250
Chlorides	250
BOD (5 Day)	10
Ammonia AS N	.50
Nitrate AS N	10.0
Cyanide	.2
Phenol	.001
Static Water Level	No higher than 6 inches below ground surface.
TOTAL COLIFORMS	1 Number /100 ml

Prior to each sampling event, the permittee is required to evacuate no less than 500 gallons of water from each monitor well. Evacuation of 500 gallons of water is intended to provide assurance that a representative groundwater sample has been obtained. This evacuated water may be discharged back through the plant at any stage of the process or injected directly back into the injection wells or may be discharged to the surface next to the well. Evacuation shall be done on the same day that the sample is taken.

G. Requirements for Monitoring the Discharge

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

The permittee is required to monitor the discharge pressure, volume and average water quality.

The permittee shall analyze the effluent from the plant for the same list of parameters as the monitor wells. All parameters to be tested once per week except total petroleum hydrocarbon, chlorinated solvents (total), and base neutral compounds (total) which are to be tested once per quarter. The quality limitations listed in Section C of this permit apply to the effluents.

The total injected volume shall be recorded on a chart recorder. The permittee is free to design a metering system using either a single recording meter on the entire effluent stream or a system using a separate meter on each of the wells. If a single meter system is used, records shall be kept showing which of the five wells are receiving effluent at all times. Changes made including

shutting in of individual wells, constricting the flow to individual wells or opening up individual wells shall be recorded on the daily report. The injected volume shall not exceed 400,000 gallons per day as a total of all injection wells under this permit. If more than one well is receiving flow, an estimate of flow to each well is required.

The injection pressure at each well shall be recorded weekly in the form of a static water level in each of the injection wells and monitor wells required by this permit. All of these readings shall be taken from the same point on the casing each time they are recorded.

At least once a quarter and more frequently if required by the administrator, the effluents shall be sampled and analyzed for volatile and semi-volatile organics by EPA methods 601, 602, and 610 as well as total petroleum hydrocarbon by EPA method 418.1.

The Water Quality Division shall be provided with as-built plans for all wells constructed along with a plan map showing all wells to a scale of 1"=100' and a relative elevation to the same datum of all well measuring points. Coordinates and elevations for each well shall also be reported to 1/100 of a foot accuracy.

A quarterly report on this injection is required. These reports shall be due no later than 30 days after the close of each calendar quarter. The permittee is free to propose the use of fiscal quarters other than calendar quarters if this would ease his work load. Each of these reports shall contain the following information:

- a. The injected volume for the entire facility for each month of the quarter. This is the total volume injected in all wells in gallons.
- b. The static water levels of all wells taken on the day that analysis samples were taken.
- c. The chemical analyses required under Sections C, F4, and G of this permit.
- d. A report of any system upsets that occurred in the quarter.
- e. A summary of any permit exceedances during the quarter.

After the third anniversary of this permit, the permittee shall produce a report showing a summary of the first three years of operation. This report shall recap the operation and evaluate the effectiveness of the environmental monitoring program required. At this time the permittee is free to propose other monitoring plans, to propose alternate schedules, or to propose different parameter lists.

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:

There are no mechanical integrity requirements placed on this system. The very nature of the construction precludes meaningful mechanical integrity testing.

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 of any well constructed under this permit, the casing shall be jacked back out of the ground and the hole filled with a bentonite slurry having a 10 minute gel strength of 20 pounds per 100 square feet and filtrate volume not to exceed 13.5 cc. The top 20 feet of the hole shall be filled with concrete designed to have a 28 day compressive strength of 3000 psi. In the event that the casing is parted during removal, or if for any reason the casing cannot be recovered, the inside of the casing shall be filled with abandonment fluid as described above, the top 20 feet of the casing filled with concrete and the casing shall be cut off 3 feet below grade and covered with a concrete cap. In no case shall these injection wells be converted to producing water wells for any other purpose.

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.

There are no financial assurances required by this permit.

O. Special Measures the Director Finds Necessary:

After the first three years of operation the environmental monitoring requirements of this permit shall be reevaluated to determine their effectiveness and the overall necessity of each of the requirements placed on the permit. At that time, Water Quality Division and the permittee shall jointly agree on improvements to the monitoring and compliance system.

The permittee shall maintain each major system within the treatment plant in working order. Operation of the plant with any system inoperable for more than 30 days shall be considered a violation of this permit, even if effluent quality meets other requirements. Water Quality Division shall be notified in advance if any system will be shutdown for more than 48 hours for any reason.

P. Special Permit Conditions:

This permit does not become valid until a 400,000 gallon emergency overflow facility has been constructed and is operational.

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.

/nc

MEMORANDUM

TO: Files -

UST Facility #3516, Trailside General Store, West Highway, Torrington [Permit #89-015]
UST Facility #1893, Laramie Heating & Sheet Metal, 602 Skyline Dr., Laramie [#89-034]
UST Facility #1853, Hartman Distributing, 1070 N. 3rd St., Laramie [Permit #89-221]
UST Facility #1228, Spring Creek Conoco, 1409 S. 3rd St., Laramie [Permit #89-231]
UST Facility #2952, Foster's Country Store #4, 1465 N. 3rd St., Laramie [Permit #89-513]

FROM: Clay Rowley, SE District Supervisor, UST/LUST Program

DATE: September 17, 1993

SUBJECT: Retraction of Notices of Violation Issued Prior to Passage of the "Water Pollution from Underground Storage Tank Corrective Action Act of 1990"

Prior to March 1990, Wyoming Department of Environmental Quality, Water Quality Division (WQD), personnel determined that petroleum hydrocarbons derived from underground storage tank systems at the facilities listed above had contaminated the soil and groundwater. State and federal regulations consider this contamination as an unauthorized discharge and letters of violation (LOV's) were issued requiring the owner/operators to take corrective action including abatement, an extent of contamination investigation, free product removal, and cleanup of the contamination.

The 1990 budget session of the Wyoming Legislature passed the "Water Pollution from Underground Storage Tank Corrective Action Act of 1990". Section 35-11-1418(a) of this act states in part that "The state attorney general shall move to dismiss any pending or ongoing suits or administrative actions which are based on the requirement the owner and operator take corrective action" In keeping with this directive the WQD retracted the letters of violation issued to the owner/operators of the facilities listed above, and the owner/operators were no longer required to take corrective action as requested provided:

The owner/operators became, and remain, eligible for use of the act's corrective action funds by paying an annual (fiscal year) site fee of \$200 until the Water Quality Division completes investigation and cleanup based on a priority ranking system of the contaminated states in Wyoming.

As long as the locations remain eligible for use of corrective action funds the state will remain responsible for corrective action based on the ranking system. The sites posing the greatest risk to the public health, safety and welfare and to the environment will be addressed first. The state will be responsible for site investigation and cleanup costs as long as eligibility is maintained.

The files listed above do not have copies of the LOV retraction letters in them, and it may be that they were never formally issued. The purpose of this memorandum is to show that the owner/operators of these facilities are no longer responsible for site investigations and cleanup as long as eligibility for use of corrective action funds at these locations is maintained.

Construction applications are withdrawn.

PB

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 89-016RR

Big Horn Basin Boat Club Disposal
 (Name of Facility)

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

Big Horn Basin Boat Club
P.O. Box 101
Powell, WY 82835

to construct a sewage collection system, septic tank, lift station, and disposal field for a 50 unit recreational park facility according to the procedures and conditions of the application No. 89-016RR. The facility is located in Section 25 (a portion of lot 56 resurvey, T52N, R103W 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 hat standards of design and construction required by the Environmental Quality Act have been met. The State assumes no liability for, and does not in any way guarantee the performance of, the permittee in the exercise of its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

G. Alan Edwards
Director
Dept. of Environmental Quality

April 6, 1989
Date of Issuance

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

PERMIT TO CONSTRUCT

- [X] New
[] Renewal
[] Modified

PERMIT NO. 89-017R

CABALLO MINE CREEKSIDE RESERVOIR
(Name of Facility)

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

The Carter Mining Company

P. O. Box 3007

Gillette, Wyoming 82717

to construct, install or modify a sedimentation facility according to the procedures and conditions of the application No. 89-017R. The facility is located in Section 22, T.48N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

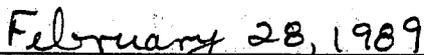
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

xc: Doyl M. Fritz
Western Water Consultants, Inc.
P. O. Box 3016
Sheridan, Wyoming 82801

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 89-018R

CABALLO MINE FAWN RESERVOIR
(Name of Facility)

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

The Carter Mining Company

P. O. Box 3007

Gillette, Wyoming 82717

to construct, install or modify a sedimentation facility according to the procedures and conditions of the application No. 89-018R. The facility is located in Section 23, 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.

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

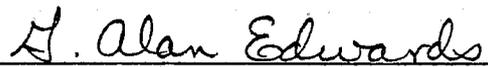
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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 personal rights, nor any infringement of Federal, State or local laws or regulations,

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality

February 28, 1989
Date of Issuance

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

xc: Doyl M. Fritz
Western Water Consultants, Inc.
P. O. Box 3016
Sheridan, Wyoming 82801

PERMIT TO CONSTRUCT

- [X] New
[] Renewal
[] Modified

PERMIT NO. 89-019R

CABALLO MINE EAGLE RESERVOIR
(Name of Facility)

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

The Carter Mining Company

P. O. Box 3007

Gillette, Wyoming 82717

to construct, install or modify a sedimentation facility according to the procedures and conditions of the application No. 89-019R. The facility is located in Section 23, 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.

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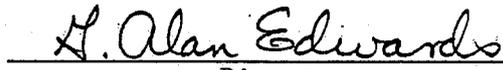
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AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality

February 28, 1989
Date of Issuance

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

xc: Doyl M. Fritz
Western Water Consultants, Inc.
P. O. Box 3016
Sheridan, Wyoming 82801

PERMIT TO CONSTRUCT

- [X] New
[] Renewal
[] Modified

PERMIT NO. 89-020R

CABALLO MINE SANDY RESERVOIR
(Name of Facility)

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

The Carter Mining Company

P. O. Box 3007

Gillette, Wyoming 82717

to construct, install or modify a sedimentation facility according to the procedures and conditions of the application No. 89-020R. The facility is located in Section 23, 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.

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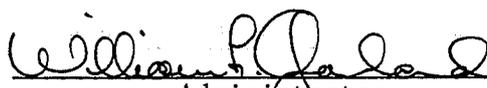
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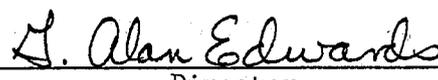
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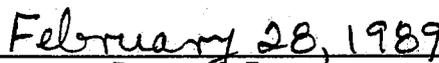
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

xc: Doyl M. Fritz
Western Water Consultants, Inc.
P. O. Box 3016
Sheridan, Wyoming 82801

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-21
See Conditions

X New
Renewal
Modified

University of Wyoming
Animal Science Livestock Center

This permit hereby authorizes the applicant:

Roger J. Baalman
University of Wyoming
211 Merica Hall
University of Wyoming
Laramie, WY 82071

to construct, install or modify sanitary sewer collection system wastewater treatment lagoons, water distribution system, and storm water detention pond according to the procedures and conditions of the application number 89-21. The facility is located in NE $\frac{1}{4}$ S11, T15N, R74W in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

Department of Environmental Quality, Water Quality Division, Herschler Building, 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 P. Jarbo
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

March 31, 1989
Date of Issuance

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

Conditions to Permit to Construct 89-21

1. The membrane liner for the wastewater lagoons shall have a minimum thickness of 30 mils.
2. No discharge shall be allowed from the storm water detention pond until the applicant has obtained a NPDES discharge permit from the Wyoming Department of Environmental Quality.

WK/mad

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: University of Wyoming Stock Farm

ENGINEER: Roy E. Prior
James M. Montgomery, Consulting Engineers, Inc.
P. O. Box 29
Laramie, Wyoming 82070

APPLICANT: Roger J. Baalman, AIA
Director, Facilities Planning
211 Merica Hall, University of Wyoming; Laramie, Wyoming 82071

WATER QUALITY DIVISION REFERENCE NUMBER: 89-021

REVIEWING ENGINEER: Wally Koch, Southeast District Supervisor *WK*

DATE OF REVIEW: February 6, 1989

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:

1. A site drainage plan drawing is needed to determine if all runoff will reach the surface drainage lagoon.
2. Calculations used to size the surface drainage lagoon must be submitted.
3. Drawing of the manure storage facility must be submitted. The facility must prevent leachate from being a threat to surface and groundwater.
4. Plan Sheet 1.8
 - A. Recommend the plan view of the pump station include a north arrow for better clarity.
 - B. The plan view of the pump station needs to show a second pipe entering the wet well from the west.
 - C. Recommend that in the plan view of the pump station, the force main piping destinations be changed from "To Secondary Cell" and "To Primary Cell" to read "Cell #1 and Cell #2" so as to match Detail D.
 - D. Inlet Culvert-Section 6: The invert elevation should be 7170.70.
 - E. Section 3 of the Lagoons: Recommend that pond bottom dimension be shown, pond bottom elevation be shown, top of dike elevation be shown, HWL be shown, and that the inlet structure piping be drawn to match Detail C on sheet 1.10.

- F. Section 2 of the Lagoons: Recommend top of dike elevations be shown, the control structure be drawn to scale to match Section A on sheet 1.10, and the dimension to the inlet splash pad be changed from 56 feet to approximately 30 to match the Plan View drawing dimension.
- G. Runoff Lagoon - Section 5:

The notes indicate that the elevation of the lagoon bottom is 7174.00 except 7173.00 at the southwest corner. These elevations do not match those shown on Detail E.
- H. The runoff lagoon is required to have a spillway to pass flows in excess of the 25 year, 24 hour storm. Is the pump pad (Detail H and Section 7) to be used as the spillway? What is the overflow elevation of this spillway? Detail H and Section 7 need to have specific elevations to ascertain the volume of this lagoon.
- I. Since the runoff lagoon has the potential to discharge, a NPDES discharge permit is required from DEQ. Enclosed is an application for the subject permit. Please complete the form and submit to Mr. John Wagner of the Department of Environmental Quality, Water Quality Division.

5. Sheet 1.9

Detail K shows water and sewer mains being 10 feet apart, but Sheet 1.5 shows this distance as 11.0' c-c.

Detail F indicates the water service lines will be tapped directly into the water mains. Is it your intention to make these connections to PVC pipe without the use of saddles?

6. Sheet 1.10

Detail C - Recommend that some sort of frost protection cover be used to prevent freezing problems.

Detail A - Recommend that the redwood planks have hooks of some sort to allow their insertion and removal while standing on the surface.

7. Specs Page 02666-3:

The hydrostatic test procedures are similar to those detailed in AWWA Manual No. M23, but not exactly. DR-18 would be Class 150 PVC pipe. From Table 22 of Manual No. M23 an eight inch pipe tested at 150 psi would have an allowable leakage of 0.66 gph per 1,000 feet which is equal to 83.64 gallons per mile per day. Paragraph D allows 13 gallons per inch diameter per mile of pipe per 24 hours. For 8" diameter pipe this amounts to 104 gallons per mile per day.

Please provide justification as to why your testing procedure is equivalent to AWWA standards.

8. Specs Pages 02776-2:

DEQ/WQD Rules and Regulations, Chapter XI, Section 18(e)(ii)(A) requires the synthetic liner to have a minimum thickness of 30 mils. Will there be any chemicals/medicines used at the facilities which will be incompatible with the PVC liner?

9. Specs - Section 02776:

What are the specifications for the backfill material which will be used to cover the PVC liner? The drawings designate the material as "native soil". What is native soil?

What are the specifications for the sand which will cover the geotextile fabric?

The soils report indicates that the groundwater levels could be considerably higher than that shown in the soil borings. In order for the leak detection system to be of any value, it must be possible to determine the static groundwater elevation at the time the leak detection system is monitored. Recommend that a groundwater monitoring well be installed on the down gradient side of the lagoons.

10. An O & M manual for operation of the water and wastewater systems will be required and will be a condition of the Permit to Construct.
11. Chapter XI, Section 18 (a)(C)(iv) requires that the wastewater lagoon be designed "... to provide sufficient storage to retain all wastewater and rainfall during the wettest year of record during a ten year period of record." The design calculations submitted indicate "average net evaporation" values. Although the facility looks to be able to handle an average year, verification that it can handle the wettest year in 10 years must be submitted.

/jn

Enclosures

cc: Jake Strohman, DEQ/WQD
Carol Pfarr, DEQ/WQD
John Wagner, DEQ/WQD
Roger J. Baalman, University of Wyoming

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-022

- X New
- Renewal
- Modified

OLD TOWN MALL SEWER REPLACEMENT

This permit hereby authorizes the applicant:

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

to construct, install or modify a public wastewater collection system according to the procedures and conditions of the application number 89-022. The facility is located in Section 31, T14N, R66W, SW1 in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

G. Alan Edwards
Director
Department of Environmental Quality

February 8, 1989
Date of Issuance

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

DM/jn

PERMIT TO CONSTRUCT

R.F.

- New
- Renewal
- Modified

Permit No. 89-023R

Wamsutter Waterline Extension
(Name of Facility)

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

Town of Wamsutter

P.O. Box 6

Wamsutter, WY 82336

to modify a 6" waterline extension from Broadway Street to Gleason Drive according to the procedures and conditions of the application No. 89-023R. The facility is located in NE 1/4, Sec. 34, T20N, R94W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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AUTHORIZED BY:

William R. Jordan
Administrator
Water Quality Division

L. Alan Edwards
Director
Dept. of Environmental Quality

February 8, 1988
Date of Issuance

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

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-024
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Tooke Engineering

This permit hereby authorizes the applicant:

Science Applications International Corp.
160 Spear Street, Suite 1250
San Francisco, CA 94105

to construct, install or modify well point system according to the procedures and conditions of the application number 89-024. The facility is located in S4, T33N, R79W, NW/SW in the county of Natrona, 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

February 1, 1989

Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-024

1. The well points shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-024. 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. 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.
3. 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 89-024 (continued)

- e. Sample collection procedures;
 - f. Sampling analytical results;
 - g. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - h. Interpretation of data and conclusions including recommended remedial measures.
4. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
 5. The field sampling protocols submitted with the application shall be adhered to. Any deviation must be approved by the DEQ/WQD prior to initiation.
 6. All monitor wells associated with this facility shall be sampled and the wastewater analyzed one time for the parameters listed below:
EPA 602 (BETX), EPA 418.1 (TPH), EPA 604 (phenols) and sulfuric acid
 7. 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.

SCF/nc

cc: Jake Strohmman

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-025
See Conditions

- New
- Renewal
- Modified

Bairs Conoco Service Station

This permit hereby authorizes the applicant:

Mountain States Petroleum Corporation
P O Box 1537
Billings, MT 59103

to construct, install or modify monitoring well system according to the procedures and conditions of the application number 89-025. The facility is located in S1, T33N, R79W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of one (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 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.

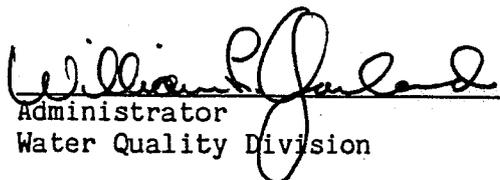
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

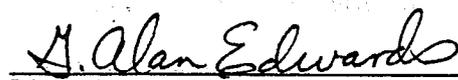
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

February 1, 1989

Date of Issuance

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

Conditions for Permit to Construct 89-025

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 89-025. 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.
6. In addition to the well construction information submitted with the permit application, the following items relating to well construction must be

Conditions to Permit 89-025 (continued)

addressed when the wells are installed:

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

Conditions to Permit 89-025 (continued)

- f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
10. All monitor wells associated with this facility shall be sampled and the wastewater analyzed one time (schedule) for the parameters listed below:
- EPA 602 (BETX) and EPA 418.1 (TPH)

cc: Jake Strohman

\mad



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 7, 1989

Gordon Herring, Mayor
Town of Kaycee
P O Box 265
Kaycee, WY 82639

RE: Town of Kaycee, Wyoming; C560145; DEQ/WQD Ref. No. 89-026RR; Approval of Plans and Specifications

Dear Mayor Herring:

The plans and specifications for the construction of the wastewater treatment facility for the referenced project have been reviewed by the State of Wyoming Department of Environmental Quality. This office hereby approves the plans and specifications and is enclosing a permit to construct. Please be advised that all the conditions in your grant agreement apply toward this project.

The procedure for submission and approval of modifications to the approved plans and specifications is the same as for the original set; i.e., five copies of any proposed modifications, together with an explanation of the reasons therefore should be forwarded to us. Unauthorized modifications of approved sets of plans and specifications may result in suspension of federal participation in the project.

The approved plans and specifications for the referenced project must be kept available at all times so that personnel from this office may have access to them during inspection activities.

In order to expedite this project, the engineer has previously requested permission to begin advertising the project for construction bids. I concur with the desire to get the project advertised as soon as possible, and therefore, the town was authorized to begin advertising this project as of March 30, 1989. This letter shall serve as documentation that the town was authorized to incur the expense of advertising for bids, and thus, these costs are eligible for EPA participation. If you have any questions, please give me a call.

This is confirmation of our verbal authorization for the project to be advertised and bids opened. You are requested to furnish this office with the date this project is advertised and the date on which bids will be opened as soon

as possible. You are reminded to complete the enclosed checklist and associated documentation when bids are opened.

The following points should be brought to your attention at this time:

1. Contracts may not be awarded until authorization has been given by the Department of Environmental Quality.
2. Prior DEQ approval is required for rejection of bids on any contract on this project.
3. Current wage rates must be in the specifications prior to bid opening.
4. Bidders must submit with their bid a signed statement as to whether they have previously performed work subject to the President's Executive Order Number 11245.
5. Contact EPA if any questions arise concerning MBE/WBE utilization on this project.

Following approval of the enclosed checklist and associated documentation by the State of Wyoming Department of Environmental Quality, you will be notified that the construction contract may be awarded.

Sincerely,



Michael Hackett
Control Engineering Supervisor
Water Quality Division

MH/nc

cc: Randy Fultz, Civil Engineering Professionals, Inc.
400 E. 1st, Room #311, Casper, WY 82601
Grant File

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

PERMIT NO. 89-026RR

TOWN OF KAYCEE WASTEWATER COLLECTION
AND TREATMENT IMPROVEMENTS
(Name of Facility)

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

Town of Kaycee

P. O. Box 265

Kaycee, Wyoming 82639

to construct, install or modify a domestic wastewater collection and treatment facility according to the procedures and conditions of the application No. 89-026RR. The facility is located in Section 12, T.43N., R.82W., and Section 7, T.43N., R.81W., in the County of Johnson, 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 ensures that the permitted facility, when constructed, will meet applicable discharge permit conditions or other effluent or operational requirements.

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

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

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

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

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

CONDITIONS FOR PERMIT

1. The existing groundwater observation well adjacent to the sanitary sewer between MH #6 and MH #7 shall be maintained. The well shall be pumped (minimum of three well volumes) at least annually to prevent siltation. Within one year of completion of the wastewater lagoon, the well shall be resampled for the following parameters:

- | | | |
|------------------------------|-----------|-----------|
| static water level | Aluminium | Nickel |
| pH | Arsenic | Potassium |
| Hydrogen Sulfide | Barium | Selenium |
| Total Dissolved Solids (TDS) | Beryllium | Silver |
| Turbidity | Boron | Sodium |
| Bicarbonate | Cadmium | Zinc |
| Carbonate | Calcium | |
| Hydroxide | Chromium | |

Sulfate	Cobalt
Chloride	Copper
Ammonia	Iron
Fluoride	Lead
Nitrate	Lithium
Nitrite	Magnesium
Phosphate	Mercury

The results shall be made available to the Water Quality Division. Additional groundwater monitoring facilities may be required if the additional analysis indicates a higher ambient groundwater class than was originally determined.

2. Approval by the Water Quality Division shall be obtained prior to final land application of the dried sludge. The information requested in Special Provisions SP-B3 and SP-B4 of the specifications shall be submitted to the Sheridan District Office, 2161 Coffeen Avenue, Suite 501, Sheridan, Wyoming 82801, at least two weeks prior to when application is desired. A final application rate will be determined based on the date submitted.

xc: Randy Fultz
Civil Engineering Professionals, Inc.
400 E. 1st Street, Suite 311
Casper, Wyoming 82601

Mike Hackett, DEQ/WQD, Cheyenne



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 24, 1989

LeRoy Schindler
City of Rawlins
P. O. Box 953
Rawlins, WY 82301

RE: Permit to Construct 89-027; Sage Creek Transmission Pipeline - Phase III;

Dear Mr. Clark:

Enclosed is a corrected Permit to Construct #89-027. Please dispose the previously permit which had an incorrect legal description.

Sincerely,

Wally Koch, P.E.
Southeast Area Supervisor
Water Quality Division

WK/mad
Enclosure

cc: Karen Halvorsen, James M. Montgomery (w/encl)

PERMIT TO CONSTRUCT

PERMIT NO. 89-027

X New
Renewal
Modified

CITY OF RAWLINS - SAGE CREEK TRANSMISSION PIPELINE - PHASE III

This permit hereby authorizes the applicant:

City of Rawlins
P O Box 953
Rawlins, Wyoming 82301

to construct, install or modify a water transmission pipeline according to the procedures and conditions of the application number 89-027. The facility is located in N $\frac{1}{2}$ Section 26, SE $\frac{1}{4}$ Section 23, S $\frac{1}{2}$ Section 24 all in T17N, R88W; N $\frac{1}{2}$ Section 19, NW $\frac{1}{4}$ Section 20, and SW $\frac{1}{4}$ Section 17 all in T17N, R87W 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.

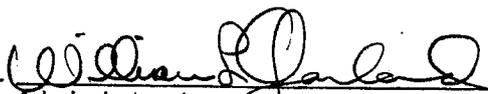
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

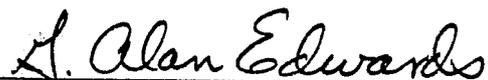
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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.

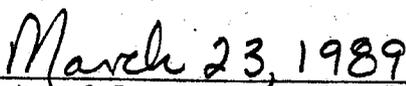
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

WK/jn

18

PERMIT TO CONSTRUCT

PERMIT NO. 89-028
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Phillips Bulk Plant, Inc.

This permit hereby authorizes the applicant:

Harold Aazard
Phillips Bulk Inc.
304 Thomas Avenue
Worland, WY 82401

to construct, install or modify six piezometers according to the procedures and conditions of the application number 89-028 and the referenced November 11, 1988 report. The facility is located in S25, T47N, R93W in the county of Washakie, 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:

William A. Gault
Administrator
Water Quality Division

G. Alan Edwards
Director
Department of Environmental Quality

February 14, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-028

1. The groundwater piezometer wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-028 and the referenced November 11, 1988 report. 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 piezometer 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 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.

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. 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;
 - c. 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;
 - d. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well; and
 - e. A protective casing and locking cap is required.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the piezometer wells and static water level measurements 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 piezometer wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and

Conditions to Permit 89-028 (continued)

- j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper static water level measurements shall be taken in accordance with standard procedures.
10. All monitor wells and piezometers associated with this facility shall be measured for static water levels and the results submitted to the department on a quarterly basis.

The results of these measurements shall be submitted to the Cheyenne office by the last day of the month following the end of each quarter. The first set of results are due by the last day of April 1989.

11. 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.

MML/nc

cc: Jake Strohman
Steve Gerber

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-029

X New
Renewal
Modified

HILLSIDE DRIVE SEWER EXTENSION

This permit hereby authorizes the applicant:

Paul Greaser
P O Box 1605
Laramie, Wyoming 82070

to construct, install or modify a public wastewater collection system according to the procedures and conditions of the application number 89-029. The facility is located in Section 3, T15N, R73W, NE1/4 in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

G. Alan Edwards
Director
Department of Environmental Quality

February 8, 1989
Date of Issuance

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

DM/jn



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

April 30, 1991

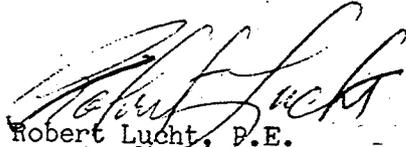
Paul R. Hildenbrand
Environmental Manager
Power Resources, Inc.
P.O. Box 1210
Douglas, Wyoming 82637

RE: Power Resources Morton 1-20 Injection Well
Permit UIC 89-030, Class I
Converse County, Wyoming

Dear Mr. Hildenbrand:

Power Resources has now provided two separate analyses of the waste stream done for Cadmium and Lead. Both of these parameters have been shown to be non-detectable in this waste. This letter authorizes you to discontinue the analyses for Lead and Cadmium in all future sampling of this waste.

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

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(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

Paul R. Hildenbrand,
Environmental Manager
Power Resources, Inc.
P.O. Box 1210
Douglas, Wyoming 82637

RE: Power Resources Morton 1-20 Injection Well
Permit UIC 89-030, Class I
Converse County, Wyoming

Dear Mr. Hildenbrand:

Our laboratory finally was able to analyze the rest of the metals on samples taken last June on the above referenced injection well. The injectate contains surprisingly high levels of lead, but the levels found are not high enough to warrant additional regulation of this waste as hazardous waste. The toxic characteristic hazardous waste limit for lead is 5.0 mg/l. In view of the high levels of lead found in this waste stream, please include lead in the quarterly sampling of this waste until further notice.

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
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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

Paul R. Hildenbrand
Environmental Manager
Power Resources, Inc.
P.O. Box 1210
Douglas, Wyoming 82637

RE: Power Resources Morton 1-20 Injection Well
Permit UIC 89-030, Class I
Converse County, Wyoming

Dear Mr. Hildenbrand:

I need to conduct an annual inspection of the above named facility on Thursday, June 28, 1990. I will meet you at the mine site at 10:00 AM on that date. During this inspection, I will need to sample the effluent. I trust that there is a sample port on the injection stream where you have been taking your required samples so this should not be a problem.

Sincerely,

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

RL/jt

xc: Jake Strohman

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY/ WATER QUALITY DIVISION

Groundwater Pollution Control Permit

APPROVAL FOR TRANSFER OF RESPONSIBILITY

Permit No. UIC 89-030 Class I

TO: Power Resources, Inc.
P.O. Box 1210
Glenrock, Wyoming 82637

and

Everest Minerals Corporation
P.O. Box 1210
Glenrock, Wyoming 82637

(New/present owner/operator)

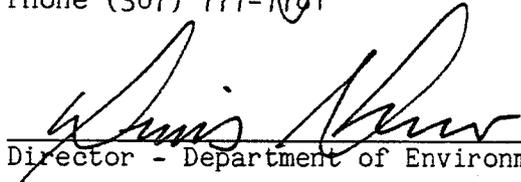
(Former owner/operator)

The transfer of the operation and all associated responsibilities of the Morton 1-20 class I injection well (Permit UIC 89-030 Class I) is approved, effective May 22, 1990.



Administrator - Water Quality Division
Phone (307) 777-7781

May 24, 1990
Date



Director - Department of Environmental Quality

May 29, 1990
Date



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

April 14, 1989

Steve Morzenti, General Manager
Everest Minerals Highland Project
P.O. Box 1210
Glenrock, Wyoming 82637

RE: Morton 1-20 Injection Well
Permit 89-030 class 1I UIC
Converse County, Wyoming

Dear Mr. Morzenti:

Attached please find the final signed permit for the modification allowing this well to operate at pressures up to 4,500 psig and to handle volumes as much as 185 gallons per minute (6,342 barrels per day). This is a modification of previous permits on this well and takes the place of all previous injection permits which are now void.

Sincerely,

William L. Garland, P.E.
Administrator
Water Quality Division

WLG/RL/jn

xc: Greg Oberley, EPA Region VIII
Janie Nelson, OGCC
Richard Stockdale, SEO

encl: Permit 89-030

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

() New
(X) Modified

Permit Number:
UIC 89-030
UIC CLASS 1I

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, Wyoming 82637
(307) 235-1628

is authorized to operate

the Morton 1-20 non-hazardous waste industrial injection well

according to procedures and conditions of the application 89-030 and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.



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

April 17, 1989
Date



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

April 18, 1989
Date

A. Discharge (Injection) Zone and Area of Review

The injection zone consists of the interval from 8,629 to 9,000 feet below the surface in the Teapot Sandstone at the top of the Mesa Verde Formation of Cretaceous age, and the interval from 9,015 to 9,141 feet below the surface in the Parkman Sandstone in the basal part of the Mesa Verde Formation. The receiver, as defined in federal and state UIC regulations, is therefore the entire interval from 8,629 to 9,141 feet below the surface.

The permittee has investigated an Area of Review consisting of all lands within a five-mile radius of this injection well. No wells have been found within this area that were in need of corrective action.

A new calculation of the area of endangering influence has been made. This calculation used the same input parameters as were used on previous permits, with corrections made where necessary to reflect the new permit conditions. The inputs used were:

Permeability: $K = 2 \times 10^{-6}$ cm/sec
= .0057 ft/day

Thickness of Injection Zone: $H = 9141 - 8629$ feet
= 512 feet

Time of Injection: $t = 20$ years
= 7300 days

Storage Coefficient: $S = 1 \times 10^{-4}$ (dimensionless)

Injection Rate: $Q = 185$ gallons / minute
= 35,951 cubic feet / day

Original head in Teapot: $h = 3800$ feet

Original head in Lance: $h_o = 4450$ feet

Calculated radius $r = 4966$ feet

For purposes of this revised permit, a fixed Area of Review will be used. This fixed Area of Review will consist of the following legally described lands:

Township 36 North, Range 72 West, Sixth P.M.

=====
Section 17: S1/2, NW1/4, S1/2NE1/4, NW1/4NE1/4
Section 18: S1/2, NE1/4, S1/2NW1/4, NE1/4NW1/4
Section 19: All
Section 20: All
Section 21: W1/2NW1/4
Section 29: N1/2NW1/4
Section 30: N1/2NE1/4

B. Groundwater Classification

The Teapot Sandstone contains waters of 16,482 mg/l in Total Dissolved Solids. The Parkman Formation contains waters of 15,560 mg/l in Total Dissolved Solids. For this reason, the Teapot Sandstone and the Parkman Formation are both class VI aquifers under Wyoming Water Quality Rules and Regulations, Chapter VIII.

C. Authorized Operations

The permittee is authorized to inject into the Teapot Sandstone through existing perforations at 8,629 to 9,000 feet, and into the Parkman Formation through existing perforations at 9,015 feet to 9,138 feet below ground surface. The injection stream shall consist of wastes generated by the in-situ mining of uranium at the Highland Uranium operation covered by Land Quality Division Permit to Mine 603.

Everest may add perforations at any time within the interval from 8,629 to 9,138 feet below ground surface. The Water Quality Division shall be given 2 weeks notice of any perforating workover to allow representative time to schedule and witness these operations. Perforation of any zone outside the interval from 8,629 to 9,138 constitutes a permit violation.

The injection fluid is specifically limited to fluids produced at the Highland Uranium Project covered under Land Quality Permit to Mine 603. This covers fluids produced at the existing facilities or any amendments to that permit which may be undertaken at a future time. Fluids from other permitted uranium operations may be disposed of with prior written approval of the Water Quality Division. Produced waters from nearby oil and gas operations may be disposed of in this well with prior written approval. Fluids from other industrial operations may be disposed of with prior written approval.

Fluids produced in the mining of miscellaneous metal ores are designated SIC 109.

IN NO CASE SHALL FLUIDS MEETING THE DEFINITION OF HAZARDOUS WASTE AS DEFINED BY THE EPA IN 40 CFR 261.31 THROUGH 261.33 BE INJECTED UNLESS THEY HAVE BEEN EXCLUDED BY THE EPA UNDER 40 CFR 260.20 AND 40 CFR 260.22. The above definitions of hazardous waste shall be the current references at the time the disposal is made. The above restriction on the disposal of hazardous waste supercedes all other provisions of this permit, notwithstanding the source of the material, the location where it was produced, or the reason it is considered hazardous.

Analysis shall be required prior to injecting any fluid other than normal overproduction streams, R.O. brine, yellowcake wash water, laboratory waste, or plant washdown water. The Water Quality Division shall be contacted prior to injecting any other waste to determine which analyses shall be required in each case.

The injected fluid is limited 65 mg/l when analyzed for Uranium as U_3O_8 .

Fluids exceeding the above limit shall be treated prior to injection. The above limitation applies to the composit quarterly samples.

All injection shall be through tubing and packer with the packer set between 8,530 feet and 8,600 feet below ground surface.

Everest shall maintain its existing system for continuous monitoring of the injection rate and pressure and the annulus pressure. The device for monitoring the annulus shall be capable of recording pressures from 0 to 2,000 psi. Everest shall maintain a minimum of 400 psi on the annulus during normal operations. Instantaneous fluctuations below 400 psi are normal, but in no case shall the annulus pressure drop below 30 psi. Because of the high permitted injection pressure, Everest shall install a pop-off valve somewhere on the annulus pressure system to insure that catastrophic failures of the casing or annulus pressure chamber do not occur. Everest shall also install a kill switch on the annulus that will automatically shut down the pumps anytime the annulus pressure exceeds 600 psi.

The maximum injection pressure in this well shall be 4,500 psig as measured at the wellhead. This maximum injection pressure is based on a step injection test run 12/7/88 in which a pressure of 5,000 psi was attained without producing a fracture. This pressure corresponds to a fracture gradient of at least .87 psi/ft. The limitation to 4,500 psig is based on the requirement that the injection pressure be limited to 90% of the observed fracture pressure.

The maximum injection rate shall not exceed 185 gallons per minute (266,400 gallons per day or 6,342 barrels per day).

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:

Everest Minerals is maintaining an extensive groundwater monitoring program including monitor wells in at least 4 zones. This monitor well network is required under Land Quality Division Permit to Mine 603. Additional wells to monitor the injection well are not necessary since the injection well is near the center of the monitor well network.

G. Requirements for Monitoring the Discharge

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

The permittee shall monitor and record continuously the injection rate and pressure (wellhead) and pressure in the annulus between the tubing and the long string. A record shall be kept of the daily maximum injection rate and pressure; this information shall be reported quarterly. Permittee shall also report quarterly the results of chemical analysis of the composite waste stream and the specific EPA methods used by the laboratory making the analysis. Samples shall be analyzed quarterly for TDS, bicarbonate, carbonate, total uranium and total radium. This analysis shall be done on a composite sample taken over a minimum of two weeks time with a minimum of four separate samples composited together. A quarterly report is required to be submitted within 30 days of the end of each calendar quarter. In view of the number of reports required quarterly, the permittee may propose to use fiscal quarters other than calendar quarters if this would ease his workload. The following materials shall be included in the quarterly report:

1. The maximum daily injection pressure (not the average pressure but an instantaneous pressure) and the maximum daily injection volume for each month within the quarter, and the dates that these maximums were reached. The accumulated total volume injected each month and the accumulated total volume injected to date.
2. The maximum daily annulus pressure and a detailed operating log for that days operations.
3. A listing of any waste disposed of that did not originate at the Highland Uranium Project, and the dates that approval was granted for this disposal.
4. Reports of any analysis required under this permit of injection streams, monitoring wells, or other required monitoring.
5. Reports of any construction, well workover, mechanical integrity tests, or pressure fall off tests run during the quarter.

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 sub-surface 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:

At least once every five years, and more frequently if required by the administrator, the casing tubing annulus shall be pressure tested to 2,000 psi. A successful test shall show that there has been negligible pressure loss after 15 minutes at 2,000 psi.

At least once a year, and more frequently if required by the administrator, the well shall be shut-in to observe a valid pressure fall off curve. This test shall be considered complete when the injection pressure reading becomes asymptotic to a horizontal line and remains so for 2 hours. In the event that the injection pressure reaches zero as measured at the surface, this test shall be considered complete.

At least once every 5 years, and more frequently if required by the administrator, this well shall be logged using a radioactive tracer log, temperature log, or injection profile log and the results and their interpretation shall be reported to the Water Quality Division along with the next quarterly report.

A radioactive tracer log and temperature log (Injection Profile Log), cement bond log, and cement evaluation tool were run on 10/18/87 and 10/5/87 respectively. The next required Injection Profile Log shall be done on or before 10/18/92.

Should any of the above tests indicate a lack of mechanical integrity, the Water Quality Division shall be notified by telephone within 24 hours and with a written report within 7 days. In the case of a failed mechanical integrity test, the well shall be immediately shut-in. Injection shall not resume until the well has been repaired and a complete mechanical integrity test including the annulus pressure test, cement bond logging, and a radioactive tracer test have all been passed. Injection shall not resume until the Water Quality Division has approved these tests.

If at any time injection occurs in any zone not within the permitted receiver, a permit violation has occurred. The operator shall prepare an estimate of the volume and quality of all wastewaters that have been injected outside the permitted receiver. In the case where any aquifer meeting class 1 through 4 under Chapter VIII of Water Quality Rules and Regulations has become contaminated due to out of zone injection, the operator shall prepare and implement a plan to recover those solutions and inject them into the proper receiver.

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:

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

This well shall be permanently abandoned within 6 months of the end of operation. This well shall be considered temporarily abandoned anytime that there has been no injection for 6 full months. If this well is temporarily abandoned at any time, the operator may maintain this permit intact as long as all reports continue to be filed, and all operating provisions of the permit are met. If at any time the operator removes either the pumps, meters, or pressure gauges for anything other than maintenance, the well will be considered abandoned and shall be plugged within six months of the removal of this equipment.

At the time of permanent abandonment, the following procedure shall be followed: A minimum of 100 sacks of cement shall be squeezed through the perforations using a cement retainer placed just above the top perforations. The casing above the perforations shall be filled with cement to a level no deeper than 7800 feet. Above this level, the casing may be recovered if the operator chooses. If the casing is recovered, a 50 sack plug shall be set at the top of the following formations: Teckla Sandstone, Lewis Shale, Fox Hills Sandstone, and the Lance Formation. The surface casing shall then be filled with cement from top to bottom. If the long string casing is not recovered, a minimum of 500 feet of cement shall be placed in the top of the pipe. A standard dry hole marker shall be fabricated so that it can be bolted to the top of the braden head flange.

In no case shall the abandonment procedure used be less than required by the Oil and Gas Conservation Commission at the time of abandonment.

M. Duties of the Permittee

It is a duty of the permittee to:

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

N. Financial Responsibility

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

The required Certification of Financial Responsibility has been submitted by the operator. In addition, abandonment of this well is covered under bonding required by Land Quality Division for Permit to Mine 603.

O. Special Measures the Director Finds Necessary:

Prior to any work over, perforation, mechanical integrity test, stimulation, or any physical change to the well itself, the Water Quality Division shall be notified 2 weeks in advance to allow division personnel to witness these tests.

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.

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.

/jn

MB

PERMIT TO CONSTRUCT

PERMIT NO. 89-031
SEE SPECIAL CONDITIONS

New
 Renewal
 Modified

Gay Johnson's Service Station

This permit hereby authorizes the applicant:

Gay Johnson's Service Station
P O Box 1070
Rawlins, WY 82301

to construct, install or modify boreholes and monitoring wells according to the procedures and conditions of the application number 89-031. The facility is located in S23, T21N, R88W 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: 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 R. Jule
Administrator
Water Quality Division

H. Alan Edwards
Director
Department of Environmental Quality

February 14, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-031

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 89-031. 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

- d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations; and
 - i. Interpretation of data and conclusions including recommended remedial measures.
8. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
 9. All monitor wells associated with this facility shall be sampled and the wastewater analyzed quarterly for the parameters listed below:

BETX, TPH, TPAT

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. The first set of results are due by the last day of April 1989.

10. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
11. The time schedule for plan implementation as submitted in February 3, 1989 proposal shall be adhered to. Drilling shall commence on or before February 27, 1989.
12. Contaminated soils encountered while drilling either boreholes or the monitoring well shall be containerized and disposed of at the municipal landfill in Rawlins.
13. Chemical analytical analyses is required on the soils removed from the borehole. The field analyses can be used as a qualifying instrument, but laboratory analyses of the soils is required.

CP/nc

cc: Jake Strohman

measures may be required by the WQD. An adequate number of wells shall be installed to define the extent of contamination.

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. 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 (as applicable):

- 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;

PERMIT TO CONSTRUCT

New

Permit No. 89-032R

Renewal

Modified

Meadowbrook Subdivision - Phase I
(Name of Facility)

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

Intermountain Insurance Group, Inc.

c/o P.O. Box 70

Cody, WY 82414

to install a eight inch sewer main and eight inch water main according to the procedures and conditions of the application No. 89-032R. The facility is located in Tract 61, T52N, R101W in the County of Park, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

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

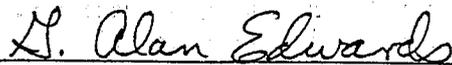
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:



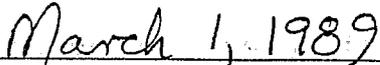
Administrator

Water Quality Division



Director

Dept. of Environmental Quality



Date of Issuance

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

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 89-033R

Three Peaks Ranch
(Name of Facility)

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

National Outdoor Leadership School

P.O. Box 104

Boulder, WY 82923

to construct a small wastewater disposal system according to the procedures and conditions of the application No. 89-033R. The facility is located in Sec. 8, T32N, R107W in the County of Sublette, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

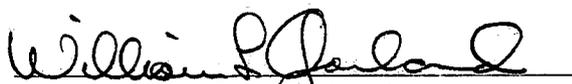
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

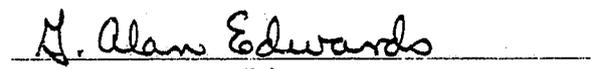
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

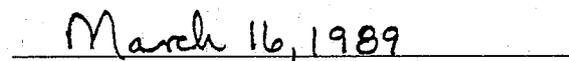
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

MEMORANDUM

TO: Files -

UST Facility #3516, Trailside General Store, West Highway, Torrington [Permit #89-015]
UST Facility #1893, Laramie Heating & Sheet Metal, 602 Skyline Dr., Laramie [#89-034]
UST Facility #1853, Hartman Distributing, 1070 N. 3rd St., Laramie [Permit #89-221]
UST Facility #1228, Spring Creek Conoco, 1409 S. 3rd St., Laramie [Permit #89-231]
UST Facility #2952, Foster's Country Store #4, 1465 N. 3rd St., Laramie [Permit #89-513]

FROM: Clay Rowley, SE District Supervisor, UST/LUST Program

DATE: September 17, 1993

SUBJECT: Retraction of Notices of Violation Issued Prior to Passage of the "Water Pollution from Underground Storage Tank Corrective Action Act of 1990"

Prior to March 1990, Wyoming Department of Environmental Quality, Water Quality Division (WQD), personnel determined that petroleum hydrocarbons derived from underground storage tank systems at the facilities listed above had contaminated the soil and groundwater. State and federal regulations consider this contamination as an unauthorized discharge and letters of violation (LOV's) were issued requiring the owner/operators to take corrective action including abatement, an extent of contamination investigation, free product removal, and cleanup of the contamination.

The 1990 budget session of the Wyoming Legislature passed the "Water Pollution from Underground Storage Tank Corrective Action Act of 1990". Section 35-11-1418(a) of this act states in part that "The state attorney general shall move to dismiss any pending or ongoing suits or administrative actions which are based on the requirement the owner and operator take corrective action" In keeping with this directive the WQD retracted the letters of violation issued to the owner/operators of the facilities listed above, and the owner/operators were no longer required to take corrective action as requested provided:

The owner/operators became, and remain, eligible for use of the act's corrective action funds by paying an annual (fiscal year) site fee of \$200 until the Water Quality Division completes investigation and cleanup based on a priority ranking system of the contaminated states in Wyoming.

As long as the locations remain eligible for use of corrective action funds the state will remain responsible for corrective action based on the ranking system. The sites posing the greatest risk to the public health, safety and welfare and to the environment will be addressed first. The state will be responsible for site investigation and cleanup costs as long as eligibility is maintained.

The files listed above do not have copies of the LOV retraction letters in them, and it may be that they were never formally issued. The purpose of this memorandum is to show that the owner/operators of these facilities are no longer responsible for site investigations and cleanup as long as eligibility for use of corrective action funds at these locations is maintained.

Construction applications are withdrawn.

PB

PERMIT TRANSFER REQUEST

DATE: Sept. 8, 1992

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

To Whom It Concerns:

Bill Davis intends to transfer ownership of the facility associated with Permit Number 89-035 to WY Department of Environmental Quality on 9/24/92. 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.

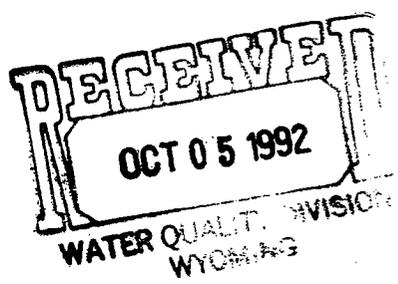
Please transfer the permit to the transferee's name and issue a modified permit reflecting the transfer of ownership. Terms and conditions of the original permit are transferred to and become the responsibility of the new owner.

W.E. [Signature]
Signature Original Owner

Tommy Ray Pitt, Sr. Environ. Analyst
Signature New Owner

Name Bill Davis
Address 400 North 6th Street
Greybull, WY 82426
Telephone 307-765-2106

Name WY Dept of Environmental Quality
Address 250 Lincoln Street
Lander, WY 82520
Telephone 307 - 332 - 3144



af

PERMIT TO CONSTRUCT

PERMIT NO. 89-035
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Short Stop Sinclair Station

This permit hereby authorizes the applicant:

Bill Davis
400 North 6th Street
Greybull, Wyoming 82426

to construct, install or modify monitor well system according to the procedures and conditions of the application number 89-035. The facility is located in Section 8, NW/SW, T52N, R93W in the county of Big Horn, in the State of Wyoming. This permit shall be effective for a period of One (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 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.

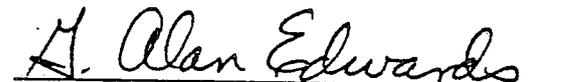
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Groundwater Engineer,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

February 14, 1989
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 89-035. 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.
6. In addition to the well construction information submitted with the permit application, the following items relating to well construction must be

Conditions to Permit 89-035 (continued)

addressed when the wells are installed:

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

Conditions to Permit 89-035 (continued)

- f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
 10. All monitor wells associated with this facility shall be sampled and the wastewater analyzed one time (schedule) for the parameters listed below:
EPA 602 (BETX) and EPA 418.1 (TPH)
 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.

SCF/jt

cc: Jake Strohman

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-036
See Conditions

X New
Renewal
Modified

Kiser Inc.

This permit hereby authorizes the applicant:

Bert Juhl
5037 W. Lafayette
Casper, WY 82604

to construct, install or modify a monitor well system according to the procedures and conditions of the application number 89-036. The facility is located in S1, T33N, R80W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of one (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 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

February 23, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-036

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 89-036. 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.
6. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be

Conditions to Permit 89-036 (continued)

implemented when the wells are constructed, installed and developed:

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

Conditions to Permit 89-036 (continued)

- f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
10. All monitor wells associated with this facility shall be sampled and the wastewater analyzed one time (schedule) for the parameters listed below:
EPA 602 (BETX) and EPA 418.1 (TPH)
11. 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.

/mad

cc: Jake Strohman



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781
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April 4, 1989

Mr. Tom Rupe
Ridgewater No. 1 Improvement District
P. O. Box 802
Douglas, WY 82633

RE: Permit to Construct Application Number 89-037

Dear Mr. Rupe:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (#89-037) for a permit to construct Ridgewater No. 2 Well (U.W. 78875) for Ridgewater No. 1 Improvement District at SW $\frac{1}{4}$ SE $\frac{1}{4}$ S13, T32N, R72W. The Water Quality Division has determined that the system meets the minimum design standards.

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 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.

Since your system has already been constructed, a permit to construct cannot be issued. This letter is your record that the Ridgewater No. 2 Well as installed meets minimum state specifications and has been approved by the Wyoming Department of Environmental Quality, Water Quality Division.

In the future if you are to build or modify a water system, you must apply for a permit to construct prior to construction to avoid enforcement action.

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/WK/mad
cc: John A. Lambert

M

PERMIT TO CONSTRUCT

PERMIT NO. 89-038
See Conditions

New
 Renewal
 Modified

Ridgewater No. 3 Well

This permit hereby authorizes the applicant:

Ridgewater No 1 Improvement District
P. O. Box 802
Douglas, WY 82633

to construct, install or modify Ridgewater No. 3 Well according to the procedures and conditions of the application number 89-038. The facility is located in S13, T32N, R72W in the county of Converse, 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:

Lawrence Reinson

Administrator
Water Quality Division

A. Alan Edwards

Director
Department of Environmental Quality

May 23, 1989

Date of Issuance

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

Conditions to Permit to Construct 89-038

1. The O&M Manual shall be submitted to the Water Quality Division by June 1, 1989.
2. Test results for VOC's and radionuclides shall be submitted to the Water Quality Division as soon as they are received from the laboratory.

LR/mad

cc: John A. Lambert

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 89-039R

Rupp Addition Water Main Replacement
(Name of Facility)

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

City of Worland

P.O. Box 226

Worland, WY 82401

to replace a water main according to the procedures and conditions of the application No. 89-039R. The facility is located in Sec. 25, T47N, R93W in the County of Washakie, in the State of Wyoming. This permit shall be effective for a period of Two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

G. Alan Edwards
Director
Dept. of Environmental Quality

March 1, 1989
Date of Issuance

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

PERMIT TO CONSTRUCT

[] New

Permit No. 89-040R

[] Renewal

[X] Modified

Decker Addition Sewer Main Replacement
(Name of Facility)

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

City of Worland

P.O. Box 226

Worland, WY 82401

to replace existing sewer main according to the procedures and conditions of the application No. 09-040R. The facility is located in Sec. 25, T47N, R93W in the County of Washakie, in the State of Wyoming. This permit shall be effective for a period of Two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

J. Alan Edwards
Director
Dept. of Environmental Quality

March 1, 1989
Date of Issuance

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

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-041
See Conditions
Ref. 86-423 473

New
X Renewal
Modified

Texaco Refinery Monitoring Wells

This permit hereby authorizes the applicant:

Texaco, Inc.
Attn: W.E. Richart
P. O. Box 320
Casper, WY 82602

to construct, install or modify system of monitoring wells according to the procedures and conditions of the application number 89-041. The facility is located in S6, T33N, R78W in the county of Natrona, 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:

William P. Janda
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

February 23, 1989
Date of Issuance

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

Conditions to Permit to Construct 89-041

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 89-041. 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 89-041 (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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - i. 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
 - j. 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 installation of any new monitoring well under this permit certain information shall be submitted to Water Quality Division as follows:
 - a. A map showing all monitoring wells on the Casper Refinery site with these new wells posted to it;
 - b. As-built construction details of the new wells;
 - c. Static water levels in the new wells and the dates measured.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.

Conditions to Permit 89-041 (continued)

10. All monitor wells associated with this facility shall be sampled and the water analyzed quarterly for benzene, ethylbenzene, toluene, xylene by EPA method 602-purgeable aromatics and total petroleum hydrocarbons by EPA method 418.1 until other monitoring operations are allowed by the DEQ/WQD. Product too thin to measure shall be noted and reported (i.e., film, sheen, odor, iridescence, etc.). When measureable product layers exist, they are to be measured and the above parameters need not be sampled for. The results of these analyses are due in the Cheyenne office by the last day of the month following the end of each quarter in January, April, July, and October. Samples should be collected during the first week of the last month of each quarter to ensure timely submittal. The first set of quarterly results are due by the last day of May, 1989.

11. 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.

\mad

cc: Jake Strohman

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-042
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Blaze Oil, East 2nd Street

This permit hereby authorizes the applicant:

Blaze Oil Company
P O Box 2116
Casper, WY 82601

*Telephone
call to Scott Forister
3/9/89*

to construct, install or modify a monitor well system according to the procedures and conditions of the application number 89-042. The facility is located in S10, NESE/NE, T33N, R79W in the county of Natrona, 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:

William R. Gailard
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

February 23, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-042

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 89-042. 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.

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;

Conditions to Permit 89-042 (continued)

- b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
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 one time for the parameters listed below:
- EPA 602 (BETX) and EPA 418.1 (TPH)
11. 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.

SCF/nc

cc: Jake Strohman

PERMIT TO CONSTRUCT

PERMIT NO. 89-043

X New
Renewal
Modified

Ledder Single Family Wastewater System

This permit hereby authorizes the applicant:

Mark Ledder
RR6
Olney, ILL 62450

to construct, install or modify small wastewater system according to the procedures and conditions of the application number 89-043. The facility is located in S31, T20N, R78W 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

G. Allen Edwards
Director
Department of Environmental Quality

March 8, 1989
Date of Issuance

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

mad



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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July 12, 1989

Rod Stalkup
Max's R.V. Honda
550 East First
Casper, Wyoming 82601

RE: Monitoring Program 550 East First, Permit 89-044, Natrona County, Wyoming

Dear Mr. Stalkup:

If you decide to eliminate the pumping of the basement of the building next to the old tanks, would you please let us know? The groundwater gradients will change radically if this pumping is stopped. At the present time, the pumping of that basement may be acting to gradually eliminate dissolved hydrocarbons from the groundwater in the area.

Sincerely,

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

RL/nc

cc: Jake Strohman

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-044
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Max's Honda Monitoring Wells

This permit hereby authorizes the applicant:

Rod Stalkup
Max's Honda - RV
501 East 1st Street
Casper, Wyoming 82601

to construct, install or modify system of monitor wells according to the procedures and conditions of the application number 89-044. The facility is located in Section 9, T33N, R79W, NE NE in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of five (5) 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 J. Jones
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

February 20, 1989
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 89-044. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (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.

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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - i. 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
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
8. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
 - a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;

Conditions to Permit 89-044 (continued)

- f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
9. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
10. All monitor wells associated with this facility including the domestic well shall be sampled and the wastewater analyzed quarterly for benzene, ethylbenzene, toluene, xylene by EPA method 602 - purgeable aromatics, and total hydrocarbons by EPA Method 418.1 until other monitoring operations are allowed by the DEQ/WQD. Product too thin to measure shall be noted and reported (i.e., film, sheen, odor, iridescence, etc.). When measurable product layers exist, they are to be measured and the above parameters need not be sampled for. The results of these analyses are due in the Cheyenne office by the last day of the month following the end of each quarter in January, April, July, and October. Samples should be collected during the first week of the last month of each quarter to ensure timely submittal. The first set of quarterly results are due by the last day of April 1989.
11. 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.

cc: Thomas J. Jaap
Western Water Consultants
701 Antler Drive, Suite 233
Casper, WY 82601
Jake Strohm

RL/jt

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-045
See Conditions

X New
Renewal
Modified

Marta-Co./WKM

This permit hereby authorizes the applicant:

Cooper Industries
P. O. Box 2117
Houston, TX 77252

to construct, install or modify a monitor well system according to the procedures and conditions of the application number 89-045. The facility is located in S27, T34N, R80W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of one (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 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

H. Alan Edwards
Director
Department of Environmental Quality

February 23, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-045

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 89-045. 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.
6. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be

Conditions to Permit 89-045 (continued)

implemented when the wells are constructed, installed and developed:

- 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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - i. 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
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
 8. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
 - a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - 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:
EPA 602 (BETX) and EPA 418.1 (TPH)
11. 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.

/mad

cc: Jake Strohman

RF

PERMIT TO CONSTRUCT

[] New

Permit No. 89-046

[] Renewal

[X] Modified

TDS Pond - 1
(Name of Facility)

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

Bridger Coal Company

P.O. Box 2068

Rock Springs, WY 82902

to modify a run-off sediment control pond according to the procedures and conditions of the application No. 89-003R. The facility is located in NW 1/4, SW 1/4, Sec. 28, T21N, R100W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

its activities allowed under this permit. The permittee understands that it is solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

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

G. Alan Edwards
Director
Dept. of Environmental Quality

March 8, 1989
Date of Issuance

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

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-047
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

EX-TEXACO AT NORTH MAIN AND KOOI

This permit hereby authorizes the applicant:

Texaco Refining and Marketing, Inc.
4601 D.T.C. Blvd.
Denver, Colorado 80237

to construct, install or modify a network of monitoring wells according to the procedures and conditions of the application number 89-047. The facility is located in NW $\frac{1}{4}$ SE $\frac{1}{4}$ Section 15, T56N, R84W in the county of Sheridan, 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:

William P. Gale
Administrator
Water Quality Division

M. Alan Edwards
Director
Department of Environmental Quality

March 31, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-047

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 89-047. 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.

6. At least one of the monitoring wells shall be installed upgradient of the tank facility to establish background (ambient) groundwater quality. The additional wells shall be located to establish both the magnitude degree and extent of contamination.
7. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be implemented when the wells are constructed, installed and developed:
 - 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. Factory slotted casing is recommended for the perforated interval;
 - 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. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - g. A protective casing and locking cap is strongly recommended;
 - h. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - i. 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
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
8. DEQ/WQD personnel in Sheridan (307-672-6457) 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. 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;

Conditions to Permit 89-047 (continued)

- c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;
 - h. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Reconciled inventory records specifying the amounts of spillage (leakage).
 - k. Interpretation of data and conclusions including recommended remedial measures.
10. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
11. All monitor wells installed under this permit must be monitored quarterly for all of the following field and chemical parameters:
- Field Parameters: static water level and free product thickness. Evidence of product too thin to measure (sheen, film, odor, etc.) shall be reported qualitatively.
- Chemical Parameters: (1) EPA method 602 for BETX (benzene, ethylbenzene, toluene, and xylene). (2) EPA Method 418.1 for TPH (total petroleum hydrocarbons).
- This monitoring program may be modified pending a WQD review of the initial sampling results. If measurable free product is reported, the chemical analyses will not be required.
12. All monitor wells associated with this facility shall be sampled and the wastewater analyzed quarterly.
- The results of these analyses shall be submitted to the Cheyenne office by the last day of the month following the end of each calendar quarter. The first set of results are due by the last day of October, 1989.
13. The results of any other analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.

Conditions to Permit 89-047 (continued)

14. The decontamination procedures for water level measurement equipment should be reconsidered to include a biodegradable soap wash to provide assurance against cross contamination between wells.

RS/jn

cc: Jake Strohman, WQD Cheyenne
Loren Leichtnam, WQD Sheridan
Patrick Fischer, Delta Environmental, Fort Collins



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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March 2, 1989

Donald A. Kissell
Texaco Refining and Marketing Inc.
4601 D.T.C. Blvd.
Denver, CO 80237

RE: Texaco at Main and Kooi Streets in Sheridan
WQD Reference No. 89-047 (Permit Application Review)
Delta No. 30-89-007

Dear Mr. Kissell:

The Water Quality Division (WQD) has received an application for a permit to construct monitoring wells at the referenced facility. This has been assigned application number 89-047 and will also serve as the WQD reference number.

A letter of violation dated January 16, 1989 requested a written response providing Texaco's plan to define the extent of contamination that includes a proposed time schedule for implementing the plan. In a telephone conversation on February 15, 1989, I was informed that Delta Environmental had been contracted to conduct the study but would need more time. We agreed on a few more days. The WQD received the application to construct the monitoring wells on February 22, 1989. This is considered to be a timely response, however the application is incomplete.

Review comments are offered:

1. A complete application package consists of three copies each of the application form, plans, and specifications. The application forms were complete, but there were no accompanying plans and specifications.
2. The plans and specifications are typically submitted within a proposal report format to conduct an extent of contamination study (site assessment). A proposal to conduct the study was requested within the letter of violation and an attachment summarizing essential elements of an extent of contamination study was provided to Texaco. This should include a site map that shows physical features and proposed monitoring well locations,

specifications for monitoring well construction, a schematic diagram of monitoring well construction, plans for sampling and analysis, and a schedule for well installation and subsequent work. One of the monitoring wells must be a background (upgradient) well to establish groundwater quality.

3. Since the cover letter states that the Wyoming State Engineer permits have been applied for, the WQD can continue processing this application once the accompanying information has been received.

The permit is therefore not authorized for construction at present. The WQD requests that a proposal to conduct the study that includes the plans and specifications be submitted within 30 days of your receipt of this letter. This would be no later than April 7, 1989. Please feel free to call this office at (307) 777-7781 if you have any questions or comments.

Sincerely,



Robert L. Stites
Groundwater Engineering Evaluator
Water Quality Division

RLS/jn

cc: Chester A. Hitchens, Delta Environmental in Ft. Collins
Jake Strohman, Groundwater Operations Supervisor, WQD
Loren Leichtnam, Water Quality Evaluator, WQD Sheridan



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

RECEIVED

JUL 26 1991

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

July 23, 1991

Mr. S. A. Buford
Halliburton Services
Drawer 1431
Duncan, OK 73536-0100

RE: Halliburton Sewer Line - Worland Facility
WQD Ref No. 89-048

Dear Mr. Buford:

The above referenced application is being returned. This package was resubmitted on June 10, 1991, and is now being permitted under No. 91-180. Therefore, No. 89-048 is considered inactive and will be closed.

If you have any questions, do not hesitate to contact Steve Gerber at 332-3144.

Sincerely,

William L. Garland
Administrator

SG/jyi

cc: ~~IPS~~, DEQ/WQD, Cheyenne



STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

RECEIVED

FEB 7 1991



WATER QUALITY DIVISION
WYOMING

Department of Environmental Quality

210 Lincoln Street • Lander, Wyoming 82520

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

CERTIFIED P 584 341 721

February 5, 1991

Mr. S. A. Buford
Haliburton Services
Drawer 1431
Duncan, OK 73536-0100

Dear Mr. Burford:

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

Facility Name: Halliburton Sewer Line - Worland Facility

DEQ/WQD Reference Number: 89-048

Engineering Consultant: P. E. Grosch Construction

DEQ/WQD Review Engineer: Steve Gerber

Date of DEQ/WQD Review: February 28, 1989

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

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

You are reminded that the construction, installation, or modification of any sewage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a permit to Construct is a violation of Wyoming State

S. A. Burford
Haliburton Services
February 5, 1991
Page 2

Statutes, and is punishable with a fine not to exceed \$10,000 for each day of violation. Unless the Water Quality Division review engineer receives information concerning the status of this project within fifteen (15) days of the receipt of this letter, follow-up action will be taken.

Sincerely,



Steve Gerber, P.E.
Northwest District Supervisor

SG/jyi
cc:IPS, DEQ/WQD, Cheyenne

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-049
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Wal-Mart Store, Inc., Cole Fire Station Addition

This permit hereby authorizes the applicant:

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

to construct, install or modify sanitary sewer collection main and water distribution main facilities according to the procedures and conditions of the application number 89-049. The facility is located in SE $\frac{1}{4}$ S20, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Department of Environmental Quality

March 23, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-049

The fire sprinkler system shall contain a double check valve to provide cross-connection protection.

/nc

cc: Peter Abplanalp, Intermountain Professional Services, Inc.
1816 Central Ave., Cheyenne, WY 82001
Dennis Piester, Cheyenne Fire Dept.

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: Wal-Mart Store, Inc., Cole Fire Station Addition

ENGINEER: Peter Abplanalp
Intermountain Professional Services, Inc.
1816 Central Avenue
Cheyenne, Wyoming 82001

APPLICANT: Cheyenne Board of Public Utilities
2100 Pioneer Avenue
Cheyenne, Wyoming 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 89-049

REVIEWING ENGINEER: Wally Koch, Southeast District Supervisor



DATE OF REVIEW: March 8, 1989

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:

1. Chapter XII of the Department of Environmental Quality Rules and Regulations on page 73 shows that fire sprinkler systems require a double check valve for cross-connection protection. The drawings (Sheet 6) do not indicate any cross-connection protection device on the 8" fire line.
2. I have contacted the Rainbird Company concerning the RPA 200. Mr. Jim Gray of Rainbird stated that the RPA 200 must be installed so as to be free draining and not subject to flooding. After reviewing Sheet 9, I cannot determine if the RPA 200 will be located in a pit or be above ground. Please clarify this.

/jn

PERMIT TO CONSTRUCT

PERMIT NO. 89-050
See Conditions

X New
Renewal
Modified

Leslie's Standard Service Station

This permit hereby authorizes the applicant:

Alan Leslie/Gill Oil Co., Inc.
P. O. Box 218
Sundance, WY 82729

to construct, install or modify monitoring well network according to the procedures and conditions of the application number 89-050. The facility is located in NW $\frac{1}{4}$, SW $\frac{1}{4}$, S13, T51N, R63W in the county of Crook, 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.

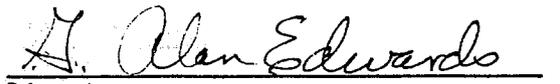
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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.

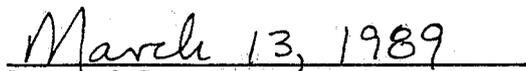
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

Conditions for Permit to Construct 89-050

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 89-050. 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.
6. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be

Conditions to Permit 89-050 (continued)

- 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 water analyzed initially for "BETX" (EPA method 602) and "TPH" (EPA method 418.1). Depending on the results, the WQD may require a regular monitoring program.
11. 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.
12. Drilling shall commence within 30 days of the permittee's receipt of this permit.

cc: Jake Strohman

Conditions to Permit 89-050 (continued)

implemented when the wells are constructed, installed and developed:

- 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
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
8. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
- a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells;
 - d. Geohydrolic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level and product thickness measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results;