



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 2, 1989

Michael Staffileno
Chen-Northern, Inc.
605 North Warehouse Road
Casper, WY 82601

RE: Review of application for permit to construct No. 89-050
Gill Oil Co. (Leslie's Standard) in Sundance
Crook County, Wyoming

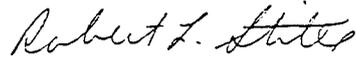
Dear Mr. Staffileno:

This is to follow up on our telephone conversation of March 2, 1989. The Water Quality Division (WQD) has reviewed the referenced application for a permit to construct monitoring wells and offers the following comments:

1. The application is not signed. This may be signed by the owner/applicant or consultant as the owner/applicant's agent. You requested that the application package be returned to you for signature.
2. Three copies of the plans and specifications (site map, monitoring well schematics, specifications within cover letter) must be submitted along with the three copies of the permit applications.
3. The construction plans for the three monitoring wells appear to meet or exceed the minimum requirements for construction as described in Part G, Chapter XI of the Wyoming Water Quality Rules and Regulations.
4. The proposed monitoring well locations appear to be able to provide background water quality and detect releases from the tank system in the presumed easterly to southeasterly downgradient direction. These locations are more suitable to an extent of contamination study. The purpose of leak detection wells is to detect releases immediately. The downgradient wells (MW-2, MW-3) are too far from the tank system for this purpose.

The permit is at this time not authorized for construction. The WQD requests that the signed permit with the additional copies be submitted within 15 days of your receipt of this letter. Once this is received, the WQD anticipates a relatively rapid processing of the permit.

Sincerely,



Robert L. Stites
Groundwater Engineering Evaluator
Water Quality Division

RLS/jn

cc: Susan Fields, NE District Supervisor, DEQ/WQD



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May 26, 1989

Keith S. Thompson
Western Water Consultants, Inc
611 Skyline Drive
Laramie, WY 82070

Dear Keith:

As agreed upon in our phone conversation on May 9, 1989 and per your letter received April 28, 1989, an extension is granted to permit to construct No. 89-051. The purpose of this letter is to grant a 75-day extension to the time within which the report of subsurface investigation is to be submitted to the WQD; to be submitted by September 15, 1989.

Thank you for your cooperation in resolving this matter. If you have any other questions please contact me at 777-7091.

Sincerely,

Edith L. Johnson
Environmental Engineering Specialist
Water Quality Division

ELJ/jn

cc: Jake Strohman, DEQ/WQD

18

PERMIT TO CONSTRUCT

PERMIT NO. 89-051
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Dowell Schlumberger, Inc.

This permit hereby authorizes the applicant:

Downell Schlumberger, Inc.
P O Box 2710
Tulsa, OK 74101

to construct, install or modify monitoring well and borehole system according to the procedures and conditions of the application number 89-051. The facility is located in S15, T55N, R99W and S30, T53N, R100W in the county of Park, 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.

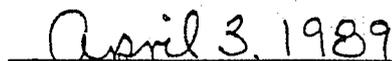
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-051

1. The groundwater monitoring wells and boreholes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-051. 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 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.
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;

Conditions to Permit 89-051 (continued)

- 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 for the parameters listed below:

EPA Methods 601, 602, 610 and 418.1.

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 June.

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. Pending WQD evaluation of the first 2 results, a reduction in sampling parameters and/or frequency may be granted.

cc: Jake Strohman

ELJ/nc

16

PERMIT TO CONSTRUCT

PERMIT NO. 89-052
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Dowell Schlumberger, Inc.

This permit hereby authorizes the applicant:

Downell Schlumberger, Inc.
P O Box 2710
Tulsa, OK 74101

to construct, install or modify monitoring well and borehole system according to the procedures and conditions of the application number 89-052. The facility is located in S26, T50N, R72W and S22, T50N, R72W in the county of Campbell, 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 P. Garland
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

April 3, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-052

1. The groundwater monitoring wells and boreholes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-052. 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 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.
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;

Conditions to Permit 89-052 (continued)

- 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 for the parameters listed below:

EPA Methods 601, 602, 610 and 418.1.

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 June.

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. Pending WQD evaluation of the first 2 results, a reduction in sampling parameters and/or frequency may be granted.

cc: Jake Strohman

ELJ/nc

ef

PERMIT TO CONSTRUCT

PERMIT NO. 89-053
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Dowell Schlumberger, Inc.

This permit hereby authorizes the applicant:

Downell Schlumberger, Inc.
P O Box 2710
Tulsa, OK 74101

to construct, install or modify monitoring well and borehole system according to the procedures and conditions of the application number 89-053. The facility is located in S35, T20N, R105W in the county of Sweetwater, 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 D. Jones
Administrator
Water Quality Division

M. Alan Edwards
Director
Department of Environmental Quality

April 3, 1989
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-053

1. The groundwater monitoring wells and boreholes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-051. 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 89-053 (continued)

6. 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.
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;

Conditions to Permit 89-053 (continued)

- 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 for the parameters listed below:

EPA Methods 601, 602, 610 and 418.1.

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 June.
 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. Pending WQD evaluation of the first 2 results, a reduction in sampling parameters and/or frequency may be granted.

cc: Jake Strohman

ELJ/nc

PERMIT TO CONSTRUCT

PERMIT NO. 89-054
See Conditions

X New
Renewal
Modified

VFW-Casper Memorial Post #9439

This permit hereby authorizes the applicant:

Michael D Hagler, Superintendent
Casper Department of Public Works
1800 E. K Street
Casper, WY 82601

to construct, install or modify system of methane monitor wells according to the procedures and conditions of the application number 89-054. The facility is located in S34, T34N, R79W 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 J. Jones
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

March 16, 1989
Date of Issuance

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

Conditions to Permit to Construct #89-054

1. The surface shall have a concrete surface seal as shown on the Schematic Diagram submitted with the application.
2. The flush mounted covers shall be kept closed when not being monitored.
3. The cuttings shall be logged by a qualified geologist. If petroleum contamination is found, it shall be reported to the Water Quality Division in writing within seven days of the drilling of these wells.
4. A lithology log and as built plan of these wells shall be submitted to Water Quality Division within 90 days of installation.

/mad

cc: Jake Strohman

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-056

- X New
- Renewal
- Modified

Newton Drive Water Main Replacement

This permit hereby authorizes the applicant:

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

to construct, install or modify a public water distribution system according to the procedures and conditions of the application number 89-056. The facility is located in Section 29, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:

William R. Jarland
Administrator
Water Quality Division

H. Alan Edwards
Director
Department of Environmental Quality

March 13, 1989
Date of Issuance

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

DM/jt

cc: Carroll Aamold
Cheyenne Board of Public Utilities
P O Box 1469
Cheyenne, WY 82003-1469

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 89-057

MARK GORDON/MERLIN RANCH SEPTIC SYSTEM
(Name of Facility)

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

Mark & Sarah H. Gordon

Box 28, Clearmont Route

Buffalo, Wyoming 82834

to construct, install or modify a septic system facility according to the procedures and conditions of the application No. 89-057. The facility is located in Section 3, T.51N., 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:

William L. Garland
Administrator
Water Quality Division

L. Alan Edwards
Director
Dept. of Environmental Quality

March 13, 1989
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. 89-058R
* Conditions on permit

Teton Texaco Service Station
(Name of Facility)

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

John W. Brazelton

412 Leasure World, Unit #46

Mesa, AZ 85206

to construct a One to four groundwater monitor wells according to the procedures and conditions of the application No. 89-058R. The facility is located in NE 1/4 SE 1/4 Sec. 28, T41N, R116W in the County of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

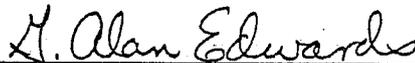
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

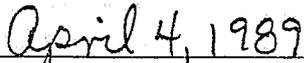
AUTHORIZED BY:



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.

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 89-058R. Additional wells meeting the requirements of the application 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 assessment, additional site investigation or remedial measures may be required by the WQD.
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 required;
 - 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

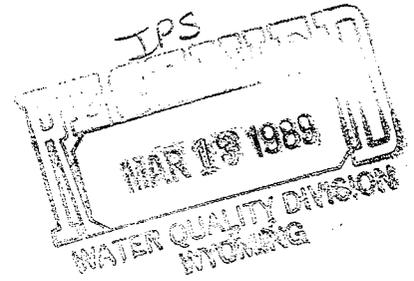
- k. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
- 7. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
- 8. If results of analyses conducted on soil or water removed from these wells or boreholes shows any contamination, the test results must be provided to the department as soon as they are available.

cc: Jake Strohman

MEMORANDUM

TO: Plans, 89-058
FROM: Jeff Hermansky
DATE: March 10, 1989
SUBJECT: Phone Review

JH



On March 7, 1989 I conducted a phone review of the Teton Texaco Service Station application for drilling monitor wells. I spoke with Jon Howell of Inberg-Miller Engineering and made the following comments:

- 1) The application form must be signed by the owner, not the engineer.
- 2) The application must include a site plan with approximate well and boring locations.
- 3) The application must include a typical detail of a monitor well.

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 89-059

TOWN OF UPTON SEWER COLLECTION REPLACEMENT
(Name of Facility)

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

Town of Upton
P. O. Box 203
Upton, Wyoming 82730

to construct, install or modify a sanitary sewer collection facility according to the procedures and conditions of the application No. 89-059. The facility is located in Section 35, T.48N., R.65W., in the County of Weston, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

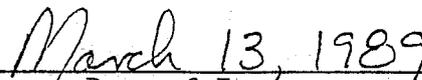
AUTHORIZED BY:



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.

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

M

PERMIT TO CONSTRUCT

PERMIT NO. 89-060

X New
Renewal
Modified

Chugwater 6" Water Distribution System

This permit hereby authorizes the applicant:

Town of Chugwater
P. O. Box 243
Chugwater, WY 82210

to construct, install or modify waterline according to the procedures and conditions of the application number 89-060. The facility is located in W $\frac{1}{2}$ S30, T21N, R66W in the county of Platte, 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. Jones
Administrator
Water Quality Division

G. Alan Edwards
Director
Department of Environmental Quality

March 27, 1989
Date of Issuance

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

/mad

PERMIT TO CONSTRUCT

New

Permit No. 89-061R

Renewal

Modified

Goldben Sewage Disposal Facility
(Name of Facility)

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

First State Bank of Hotchkiss

P.O. Box 38

Hotchkiss, CO 81419

to construct a lift station and mound type disposal field according to the procedures and conditions of the application No. 80-061R. The facility is located in Section 18, T43N, R94W in the County of Hot Springs, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable 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. Garland
Administrator
Water Quality Division

H. Alan Edwards
Director
Dept. of Environmental Quality

April 4, 1989
Date of Issuance

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

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-062
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

C Street Service Station

This permit hereby authorizes the applicant:

Ted Anest
1744 South Wills
Casper, Wyoming 82601

to construct, install or modify a monitor well and borehole system according to the procedures and conditions of the application number 89-062. The facility is located in Section 3, NW, SE, 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:

William H. Jordan
Administrator
Water Quality Division

H. Alan Edwards
Director
Department of Environmental Quality

March 13, 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 89-062. 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 89-062 (continued)

6. 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.
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;

Conditions to Permit 89-062 (continued)

- 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 418.1 (TPH) and EPA 602 (BTX)
 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. The time schedule for plan implementation as submitted in the proposal shall be adhered to.

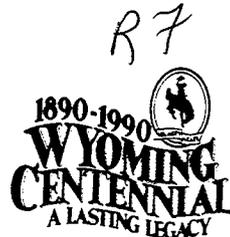
SCF/jt

cc: Steven F. Moldt
Inberg-Miller Engineers
355 North Lincoln
Casper, WY 82601
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

March 14, 1989

Philip Stuckert, City Engineer
City of Casper
200 North David
Casper, Wyoming 82601

RE: Nicolaysen Art Museum Heat Pump System
Permit UIC 89-063, class 5A7
Casper, Natrona County, Wyoming

Dear Mr. Stuckert:

Enclosed please find a permit to inject to cover the above referenced facility. This permit requires a minimum of groundwater monitoring to classify the waters, to provide a method of detecting leaks and the extent on any contamination that might result, and to provide a defense for the system against outside contamination that might detrimentally affect the loops themselves.

The permit requires that yearly samples be taken for TDS only, and that the wells be visually inspected yearly for petroleum hydrocarbons.

This permit also requires that notices be sent any time a leak might develop in the system.

Sincerely,

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

RL/jn

xc: Jake Strohman
Greg Oberley, EPA Region VIII

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

(X) New

Permit Number: UIC 89-063

() Modified

UIC CLASS 5A7

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),

Philip Stuckert, City Engineer
City of Casper
200 North David
Casper, Wyoming 82601
(307) 235-8298

is authorized to operate

a ground based heat pump system of the closed loop type at the Nicolaysen Art Museum (corner of East Collins Avenue and South Kimball Street) in Casper, Natrona County, Wyoming

according to procedures and conditions of the application 89-063 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

March 18, 1989
Date



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

March 23, 1989
Date

A. Discharge (Injection) Zone and Area of Review

The Area of Review for this project is limited to the NE 1/4 Section 9, Township 33 North, Range 79 West, in Natrona County, Wyoming. Formations potentially affected by this facility include the alluvium of the Platte River and the Cody Shale including possibly either the Sussex or Shannon sandstone members of the Cody Shale. Available drilling on site has not encountered any sandstone in the Cody Shale.

B. Groundwater Classification

There is no data available on this site or nearby as to the actual quality of water in any of the affected formations. A search of Wyoming State Engineer's records reveals that there are wells that tap any or all of these formations that may be used for domestic use purposes. The groundwater in all of these formations is therefore class I by use and shall not be degraded below its present chemical constituents.

C. Authorized Operations

The permittee is authorized to operate a closed loop heat pump system consisting of 48 wells drilled to a depth of 300 feet. Each well will be drilled approximately 5 inches in diameter and a 1 inch polypropylene tubing with fused joints will be installed and pressure checked. The hole will be sealed with drilling mud having a 10 minute gel strength of at least 20 pounds per 100 square feet and a filtrate volume not to exceed 13.5 cubic centimeters. All mud will be emplaced through a tremie pipe to the bottom of the hole. The completed loops shall be pressure checked to at least 10 percent above operating pressure.

The completed system shall have controls placed so that any leak in any of the 48 wells shall cause the entire system to shut down. After determining the location of the leak, that individual well or that entire branch of 6 wells shall be isolated and abandoned.

When abandoning wells under this permit, all fluid in the loop shall be displaced with clean water to the extent possible. Fluid recovered may be used as makeup for any replacement system or disposed of in an approved manner.

Circulating fluid shall be nontoxic. Ethylene glycol shall not be used in this system in any case. Twenty percent propylene glycol shall be the circulating fluid for this system. Any other non toxic fluid may be used if prior approval is obtained prior to installation.

D. Proper Operation and Maintenance

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

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

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

E. Entry and Inspection

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

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

F. Environmental Monitoring Program for Groundwaters of the State

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

- e. The analytical techniques or methods used; and
- f. The results of such analyses.

4. The prescribed program for this permitted activity is as follows:

This system shall be continuously monitored for any leakage. The system as designed will limit any discharge to the volume of the piping in which the leak occurs. The volume of all 1" piping alone is approximately 1200 gallons, not counting the header pipes. This system should limit the discharge to the volume in one 6 well field or approximately 300 gallons.

Because of the large number of boreholes in this system and the fact that there could be an upward gradient from poor quality waters at depth, several monitor wells shall be constructed to monitor this system. These wells shall be constructed in two groups, three wells in the near surface alluvium and one well each in each sand which may be encountered in the Cody Shale.

The alluvial monitor wells shall be constructed so that one is on the north side of the wellfields, one is south of the wellfields and one is southwest of the wellfields. These monitoring wells shall meet the following standards:

1. 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.
2. After the monitoring wells have fulfilled their useful purpose, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after a well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
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. When the wells are installed, the following construction items shall be addressed:
 - a. After the bentonite has been placed in the annular space, it shall be hydrated to insure a proper seal;
 - b. The borehole diameter shall be at least 4 inches larger than the diameter of the casing;

- 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 shall be used. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings.
 - e. 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 on the casing to prevent sediment and surface water from entering the well;
 - g. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. A seal of bentonite or bentonite grout shall be installed from the surface to a point 2 feet above the top perforation.
 - i. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
5. All monitor wells installed under this permit shall be monitored once after construction and analyzed for the following constituents: TDS, HCO₃, CO₃, SO₄, NH₄, NO₃, Na, Ca, Mg, pH field conductivity, Static Water Level and the presence of free petroleum products on the top of the well. The purpose of this monitoring is to classify the groundwaters encountered and to insure that contamination from any adjacent site does not cause a chemical breakdown of the installed loops. If free petroleum product is encountered, the Water Quality Division shall be notified immediately. On a yearly basis after construction, each well constructed under this permit shall be analyzed for TDS and the presence of free product in the well.
6. All Cody Formation wells, if required by site geology, shall be completed in a single sandstone unit within the Cody Formation and shall be sealed in all other units. A minimum well screen of 10 feet shall be installed in each of these wells and shall be sand packed 2 feet above the top perforation. At least 1 well shall be installed in each sandstone unit encountered during the drilling. All Cody Formation wells, if required, shall be monitored at the same time and for the same parameters as the alluvium wells. All construction standards for alluvial wells shall apply to Cody Formation wells except 4c above.
7. After construction, all of these wells shall be available to the Water Quality Division for monitoring at any time and for any parameters.

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

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

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

Public notice of the permit review and request for public comment will be made every 10 years by the administrator.

K. Mechanical Integrity

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

Mechanical integrity of this system shall be monitored at all times. Any loss of mechanical integrity will cause the entire system to become inoperable and will trigger all required leak reports.

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:

Any loop constructed under this permit shall be abandoned properly at the conclusion of its useful life. The circulating fluid shall be displaced with clean water and then removed from the circuit. All fluids recovered shall be disposed of in an approved manner at the time of abandonment. Prior to final abandonment, the entire circuit shall be filled with a bentonite slurry meeting the specifications above (Section C of this permit) for the drillhole seals.

M. Duties of the Permittee

It is a duty of the permittee to:

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.

The only reports required by this permit is an annual report showing the analysis required for each monitor well.

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.

After all construction is complete, the permittee shall submit a report detailing the as-built construction of all heat pump loops and all monitor wells. In addition, all required analysis shall be submitted at this time. This report shall be filed no later than 90 days after the date when the last drilling is done under this permit.

All drilling done under this permit shall be logged for lithology by a competent geologist or geological engineer or hydrologist. Copies of all logs shall be submitted along with the as built plans.

In the case that a leak occurs in the system, the permittee shall jointly structure a monitoring program along with the Water Quality Division. Parameters to be analyzed shall be determined at the time and shall be based on the technical problems encountered at that time. Parameters that may be required include EPA Methods 601 - Purgeable Halocarbons, EPA Method 602 - Purgeable Aromatics, EPA Method 418.1 - Total Petroleum Hydrocarbon, EPA Method 604 - Phenols, or other methods which may be identified at the time. In case a leak occurs, other monitor wells may be required at that time. In case a leak occurs, all monitor wells shall be analyzed for parameters indicative of the circulating fluid, at a minimum.

G. Requirements for Monitoring the Discharge

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

If a leak occurs, or any fluid is added to this system, the City of Casper is required to report this fact within 24 hours of its detection by telephone to the Water Quality Division. This report shall be followed within 7 days by a written report detailing the nature of the fluid lost, its concentration, and the approximate volume released, and any remedial measures already accomplished such as abandoning any wells.

To insure that this requirement is known to the people who must make this report, the City of Casper is required to keep a copy of this permit in the files of the City Engineer, Philip Stuckert or his successor. In addition, a notice shall be posted in each location where heat pumps are located including the rooms where the actual heat pumps are located and in the subsurface room containing pumps P-1 and P-2 on the plans. The exact wording of this notice shall be:

"IN CASE OF A LEAK you are required to report this fact immediately upon discovery to the the City Engineer's Office and to the Water Quality Division by telephone to (307) 777-7081. This report shall be followed by a written report within seven days addressed to:

WYOMING DEQ, WATER QUALITY DIVISION
UIC PROGRAM SUPERVISOR
HERSCHLER BUILDING, 4TH FLOOR WEST
122 WEST 25TH STREET
CHEYENNE, WYOMING 82002"

All words in all capital letters above shall be a minimum of 2 inches high and the remaining words shall be a minimum of 1 inch high.

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 City of Casper has sufficient financial strength to insure that this system will be properly abandoned when it has served its useful life.

O. Special Measures the Director Finds Necessary:

Should the City of Casper ever decide to operate this facility through a concessionaire, sufficient contractual clauses shall be incorporated into such a contract to insure that all provisions of this permit are followed. Any concessionaire shall be made aware of all permit provisions and be bound by contract to abide by them.

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

CONVERSATION

DATE 6-26-89

NAME ~~WAYNE COLETTA~~ GUS ANDERSON

COMPANY _____

ADDRESS _____

PHONE NO. 265 3158

TOPIC: PERMIT # 89-064

C O N V E R S A T I O N

GUS IN MARCH, 1989
PHONED ~~WAYNE~~ TO INFORM HIM THAT
A PERMIT WOULD NOT BE REQUIRED FOR
THE DEMANTLING FACILITY, THEREFORE PERMIT
#89-064 WOULD BE WITHDRAWN.

SIGNATURE Gus Anderson

R7

PERMIT TO CONSTRUCT

PERMIT NO. 89-065
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

DRESSER SECURITY MONITOR WELLS

This permit hereby authorizes the applicant:

Dave McGuire
Security Division of Dresser Industries
P O Box 2750
Mills, Wyoming 82644

to construct, install or modify a system of monitor wells according to the procedures and conditions of the application number 89-065. The facility is located in Section 35, T34N, R80W, SE $\frac{1}{4}$ SW $\frac{1}{4}$ 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.

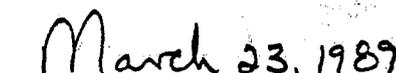
AUTHORIZED BY:



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 89-065

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 89-065. 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 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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. 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
 - i. 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;

Conditions to Permit 89-065 (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 wastewater analyzed quarterly for the parameters listed below:
- Purgeable halocarbons by EPA Method 601, purgeable aromatics by EPA Method 602, polynuclear aromatic hydrocarbon by EPA Method 610, and total petroleum hydrocarbon by EPA Method 418.1.
- 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.
11. After one round of sampling results, WQD will re-examine the above parameter list. An alternate list of parameters may be required at that time.
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.

RL/jn

cc: Jake Strohman, DEQ/WQD
Kent Angelos, Core Labs, 420 W. 1st Street, Casper, WY 82601

PERMIT TO CONSTRUCT

New

Permit No. 89-066R

Renewal

Modified

Cody - "A" Street & "E" Ave. Water Main
(Name of Facility)

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

City of Cody

1338 Rumsey Avenue

Cody, WY 82414

to construct a 10 inch water main according to the procedures and conditions of the application No. 89-066R. The facility is located in Tract 40, T53N; 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:

Laurence Robinson
Administrator
for Water Quality Division

M. Alex Edwards
Director
Dept. of Environmental Quality

May 19, 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. 89-067
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

CHEYENNE, WYOMING UNION PACIFIC RAIL YARD

This permit hereby authorizes the applicant:

Union Pacific Railroad
1416 Dodge Street, Room 1026
Omaha, Nebraska 68179

to construct, install or modify groundwater monitoring wells and borings according to the procedures and conditions of the application number 89-067. The facility is located in Section 6, T13N, R66W, and Section 31, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:

William P. Jones
Administrator
Water Quality Division

H. 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 for Permit to Construct 89-067

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 89-067. 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 89-067 (continued)

- 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.
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;

Conditions to Permit 89-067 (continued)

- 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 for the parameters listed below:

BETX, TPH, Perchloroethylene

The results of these analyses shall be submitted to the Cheyenne office in the report due in 90 days. Depending on the results of these analyses, additional sampling and analysis may be required by the Water Quality Division. A sampling schedule will be developed at that time.

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.

DM/jn

cc: Jake Strohman, DEQ/WQD

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-068

X New
Renewal
Modified

Black Court Sewer Replacement

This permit hereby authorizes the applicant:

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

to construct, install or modify public wastewater collection system according to the procedures and conditions of the application number 89-068. The facility is located in SW $\frac{1}{4}$ S29, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:

William S. Jansd
Administrator
Water Quality Division

H. 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.

DM/mad



THE STATE

OF WYOMING



Department of Environmental Quality

Air Quality Division
(307) 672-6457

Water Quality Division
(307) 672-6457

March 20, 1989

Mr. J. S. Castleberry
Mobil Coal Producing, Inc.
P. O. Box 3021
Gillette, Wyoming 82716

RE: As-Built Approval for Caballo Rojo Mine
Sediment Traps 2, 3 and 4
Water Quality Reference Nos. 89-069 through 89-071

Dear Steve:

The Water Quality Division has reviewed your application for as-built approval of Sediment Traps 2, 3 and 4 at the Caballo Rojo Mine in Campbell County, Wyoming. Based on the information submitted, it appears that the facilities meet minimum design and construction requirements of the Water Quality Rules and Regulations.

Since these facilities are already installed, a Permit to Construct can not be issued. This letter serves essentially the same purpose and will be your only notification of this office's approval.

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

Sincerely,

Susan Fields
NE District Supervisor
Water Quality Division

SF:jj

xc: Bob Giurgevich, LQD, Sheridan

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 89-072

ROGER WOOD SMALL WASTEWATER FACILITY
(Name of Facility)

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

William Brimmer

Lytle Creek Road

Devils Tower, Wyoming 82714

to construct, install or modify a small wastewater facility according to the procedures and conditions of the application No. 89-072. The facility is located in Section 30, T.53N., R.64W., in the County of Crook, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

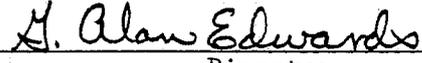
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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,

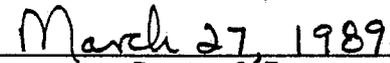
AUTHORIZED BY:



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.

R7

PERMIT TO CONSTRUCT

PERMIT NO. 89-073
SEE SPECIAL CONDITIONS

- X New
- Renewal
- Modified

Hydraulics, Inc. Monitor Wells

This permit hereby authorizes the applicant:

Rick Pekar
Morgantown Machine and Hydraulics
Star Route 2 West
Rock Springs, WY 82901
(307) 382-9787

to construct, install or modify system of monitor wells and soil borings according to the procedures and conditions of the application number 89-073. The facility is located in T18N, R106W, Section 12, NW of SE in the county of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of five years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

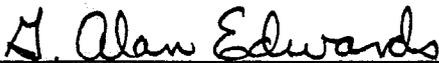
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

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 #89-073

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 89-073. 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 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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. 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
 - i. 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;

Conditions to Permit 89-073 (continued)

- 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 for the parameters listed below:
- Purgeable halocarbons by EPA Method 601; purgeable aromatics by EPA Method 602; polynuclear aromatics by EPA Method 610 and total petroleum hydrocarbon by EPA Method 418.1
- 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 May, 1989.
11. Soils encountered during drilling shall be field-scanned using a photoionization meter or an HNU. Soil samples showing contamination with this device shall be analyzed using EPA methods 8240, 8270 and 418.1
12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
13. Issuance of this permit does not constitute acceptance by the Water Quality Division of the concept that monitor wells deeper than 35 feet will not be required. Monitor wells 100 or more feet deep may ultimately be required on this project.

RL/nc

cc: Jack Bedessem, TriHydro Corporation, 410 Grand Ave., Laramie, WY 82070
Jake Strohman

R7

PERMIT TO CONSTRUCT

PERMIT NO. 89-074
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Amoco Service Station 9561

This permit hereby authorizes the applicant:

Martin S. Johnson
Amoco Oil Company
P O Box 3385
Tulsa, OK 74102
(918) 660-4434

to construct, install or modify system of monitor wells according to the procedures and conditions of the application number 89-074. The facility is located in Section 10, T33N, R79W, NW1/4 in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of 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 L. Galan
Administrator
Water Quality Division

H. Alan Edwards
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 #89-074

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 89-074. 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 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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. 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
 - i. 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 site map showing physical features, well locations and elevations;
 - b. Final location, construction details and logs of all monitoring wells;
 - c. Geohydrolic maps and/or cross sections that clearly describe the subsur-

Conditions to Permit 89-074 (continued)

face distribution of geological materials and groundwater occurrence;

- d. Water level and product thickness measurements;
 - 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. A potentiometric surface map showing the direction of groundwater movement; and
 - i. 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 for the parameters listed below:

Total petroleum hydrocarbon by EPA Method 418.1 and benzene, ethylbenzene, toluene xylene by EPA Method 602

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

11. All inventory records for a year prior to the report of a spill shall be submitted to the DEQ/WQD within 15 days of receipt of this permit. Reconciled inventory records with the volume of the spill specified shall be submitted to the DEQ/WQD within 45 days of receipt of this permit.
12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
13. The permittee is free to use quarters other than calendar quarters, if this would ease his workload. If quarters other than calendar quarters are to be used, the permittee shall notify the Water Quality Division prior to adopting such an alternate schedule.

RL/nc

cc: Jake Strohman

R.F.

PERMIT TO CONSTRUCT

New

Permit No. 89-076

Renewal

Modified

Sedimentation Pond No SP-LH2
(Name of Facility)

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

Black Butte Coal Company

P.O. Box 98

Point of Rocks, WY 82942

to construct a sedimentation pond according to the procedures and conditions of the application No. 89-076. The facility is located in SE 1/4, SW 1/4, Section 34, Township 21N, Range 101W 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. Jarboe
Administrator
Water Quality Division

H. Alan Edwards
Director
Dept. of Environmental Quality

March 31, 1989

Date of Issuance

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

4

PERMIT TO CONSTRUCT

PERMIT NO. 89-077
See Conditions

X New
Renewal
Modified

Lambert Small Septic System

This permit hereby authorizes the applicant:

Charles V. Lambert
702 12th Street
Wheatland, WY 82201

to construct, install or modify small wastewater system according to the procedures and conditions of the application number 89-077. The facility is located in NW $\frac{1}{4}$, S16, T24N, R68W, in the county of Platte, 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 R. Gault
Administrator
Water Quality Division

H. Alan Edwards
Director
Department of Environmental Quality

March 27, 1989
Date of Issuance

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

Conditions to Permit to Construct 89-077

The septic tank manufacturers recommendations will be followed for the installation of the tank.

DM/mad

R 7

PERMIT TO CONSTRUCT

PERMIT NO. 89-078
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Cheyenne No. 31 & 55 Wells

This permit hereby authorizes the applicant:

Cheyenne Board of Public Utilities
2100 Pioneer Ave
Cheyenne, WY 82003

to construct, install or modify replacement of existing wells according to the procedures and conditions of the application number 89-078. The facility is located in Section 33, T14N, R68W and Section 9, T15N, R69W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of three 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: Southeast 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.

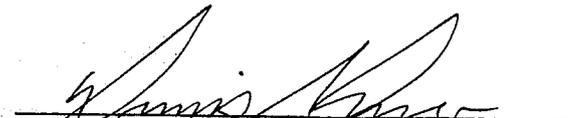
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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.

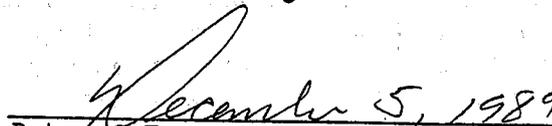
AUTHORIZED BY:



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.

CONDITIONS TO PERMIT TO CONSTRUCT #89-078

The completed operations manual for each well and pump house must be submitted to Department of Environmental Quality, Water Quality Division before the project is completed.

LBH/nc

cc: Bealodge Ltd. Inc.
P.O. Box 130
Sundance, WY 82279

P.F.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 89-079RR

West Diamondville Addition
(Name of Facility)

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

Four Way Investments

P.O. Box 631

Kemmerer, WY 83101-0631

to construct water distribution system and sanitary sewer collection system for new subdivision according to the procedures and conditions of the application No. 89-079RR. The facility is located in NW 1/2 Section 25 and NE 1/4 Section 26, T21N, R116W in the County of Lincoln, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

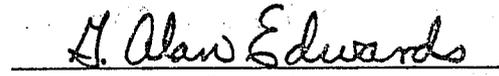
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

June 14, 1989
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. 89-080

McCONAUGHEY MOBILE HOME SEPTIC SYSTEM
(Name of Facility)

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

Custom Contracting Services

P. O. Box 9969

Casper, Wyoming 82609

to construct, install or modify a small wastewater facility according to the procedures and conditions of the application No. 89-080. The facility is located in Section 25, T.33N., R.63W., in the County of Niobrara, 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.

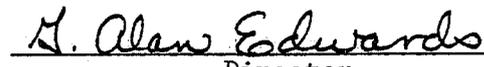
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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,

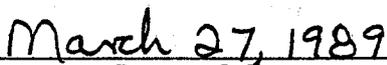
AUTHORIZED BY:



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.

RT

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 89-081
*Conditions on Permit

Riverton Automotive Operation Garage
(Name of Facility)

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

U.S. West Communications

P.O. Box 428

Cheyenne, WY 82003

to install five groundwater monitor wells according to the procedures and conditions of the application No. 89-081. The facility is located in NE 1/4 SE 1/4 Section 34 T1N, R4E in the County of Fremont, in the State of Wyoming.

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

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

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

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

Permit 89-081
Conditions

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.

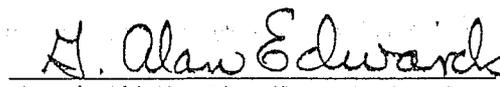
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

April 18, 1989
Date of Issuance

This permit does not supersede 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 89-081. Additional wells meeting the requirements of the application 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

Permit 89-081
Conditions

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. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;

Permit 89-081
Conditions

- g. A protective casing and locking cap is strongly required for all wells;
 - 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 at least one 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 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.

Permit 89-081
Conditions

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 for the parameters listed below:
BETX and TPH

The results of these analyses shall be submitted to the Lander office by the last day of the month following the sampling due date. The first set of results are due by the last day of July 1989.

11. All inventory records for a year prior to the report of a spill shall be submitted to the DEQ/WQD within 15 days of receipt of this permit. Reconciled inventory records with the volume of the spill specified shall be submitted to the DEQ/.WQD within 45 days of receipt of this permit.
12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
13. The time schedule for plan implementation as submitted in the proposal shall be adhered to.

cc: Jake Strohman

R.F.

PERMIT TO CONSTRUCT

New

Permit No. 89-082

Renewal

Modified

High Island Ranch On-Site Sewage System
(Name of Facility)

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

George Nelson

P.O. Box 71

Hamilton Dome, WY 82427

to construct a septic tank/leach field for a trailer house according to the procedures and conditions of the application No. 89-082. The facility is located in NE 1/4 SE 1/4 Section 28, T45N, R97W in the County of Hot Springs, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable 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. Ireland
Administrator
Water Quality Division

L. Alan Edwards
Director
Dept. of Environmental Quality

April 11, 1989
Date of Issuance

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

R.F.

PERMIT TO CONSTRUCT

New

Permit No. 89-083R

Renewal

Modified

Cottonwood Park Corner Creek - Phase Two
(Name of Facility)

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

Four Lazy F Ranch

P.O. Box 453

Jackson, WY 83001

to construct water and sewer lines according to the procedures and conditions of the application No. 89-083R. The facility is located in Section 6, T40N, R116W in the County of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

A. Alan Edwards
Director
Dept. of Environmental Quality

June 14, 1989
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. 89-084R
*Conditions on permit

Alco Inc. Service Station Monitor Wells
(Name of Facility)

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

Charlie Stump, Jr.

P.O. Box 1148

Thermopolis, WY 82443

to install a series of 3 groundwater monitor wells facility according to the procedures and conditions of the application No. 89-084R. The facility is located in NW 1/4 NW 1/4 Section 1, T42N, R95W in the County of Hot Springs, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable 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 construc-

Permit to Construct
Alco Inc.

tion 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. Garland H. Alan Edwards
Administrator Director
Water Quality Division Dept. of Environmental Quality

May 8, 1989
Date of Issuance

This permit does not supersede 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 89-084R. Additional wells

Permit to Construct
Alco Inc.

meeting the requirements of the application 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 required.
 - 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 at least one 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 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;

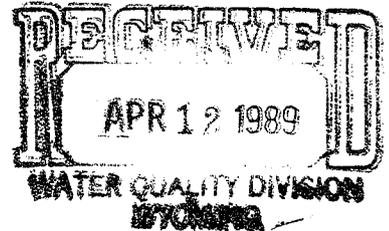
Permit to Construct
Alco Inc.

- 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 for the parameters listed below:
BETX and TPH
- The results of these analyses shall be submitted to the Lander office.
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.
13. The time schedule for plan implementation is submitted in proposal shall be adhered to.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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



PROJECT: Alco Inc. Service Station

ENGINEER: Inberg-Miller Engineers
Jon Howell, P.E.
124 E. Main St.
Riverton, WY 82501

OWNER: Charlie Stump, Jr.
P.O. Box 1148
Thermopolis, WY 82443

WATER QUALITY DIVISION REFERENCE NUMBER: 89-084

REVIEWING ENGINEER: Jeff Hermansky

DATE OF REVIEW: April 5, 1989

ACTION: Not authorized

COMMENTS:

I have completed a review of the proposed groundwater investigation at the Alco Inc. Site in Thermopolis. Please address the following comments:

- 1) As we discussed, the groundwater gradient, 2 1/2 to 3 blocks north of this site, was found to be almost exactly north-east. If we were to begin this investigation with the assumption that the groundwater at the Alco site flows in a similar direction, monitor wells 1 and 3 appear to be proposed in locations that will benefit this investigation. However, I would suggest that, if possible, monitor well 2 would be more useful located just south of the Alco Station building near the east property line.
- 2) The analysis of soil samples from the monitor well borings is unnecessary since wells are to be constructed in each of the 3 borings. I would suggest, however, that your split spoon samples taken from about 4 feet above to 4 feet below the groundwater elevation are checked for hydrocarbon vapors on-site with your H·Nu organic vapor analyzer.
- 3) When your proposal is resubmitted, please supply an additional two (2) copies for our authorization.

RT

PERMIT TO CONSTRUCT

PERMIT NO. 89-085

X New
Renewal
Modified

EAST POINT SUBDIVISION

This permit hereby authorizes the applicant:

William J. Edwards
5920 Yellowstone Road
Cheyenne, WY 82009

to construct, install or modify a Distribution and Collection System according to the procedures and conditions of the application number 89-085. The facility is located in SW Section 22 Township 14 North Range 66 West in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

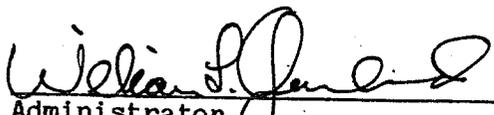
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

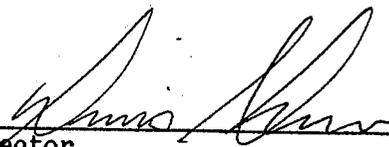
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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.

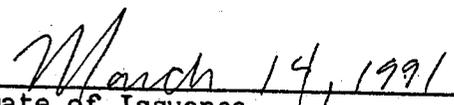
AUTHORIZED BY:



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.

SCF/jt

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: East Point Subdivision

ENGINEER: Joseph E. Kub, P.E.
5920 Yellowstone Road
Cheyenne, Wyoming 82009

APPLICANT: William J. Edwards
5920 Yellowstone Road
Cheyenne, Wyoming 82009

WATER QUALITY DIVISION REFERENCE NUMBER: 89-177

REVIEWING ENGINEER: David Montague, ^{DM} Engineering Specialist

APPROVING ENGINEER: Lawrence Robinson, Engineering Supervisor *LR*

DATE OF REVIEW: May 30, 1989

ACTION: NC

COMMENTS:

Same as 89-085

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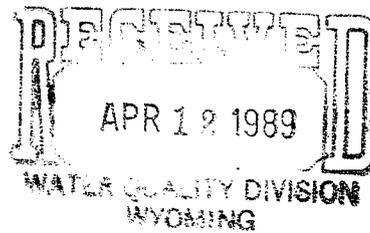
/jn



THE STATE

OF WYOMING

MIKE SULLIVAN
GOVERNOR



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

April 7, 1989

Yellow Creek Ranch Co.
ATTN: Mr. Michael G. Pexton
170 Yellow Creek Rd.
Evanston, WY 82930

RE: Beverly Subdivision "Permit to Construct"
WQD No. 89-086

Dear Mr. Pexton:

I have received your application package for the above referenced project. In order to process this package and conduct a technical review, we will need you to fill out a new application form (attached) and return it to this office.

Should you have any questions while completing this application, please do not hesitate to call.

Sincerely,

Bill Locke, P.E.
Southwest District Supervisor

BL/anc

PERMIT TO CONSTRUCT

PERMIT NO. 89-087
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Road Runner, Inc.

This permit hereby authorizes the applicant:

Road Runner, Inc.
c/o Enecotech, Inc.
1801 Broadway Suite 700
Denver, CO 80202

to construct, install or modify boreholes according to the procedures and conditions of the application number 89-087. The facility is located in NW $\frac{1}{4}$, SE $\frac{1}{4}$, Section 13, T14N, R67W in the county of Laramie, 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 J. Janda
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

April 4, 1989
Date of Issuance

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

Conditions for Permit to Construct 89-087

1. The boreholes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-088. Additional boreholes 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.
3. DEQ/WQD personnel shall be given at least two weeks notice prior to the drilling of the boreholes and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
4. 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 site map showing borehole locations;
 - b. Sample collection procedures;
 - c. Sampling analytical results.
5. Proper sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.

Conditions to Permit 89-087 (continued)

6. All borehole samples associated with this facility shall be sampled and the soils analyzed one time for the parameters listed below:

Benzene, ethylbenzene, toluene, xylene, TVH

7. The results of any analyses conducted on soil or water removed from these boreholes shall be provided to the department as soon as they are available.
8. All contaminated soils with a reading greater than 10 on an HNU calibrated to benzene not used for the purposes of analyses must be containerized and properly disposed of at an approved facility.
9. The boreholes must advance to a depth of at least 20 feet. If the soils are contaminated, drilling should proceed to either an impervious layer or groundwater, whichever is the shallowest. If groundwater is encountered, a monitor well will be required.
10. If groundwater is encountered, and shows contamination a monitoring well will be required. This monitoring well will require a permit prior to installation.
11. Calibration documentation for all field equipment should be submitted with the analyses.

CP/nc

cc: Jake Strohman

PERMIT TO CONSTRUCT

PERMIT NO. 89-088
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Road Runner, Inc.

This permit hereby authorizes the applicant:

Road Runner, Inc.
c/o Enecotech, Inc.
1801 Broadway Suite 700
Denver, CO 80202

to construct, install or modify boreholes according to the procedures and conditions of the application number 89-088. The facility is located in SW $\frac{1}{4}$, SW $\frac{1}{4}$, Section 5, T14N, R66W in the county of Laramie, 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 J. Garland
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

April 4, 1989
Date of Issuance

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

Conditions for Permit to Construct 89-088

1. The boreholes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 89-088. Additional boreholes 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.
3. DEQ/WQD personnel shall be given at least two weeks notice prior to the drilling of the boreholes and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
4. 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 site map showing borehole locations;
 - b. Sample collection procedures;
 - c. Sampling analytical results.
5. Proper sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.

Conditions to Permit 89-088 (continued)

6. All borehole samples associated with this facility shall be sampled and the soils analyzed one time for the parameters listed below:

Benzene, ethylbenzene, toluene, xylene, TVH

7. The results of any analyses conducted on soil or water removed from these boreholes shall be provided to the department as soon as they are available.
8. All contaminated soils with a reading greater than 10 on an HNU calibrated to benzene not used for the purposes of analyses must be containerized and properly disposed of at an approved facility.
9. The boreholes must advance to a depth of at least 20 feet. If the soils are contaminated, drilling should proceed to either an impervious layer or groundwater, whichever is the shallowest. If groundwater is encountered, a monitor well will be required.
10. If groundwater is encountered, and shows contamination a monitoring well will be required. This monitoring well will require a permit prior to installation.
11. Calibration documentation for all field equipment should be submitted with the analyses.

CP/nc

cc: Jake Strohman

R.F.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

PERMIT NO. 89-090
 (Ref.: 76-396)
 SEE CONDITION

WYODAK MINE NORTH PIT ASH POND MODIFICATION
 (Name of Facility)

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

Pacific Power & Light Company

48 Wyodak Road

Gillette, Wyoming 82716

to construct, install or modify an ash slurry containment facility according to the procedures and conditions of the application No. 89-090. The facility is located in Section 28, T.50N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:

William L. Paul
Administrator
Water Quality Division

H. Alan Edwards
Director
Dept. of Environmental Quality

April 18, 1989
Date of Issuance

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

CONDITION FOR PERMIT

1. All existing groundwater monitoring wells shall be maintained in good condition. Casing extentions shall be provided if required due to the embankment work. Quarterly groundwater monitoring shall be continued as previously required.

xc: Doyl M. Fritz
Western Water Consultants, Inc.
P. O. Box 3016
Sheridan, Wyoming 82801
Carol Pfarr, DEQ/WQD, Cheyenne

PERMIT TO CONSTRUCT

- [] New
[] Renewal
[X] Modified

PERMIT NO. 89-090
(Ref.: 76-396)
SEE CONDITION

WYODAK MINE NORTH PIT ASH POND MODIFICATION
(Name of Facility)

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

Pacific Power & Light Company

48 Wyodak Road

Gillette, Wyoming 82716

to construct, install or modify an ash slurry containment facility according to the procedures and conditions of the application No. 89-090. The facility is located in Section 28, T.50N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

AUTHORIZED BY:

William J. [Signature]
Administrator
Water Quality Division

A. Alan Edwards
Director
Dept. of Environmental Quality

April 7, 1989
Date of Issuance

This permit
local agency

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cc: Doyl M.
Western
P. O. Box
Sheridan

Carol P

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PERMIT TO CONSTRUCT

PERMIT NO. 89-091
See Conditions

X New
Renewal
Modified

Bell Petroleum, Inc., Monitor Wells

This permit hereby authorizes the applicant:

John Richter
Bell Petroleum, Inc.
P. O. Box 2988
Midland, TX 79702

to construct, install or modify system of monitor wells according to the procedures and conditions of the application number 89-091. The facility is located in NW $\frac{1}{4}$ NW $\frac{1}{4}$ S7, T33N, R79W 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 P. Jones
Administrator
Water Quality Division

A. Alan Edwards
Director
Department of Environmental Quality

April 6, 1989
Date of Issuance

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

Conditions to Permit to Construct 89-091

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 89-091. 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

Conditions to Permit 89-091 (continued)

- 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. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - h. 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
 - i. 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 (in triplicate) 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 89-091 (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 wastewater analyzed quarterly for the parameters listed below:
- Purgeable halocarbons by EPA method 601, purgeable aromatics by EPA method 602, polynuclear aromatic hydrocarbons by EPA method 610, total petroleum hydrocarbon by EPA method 418.1, arsenic by EPA method 600-200.7, barium by EPA method 600-208.7, cadmium by EPA method 600-213.1, chromium by EPA method 600-218.1, lead by EPA method 600-239.1, mercury by EPA method 600-245.1, selenium by EPA method 600-200.7, silver by EPA method 600-272.1
- 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 May, 1989.
11. The above list of parameters will be reviewed by the Water Quality Division and may be modified after the first results are received. Parameters may be dropped, new ones added, or methods changed based on the results obtained.
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.

RL/mad

cc: Jake Strohman, WQD
Charlie Porter, Special Resource Management, 2232 Del Range, Ste 306,
Cheyenne, WY 82009
Bob Stone, EPA Casper
Tim Link, SWM

R.F.

PERMIT TO CONSTRUCT

[X] New

Permit No. 89-092

[] Renewal

[] Modified

School District No. 25 Bus Garage
(Name of Facility)

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

Fremont County School District No. 25

121 N. 5th W.

Riverton, WY 82501

to install a series of groundwater monitor wells for LUST investigation according to the procedures and conditions of the application No. 89-092. The facility is located in SE 1/4 SE 1/4 Sec. 27, T1N, R4E WRM in the County of Fremont, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met.

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

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

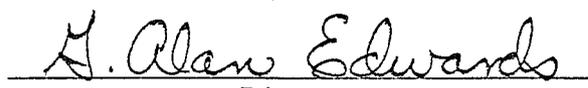
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

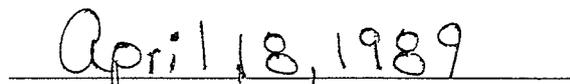
AUTHORIZED BY:



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.

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 89-092. Additional wells meeting the requirements of the application 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. 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 required.
 - 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 at least one 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 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 for the parameters listed below:
BETX and TPH
- The results of these analyses shall be submitted to the Lander office.
11. All inventory records for a year prior to the discovery of the leakage shall be submitted to the DEQ/WQD within 15 days of receipt of this permit. Reconciled inventory records with the volume of the spill specified shall be submitted to the DEQ/.WQD within 45 days of receipt of this permit.
12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.
13. The time schedule for plan implementation as submitted in the proposal shall be adhered to.

JH/anc

cc: Jake Strohman

HARMON
KOEHL

89-093

Yoder, WY Water Exploration Test Wells

04/03/89	UR	06/03/89
4-4-89	RS	
6-12-89	UR	8/12/89
6-19-89	RS	—
Replaced by 90-398 noted 1/23/91 (on NOT auth)		

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: Yoder Water Well

ENGINEER: Wells Engineers, Inc.

APPLICANT: Town of Yoder
P. O. Box 86
Yoder, WY 82244

WATER QUALITY DIVISION REFERENCE NUMBER: 89-093

REVIEWING ENGINEER: Lou Harmon, Southeast District Supervisor

DATE OF REVIEW: June 16, 1989

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:

1. Approval is hereby given to drill a full scale screened and cased test well only at the location of the pilot hole in Sec. 15, T23N, R62W, provided:
 - A. The well shall conform to the "Work Specifications....." prepared for the Town of Yoder by TriHydro Corporation.
 - B. The testing program shall conform the Wyoming Water Development Commission Groundwater Exploration Program RV101188/F, Attachment "A".
 - C. The Wyoming DEQ has not assumed primacy from the U.S. EPA for drinking water quality. Consequently approval of the quality of water introduced to the Town of Yoder public water system must come from EPA.
 - D. The sample collected by air purging from the pilot hole in Sec. 15 was at the upper limit for alpha activity. Water produced from uranium bearing sediments tends to either increase or decrease in gross alpha activity during periods of sustained production. For this reason it is recommended that during the 8 day pumping test samples for radiometric testing be taken at 24 hour intervals.
 - E. Neither primary nor secondary standards for sodium levels have been established for drinking water. Although the sodium levels are relatively high in the test of the pilot hole, the other parameters indicate that if radiometric standards can be met the water from this well would be a vast improvement on the water presently being used in Yoder.
 - F. This approval for a test well does not give authorization to proceed with construction of the permanent well or any associated construction. If the test well is expected to become the permanent well this fact should be indicated. Complete construction plans should then be submitted for the test well to insure it approval as the permanent well.



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756

Solid Waste Management Program
(307) 777-7752

Water Quality Division
(307) 777-7781

June 20, 1989

Honorable Thomas C. Bancroft
Mayor, City of Worland
P O Box 226
Worland, WY 82401

RE: Federal Sewage Works Grant C560128; City of Worland; DEQ/WQD Ref. No. 89-094; Approval of Plans and Specifications for the City of Worland Wastewater Treatment Plant Expansion

Dear Mayor Bancroft:

The plans and specification for the construction of the Worland Wastewater Treatment Plant Expansion 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. This permit does not supercede the requirements for obtaining any permit from local or state agencies.

The procedure for submission and approval of modifications to the approved plans and specification 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.

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

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/WK/nc

cc: Harry LaBonde, ARIX (w/encl)
Steve Gerber, DEQ/WQD, Lander (w/encl)
Grant File (w/encl)
Archives File (w/encl)

PERMIT TO CONSTRUCT

PERMIT NO. 89-094
EPA C560128

X New
Renewal
Modified

Worland Wastewater Treatment Plant Expansion

This permit hereby authorizes the applicant:

City of Worland
P O Box 226
Worland, WY 82401

to construct, install or modify wastewater treatment plant expansion according to the procedures and conditions of the application number 89-094. The facility is located in Section 13, T47N, R92½W in the county of Washakie, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

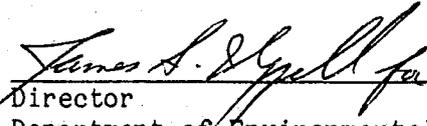
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

6/26/89

Date of Issuance

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

WK/nc

cc: Harry LaBonde, ARIX

PERMIT TO CONSTRUCT

PERMIT NO. 89-095
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Courtesy Standard

This permit hereby authorizes the applicant:

Hacker Oil, Inc.
P O Box 459
Torrington, WY 82240

to construct, install or modify soil vapor monitoring wells according to the procedures and conditions of the application number 89-095. The facility is located in S10, T24N, R61W, SW $\frac{1}{4}$ in the county of Goshen, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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

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

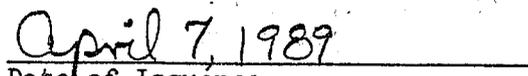
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #89-095

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 89-095. 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. 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. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;

Conditions to Permit 89-095 (continued)

- 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;
 - e. A protective casing and locking cap is strongly recommended;
 - f. 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
6. If hydrocarbon vapors are detected in the well(s), the WQD is to be notified immediately.

DM/nc

cc: Jake Strohman

RF

PERMIT TO CONSTRUCT

PERMIT NO. 89-096R
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Flying X Ranch Septic Tank and Drainfield

This permit hereby authorizes the applicant:

Flying X Ranch
P.O. Box 14026
Denver, CO 80214

to construct, install or modify septic tank and drainfield according to the procedures and conditions of the application number 89-096R. The facility is located in Section 21, T22N, R71W in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

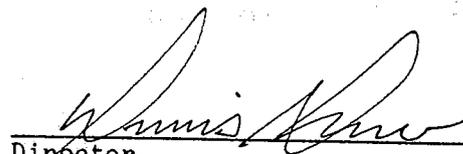
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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.

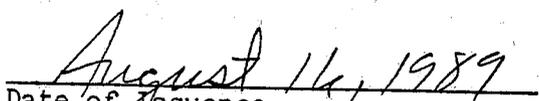
AUTHORIZED BY:



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.

CONDITIONS TO PERMIT TO CONSTRUCT #89-096R

1. The owner is required to prepare an operations and maintenance manual as outlined in Department of Environmental Quality (DEQ), Water Quality Division (WQD) Rules and Regulations Chapter XI, Section 24. Specifically this O & M manual should create a requirement to measure the sludge level in the septic tanks and the loading of the drainfields on an annual basis. A record should be maintained on site. The O & M manual must be approved before the system is placed in operation.
2. The owner shall provide as-built plans of the entire collection and treatment system using one datum for elevations. It is strongly encouraged that this datum be based on mean sea level.

LBH/nc

cc: Stewart Engineering, Inc.
9512 East Peakview Avenue
Englewood, CO 80111

R.F.

PERMIT TO CONSTRUCT

PERMIT NO. 89-097
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

MARATHON PIPELINE COMPANY

This permit hereby authorizes the applicant:

Marathon Pipeline Company
P O Box 3128
Houston, Texas 77253

to construct, install or modify pipeline and production deep and surface grounded anodes according to the procedures and conditions of the application number 89-097. The facility is located Statewide, 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 L. Pauland
Administrator
Water Quality Division

G. Alan Edwards
Director
Department of Environmental Quality

April 21, 1989
Date of Issuance

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

Special Conditions for Permit to Construct 89-097

1. The cathodic protection deep anode ground beds and all ground beds included in the application for permit to construct shall be installed in accordance with the conditions of this permit and plans and specifications submitted in permit to construct application number 89-097.
2. After the anode beds have 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 wells and surface anodes have been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
3. In addition to the anode bed constructions submitted with the permit application, the following items relating to well construction must be addressed:
 - a. The coke breeze has total organic content no greater than .2 percent.
 - b. All aquifers encountered while drilling shall be isolated with bentonite to prevent co-mingling of different aquifers or each aquifer shall be isolated, sampled and analyzed for all parameters in Table I Chapter VIII of Wyoming Water Quality Rules and Regulations. If the aquifers are of the same class of use as determined by the Department of Environmental Quality, intermingling may be allowed.
 - c. Any water used during installation will be analyzed for TDS, sodium, calcium, magnesium, potassium cations, chlorides, sulfate, carbonate, bicarbonate anions, pH, specific gravity and resistivity.

Conditions to Permit 89-097 (continued)

- d. Manufacturer's information on the carbon content of the coke breeze and leachability testing submitted to this office prior to installation of anode beds.
4. Within 45 days after the anode beds have been installed as-built construction plans need to be submitted to the Wyoming Department of Environmental Quality, Water Quality Division, detailing that groundwater was protected during construction.

CP/jn

LAND APPLICATION PERMIT

Permit No. 89-098
SEE SPECIAL CONDITIONS

Union Oil South Casper Creek Oil Field
(Name of Facility)

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

Union Oil of California

P.O. Box 79

Worland, WY 82401

to land apply 1000 cubic yards of pit bottom sludge. The application site is located in Sec. 3, T33N, R83W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of 6 months 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. Jaland
Administrator
Water Quality Division

G. Alan Edwards
Director
Dept. of Environmental Quality

May 1, 1989
Date of Issuance

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

LAND APPLICATION STANDARD

1. Waste shall be applied at a rate which will not produce runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The application site slope shall not exceed 8 percent.
3. Wastewater application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.
4. The permittee will contact the Department of Environmental Quality, Water Division District Engineer, Wally Koch phone number 777-7081, 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. Sludges must be mechanically incorporated into the road bed as it is applied.

R.F.

PERMIT TO CONSTRUCT

[X] New

Permit No. 89-099R

[] Renewal

[] Modified

Sanitary Sewer Improvements
(Name of Facility)

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

Church and Dwight Co., Inc.

P.O. Box 123

Green River, WY 82935

to construct a septic tank and lift station system according to the procedures and conditions of the application No. 89-099R. The facility is located in Section 30 T19N R109W 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 L. Parla
Administrator
Water Quality Division

H. Alan Edwards
Director
Dept. of Environmental Quality

April 21, 1989
Date of Issuance

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

PERMIT TO CONSTRUCT

New

Permit No. 89-100R

Renewal

Modified

Jackson - Gill Addition Water Improvements
(Name of Facility)

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

Town of Jackson

P.O. Box 1687

Jackson, WY 83001

to replace 5370 ft of 8 and 6 inch water main including valves and fire hydrants according to the procedures and conditions of the application No. 89-100R. The facility is located in Section 27, T41N, R116W in the County of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

Nothing in this permit constitutes an endorsement of the construction or the design of the facility described herein. This permit indicates only that standards of design and construction required by the Environmental Quality Act have been met.

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

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

Lawrence Robinson

Administrator
for Water Quality Division

G. Alan Edwards

Director
Dept. of Environmental Quality

05/19/89

Date of Issuance

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