

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-051

X New
Renewal
Modified

CHUGWATER WATER AND SEWER LINE EXTENSION

This permit hereby authorizes the applicant:

Town of Chugwater
P O Box 243
Chugwater, WY 82210

to construct, install or modify a Distribution and Collection System according to the procedures and conditions of the application number 91-051. The facility is located in SE Section 35 Township 21 North Range 67 West 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.

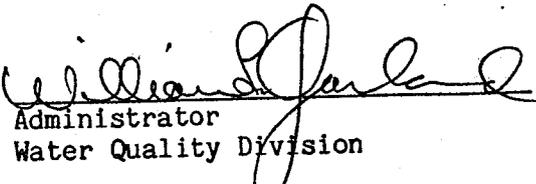
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

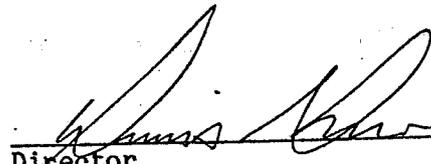
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 7, 1991

Date of Issuance

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

SCF/jt

cc: J. Kenneth Kennedy, Kenneth Engineering, P O Box 1089, Wheatland, WY 82201

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-052
SEE CONDITIONS

WERNER RANCH PIT EXPLORATION MW
(Name of Facility)

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

JIM'S WATER SERVICE
P.O. Box 2290
Gillette, WY 82717-2290

to construct, install or modify a monitoring well and test hole network system according to the procedures and conditions of the application No. 91-052. The facility is located in Section 28, T.36N., R.70W., in the County of Converse, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

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

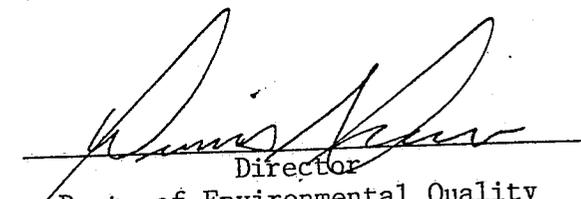
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division, the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

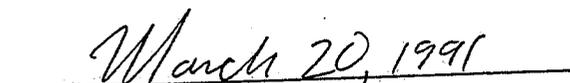
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

CONDITIONS FOR MONITORING WELLS

1. The groundwater monitoring wells and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-052. Additional wells and test holes 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 and testholes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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. After the bentonite has been placed in the annular space, it shall be hydrated to ensure a proper seal;
 - b. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;
 - c. The screened interval shall extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level. Factory slotted casing is recommended for the perforated interval;
 - d. If PVC casing is used, only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack shall be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval;
 - f. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - g. A protective casing and locking cap is strongly recommended;
 - h. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
 - i. A seal of bentonite or bentonite grout is required from the surface to a foot or two above the top perforation. Protective casing shall be cemented into a sloping concrete cap; and
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
6. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.

Conditions for Monitoring Wells (Continued)
Page Four

7. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:

- a. A chronology of events leading up to the investigation;
- b. A site map showing physical features, well and test hole locations and elevations;
- c. Final location, construction details and logs of all monitoring wells and test holes;
- d. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
- e. Water level measurements;
- f. Sample Collection procedures;
- g. Sampling analytical results;
- h. A potentiometric surface map showing the direction of groundwater movement; and
- i. Interpretation of data and conclusions including recommended remedial measures, as appropriate.

8. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.

9. 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.

EJL:pr

cc: Kevin Frederick, WQD, Cheyenne
Larry Robinson, WQD, Cheyenne
Tom Roan, Assistant Attorney General, Cheyenne

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-053
SEE CONDITIONS

CANNON LAND & LIVESTOCK MW
(Name of Facility)

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

JIM'S WATER SERVICE
P.O. Box 2290
Gillette, WY 82717-2290

to construct, install or modify a monitoring well and test hole network system according to the procedures and conditions of the application No. 91-053. The facility is located in Section 34, T.36N., R.71W., in the County of Converse, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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 Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

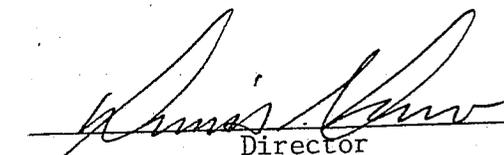
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

5/1/91

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 and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-053. Additional wells and test holes 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 and testholes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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 investigation, additional site investigations 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 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 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.

Conditions for Monitoring Wells (Continued)

Page Four

7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes 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 and test hole locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells and test holes;
 - d. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level measurements;
 - f. Sample Collection procedures;
 - g. Sampling analytical results;
 - h. Documentation of groundwater quality and quantity;
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures, as appropriate.
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 EPA method 502.2 and the following parameters using appropriate EPA methods:

Phenols, Total Dissolved Solids, Chlorides, Ammonia, Nitrates, Nitrites, Total Aluminum, Total Arsenic, Total Barium, Total Beryllium, Total Boron, Total Cadmium, Total Chromium, Total Cobalt, Total Iron, Total Lead, Total Lithium, Total Manganese, Total Mercury, Total Nickel, Total Radium 226, Total Selenium, Total Silver, Total Uranium, Total Vanadium, Total Zinc, pH, Oil & Grease, Sulfates, Cyanide, Fluoride, and Hydrogen Sulfide.

Conditions for Monitoring Wells

Page Five

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

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 receipt and review of analysis results, modifications to the sampling frequency and/or parameters may be required.

13. A construction schedule shall be submitted to and approved by the WQD prior to installation of any monitoring wells or test holes.

14. Upon request of DEQ/WQD personnel, split samples shall be provided.

15. If the proposed monitoring wells are completed into first continuous, impervious geologic formation and no ground water is encountered, the monitoring wells shall be maintained as a leak detection system for this facility.

16. In the event that soil or groundwater contamination is observed, an extent of contamination investigation shall be conducted by permittee.

17. Prior to initiation of additional subsurface investigations, the permittee shall submit and obtain WQD approval for the investigative plan.

18. Soil samples shall be collected at five foot intervals during drilling of each monitoring well and analyzed for the following:

TPH, using EPA Method 418.1 (or other comparable method)

or

OVA, PID, or other field screening device used to detect the occurrence of petroleum products, carefully recording the levels and contaminant detected in each sample screened.

One composite sample shall be collected for each drilling location. Using those samples collected at each five foot interval, an approved laboratory shall create and analyze a composite sample for the following parameters:

TCLP Volatiles, using EPA Method 8240;

TCLP B/N/A, using EPA Method 8270; and

TCLP Metals, using EPA Methods 1311/6010 and 1311/7420.

EJL:pr

cc: Kevin Frederick, WQD, Cheyenne

PERMIT TO CONSTRUCT

New

PERMIT NO. 91-054

Renewal

Modified

GANTZ HOME
(Name of Facility)

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

Randy and Barbara Gantz
P.O. Box 281
Hulett, Wyoming 82720

to construct, install or modify a small wastewater facility according to the procedures and conditions of the application No. 91-054. This facility is located in Section 35, T55N, R65W in the County of Crook in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

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

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

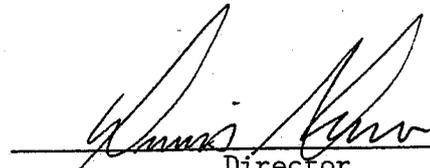
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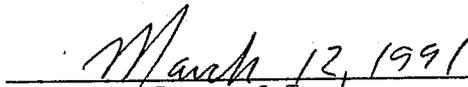
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

GPB:pr

91-055

HARMON

Wyoming Territorial Park

3/5/91

UR

5/5/91

3/18/91 AW Same as 90-040

PERMIT TO CONSTRUCT

PERMIT NO. 91-056

X New
Renewal
Modified

LARAMIE LOW LEVEL RESERVOIR MODIFICATIONS

This permit hereby authorizes the applicant:

City of Laramie
406 Ivinson Street
Laramie, WY 82070

to construct, install or modify a Water Storage Facility according to the procedures and conditions of the application number 91-056. The facility is located in SW Section 35 Township 16 North Range 73 West 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.

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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/jn

PERMIT TO CONSTRUCT

New

Permit No. 91-057

Renewal

Modified

Cody Water Extensions, Frank Court and at Yellowstone Regional Airport
(Name of Facility)

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

City of Cody

1338 Rumsey Avenue

Cody, WY 82414

to construct an 8" waterline from 26th Street West in Frank Court and a 6" waterline from U. S. Hwy 14, 16, 20 North to airport terminal facility according to the procedures and conditions of the application No. 91-057.

The facility is located in Tract 61, T52N, R101W, resurvey in the County of Park, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

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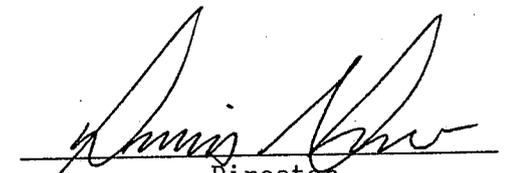
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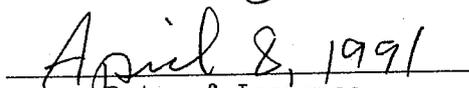
AUTHORIZED BY:



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.

JH/jyi

PERMIT TO CONSTRUCT

New

Permit No. 91-058

Renewal

Modified

Kelly Inn-Sewer & Water Extensions
(Name of Facility)

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

Kelly Cody Venture Limited Partnership

2600 N. Louise Avenue

Sioux Falls, SD 57107

to install a 8" sewer in Frank Ct. and to proposed motel, 6" and 4" water main to motel according to the procedures and conditions of the application No. 91-058. The facility is located in Tract 61, T52N, R101W resurvey in the County of Park, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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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.

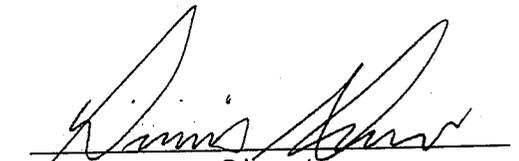
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

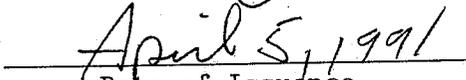
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

JH/jyi

PERMIT TO CONSTRUCT

New

Permit No. 91-059R

Renewal

Modified

Spring Creek Ranch Equestrian Center and Master Plan
(Name of Facility)

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

Spring Creek Ranch Company

P.O. Box 3154

Jackson, WY 83001

to construct a water distribution and sewage collection system for the Equestrian Center Complex according to the procedures and conditions of the application No. 91-059R. The facility is located in portions of Sections 16, 17 and 21, T41N, R116W in the County of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

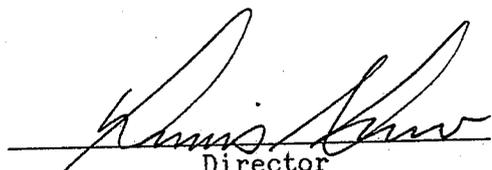
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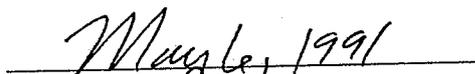
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

Condition on Permit

A septic tank must be installed on Lot 9 between any future house and sewer collection main at the time the service is constructed.

STATE OF WYOMING
DEPARTMENT OF ENVIRONMENTAL QUALITY/WATER QUALITY DIVISION

PERMIT TO CONSTRUCT

APPROVAL FOR TRANSFER OF RESPONSIBILITY

Permit Number 91-060
Reference Permit # 88-252

TO: <u>Rio Algom Mining Corporation</u> and	<u>Sequoyah Fuels Corporation</u>
<u>6305 Waterford Boulevard, Suite 325</u>	<u>P.O. Box 25861</u>
<u>Oklahoma City, Oklahoma 73118</u>	<u>Oklahoma City, Oklahoma 73125</u>
<u>(405) 848-1187</u> (new/present owner/operator)	<u>(405) 848-1187</u> (former owner/operator)

This transfer for permit 88-252 is approved effective on the later of the two dates below: All permit conditions as presented in permit 88-252 remain in effect under new permit number 91-060.

William L. Garcia
Administrator - Water Quality Division

April 3, 1991
Date

James New
Director - Department of Environmental Quality

April 5, 1991
Date

PERMIT TO CONSTRUCT

PERMIT NO. 91-060
SEE SPECIAL CONDITIONS

- New
- Renewal
- Modified

SMITH RANCH BRINE EVAPORATION PONDS

This permit hereby authorizes the applicant:

Rio Algom Mining Company
6305 Waterford Blvd., Suite 325
Oklahoma City, OK 73118

to construct, install or modify a series of lined solar evaporation ponds for brine disposal according to the procedures and conditions of the application number 88-252. The facility is located in Section 23, Township 36 North, Range 74 West SE in the county of Converse, 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.

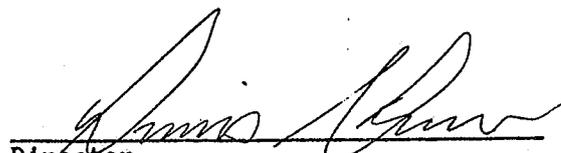
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 5, 1991

Date of Issuance

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

SPECIAL CONDITIONS ON PERMIT TO CONSTRUCT 91-060

1. Prior to construction of any ponds under this permit, a site specific geotechnical study shall be done. This study shall address the geological and hydrogeological characteristics of the formations immediately under the ponds and within 20 feet of the final bottom grade of the ponds. Water Quality Division shall receive a copy of this report prior to installation.
2. Leak detection piping shall be schedule 40 PVC or better, in the sizes shown on the plans. Pond inlets are not shown on the plans, but will include hoses pipes, or additional liner thickness to prelude damage to the liner. Pond inlets can be through an enhanced evaporation system such as a trickle system. If a trickle system is installed, no extra protection will be required for the liner that is wetted by the system.
3. The top 24" of subgrade material on all ponds constructed under this permit shall be compacted so that its total permeability is at least 100 times less than the sand blanket of the leak detection system. Compaction shall be at least 95% of Proctor Standard density for the 24" immediately under the leak detection system.
4. Sand for the leak detection system shall contain no more than 15% passing 200 mesh and shall contain nothing larger than $\frac{1}{2}$ inch. The sand blanket for the leak detection system shall be at least 6" thick.
5. Should a leak be detected in one of the pond liners, that pond shall be pumped out to the extent necessary to fully expose the defect and repair the leak. This requires that there always exist enough spare capacity to allow any one cell to be emptied completely. Any water in the leak detection system shall, to the extent possible, be pumped out to another cell.

Conditions to Permit 91-060 (continued)

6. An enhanced evaporation system may be installed in one or more of the ponds installed under this permit. While this is acceptable, a complete written description of the system to be installed plus a complete set of construction drawings shall be submitted to the Water Quality Division prior to construction of such a system. Water Quality Division will review this material and determine if it is acceptable as submitted or if additional work needs to be done, or if the enhanced evaporation system is unacceptable as submitted.
7. Should a leak be detected a sample should be taken as soon as practical of the water in the leak detection system. The first samples shall be taken when there is 6 inches of water in the leak detection system.
8. The leak detection piping shall be laid to true line and grade so that as little water as possible will be unrecoverable in the leak detection piping.
9. Should any leak be detected a report shall be made within 24 hours of discovery to the Water Quality Division district office in Sheridan, Wyoming followed by a written confirmation within seven days.
10. Prior to installation, the technical specifications for the synthetic liner shall be submitted to Water Quality Division for review and approval. Synthetic liners shall be 30 mil thickness or better.
11. Water Quality Division reserves the right to require additional technical specifications prior to the installation of these ponds. Rio Algom shall submit a copy of the construction specifications to the Water Quality Division at least 30 days prior to construction for comments and approval.
12. Up to 6 cells may be constructed under this permit covering up to 70 acres total area.
13. If any of these cells should develop a history of leaks, Water Quality Division reserves the right to require monitor wells and full subsurface contamination study to be done.

RL/jn

PERMIT TO CONSTRUCT

New

Permit No. 91-061R

Renewal

Modified

Bitter Creek Rest Areas

(Name of Facility)

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

Wyoming Highway Department

P. O. Box 1260

Rock Springs, WY 82901

to construct a new septic tank and associated piping according to the procedures and conditions of the application No. 91-061R. The facility is located in S $\frac{1}{2}$, Sec 3, and N $\frac{1}{2}$ Sec 11, T19N, R99W in the County of Sweetwater, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

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

solely responsible to any third parties for any liability arising from the construction or operation of the facility described herein. By the issuance of this permit, the State does not in any way waive its sovereign immunity.

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

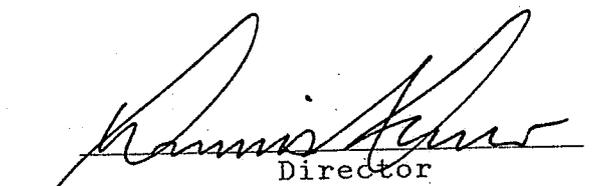
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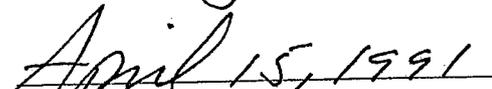
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AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

BL/jyi

PERMIT TO CONSTRUCT

New

Permit No. 91-062R

Renewal

Modified

Mavrick Country Store
(Name of Facility)

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

Mavrick Country Stores, Inc.

ATTN: DeVerl Stoddard

Rt. 2, Box 5

St. Anthony, Idaho 83445

to construct a sewer line to Jackson collection system facility according to the procedures and conditions of the application No. 91-062R. The facility is located in NE 1/4 Sec 32, T41N, R116W in the County of Teton, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

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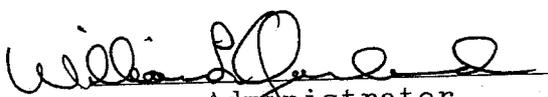
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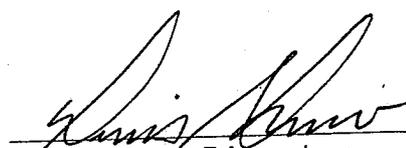
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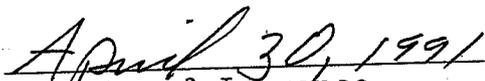
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AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

JH/jyi

PERMIT TO CONSTRUCT

New

PERMIT NO. 91-063

Renewal

Modified

WASTEWATER NO. 1 RESERVOIR
(Name of Facility)

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

TRITON COAL COMPANY
P.O. Box 3027
Gillette, Wyoming 82717

to construct, install or modify a facilities disposal pond according to the procedures and conditions of the application No. 91-063. This facility is located in Section 32, T52N, R72W in the County of Campbell in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

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

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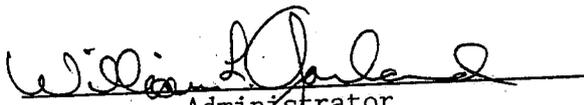
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The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division, the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted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

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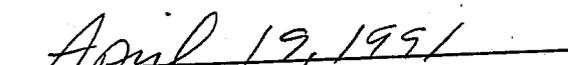
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

December 10, 1991

Mr. Gerald B. Faudel
Environmental Director
Frontier Refining Inc.
P.O. Box 1588
Cheyenne, WY 82003-1588

RE: Permit #91-064R: Authorization for Closure of the Upper Impoundments #1,2,3 and 4 pursuant to Frontier's submittal "Permit Amendment, Upper Pond Closure", 10/19/91.

Dear Mr. Faudel:

The attached Permit #91-064R authorizes Frontier Refining Inc. to proceed with closure operations of the Upper Wastewater Treatment Ponds #1,2,3 and 4 (Attachment 1) pursuant to the Permit Amendment, Upper Pond Closure (Permit #91-064) submitted by Frontier on September 19, 1991. Please note that Frontier must comply with the stated Conditions which are part of the Permit.

Based upon the submitted TCLP analytical results of leachate derived from samples of the ponds' sludge taken after the sludge was stabilized, four constituents were detected: arsenic, barium, chromium and selenium. Concentrations of barium and selenium exceed Class I groundwater standards. Accordingly, since the stabilized sludges and their leachates are at least partially submerged in groundwater, they constitute sources of groundwater contamination and cause violations of water quality standards for these two constituents.

Frontier's predictive modeling (MYGRT) indicates that, when added to mean background concentrations (.894 mg/l), only barium would likely exist in concentrations (1.007 mg/l) that exceed Class I standards (1.0 mg/l) at the down-gradient property boundary as a result of leaving the sludge in place. Provision for even minor attenuation (.007 mg/l, or more) of background barium concentrations in the interval between the ponds and the down-gradient property boundary may likely reduce the concentration to an acceptable level. Reduction through dispersion would likely be insignificant.

WQD is concerned with the 'background' levels of arsenic (mean = .059 mg/l) that are cited in Table 3-2 of the proposal, indicating that a contaminant source, other than the ponds' sludge, likely exists and is causing a violation of the groundwater standard (.05 mg/l) for this constituent. As a Condition to the Permit authorizing Frontier to proceed with closure

Mr. Gerald B. Faudel
December 10, 1991
Page 2

of the Upper Ponds, Frontier is required to investigate as necessary and submit information to WQD for determination as to the nature and location of this source of contamination. If responsible, Frontier will be required to alleviate the source.

It is possible that certain volatiles and semi-volatiles might also exceed Class I groundwater standards, however the elevated detection limits set for the sample analyses which have been submitted preclude the determination of whether the standards (MCL's, Health Advisories, and recent scientific criteria) for these constituents are being violated, or not.

No modeling examples were provided for volatile and semi-volatile constituents although, for the purposes of determining DEQ authorization to proceed with closure of the ponds as proposed, none may be necessary. Relative to the volatile and semi-volatile groundwater contamination which has been identified throughout much of the site, including the area of the upper ponds, similar contaminant contribution from the sludge will likely be minor in comparison to that which already exists from other on-site sources. Furthermore, removal of the sludge presently in the ponds will not prevent existing up-gradient hydrocarbon contamination from migrating into and re-contaminating any material used to replace the sludge during closure. Pursuant to the existing Consent Decree between Frontier and the State, as well as existing DEQ permits, Frontier is required to implement a groundwater monitoring program which will include these constituents, and to provide for groundwater restoration.

For these reasons, DEQ authorizes Frontier to proceed with the proposed closure in accordance with the attached Permit and its Conditions.

Please contact me if you have any questions.

Sincerely,



Kevin D. Frederick
Supervisor
Groundwater Pollution Control Program

KDF/jn
12970.LTR

cc: Jake Strohman, DEQ/WQD
Carl Anderson, DEQ/SWMP
Bob Burm, US EPA, Region VIII
File: Frontier Refining; Upper Ponds

PERMIT TO CONSTRUCT

PERMIT NO. 91-064
See Special Conditions

New
 Renewal
 Modified

FRONTIER REFINING COMPANY

This permit hereby authorizes the applicant:

Frontier Refining Inc.
P.O. Box 1588
Cheyenne, WY 82002

to construct, install or modify Upper wastewater treatment ponds #1, 2, 3 and 4 according to the procedures and conditions of the application number 91-064. The facility is located in Section 4; SW/4 NW/4; T13N, 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.

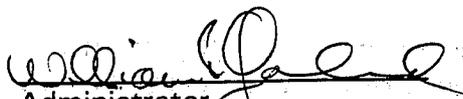
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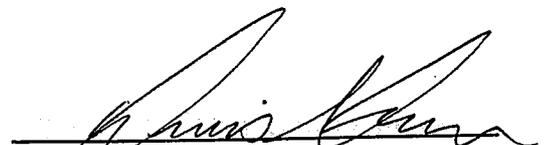
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State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

12/12/91
Date of Issuance

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

Special Conditions for Permit to Construct #91-064

1. To confirm MYGRT model predictions and provide compliance monitoring, Frontier shall monitor downgradient wells DM16S, EEI61, DM21S, EEI60, EEI94 and EEI81 (Attachment 2) for both total and dissolved arsenic, barium, chromium and selenium on a quarterly basis according to current EPA methodology. Frontier shall amend its proposed Groundwater Monitoring Program to reflect this monitoring requirement.

- * MYGRT modeling submitted by Frontier predicts that barium concentrations at the down-gradient property boundary will exceed Class I standards (1.0 mg/l) during the 16th through the 29th years following sludge stabilization in 1990, assuming a sludge lifetime of 25 years and no attenuation of background concentrations.

Analytical results will be submitted to the DEQ/WQD on a quarterly basis.

2. Within 90 days, submit a determination of the statistically significant difference (in arsenic concentrations) between ambient, off-site, up-gradient groundwater monitoring wells and on-site groundwater monitoring wells, with a conclusion as to the nature and source of the elevated arsenic concentrations in groundwater beneath the refinery.

KF/jn
12970.DOC



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

April 11, 1991

Ms. Jodell Mizoue
Applied Environmental Consulting, Inc.
6143 South Willow Drive, Suite 200
Englewood, CO 80111

Re: Permit Application No. 91-066
Paraffin Meadows Meter Station, Laramie County, Wyoming

Dear Ms. Mizoue:

The Water Quality Division does not issue a permit to construct for boreholes within the southeast district. Therefore the above referenced permit application is being returned to you. This action does not preclude any requirements to properly construct and abandon boreholes.

We would appreciate a copy of any report generated from the investigation. If you have any questions regarding this matter, feel free to call me at 307-777-6183.

Sincerely,

Scott C. Forister
Senior Analyst
Water Quality Division

SCF/mad
Enclosure



THE STATE OF WYOMING



JIM GERINGER
GOVERNOR

Department of Environmental Quality

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

ADMINISTRATION (307) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-6145 FAX 634-0799	AIR QUALITY (307) 777-7391 FAX 777-7682	INDUSTRIAL SITING (307) 777-7368 FAX 777-6937	LAND QUALITY (307) 777-7756 FAX 634-0799	SOLID & HAZARDOUS WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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June 27, 1995

Randy Williams
Little America Refining Company
P.O. Box 510
Evansville, WY 82636

Dear Mr. Williams:

RE: ABTU Permanent Status Schedule & Annual Report (March 27, 1995)
Permit to Construct No. 91-067

The Department of Environmental Quality/Water Quality Division (DEQ/WQD) has reviewed the referenced report. The WQD is aware that Permit No. 91-067 granted approval of the pilot plant operation of the Aggressive Biological Treatment Units (ABTU). This pilot plant status enabled LARCo to gather design data for implementation of a final permanent wastewater treatment system. WQD concurs that the operations and maintenance manual is being submitted in the application for the final Part B RCRA permit.

It is the WQD's understanding that once the Solid & Hazardous Waste Division (SHWD) has obtained primacy for its hazardous waste program, SHWD will be negotiating and issuing equivalent state orders and permits to replace existing federal orders and permits. SHWD anticipates receiving hazardous waste primacy this fall and soon after will begin the process of replacing the federal permits and orders; therefore, the approval and reporting requirements of the final wastewater system will be addressed by the SHWD. The present sampling data (i.e., inlet and outlet sampling of D018 waste stream) shall continue to be submitted in a monthly report that needs to be sent to Mr. Jerry Breed, SHWD/Cheyenne. Any proposed modifications to the present ABTU need to be approved by the SHWD.

Sincerely,

Phillip Stump
Phillip Stump
Senior Environmental Analyst
Water Quality Division

PS/nc 52783.LTR

cc: Kevin Frederick, GPC Program Supervisor
Jerry Breed, SHWD/Cheyenne
Permit No. 91-067 Archives

f:...OIL-COMPLARCO\ABTU.ltr

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-067
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

LARCO PILOT WASTE TREATMENT FACILITY

This permit hereby authorizes the applicant:

Little America Refining Company
P.O. Box 510
Evansville, WY 82636

to construct, install or modify pilot industrial wastewater treatment facility according to the procedures and conditions of the application number 91-067. The facility is located in NE 1/4 Section 6 T33N R78W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

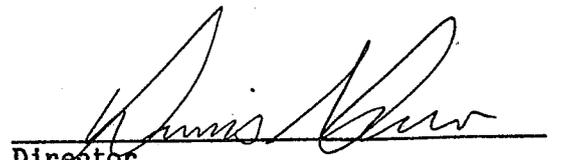
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Southeast District Engineer,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

April 5, 1991
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #91-067

1. This permit to construct is for a pilot plant operation as allowed under Section 5 Chapter XI of DEQ/WQD regulations. The facilities constructed under this permit are to be used to develop data to design a permanent facility. Various conditions must be satisfied to allow operation of this facility and in no case can operation be allowed for more than two years under this permit. The construction and operations allowed under this permit are dependent upon compliance with the conditions established in the Work Plan for Investigation of the North Evaporation Ponds and Permit 91-079, LARCO Wastewater Treatment Facility Monitoring Wells.
 - a. Construction under this permit may not be initiated prior to DEQ approval of a Work Plan for Investigation of the North Evaporation Ponds. Failure to comply with the schedule of that Work Plan without prior approval of DEQ/WQD shall require cessation of any construction and discontinuing operation of the pilot plant.
 - b. The pilot plant shall not be placed in operation until the monitoring wells permitted under 91-079 are completed and initial samples obtained.
 - c. After December 31, 1991, this plant shall meet the operating conditions established by DEQ/WQD based on the data provided in the "Final Investigative Report" due October 15, 1991.
2. The discharge from the pilot plant will only be allowed to the North Evaporation Ponds.
3. DEQ may require modifications of the pilot plant as necessary to protect waters of the State based on operating results. Such construction will only be allowed under a separate permit and as a pilot operation.

Conditions to Permit 91-067 (continued)

4. A permanent wastewater treatment plant must be in place at the end of two years. A comprehensive permanent construction permit will be required. Any or all components of the pilot operation as appropriate may be included in the permanent construction, but must be re-permitted on the permanent construction permit.
5. Monthly reporting of all data collected on the operation of the pilot plant will be required. The reports shall be submitted in a printed format and in an electronic format mutually compatible to LARCO and DEQ/WQD. As a minimum the following parameters will be monitored at the locations specified (unless otherwise noted).
 - a. Continuously recorded at inlet and discharge:
 - (1) Temperature
 - (2) Flow rate
 - (3) Dissolved oxygen
 - (4) pH
 - b. Eight hour grab sample at crossflow structure:
 - (1) Temperature
 - (2) Dissolved oxygen
 - (3) pH
 - c. Eight hour grab sample at inlet, crossflow, discharge: (the following analysis will be accomplished by field techniques and will be specified in the operations manual - see item 6).
 - (1) Ammonia
 - (2) Sulphides
 - (3) Biological activity and life forms (inlet excluded)
 - (4) Total amount of chemical added during the shift
 - (5) Any aerator downtime
 - d. Monthly at inlet and discharge:
 - (1) Benzene, ethyl benzene, toluene, and xylene
 - (2) Oil and grease
 - (3) Total petroleum hydrocarbon
 - (4) TDS
 - (5) TSS
 - (6) COD and BOD
 - (7) Phenols and creosols
 - e. Semi-annual (every 6 months) at crossflow items d.1 through d.7
 - f. Beginning the second quarter of 1992 and thereafter on a quarterly basis on the discharge only:
 - (1) acute biotoxicity with fathead minnows (only) monitoring
6. An operations manual covering all aspects of pilot plant operation, sampling procedures, and personnel (by position) assigned shall be submitted to DEQ/WQD before plant startup.
7. At the end of the first quarter and again at the end of the first year of operation of the pilot plant an engineering report shall be submitted to DEQ/WQD. This report shall address the successes and failures of the pilot plant and make recommendations for immediate improvements.



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration (307) 777-7937	Air Quality Division (307) 777-7391	Land Quality Division (307) 777-7756 FAX (307) 634-0799	Solid Waste Management Program (307) 777-7752	Water Quality Division (307) 777-7781 FAX (307) 777-5973
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April 5, 1991

Little America Refining Company
P.O. Box 510
Evansville, Wyoming 82636

RE: Comments on Draft Work Plan, North Evaporation Ponds, dated April 3, 1991

Gentlemen:

This letter offers comments on your work plan for investigation of the North Evaporation Ponds. As you are well aware, approval of the work plan by DEQ will be a condition for beginning construction of the pilot wastewater treatment plant to be permitted under DEQ/WQD Permit #91-067. The comments are keyed to the paragraph numbers of the Draft Work Plan.

Para. 3: Your schedule proposes submittal of an initial investigative report October 15, 1991. A final report will be required by that date. It is suggested that you consider utilizing portable sample analysis equipment in conjunction with the soil boring and monitor well sampling program. A portable gas chromatograph would permit real time decisions on the need and location for additional samples and borings. A competent geologist or geotechnical engineer with adequate field decision authority should be able to gather the necessary information to prepare a final investigative report by October 15, 1991. This in all likelihood will include completion of additional monitoring wells and sampling before October 15.

Para. 3.2.1: Additional literature research done April 3 and 4 indicates the the pond area may be underlain by subcropping Mesa Verde Formation. The regional strike and dip of the Mesa Verde may mean that the potential exists for water bearing sandstone members to be recharged by infiltration from the evaporation ponds. Consequently a geologic and hydrologic investigation supported by a minimum of three deeper wells is required. These wells should be spaced and drilled to the necessary depths to identify any water bearing formations that subcrop in the area of influence or contamination from the ponds. These wells should be logged with the appropriate geophysical techniques. The geophysical logs will be used to correlate between borings to determine strike and dip of the formation to identify probable water bearing members. If a water bearing member is present, all wells should be completed to the same member to determine the potentiometric surface and direction of groundwater flow. Sampling procedures will be the same as for other monitoring wells. Preliminary research indicates that these wells will need to be from 200 feet to 800 feet deep. Actual depth will have to be determined based on what is required to identify any potentially affected water bearing members.

Para. 4: All data collected will be submitted to DEQ on a monthly basis.

Para. 6: The corrective measure study work plan will be developed concurrently with the investigative report. The classification of any affected aquifer will be determined by DEQ/WQD based on information presented in the investigative report and such other research as DEQ/WQD may determine necessary. The corrective measures must be adequate to restore and protect the Class of Use determined for the aquifer, regardless of path of exposure.

Add Para. 6.1: The investigation of the North Evaporation Ponds must include an analysis that documents the ponds will not adversely affect groundwater in accordance with Section 15, Chapter III Wyoming Water Quality Rules and Regulations. Section 15 allows two alternatives that apply to the North Evaporation Ponds. The first alternative is that the wastewater meets the groundwater standard of the aquifer class. The second alternative is the preparation of a subsurface study to demonstrate that the groundwater standards will be met by the infiltrate given the assimilation capabilities of the soils and the hydrology of the site. This analysis is also necessary to adequately evaluate the corrective action alternatives and therefore shall be done by October 15, 1991. The analysis must identify the quality of water that can be discharged to the North Evaporation Ponds and provide compliance with the appropriate groundwater classification in Chapter VIII DEQ/WQD Regulations. This information will be the basis of design for the discharge quality criteria for the aggressive biological treatment system.

Para. 7.6.5.5: A long range groundwater sampling program and well abandonment schedule subject to DEQ/WQD approval shall be developed by September 15, 1991.

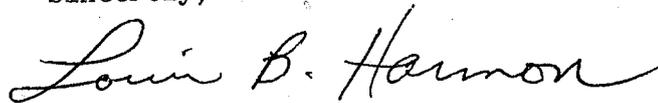
Para. 7.7: The final investigative report must be submitted by October 15. The corrective measure study work plan shall be submitted concurrently.

Para. 7.8: The selection of the corrective measures shall be made by December 15, 1991.

Para. 7.9: The remedial design, construction permits, and implementation schedule shall be submitted by January 31, 1992.

The groundwater samples should be analyzed for chemical oxygen demand (COD) in addition to the other parameters listed.

Sincerely,



Louis B. Harmon, PE
Southeast District Supervisor
Water Quality Division

LBH/nc

cc: Larry Robinson
Bill Garland
Dennis Hemmer

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-068
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Jess's Hat Six Truck Plaza Water Supply Line

This permit hereby authorizes the applicant:

Hat Six Enterprises, Inc.
P.O. Box 1750
Casper, WY 82609

to construct, install or modify a water supply line according to the procedures and conditions of the application number 91-068. The facility is located in Section 9 T33N R78W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

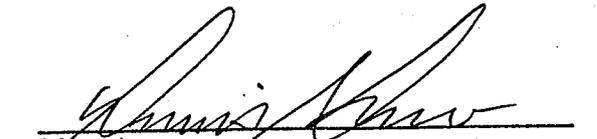
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Southeast District Engineer,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

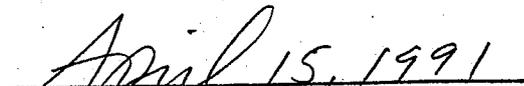
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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 #91-068

1. This water line is for the use of the Hat Six Truck Plaza as presently sized only.
2. This water line is approved for interim use for potable water supply only. It affords no fire protection capability. As soon as larger diameter water service is available significantly closer to the Truck Plaza, this service line must be shortened.

LBH\jn

cc: Brady Engineering Co.
P.O. Box 2521
Grand Island, NE 68802

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-069

X New
Renewal
Modified

MAPLE STREET WATER LINE REPLACEMENT

This permit hereby authorizes the applicant:

Town of Saratoga
P O Box 913
Saratoga, WY 82331

to construct, install or modify Distribution System according to the procedures and conditions of the application number 91-069. The facility is located in NE Section 14 Township 17 North Range 84 West in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

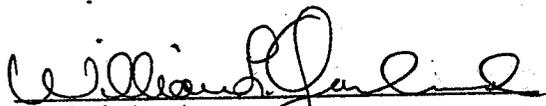
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

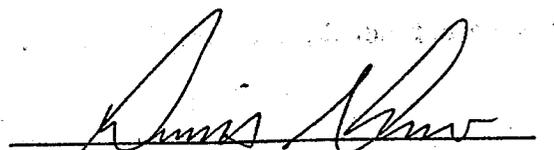
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Southeast District Engineer,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

April 2, 1991
Date of Issuance

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

SCF/jt

cc: Paul McCarthy, PMPC, Box 370, Saratoga, WY 82331

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-070
SEE SPECIAL CONDITIONS

New
 Renewal
 Modified

PLAINSMAN MONITOR WELLS

This permit hereby authorizes the applicant:

Four G Enterprises, Inc.
P O Box 310
Laramie, WY 82070

to construct, install or modify a Groundwater and Vapor Monitor Well System according to the procedures and conditions of the application number 91-070. The facility is located in SE Section 33 Township 16 Range 73 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.

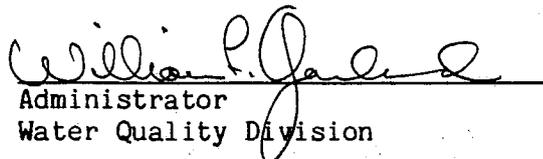
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

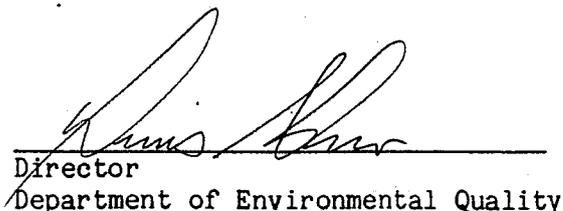
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 26, 1991

Date of Issuance

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

CONDITIONS FOR MONITOR WELLS

1. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells. Additional wells installed at the site must have prior approval from the DEQ/WQD.
2. 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. All wells must have a unique number.
3. The monitoring wells installed as part of this permit must be monitored for vapors and free product. The results must be reported to the Water Quality Division as required by 40 CFR Part 280, Technical Requirements for Underground Storage Tanks.
4. After the monitoring wells have fulfilled their useful purpose, and upon approval by DEQ/WQD, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Wyoming Water Quality Rules and Regulations. A plugging record must be filed with the DEQ/WQD within 15 days of abandonment.

SCF/mad

R7

PERMIT TO CONSTRUCT

PERMIT NO. 91-071
SEE SPECIAL CONDITIONS

New
 Renewal
 Modified

CIRCLE J GAS MONITOR WELLS

This permit hereby authorizes the applicant:

Four G Enterprises, Inc.
P O Box 310
Laramie, WY 82070

to construct, install or modify a Groundwater and Vapor Monitor Well System according to the procedures and conditions of the application number 91-071. The facility is located in SE Section 34 Township 16 Range 73 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.

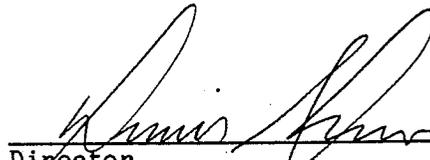
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 26, 1991

Date of Issuance

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

CONDITIONS FOR MONITOR WELLS

1. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells. Additional wells installed at the site must have prior approval from the DEQ/WQD.
2. 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. All wells must have a unique number.
3. The monitoring wells installed as part of this permit must be monitored for vapors and free product. The results must be reported to the Water Quality Division as required by 40 CFR Part 280, Technical Requirements for Underground Storage Tanks.
4. After the monitoring wells have fulfilled their useful purpose, and upon approval by DEQ/WQD, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Wyoming Water Quality Rules and Regulations. A plugging record must be filed with the DEQ/WQD within 15 days of abandonment.

SCF/mad

R7

PERMIT TO CONSTRUCT

PERMIT NO. 91-072
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

PIT STOP MONITOR WELLS

This permit hereby authorizes the applicant:

Four G Enterprises, Inc.
P O Box 310
Laramie, WY 82070

to construct, install or modify a Groundwater and Vapor Monitor Well System according to the procedures and conditions of the application number 91-072. The facility is located in NW Section 4 Township 15 Range 73 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

April 26, 1991
Date of Issuance

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

CONDITIONS FOR MONITOR WELLS

1. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells. Additional wells installed at the site must have prior approval from the DEQ/WQD.
2. 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. All wells must have a unique number.
3. The monitoring wells installed as part of this permit must be monitored for vapors and free product. The results must be reported to the Water Quality Division as required by 40 CFR Part 280, Technical Requirements for Underground Storage Tanks.
4. After the monitoring wells have fulfilled their useful purpose, and upon approval by DEQ/WQD, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Wyoming Water Quality Rules and Regulations. A plugging record must be filed with the DEQ/WQD within 15 days of abandonment.

SCF/mad

R7

PERMIT TO CONSTRUCT

PERMIT NO. 91-073
SEE SPECIAL CONDITIONS

New
 Renewal
 Modified

GUNSLINGER 66 MONITOR WELLS

This permit hereby authorizes the applicant:

Four G Enterprises, Inc.
P O Box 310
Laramie, WY 82070

to construct, install or modify a Groundwater and Vapor Monitor Well System according to the procedures and conditions of the application number 91-073. The facility is located in SE Section 31 Township 16 Range 73 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.

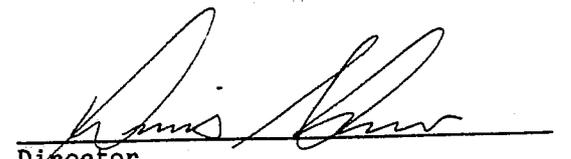
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 26, 1991
Date of Issuance

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

CONDITIONS FOR MONITOR WELLS

1. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells. Additional wells installed at the site must have prior approval from the DEQ/WQD.
2. 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. All wells must have a unique number.
3. The monitoring wells installed as part of this permit must be monitored for vapors and free product. The results must be reported to the Water Quality Division as required by 40 CFR Part 280, Technical Requirements for Underground Storage Tanks.
4. After the monitoring wells have fulfilled their useful purpose, and upon approval by DEQ/WQD, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Wyoming Water Quality Rules and Regulations. A plugging record must be filed with the DEQ/WQD within 15 days of abandonment.

SCF/mad

PERMIT TO CONSTRUCT

New

Permit No. 91-074R

Renewal

Modified

Diamond Transport Site
(Name of Facility)

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

Romco Inc.

Box 599

Dubois, WY 82513

to construct, install, or modify a series of soil borings and/or groundwater monitoring wells facility according to the procedures and conditions of the application No. 91-074R. The facility is located in NE 1/4, Section 17, T15N, R120W in the County of Uinta, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

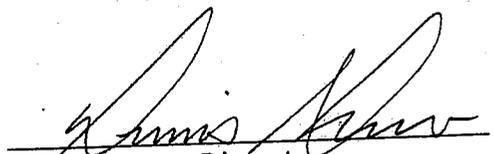
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

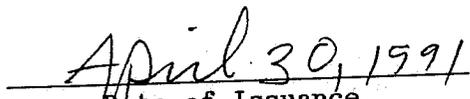
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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 91-074R. 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 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 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 one time for BETX (EPA Method 502.2 or 602), TPH (EPA Method 418.1).

If free product is found the above analysis will not be required, but the thickness of product shall be measured.

The results of these analyses shall be submitted to the Lander office by the last day of the month following the end of each quarter.

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.

SR/anc
cc: Jake Strohmman



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

April 5, 1991

Kenneth Webber
U.S. Energy Corporation
877 North 8th West
Riverton, Wyoming 82501

RE: Sheep Mountain Partners Injection Program II
Permit UIC 91-075 Class 5R21
Fremont County, Wyoming

Dear Mr. Webber:

Enclosed please find the final permit for the above referenced project. This project and permit are identical to your earlier permit on the Sheep Mountain #1 injection project.

Sincerely,

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

RFL/nc

xc: Jake Strohman

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

(X) New
() Modified

Permit Number:

91-075
UIC CLASS 5R21

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),

U.S. Energy Corporation
877 North 8th West
Riverton, Wyoming 82501
(307) 856-9271

is authorized to operate

The SMP Injection Well Program #2 in the NW1/4 NE1/4, Section 28, Township 28 North, Range 92 West, of the 6th Principal Meridian

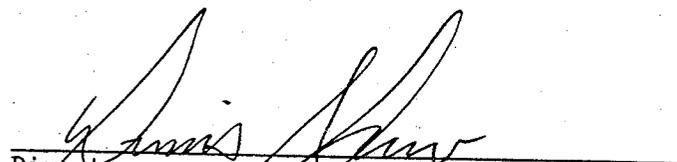
according to procedures and conditions of the application #91-075 and requirements and other conditions of this permit.

This permit shall become effective on date of issuance.



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

April 5, 1991
Date



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

April 8, 1991
Date

A. Discharge (Injection) Zone and Area of Review

Discharge Zone

These injection wells are authorized to inject into the Tertiary Fort Union and Cretaceous Mesa Verde Formations which are found at this location from 2,500 to 4,120 feet below the ground surface.

Area of Review

The facility authorized by this permit is located in:

Township 28 North, Range 92 West, 6th Principal Meridian
Section 28: NW1/4NE1/4

The Area of Review around this facility is legally described as:

Township 28 North, Range 92 West, 6th Principal Meridian
Section 16: All
Section 17: S1/2SE1/4
Section 20: E1/2
Section 21: All
Section 22: NW1/4NW1/4, S1/2NW1/4, SW1/4,
SW1/4SE1/4, S1/2NW1/4SE1/4
Section 27: N1/2NW1/4, SW1/4NW1/4, NW1/4NE1/4
Section 28: All
Section 29: E1/2
Section 32: NE1/4
Section 33: W1/2NW1/4, NE1/4NW1/4

B. Groundwater Classification

The groundwater in the Fort Union and Mesa Verde Formations has not yet been sampled and analyzed. Based on the general water quality of similar formations in the area, these formations can be assumed to meet the water quality standards to be classified as class I, II or III under Chapter VIII of Wyoming Water Quality Rules and Regulations (April 9, 1980). This classification was made without an analyses because:

1. The groundwater in this formation is assumed to meet all of the quality standards set forth in Chapter VIII for class I, II or III water; and
2. The application is for the right to inject waters that meet class I standards only.

After an analyses of the water in each receiver is obtained as required in Section F of this permit, a final classification shall be made by the Water Quality Division. If that classification

indicates that the groundwater in the receiver is class I, then the uranium UCL shall be changed to the baseline level for uranium in the receiver. If this provision governs, the Water Quality Division will, by letter, set the exact limit to be used for uranium.

C. Authorized Operations

The permittee is authorized to inject 12,000 barrels per day (504,000 gallons per day), of wastewater produced by the necessity to dewater the Sheep Mountain #2 Mine. This wastewater is actually groundwater which has entered the mine as seepage and is known to meet or exceed class I groundwater standards. This permit authorizes only the injection of class I groundwater. Injection of water which does not meet class I standards is a violation of this permit.

The permittee is authorized to inject at a pressure of no more than 900 psig as measured at the wellhead, assumed to be located 1,360 feet below ground surface in the Sheep Mountain Mine. The pressure of injection shall be continuously monitored and recorded on a chart recorder unless this pressure is atmospheric pressure or below.

This permit covers a total of five injection wells, all of which shall be located within 750 feet of the Sheep Mountain #2 Mine shaft. Each well shall be constructed to similar standards, including the use of steel casing with cement carried back to the surface. Injection can be done without the use of tubing and packer arrangement. In the event that control of this discharge is lost due to mechanical integrity failure, the Water Quality Division may require that a tubing and packer be installed without amending this permit.

Hazardous Waste

This permit does not allow for the injection of any hazardous waste as defined by 40 CFR 261. Injection of any substance defined as hazardous waste, whether hazardous by listing or by characteristic, is a violation of this permit.

D. Proper Operation and Maintenance

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

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

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

E. Entry and Inspection

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

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

F. Environmental Monitoring Program for Groundwaters of the State

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

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

At a minimum, the groundwater in each of the receiving formations shall be sampled prior to the injection of any fluid into that formation under this permit. This sample shall be analyzed for the following parameters:

Aluminum	Ammonia (NH ₃ as N)	Arsenic
Barium	Boron	Cadmium
Chloride	Chromium	Copper
Cobalt	Cyanide	Fluoride
Iron	Lead	Manganese
Mercury	Nickel	Nitrate (NO ₃ as N)
Oil and Grease	Selenium	Silver
Uranium (U)	Vanadium (V)	Zinc
Potassium	Sodium	Calcium
Magnesium	Sulfate	Hydrogen Sulfide
Carbonate	Bicarbonate	Total Dissolved Solids
pH	Conductivity	Specific Gravity

G. Requirements for Monitoring the Discharge

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

The permittee shall monitor the quality of the injectate fluid on an approved schedule. The following parameters shall be analyzed by the listed methods and reported quarterly:

<u>PARAMETER</u>	<u>APPROVED METHOD NUMBER</u>	<u>SCHEDULE</u>	<u>UCL</u>
Total Dissolved Solids (TDS)	Method 160.1 ⁽¹⁾	Quarterly	500.0
pH	Method 150.1 ⁽¹⁾	Quarterly	>6.5, <9.0
Sulfate	Method 375.2 ⁽²⁾	Quarterly	250.0
Uranium (U)	Method 908.1 ⁽³⁾	Quarterly	5.0 ⁽⁴⁾
Radium-226	Method 903.1 ⁽³⁾	Quarterly	5.0

(1) EPA Methods for analyses of Water and Wastewater.

(2) EPA Methods for Chemical Analyses of Water and Wastes

(3) EPA Prescribed Procedures for the Measurement of Radioactivity in Drinking Water

(4) Or the baseline uranium level in the receiver if the final classification of that receiver is class I under Chapter VIII. See Section B of this permit.

The above Upper Control Limit (UCL) is not to be exceeded in any sample. Exceedance of this value is a violation of this permit and shall require corrective action. All chemical concentrations in this permit are expressed in mg/l except for Radium-226 which is in pCi/l. pH is always expressed in standard units and conductivity is expressed in mmhos/meter or umhos/cm.

H. Test Procedures

Test procedures for the determination of water quality parameters and constituents shall be in accord with provisions of Water Quality Rules and Regulations Chapter VIII, Section 7.

I. Records and Reports

1. The permittee shall retain copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the report or application.
2. The permittee shall give notice to the administrator as soon as possible of any planned physical alterations or additions to the permitted facility.
3. The permittee shall give advance notice to the administrator of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.
4. Monitoring results shall be reported at intervals specified in Section C and/or Section G of this permit.
5. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.
6. The permittee shall report any noncompliance which may endanger health or the environment, orally within 24 hours from the time the permittee becomes aware of the circumstances. The report should include:
 - a. Any monitoring or other information which indicates that any contaminant may cause an endangerment to a usable groundwater of the state.
 - b. Any noncompliance with a permit condition or malfunction of the discharge (injection) system which may cause fluid migration into or between usable groundwaters of the state.

A written submission shall be provided within 5 days of the time the permittee becomes aware of the circumstances. This written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue, and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted; such reports shall contain the information listed in 6. above.
8. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the administrator, it shall promptly submit such facts or information.
9. The permittee shall retain all records concerning the nature and composition of injected fluids until 5 years after completion of any specified plugging and abandonment procedures. The administrator may require the owner/operator to deliver the records to the administrator at the conclusion of the retention period.
10. A subsurface discharge (injection) well may not commence subsurface discharge (injection) until, following public notice and an opportunity for hearing, a groundwater pollution control permit has been issued by the department for the proposed operation, and:
 - a. Well construction is complete and the permittee has submitted notice of completion of construction to the administrator, and
 - b. The administrator has inspected or otherwise reviewed the subsurface discharge (injection) well and finds it in compliance with the conditions of the permit; or the permittee has not received notice from the administrator of intent to inspect or otherwise review the facility within 13 days of the notice of a. above, in which case prior inspection or review is waived, and
 - c. Well mechanical integrity testing has been proven or demonstrated to the satisfaction of the administrator.
11. Annual reports shall be submitted to the administrator within 30 days following the anniversary date of the permit.
12. A comprehensive report for an aborted or curtailed operation authorized by this permit shall be submitted to the administrator within 30 days of complete termination of the injection (discharge) or associated activity, in lieu of an annual report.

A quarterly report shall be submitted no later than 30 days after the end of the calendar quarter showing:

- a. The highest injection volume reached during a single day for each month of the quarter, and the dates when those volumes were injected.
- b. The highest injection pressure recorded during each month of the quarter and the dates when those pressures were reached.

- c. The total volume injected for each month of the quarter, for the total of the quarter, for the calendar year, and the total injected under this permit.
- d. The results of all analyses required under either Section F or G of this permit for that quarter.

An annual report of injection shall be submitted no later than 30 days after the end of each calendar year which shall include:

- a. The fourth quarterly report for the calendar year.
- b. Graphs showing how the injection pressure, highest monthly injection rate, and water quality of the injectate has varied over the previous five years of the injection.

J. Permit Actions

After notice and opportunity for a hearing, a permit may be modified, suspended or revoked in whole or part during its term for cause which includes, but is not limited to, any of the following:

1. Violation of the permit;
2. Obtaining a permit by misrepresentation or failure of the discharge well or system.

Each permit is reviewed at least once every 5 years, and may be reviewed more frequently.

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

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

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

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

K. Mechanical Integrity

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

Prior to injection of any fluid in any well covered by this permit, a Cement Bond Log (CBL) shall be run and submitted to the Water Quality Division for approval. Prior to the 5th anniversary of the logging of each well for a CBL, that well shall be logged using a standard Radioactive Tracer Survey (RATS). In the event that the RATS shows that the injection water is not entering the intended receiver, that well shall be abandoned. The Water Quality Division has not required these wells to be completed with tubing and packer. In the event that corrosion causes wells to be abandoned, Water Quality Division reserves the right to require tubing and packer in future wells.

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.

Each well shall be cemented back to the surface as shown in the application. In the event that this is impossible due to lost circulation of the cement, repair shall be necessary until cement bond can be shown at least from the bottom of the casing up to the pump station at the 1,630 foot level.

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:

Prior to any shutdown of the mine dewatering pumps prior to final mine flooding and abandonment, all casing valves located underground for this system shall be removed and replaced with blank pipe. This is intended to insure that the well can be entered from the surface with cementing tools as needed. Wells shall be entered from the surface and sealed with 100 feet of cement placed immediately above the perforations, a second plug of 100 feet of cement placed immediately below the injection pump elevation, a third plug of 100 feet of cement placed directly above the injection pump elevation, and a final 100 foot cement plug just below the surface.

M. Duties of the Permittee

It is a duty of the permittee to:

1. Comply with all permit conditions;
2. Halt or reduce activity -- it shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the permit conditions;

3. Take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit;
4. Furnish to the administrator within a reasonable time, any information which the administrator may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit; and furnish to the administrator, upon request, copies of records required to be kept by this permit.

N. Financial Responsibility

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

O. Special Measures the Director Finds Necessary:

The permittee shall maintain access to the underground pumping station throughout the operation of this system. In the event that a cave-in occurs that prevents access to this station, the permittee is required to reestablish this access, even if this requires opening new crosscuts, or adits to accomplish this.

This permit does not authorize surface discharge. If surface discharge is desired as shown on Exhibit 5 of the application, that discharge must be covered by an NPDES permit issued by Water Quality Division.

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.

/nc

R7

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

CORRECTED COPY
PERMIT NO. 91-076
SEE CONDITIONS

DIESEL SEEP INVESTIGATION WELLS
(Name of Facility)

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

CORDERO MINING COMPANY
P.O. Box 1449
Gillette, WY 82717-1449

to construct, install or modify a monitoring well and/or test hole network system according to the procedures and conditions of the application No. 91-076. The facility is located in Section 24, T.47N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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 Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

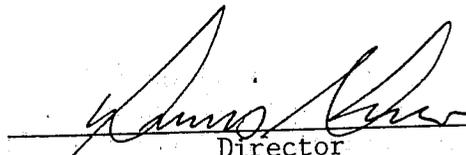
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

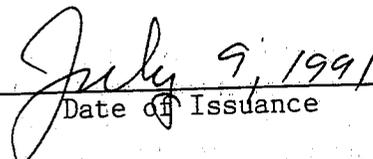
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

CONDITIONS FOR MONITORING WELLS

1. The groundwater monitoring wells and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-076. Additional wells and test holes 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 and test holes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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 WOD. 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.

Conditions for Monitoring Wells (Continued)
Page Four

7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes 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 and test hole locations and elevations;
- c. Final location, construction details and logs of all monitoring wells and test holes;
- d. Geohydrologic 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, as appropriate.

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:

Static water level; EPA method 418.1 (or other comparable method); and TOX test or list of parameters with regulatory limits set according to TCLP (minus herbicide and pesticide parameters). In the case that the TOX test should indicate elevated contaminant levels, the TCLP must be completed (minus herbicide and pesticide parameters).

Conditions for Monitoring Wells
Page Five

The results of these analyses shall be submitted to the Sheridan 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, 1991.

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 receipt and review of one quarterly monitoring results, sampling parameters and/or frequency may be modified.

EJL/pr

cc: Kevin Frederick, WQD, Cheyenne
Mark Taylor, LQD, Sheridan

corrected permit dated 2/9/91

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-076
SEE CONDITIONS

DIESEL SEEP INVESTIGATION WELLS
(Name of Facility)

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

CORDERO MINING COMPANY
P.O. Box 1449
Gillette, WY 82717-1449

to construct, install or modify a monitoring well and/or test hole network system according to the procedures and conditions of the application No. 91-076. The facility is located in Section 24, T.47N., R.71W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

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

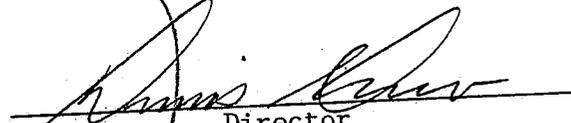
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division, the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

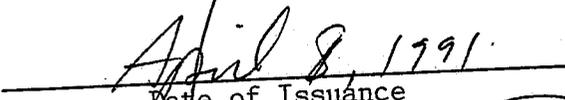
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

CONDITIONS FOR MONITORING WELLS

1. The groundwater monitoring wells and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-076. Additional wells and test holes 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 and test holes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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.

Conditions for Monitoring Wells (Continued)
Page Four

7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes 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 and test hole locations and elevations;
- c. Final location, construction details and logs of all monitoring wells and test holes;
- d. Geohydrologic 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, as appropriate.

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:

Static water level; EPA method 418.1 (or other comparable method); and TOX test for list of parameters with regulatory limits set according to TCLP (minus herbicide and pesticide parameters). In the case that the TOX test should indicate elevated levels of any parameter analyzed, the TCLP must be completed (minus herbicide and pesticide parameters).

Conditions for Monitoring Wells
Page Five

The results of these analyses shall be submitted to the Sheridan 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, 1991.

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 receipt and review of one quarterly monitoring results, sampling parameters and/or frequency may be modified.

EJL/pr

cc: Kevin Frederick, WQD, Cheyenne
Mark Taylor, LOD, Sheridan

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-077
SEE CONDITIONS

BLACK HILLS TRUCKING MONITORING WELL
(Name of Facility)

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

BLACK HILLS TRUCKING
P.O. Box 2360
Casper, WY 82602

to construct, install or modify a monitoring well and/or test hole network system according to the procedures and conditions of the application No. 91-077. The facility is located in Section 34, T.50N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

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

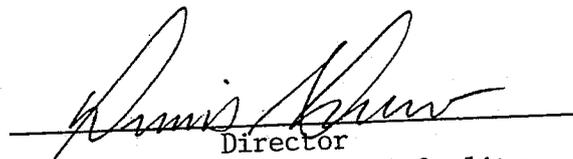
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division, the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

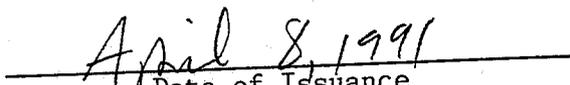
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

CONDITIONS FOR MONITORING WELLS

1. The groundwater monitoring wells and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-077. Additional wells and test holes 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 and test holes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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.

Conditions for Monitoring Wells (Continued)
Page Four

7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes 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 and test hole locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells and test holes;
 - d. Geohydrologic 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, as appropriate.
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 analyzed quarterly for the parameters listed below:

Soils (on a one time basis) for:

EPA method 418.1 and 8240 (or other comparable methods).

Conditions for Monitoring Wells
Page Five

Wastewater (quarterly) for:

EPA method 418.1 (or other comparable methods) and TOX test for all TCLP parameters listed with regulatory limits (minus herbicide and pesticide parameters). In the event that elevated levels of a parameter are indicated in the TOX analysis, the TCLP shall be completed for all those parameters with elevated levels indicated in TOX analysis.

The results of these analyses shall be submitted to the Sheridan 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, 1991.

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 receipt and review of one quarterly monitoring result, the sampling parameters and/or frequency may be modified.

EJL/pr

cc: Kevin Frederick, WQD, Cheyenne

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-078
SEE CONDITIONS

KISSACK WATER DISPOSAL PITS MW
(Name of Facility)

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

KISSACK WATER & OIL, INC.
P.O. Box 9
Rozet, WY 82727

to construct, install or modify a monitoring well and test hole network system according to the procedures and conditions of the application No. 91-078. The facility is located in Section 4, T.50N., R.69W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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 Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

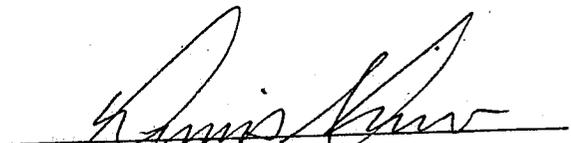
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

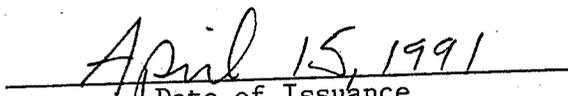
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Dept. of Environmental Quality



Date of Issuance

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

CONDITIONS FOR MONITORING WELLS

1. The groundwater monitoring wells and test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-078. Additional wells and test holes 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 and test holes 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 monitoring well has been plugged and abandoned, the owner shall file a plugging record with the WQD.

Conditions for Monitoring Wells
Page Three

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. After the bentonite has been placed in the annular space, it shall be hydrated to ensure a proper seal;
 - b. The borehole diameter shall be at least four inches larger in diameter than the casing diameter;
 - c. The screened interval shall extend at least two or three feet above the highest expected seasonal groundwater level and at least five feet below the lowest expected groundwater level. Factory slotted casing is recommended for the perforated interval;
 - d. If PVC casing is used, only threaded PVC casing is acceptable. Under no circumstances are PVC glue or plastic welding solvents to be used to join casings;
 - e. To minimize the entrance of fine-grained material into the well, the filter pack shall be designed to be compatible with the perforation size and the geologic materials encountered within the perforated interval;
 - f. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - g. A protective casing and locking cap is strongly recommended;
 - h. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected.
 - i. A seal of bentonite or bentonite grout is required from the surface to a foot or two above the top perforation. Protective casing shall be cemented into a sloping concrete cap; and
 - j. All monitor wells shall be designed so that they contain a minimum of 3 feet of water at all times.
6. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the monitor wells and test holes and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.

Conditions for Monitoring Wells (Continued)
Page Four

7. Within 90 days of the issuance of this permit, a report on the subsurface investigation shall be submitted to the WQD. This report shall contain at a minimum:
- a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well and test hole locations and elevations;
 - c. Final location, construction details and logs of all monitoring wells and test holes;
 - d. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geological materials and groundwater occurrence;
 - e. Water level measurements;
 - f. Sample collection procedures;
 - g. Sampling analytical results; and
 - h. A potentiometric surface map showing the direction of groundwater movement.
8. Proper well evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
9. All monitor wells associated with this facility shall be sampled and the wastewater analyzed for the parameters and frequency to be established by DEQ upon completion of drilling activities conducted under this permit.
- The results of these analyses shall be submitted to the Sheridan office by the last day of the month following the end of the sampling due date.
10. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the Department as soon as they are available.

EJL:pr

cc: Kevin Frederick, WQD, Cheyenne

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-079
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

LARCO Wastewater Treatment Facility Monitoring Wells

This permit hereby authorizes the applicant:

Little America Refining Co.
P.O. Box 510
Evansville, WY 82636

to construct, install or modify monitoring wells according to the procedures and conditions of the application number 91-079. The facility is located in NE 1/4 Section 6 T34N R78W in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

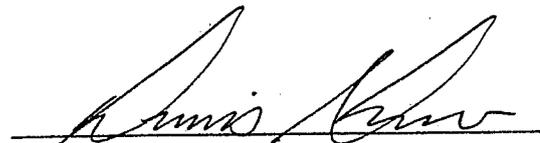
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

May 14, 1991

Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #91-079

1. This permit is valid only for monitoring wells constructed within 100 feet of the wastewater treatment facility proposed for construction under DEQ/WQD permit 91-067. These wells are only for purposes of monitoring that facility and the groundwater in that area.
2. A minimum of four wells are required; one at each of the four corners of the proposed lagoon site. The existing monitoring well at the southeast corner of the lagoon may be maintained as one of the four. Each well shall be screened from 10 feet above the water table or 5 feet below the ground surface, whichever is more, to 1 foot into the confining layer below the surface aquifer. The monitoring wells shall be completed and initial samples taken before wastewater is introduced to the proposed facility.
3. The water in each well shall be initially sampled and analyzed for EPA Primary and Secondary Drinking Water Standards and the parameters on the enclosed "Modified Skinner's List." Thereafter one downgradient well shall be sampled and analyzed for EPA primary and secondary drinking water standards and the "Modified Skinner's List" on an annual basis. Any place a hydrocarbon layer exists in a well it shall be analyzed for density and distillation curve on an annual basis. The State reserves the right to request a fingerprint analysis.
4. The initial and monthly sampling for each well shall include:
 - a. Floating nonaqueous level, water level, and sinking nonaqueous level in m.s.l.
 - b. Temperature, pH, dissolved O₂, conductivity; with total dissolved solids being analyzed on an initial and annual basis and correlated with conductivity.

Conditions to Permit 91-079 (continued)

- c. Ammonia as N, nitrates as N, nitrites as N, benzene, ethyl benzene, toluene, and zylene.
- d. Data shall be reported to DEQ/WQD on a monthly basis in a printed format and in a mutually compatible electronic format.
- e. The sampling shall continue until the waste treatment facility is properly closed as defined by the RCRA program.
5. The well completion data, to include well logs, any soil analysis, and well location, and the initial sampling results shall be reported within 90 days of well installation.
6. Upon request with not more than 24 hours notice, DEQ/WQD shall be allowed to obtain split samples from any well completed under this permit.
7. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells. Additional wells installed at the site must have prior approval from the DEQ/WQD. Any well damage must be immediately reported to DEQ/WQD and repairs or replacement accomplished within 30 days.

LBH/nc

R7

PERMIT TO CONSTRUCT

PERMIT NO. 91-080
SEE CONDITIONS

New
Renewal
X Modified

GLACIER PARK MONITOR WELLS

This permit hereby authorizes the applicant:

Glacier Park Company
1011 Western Avenue Suite 700
Seattle, Washington 98102

to construct, install or modify monitor wells according to the procedures and conditions of the application number 91-080. The facility is located in Section 3 and 4, Township 79 North, Range 33 West 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: 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

12-5-91

Date of Issuance

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

Conditions to Permit to Construct # 91-080

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 91-080. Additional wells meeting the requirements of 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 the ground surface as detailed in Chapter XI, Part G. However, a sufficient seal shall be installed according to normal engineering practice.
3. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly numbered using either a stamp to permanently engrave the number into the steel top or by writing the number in the wet concrete of the base.
4. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial work which may be required. Depending on the results of the subsurface investigation, additional site investigations or remedial actions may be required by the WQD. An adequate number of wells shall be installed to define the extent of the contamination.
5. In addition to the well construction information submitted with the permit application, the following items relating to well construction shall be implemented when the wells are constructed, installed and developed:
 - a. The screened interval shall extend at least 2 feet above the highest

Conditions to Permit 91-080 (continued)

- expected groundwater level and at least five feet below the lowest expected groundwater level. Factory slotted casing is recommended for the perforated interval;
- b. All monitor wells shall be designed to contain a minimum of 3 feet of water at all times of the year.
6. Proper well evacuation shall include removal of a minimum of 3 casing volumes prior to sampling or pumping the well dry once, whichever occurs first. Sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD and EPA standard procedures.
 7. All monitor wells associated with this facility shall be sampled and the groundwater analyzed annually for the following listed parameters:
 - a. Methylene Chloride using EPA Method 624 or EPA Method 8240.
 - b. Tetrachloroethene (PCE) using EPA Method 624 or EPA Method 8240.
 - c. Trichloroethene (TCE) using EPA Method 624 or EPA Method 8240.
 - d. 1,1,2-Trichloroethane (TCA) using EPA Method 624 or EPA Method 8240.
 - e. 1,2-Dichloroethene (DCE) using EPA Method 624 or EPA Method 8240.
 - f. After the first monitoring event, the WQD may substitute a shorter list for the above parameters, depending on the results of the first monitoring event. WQD may substitute less expensive methods for the above listed methods depending on the results of the first monitoring.
 - e. The results of these analyses shall be submitted to the Cheyenne office by the last day of the month following the end of each anniversary of this permit. The first set of results are due by the last day of December, 1992.
8. 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.

RFL/mad

cc: Jake Strohman
Louis Harmon

PERMIT TO CONSTRUCT

New

Permit No. 91-081

Renewal

Modified

Robertson Avenue Sanitary Sewer Replacement
(Name of Facility)

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

City of Worland

P. O. Box 226

Worland, WY 82401

to install 1510 feet 8" PVC to replace 6" orange berg sewer in Robertson Avenue East of 17th Street facility according to the procedures and conditions of the application No. 91-081. The facility is located in S $\frac{1}{2}$ NW $\frac{1}{4}$ Sec 30, T47N, R92W in the County of Washakie, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

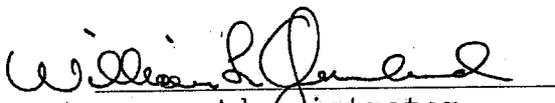
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

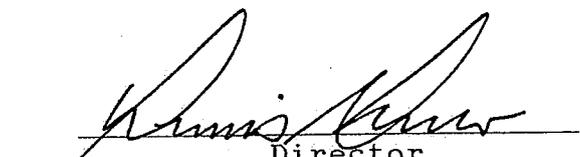
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

JH/jyi



THE STATE OF WYOMING



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

ADMINISTRATION (307) 777-7758 FAX 777-7682	ABANDONED MINES (307) 777-6145 FAX 634-0799	AIR QUALITY (307) 777-7391 FAX 777-5616	INDUSTRIAL SITING (307) 777-7368 FAX 777-6937	LAND QUALITY (307) 777-7756 FAX 634-0799	SOLID & HAZARDOUS WASTE (307) 777-7752 FAX 777-5973	WATER QUALITY (307) 777-7781 FAX 777-5973
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January 31, 1994

Mr. Vern Fauss
Bureau of Reclamation
P.O. Box 1630, 705 Pendell
Mills, WY 82644

Dear Mr. Fauss:

Our records indicate an application for a permit to construct was submitted to this office. Our records however show that no action was taken by this office and that additional information has not been resubmitted to this office for review and authorization. The specific information for your proposed project are:

Facility Name: Seminole Dam Government Community *Car*
 DEQ/WQD Reference Number: 91-082
 Engineering Consultant: Vern Fauss Bureau of Reclamation
 Date Received DEQ/WQD : April 3, 1991

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

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

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

Sincerely,

Gary L. Steele
Southeast District Engineer
Water Quality Division

GLS/nc 40444.LTR
cc: IPS



United States Department of the Interior
BUREAU OF RECLAMATION
Great Plains Region
North Platte River Projects Office
P.O. Box 1630
Mills, Wyoming 82644-1630



IN REPLY
REFER TO:
C-200

RECEIVED

FEB 10 1994

FEB 11 1994

Mr. Gary L. Steele
Southeast District Engineer
Water Quality Division
Hershler Building
122 West 25th Street
Cheyenne WY 82002

WATER QUALITY DIVISION
WYOMING

Subject: Application for Permit to Construct - Department of Environmental
Quality/Water Quality Division Reference Number 91-082.

Dear Mr. Steele:

In follow-up to the February 4, 1994, telephone conversation with Mr. Vern Fauss, we are verifying that this office does not wish to proceed with the permit to construct permitting process. We thank you for returning the subject application and at this time there are no plans to proceed with this project.

Should you have any questions concerning this matter, please contact Vern Fauss at (307) 261-5672.

Sincerely,

John H. Lawson
Area Manager

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-083
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

WOLD OIL PROPERTIES - MAHONEY DOME SLUDGE ROAD APPLICATION

This permit hereby authorizes the applicant:

WOLD OIL PROPERTIES, INC.
139 WEST 2ND STREET, SUITE 200
CASPER, WY 82602

to construct, install or modify tank sludges to road surfaces according to the procedures and conditions of the application number 91-083. The facility is located in NE1/4, Section 34, T26N, R88W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of one (1) 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.

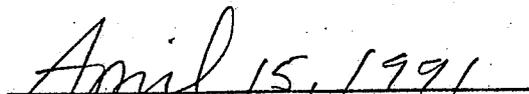
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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 Land Application Permit #91-083

1. Sludges 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 eight percent for vehicular application.
3. Sludge 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 district engineer should be notified at least 48 hours in advance of discharges and must be informed of the volume of material which will be applied (number of truckloads), the specific site of application (to the nearest 1/4 section) and time of application.
5. Waste oil and sludges applied to a road will be mechanically incorporated into the road bed as applied. Wastes will not be applied during the period from November 1 to April 30.
6. This permit authorizes one application only and expires in one year. Authorization for future applications must be obtained by submitting an application for a permit to land apply wastes.

MGD/jn

PERMIT TO CONSTRUCT

New

Permit No. 91-085R

Renewal

Modified

Afton Municipal Water Supply
(Name of Facility)

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

Town of Afton

P.O. Box 310

Afton, WY 83110

to construct, install, or modify a water distribution system facility according to the procedures and conditions of the application No. 91-085R.

The facility is located in SE 1/4 and NE 1/4 of Section 31, T32N, R118W in the County of Lincoln, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

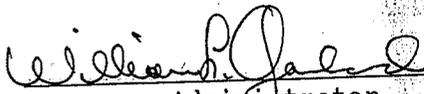
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions 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, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

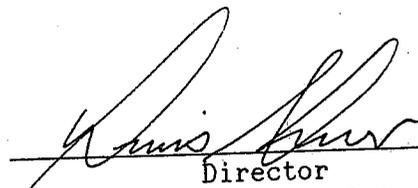
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

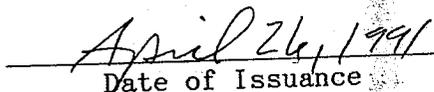
AUTHORIZED BY:



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.
SR/anc

PERMIT TO CONSTRUCT
CONDITIONS

- New
 Renewal
 Modified

Permit No. 91-087

Chevron Country Store
(Name of Facility)

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

Decker Oil Company

104 South Main Street

LaBarge, WY 83123

to install a series of test borings for subsurface contamination assessment according to the procedures and conditions of the application No. 91-087.

The facility is located at 104 South Main Street, LaBarge in the County of Lincoln, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

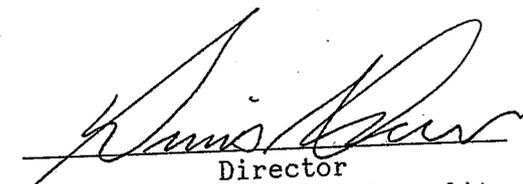
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

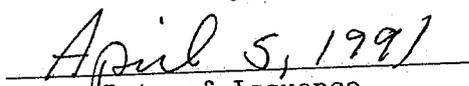
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

SR/jyi

CONDITIONS FOR SOIL BORINGS

1. Upon completion of the project a report shall be submitted containing, at a minimum, the following items:
 - a. An explanation of findings;
 - b. Description of drilling and sampling methods;
 - c. Boring logs/soil descriptions, including delineation of any contamination encountered and method used to determine concentrations;
2. Soil borings may be backfilled with drill cuttings taken from the borings.



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

April 5, 1991

Mr. Michael K. Berry
276 Bertha County Road
Moorcroft, WY 82716

RE: Permit to Construct Application Number #91-084

Dear Mr. Berry:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (#91-084) for a permit to construct a septic system for Michael K. Berry at 276 Bertha County Road. The Water Quality Division has determined that the system meets the minimum design standards.

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

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

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

Sincerely,

William L. Garland
Administrator
Water Quality Division

WLG/GPB/mad

2F

PERMIT TO CONSTRUCT

PERMIT NO. 91-086
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Statewide Cathodic Protection Deep Anode Ground Bed Systems

This permit hereby authorizes the applicant:

Pacific Enterprises Oil Company
P O Box 2500
Casper, WY 82602

to construct, install or modify series of TEG-powered deep anode ground bed cathodic protection systems according to the procedures and conditions of the application number 91-086. The facility is located in various locations throughout 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: District Engineer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 250 Lincoln, Lander, Wyoming 82520; telephone (307) 332-3144.

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

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Department of Environmental Quality

April 15, 1991
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #91-086

1. The cathodic protection deep anode ground bed well shall be installed in accordance with the conditions of this permit and plans and specifications submitted in permit to construct application number 91-086.
2. After the deep anode ground bed well has fulfilled its useful purpose, it shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of Wyoming Water Quality Rules and Regulations. Within 15 days after the well has been plugged and abandoned, the owner shall file a plugging record with the Water Quality Division.
3. In addition to the anode bed construction information submitted with the permit application, the following items relating to well construction must be addressed when the well is installed:
 - a. Bentonite grout seal installed to a depth just above coke breeze.
 - b. The coke breeze shall be a high quality product containing a minimum amount of leachable metals, or organic pollutants such that leachate does not contain concentrations which will cause a Wyoming groundwater standard violation.
 - c. All aquifers encountered while drilling shall be isolated with polymer mud to prevent co-mingling of different aquifers or each aquifer shall be isolated, sampled and analyzed for all parameters contained in Table I of Chapter VIII of Wyoming Water Quality Rules and Regulations. If aquifers are of the same class of use as determined by the Department of Environmental Quality, intermingling may be allowed.
4. Within 45 days after the well has been installed, as-built construction plans need to be submitted to the Wyoming Department of Environmental Quality, Water Quality Division, detailing that the groundwater was protected during construction.

DG/jyi/nc

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

PERMIT NO. 91-088
SEE CONDITIONS

BLACK HILLS TRUCKING
HWY. 14-16 FACILITY TEST HOLES
(Name of Facility)

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

BLACK HILLS TRUCKING, INC.
P.O. Box 2360
Casper, Wyoming 82602

to construct, install or modify a test hole network facility according to the procedures and conditions of the application No. 91-088. The facility is located in Section 23, T.50N., R.72W., in the County of Campbell, in the State of Wyoming. This permit shall be effective for a period of one (1) year (five (5) years maximum) from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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 Annex, Sheridan, Wyoming 82801, telephone (307) 672-6457.

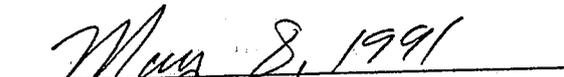
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:


Administrator
Water Quality Division


Director
Dept. of Environmental Quality


Date of Issuance

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

CONDITIONS FOR TEST HOLES

1. The test holes shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-088. Additional test holes meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. After the test holes 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.
3. 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.

4. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of the test holes and sample collection so that DEQ/WQD personnel may be on-site if deemed necessary.
5. Within 90 days of the issuance of this permit, a report on this 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 and test hole locations and elevations;
 - c. Final location, construction details and logs, and plugging and abandonment data of all test holes;
 - d. Geohydrologic 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 (as applicable);
 - i. A potentiometric surface map showing the direction of groundwater movement; and
 - j. Interpretation of data and conclusions including recommended remedial measures.
6. Proper evacuation, sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD standard procedures.
7. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the Department as soon as they are available.

EJL/pr

cc: Kevin Frederick, WQD, Cheyenne

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-089
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

WYOMING DEPARTMENT OF ADMINISTRATION & FISCAL CONTROL

This permit hereby authorizes the applicant:

Jerry Pelesky Construction Company, Inc.
Box 1084
Sheridan, WY 82801

to construct, install or modify secondary barrier monitoring wells according to the procedures and conditions of the application number 91-089. The facility is located statewide, in the State of Wyoming. This permit shall be effective for a period of one (1) year (5 years maximum) from the date of issuance of this permit.

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

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

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

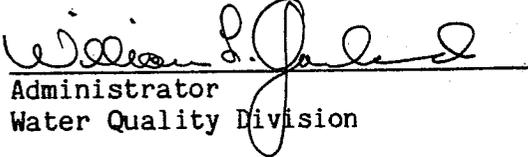
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

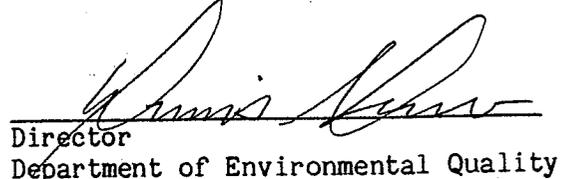
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

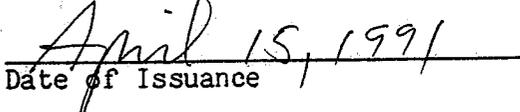
AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality



Date of Issuance

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

Conditions for Monitoring Wells

1. The detection wells shall be installed in accordance with the conditions of this permit and the plans and specifications submitted in permit to construct application number 91-089. Additional wells meeting the requirements of the application and this permit may be installed if prior approval is received from the Water Quality Division (WQD).
2. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below ground surface as detailed in Chapter XI, Part G. However a sufficient seal shall be installed according to normal engineering practice.
3. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells shall be reported immediately to the division. The wells shall be clearly defined, by lettering, that it is a "monitoring well only".
4. In addition to the well construction information submitted with the permit application, the following items relating to well construction must be addressed when the wells are installed:
 - a. 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;
 - b. 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;

Conditions to Permit 91-089 (continued)

5. Keys for the locked detection wells shall be kept on site at all times.
6. After the wells have been installed, inspected by DEQ personnel and meet the requirements of this permit, the permit will be transferred to the appropriate Wyoming State Agency.
7. Monthly monitoring of the wells is required.
8. A strike plate or reinforced plug or seal installed at the bottom of the well is required.
9. If product is detected in a monitoring well, the DEQ shall be notified immediately using the 24 hour number, 307-777-7781.
10. The results of the monitoring must be maintained for at least 5 years.

CWP/jt

PERMIT TO CONSTRUCT

PERMIT NO. 91-090
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

Sinclair Refinery Pilot Waste Treatment Facility

This permit hereby authorizes the applicant:

Sinclair Oil Corporation
P.O. Box 277
Sinclair, WY 82334

to construct, install or modify pilot waste treatment facility according to the procedures and conditions of the application number 91-090. The facility is located in Section 21 T21N R86W in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

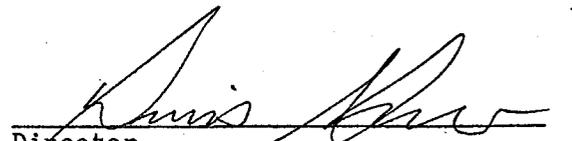
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 12, 1991
Date of Issuance

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

CONDITIONS TO PERMIT TO CONSTRUCT #91-090

1. This permit to construct is for a pilot plant operation as allowed under Section 5 Chapter XI of DEQ/WQD regulations. The facilities constructed under this permit are to be used to develop data to design a permanent facility. Various conditions must be satisfied to allow operation of this facility and in no case can operation be allowed for more than two years under this permit. The construction and operations allowed under this permit are dependent upon compliance with the conditions established in the Work Plan for Evaporative Ponds and Effluent Canal and requirements for further groundwater investigations at the Sinclair Refinery. Operation under this permit may not begin prior to DEQ approval of a Work Plan for Evaporative Ponds and Effluent Canal. Failure to comply with the schedule of that Work Plan or to continue groundwater investigations as approved by DEQ/WQD shall require discontinuing operation of the pilot plant.
2. The discharge from the pilot plant will only be allowed to the existing Evaporative Ponds.
3. DEQ may require modifications of the pilot plant as necessary to protect waters of the State based on operating results. Such construction will only be allowed under a separate permit and as a pilot operation.
4. A permanent wastewater treatment plant must be in place at the end of two years. A comprehensive permanent construction permit will be required. Any or all components of the pilot operation as appropriate may be included in the permanent construction, but must be repermited on the permanent construction permit.
5. Monthly reporting of all data collected on the operation of the pilot plant will be required. The reports shall be submitted in a printed format and in an electronic format mutually compatible to Sinclair and DEQ/WQD. As a minimum the following parameters will be monitored at the locations specified:

Conditions to Permit 91-090 (continued)

- a. Continuously recorded at inlet and discharge:
 - (1) Temperature
 - (2) Flow rate
 - (3) Dissolved oxygen
 - (4) pH
 - b. Eight hour grab sample at crossflow structure:
 - (1) Temperature
 - (2) Dissolved oxygen
 - (3) pH
 - c. Eight hour grab sample at inlet, crossflow, discharge (the following analysis will be accomplished by field techniques and will be specified in the operations manual - see item 6):
 - (1) Ammonia
 - (2) Sulfides
 - (3) Biological activity and life forms (inlet excluded)
 - (4) Total amount of chemical added during the shift
 - (5) Any aerator downtime
 - d. Monthly at inlet and discharge:
 - (1) Benzene, ethyl benzene, toluene, and xylene
 - (2) Oil and grease
 - (3) Total petroleum hydrocarbon
 - (4) TDS
 - (5) TSS
 - (6) COD and BOD
 - (7) Phenols and creosols
 - e. Semi-annual (every 6 months) at crossflow items d.1 through d.7
 - f. Beginning the second quarter of 1992 and thereafter on a quarterly basis on the discharge only:
 - (1) acute biotoxicity with fathead minnows (only) monitoring
6. An operations manual covering all aspects of pilot plant operation, sampling procedures, and personnel (by position) assigned shall be submitted to DEQ/WQD before plant startup.
 7. At the end of the first quarter and again at the end of the first year of operation of the pilot plant an engineering report shall be submitted to DEQ/WQD. This report shall address the successes and failures of the pilot plant and make recommendations for immediate improvements.

LBH/nc

cc: Kevin Frederick



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

May 1, 1991

Mr. R. H. Johnson
Refinery Manager
Sinclair Oil Corporation
P.O. Box 277
Sinclair, WY 82334

RE: Authorization to operate facility; WQD Permit #91-090

Dear Mr. Johnson:

This letter acknowledges Sinclair's compliance with the applicable parts of Conditions #1 and #6 of Permit to Construct #91-090 relating to Department of Environmental Quality, Water Quality Division's (DEQ/WQD) authorization to proceed with the operation of the pilot waste treatment facility.

Sinclair has complied with the pertinent parts of Conditions #1 and #6 and is authorized to proceed with operation of the facility, however, DEQ/WQD has not formally approved the submitted Work Plan and Schedule for investigation of the evaporation ponds and effluent canal, nor agreed to the proposed modification to the sampling program outlined in Sinclair's letter of April 29, 1991 to Lou Harmon.

Sincerely,

Kevin D. Frederick
Supervisor
Groundwater Pollution Control

KDF/jt

cc: Lou Harmon, Southeast District Supervisor, Water Quality Division
File: Permit #91-090



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

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(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

April 18, 1991

Mr. Klane F. Forsgren, P.E.
Corporate Environmental Coordinator
Sinclair Oil Corporation
P. O. Box 277
Sinclair, WY 82334

RE: WQD Permit #91-090 Correction; Work Plan (Sinclair letter of April 12, 1991) Modification

Dear Mr. Forsgren:

This letter is to inform you that Condition #1 to the above referenced permit erroneously requires Department of Environmental Quality, Water Quality Division (DEQ/WQD) approval of a groundwater Work Plan prior to operation of the pilot waste treatment facility at the Sinclair refinery. Please be advised that submittal by April 26, 1991 of a Work Plan addressing groundwater investigation of the Evaporative Ponds and Effluent Canal as subsequently agreed to by WQD will remain the requirement to allow operation of the waste treatment facility.

Additionally, Mr. Leon Corpuz of the Sinclair refinery has clarified that the intent of the second Item #3 of the description of the study and work proposed for the refinery's periphery in your letter of April 12, 1991 is such that:

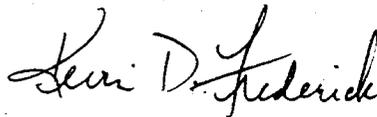
"Monitoring" includes groundwater sampling and analysis, and;

following the first year of monitoring, wells will be monitored "consistent with the RCRA 3013 Program".

Mr. Klane F. Forsgren
April 18, 1991
Page 2

Please contact me if you have any questions or concerns.

Sincerely,



Kevin D. Frederick
Supervisor
Groundwater Pollution Control Program
Water Quality Division

KDF/jn

cc: Lou Harmon; SE District Engineering Supervisor, WQD/Cheyenne
Tom Aalto; US EPA Region VIII
Leon Corpuz; Sinclair Oil Corporation
File: GPC, Carbon County, Sinclair Refinery



RECEIVED

APR 17 1991

WATER QUALITY DIVISION
WYOMING

April 12, 1991

Mr. Kevin D. Frederick, Supervisor
Groundwater Pollution Control
Department of Environmental Quality
Herschler Building
122 West 25th Street
Cheyenne, WY 82002

Re: Work plans for Sinclair Refinery To Receive DEQ/WQD Permit #91-090

Dear Mr. Frederick:

Sinclair Oil Corporation (SOC) is in receipt of your draft letters dated April 9 and 11, 1991 outlining the requirements for the work plan relative to investigations at the evaporative ponds and an Extent of Contamination investigation followed by containment and remediation of contaminated groundwater at the refinery. Subsequent telephone discussion suggested that if SOC would provide a letter to DEQ/WQD outlining our intent regarding these areas, including a schedule for submitting work plans, DEQ/WQD would immediately issue the construction permit for construction of the aggressive biological waste water treatment system. This letter is our suggested work plan approach and best schedule in response to your letters and subsequent telephone conversations with Leon Corpuz on April 11, 1991.

WORK PLAN - EVAPORATIVE PONDS AND EFFLUENT CANAL

We propose the following activities in the evaporative pond areas:

1. Place monitoring wells on the north and south sides of the evaporative ponds to a depth necessary to evaluate hydrogeologic conditions. Well location to be included in final work plan.
2. Screen soils from wells for contamination.
3. Test water from appropriate water-bearing zones for contamination. If contamination is found relative to LNAPL, DNAPL or dissolved constituents, install additional soil borings and/or monitoring wells to determine extent of contamination.
4. Evaluate potentiometric surfaces associated with water-bearing zones.
5. Determine vertical hydraulic gradient between water-bearing zones.
6. Establish a monitoring well that will serve as a baseline well from which to compare results of test wells.

Sinclair Oil Corporation

P.O. BOX 277, SINCLAIR, WYOMING 82334
AREA CODE (307) 324-3404

6. Establish a monitoring well that will serve as a baseline well from which to compare results of test wells.
7. Install monitoring wells along the effluent canal to test for contamination. If contamination is found relative to LNAPL, DNAPL or dissolved constituents, install soil borings and/or monitoring wells to determine extent of contamination.
8. The location of the wells and contaminant tests to be run will be outlined in detail in the work plan. Reports will be issued within 60 days after receipt of complete laboratory results.

Schedule: SOC proposes to have this Work Plan submitted to DEQ/WQD by April 26, 1991. If DEQ/WQD determines that the Work Plan submitted is unacceptable, both DEQ/WQD and SOC will make every reasonable effort to complete a negotiated Work Plan within 30 days of original submittal. Activities to be conducted under the Work Plan will commence within 30 days after receipt of final written approval from DEQ/WQD.

We propose that this submittal by April 26, 1991 be the requirement to allow the aggressive biological treatment plant to be operational on or before May 2, 1991.

**WORK PLAN - REFINERY PERIPHERY - GROUNDWATER
Monitoring for Refinery Related Hydrocarbon Contamination.**

This study will investigate the extent of contamination in the following areas:

1. Northern Plume - Parts of Sections 16 and 17.
2. Well 510 Plume.
3. Area 4 Plume.
4. Southern boundary of the refinery.

The study will be accomplished by the following:

1. Install soil borings and/or monitoring wells on a predetermined grid and test for presence of LNAPL, DNAPL and dissolved constituents related to the SOC operations.
2. Testing for dissolved constituents may occur in selected wells where LNAPL and DNAPL are not found.
3. Monitor wells on quarterly basis for first year and semi-annual basis for all subsequent years.
4. Reports will be issued within 60 days after receipt of complete laboratory results.

Schedule: Work Plan will be submitted to DEQ/WQD by June 15, 1991. If DEQ/WQD determines that the Work Plan submitted is unacceptable, both DEQ/WQD and SOC will make every reasonable effort to complete a negotiated Work Plan within 30 day of original submittal. Activities conducted under the Work Plan will commence within 30 days after receipt of final written approval from DEQ/WQD.

WORK PLAN - INDUSTRIAL LANDFILL SITES
Monitoring for Industrial Waste Landfill Sites.

We propose testing at the industrial landfill site by doing the following:

1. Determine the nature and extent of LNAPL, DNAPL and dissolved constituent contamination. Install additional soil borings and/or monitoring wells as required.
2. Reports will be presented 60 days after receipt of complete laboratory test results.

Schedule: SOC will submit this work plan by July 1, 1991. If DEQ/WQD determines that the Work Plan submitted is unacceptable, both DEQ/WQD and SOC will make every reasonable effort to complete a negotiated Work Plan within 30 days of original submittal. Activities to be conducted under the Work Plan will commence within 30 days after receipt of final written approval from DEQ/WQD.

SOC will submit to DEQ/WQD design(s) and necessary permit applications for groundwater containment system(s) to prevent migration of contaminants off site within one year of the implementation of the final work plan, (August 1, 1992).

SOC will submit a design(s) and necessary permit applications for remediation system(s) to restore the quality of the ground water and soils affected by SOC operations. The submittal to DEQ/WQD will be within 180 days of DEQ/WQD's written approval of SOC's final extent of contamination studies.

SOC believes this answers your requests. Thank you for your assistance. We must begin construction of the wastewater treatment facility immediately.

Respectfully,

SINCLAIR OIL CORPORATION



Klane F. Forsgren, P.E., Ph.D.
Corporate Environmental Coordinator



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

October 29, 1991

Mr. R. H. Johnson
Refinery Manager
Sinclair Oil Corporation
P.O. Box 277
Sinclair, WY 82334

RE: Requirements for Extent of Contamination Investigation pursuant to Condition #1 to WQD Permit to Construct #91-090

Dear Mr. Johnson:

Pursuant to the above referenced Permit Condition and as set forth in the "Work Plan" detailed in Mr. Forsgren's letter to me dated April 12, 1991, Sinclair Oil Corporation was required to submit proposals to perform Extent of Contamination investigations and, upon DEQ approval, perform Extent of Contamination investigations at the Sinclair refinery. This "Work Plan" also included provisions for Sinclair's implementation of groundwater containment and remediation systems.

Sinclair has since submitted proposals to perform Extent of Contamination investigations as set forth in the "Work Plan". The Department of Environmental Quality's (DEQ) Water Quality Division (WQD) has reviewed these proposals and responded to Sinclair in my letter to you dated August 29, 1991, detailing WQD concerns with general adequacy of the proposals, as well as certain technical issues.

At Sinclair's request, a productive meeting was held today in our Cheyenne office to discuss Sinclair's and WQD's positions with respect to an approvable Extent of Contamination investigation(s). Representatives from Sinclair Oil Corporation, TriHydro Corporation, WQD and Solid Waste Management Program (SWMP) were involved in these discussions.

For the record, please be advised that at Sinclair's request, the Department of Environmental Quality will attempt to coordinate with EPA to ensure that it's (DEQ's) interests, with respect to Sinclair implementing an approvable Extent of Contamination investigation(s), are met in the RFI (RCRA Facility Investigation) Work Plan to be submitted to EPA and DEQ by February 25, 1992.

If DEQ approves of the extent of contamination work proposed in the RFI and formally states its approval in a letter to Sinclair, Sinclair will be released from the Permit #91-090 requirements to perform the Extent of Contamination investigations set forth in the April 12, 1991 "Work Plan". If not approved by DEQ, Sinclair will re-submit to DEQ its Extent of Contamination proposals previously developed to meet Permit #91-090 requirements.

Mr. R. H. Johnson
October 29, 1991
Page 2

Furthermore, DEQ will attempt to coordinate with EPA to ensure that its (DEQ's) interests, with respect to Sinclair implementing contaminant containment and remediation as set forth in the April 12, 1991 "Work Plan" are met in the IM (Interim Measures) Work Plan to be submitted to EPA and DEQ by November 27, 1991.

If DEQ approves the IM for containment and remediation work and formally states its approval in a letter to Sinclair, Sinclair will be released from the Permit #91-090 requirements to perform the containment and remediation work set forth in the April 12, 1991 "Work Plan". If not approved, Sinclair will adhere to the containment and remediation work and schedule set forth in the April 12, 1991 "Work Plan".

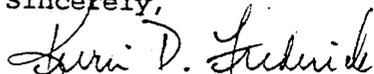
If approved by DEQ, the RFI and IM work plans and schedules will become that referred to in Permit #91-090 condition #1.

Sinclair agrees to provide two (2) copies of the RFI and IM Work Plans to DEQ. DEQ will have a minimum of ninety (90) days to respond to EPA and Sinclair as to its approval or disapproval of the adequacy of the Work Plans toward addressing DEQ concerns with respect to groundwater contamination at the Sinclair refinery.

Based upon the discussion held here today, and information provided by Sinclair Oil Corporation and TriHydro Corporation representatives, DEQ trusts that Sinclair will propose an acceptable approach to extent of contamination investigations in the RFI Work Plan. It is primarily for this reason, together with its interest in reasonable cooperation with industry, that DEQ has agreed to extend its deadlines for investigative work.

We look forward to a mutually cooperative approach toward protection of Wyoming's groundwater.

Sincerely,



✓ Kevin D. Frederick
Supervisor
Groundwater Pollution Control Program

KF/bb

cc: Leon Corpuz
Klane Forsgren
Jake Strohman
Tom Rinehart
Bill Garland
Tom Aalto



THE STATE OF WYOMING



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

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FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

May 7, 1993

Mr. Klane F. Forsgren, P.E.
Manager, Corporate and Environmental Engineering
Sinclair Oil Corporation
550 E. South Temple
P.O. Box 30825
Salt Lake City, Utah 84130-0825

**RE: Sinclair Refinery, Sinclair, Wyoming
ABTU Permit to Construct #91-090 (Condition #4)**

Dear Mr. Forsgren:

The Water Quality Division has reviewed the information submitted by Sinclair to support its request for an extension of the Water Quality Division (WQD) deadline for construction of a permanent wastewater treatment plant as required by Condition #4 of WQD Permit to Construct #91-090. Since Sinclair is proposing to implement measures in addition to those which it has already implemented to improve the effectiveness of wastewater treatment at the refinery, the Division is hereby willing to extend the deadline for installation of a permanent wastewater treatment facility from April 12, 1993 to April 12, 1996.

The Division's approval of the deadline extension is contingent upon Sinclair's:

1. submittal of a preliminary design plan and schedule for construction and operation of a permanent wastewater treatment system by April 12, 1995, and;
2. fulfillment and completion of the Monitoring Plan, the Final Report, and the equipment installation Schedule as presented in Sections 6.4, 6.7, and 7.0 of the March 17, 1993 letter and proposal to the Department. Results and summary conclusions of the Monitoring Plan for each unit (Sour Water Stripper, Hydrotreater, and Sulfur Recovery) will be submitted monthly with the current ABTU sampling and monitoring requirements.

Sinclair shall also continue to investigate and implement potential remedies to improve the effectiveness of the ABTU. These recommendations have been provided by Sinclair in the First Quarter and Annual reports required under Condition #7 of the existing

Page 2
May 7, 1993
Klane Forsgren

Permit, and include:

1. Regulation and monitoring of the temperature of the wastestream entering the ABTU to reduce the growth of filament formers and enhance the growth of constructive bacteria;
2. Addition and monitoring of nutrients and hydrogen peroxide to the ABTU to increase the biological activity within the unit;
3. Installation and monitoring of a pH control system to regulate the pH of the ABTU influent and/or crossflow to optimize biological activity;
4. Continued utilization of: the second oil-water separator; hydrogen peroxide addition into the ABTU; and an additional aeration system in Cell #1 as long as is necessary to achieve and maintain optimum treatment effectiveness.

Monitoring results, summary conclusions, and schedules for implementation of the above mentioned measures shall be provided to DEQ/WQD quarterly. An annual report shall be submitted by April 12 of each year, addressing the effectiveness of the above measures, and identifying recommendations for immediate improvements.

Additionally, within 30 days of receipt of this letter Sinclair must submit information describing the following to WQD:

1. the chemical and physical nature, volume, pH, frequency, and source of all wastes, including production well water, not generated at the refinery but disposed into either the wastestream treated by the ABTU or the evaporation ponds;
2. a site map illustrating all location(s) at which non-refinery waste(s) have been disposed, and associated wastewater distribution and treatment systems;
3. a summary discussion which documents the effect(s) that these wastes may have on the operational effectiveness of the ABTU and the evaporation ponds.

This clarification is necessary to avoid any confusion or misunderstanding regarding the specific wastes which are authorized to be received and treated at the ABTU. Dependent upon the effects that non-refinery wastes have on the operational effectiveness of the ABTU and the evaporation ponds, acceptance of production well (produced) water from Sinclair Oil Corporation sources may be acceptable.

Page 3
May 7, 1993
Klane Forsgren

The U.S. Bureau of Land Management has requested clarification from DEQ/WQD regarding the disposal of oil and gas field production water at the evaporation ponds at the Sinclair Oil Corporation refinery in Sinclair, Wyoming. The BLM is required to document that wastes from federal lands are disposed at approved sites. The BLM indicated that produced water from gas wells operated by Sinclair Oil Corporation as well as at least one other company has and is being disposed at the evaporation ponds.

In a telephone conversation, Leon Corpus indicated that produced water from Sinclair Oil Corporation wells only is received and that the produced water is treated at the ABTU unit prior to discharge to the evaporation ponds. Mr. Corpus indicated that only produced water from gas wells is received and that no drilling muds or other wastes from oil field exploration and production are received.

Sinclair is reminded that if produced water from other companies is received, the facility qualifies as a commercial oilfield waste disposal facility and is therefore subject to the bonding and financial assurance requirements of Wyoming Statute §35-11-306. Obviously, no drilling muds or other oilfield exploration and production wastes should be received at the treatment unit, or discharged directly into the evaporation ponds without first receiving the required permits and bonding approvals.

Please remember that the original ABTU Permit (91-090) and its operating Conditions, including the ABTU monitoring, sampling and reporting requirements continue to remain in effect.

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

Sincerely,



Kevin D. Frederick, P.G.
Supervisor
Groundwater Pollution Control Program

KDF:jmm 32221.1tr

cc: Tom Aalto, USEPA, Region VIII, Denver
Leon Corpus, Sinclair Refinery, Sinclair, WY
Don Fischer, SE District GPC, WQD
Bill Garland, Administrator, WQD
Clare Miller, BLM, Rawlins
Larry Robinson, Manager, State Program Operations Section
Jake Strohman, Manager, Groundwater Section
John Wagner, Manager, NPDES Program
Randy Taylor, SW District Engineering Supervisor

GROUNDWATER POLLUTION CONTROL PROGRAM
REVIEW COMMENTS: REPORTS/PROPOSALS/PLANS

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

PROJECT: Request for Deadline Extension: Permit #91-090 Condition (#4)
ABTU Wastewater Treatment; Modifications to Improve Influent Quality

APPLICANT: Sinclair Refinery
P.O. Box 277
Sinclair, WY 82334

ENGINEER: Klane F. Forsgren

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: #91-090

EXISTING NEW

TITLE:
 PROPOSAL PLANS REPORT (Check each that applies)

DATE ON PROPOSAL/PLANS/REPORT: March 17, 1993; April 28, 1993

IS THIS PROPOSAL SUBMITTED PURSUANT TO 'CONDITIONS' TO ANY WQD PERMIT?

YES NO (PERMIT #91-090)

REVIEWING GEOLOGIST/ENGINEER: K. Frederick, P.G.

DATE OF LAST REVIEW: NA

DATE OF THIS REVIEW: May 3, 1993

ACTION: Grant request for extension of Condition #4 requirement to April 12, 1996.

COMMENTS

1. Sinclair (SOC) has proposed to make modifications to the treatment of refinery wastewater upstream of the ABTU through the construction of additional wastestream treatment units. By improving the quality of influent to the ABTU, the ABTU should become more effective and efficient at treating refinery wastewater. Improved efficiencies and effectiveness of the ABTU should improve the quality of effluent discharged from the ABTU into the evaporation ponds. All units are scheduled to be operational by the

end of 1993. Sinclair is requesting an extension of the deadline for permitting a permanent wastewater treatment system to provide time to install these units, operate them for roughly 1 year and 4 months, monitor the effects which they have on the effectiveness of the ABTU, and make system adjustments as may be necessary to reach optimum operating conditions at the ABTU. The costs associated with construction of these treatment units represents a significant commitment by Sinclair to improve the quality of discharged effluent.

2. Modifications to the treatment of refinery wastewater includes the addition of a Sour Water Stripper (SWS). Other systems SOC has proposed are designed to reduce the sulfur content of the feedstock, and include the Hydro-Desulfurization Unit (HDU), or Hydrotreater, and the Sulfur Recovery Unit (SRU).
3. The additional treatment to the refinery process water wastestream by the **Sour Water Stripper** and the **Hydrotreater** will reduce the VOC loading to the ABTU by approximately 44%. In addition to VOC removal by the SWS, the SWS will also reduce ammonia (NH₃) and hydrogen sulfide (H₂S) concentrations in wastewater treated by the SWS and entering the ABTU according to the following table:

SWS Predicted % Reduction (Wastestream)*				
Unit	VOCs	NH ₃	H ₂ S	Benzene
HDU*	80	100	100	NA
SWS	50	95+	95+	80

* The **Hydrotreater** will treat approximately 5% of the waste stream from the SWS, reducing VOCs in this portion of the wastestream by 80%.

4. Sinclair has voluntarily taken additional steps to improve the quality of the wastestream entering the ABTU, including:
 - a. Adding surge capacity downstream of the tank field sewer system. This surge capacity permits more effective separation of oil and emulsion from the wastewater stream generated from tank water draws. Hydrocarbon is returned to the slop oil system for refining and wastewater is conveyed to the wastewater treatment system. This project reduces the loading on the API separator and therefore reduces the amount of oil going to the ABTU. (Completed 3/16/93)
 - b. Adding surge capacity downstream of the two de-salter units. This surge capacity permits more effective separation of oil and emulsion from the wastewater stream generated from the de-salter process unit. Hydrocarbon is returned to the slop oil system for refining

and wastewater is conveyed to the wastewater treatment system. This project reduces the amount of oil going to the ABTU. (Completed 3/16/93)

- c. Adding a second oil-water separator at the wastewater treatment system. The second separator is in a series downstream from the existing API separator and provides additional oil removal capacity and enhances the effectiveness of downstream wastewater treatment units (ABTU). Hydrocarbon is returned to the slop oil system for refining and wastewater is conveyed to the existing induced air flotation units for further treatment. (Completed 3/15/93)
 - d. Installation of an emergency back-up skimming system which is operated in the equalization area of the first treatment cell;
 - e. Formation of a Refinery Water Committee to develop strategies for pollution prevention, wastewater treatment and water use. The Committee has initiated a project to eliminate boiler blowdown wastes from the wastewater stream;
 - f. Installation of a rope skimmer in the sump located downstream of the API separator to remove oil that accumulates in the sump, reducing the amount of oil going to the ABTU;
 - g. Addition and monitoring of a polymer upstream of the WEMCO and Quadricell to improve the efficiency of removing emulsified oil before reaching the ABTU. (Commenced on 3/8/93)
 - h. Addition of hydrogen peroxide upstream of the ABTU on a trial basis to oxidize the sulfide in the ABTU and enhance biological activity. (Commenced on 3/9/93)
 - i. Installation of an additional aeration system in Cell #1 on a temporary basis to supply additional oxygen for enhanced bacterial growth. (Commenced 3/8/93)
5. Installation of the Sour Water Stripper should decrease both the pollutant loading (VOCs, ammonia, hydrogen sulfide) and the hydraulic loading on the process water treatment system, improving the performance of the entire system.
 6. Sinclair has been forthright in meeting the operating requirements established as Conditions in the existing ABTU Permit to Construct.

IPS/Cheyenne

Jake Strohman, Groundwater Program Manager, Cheyenne

Review of Plans & Specs - 92-274
May 10, 1993
Page 4

Kevin Frederick, GPC Program Supervisor, Cheyenne

SINCLAIR/91-090-2.RVW

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-091
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

HOUSE AVENUE & BLACK COURT SEWER REHABILITATION

This permit hereby authorizes the applicant:

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

to construct, install or modify a Collection System according to the procedures and conditions of the application number 91-091. The facility is located in Sections 29 & 30 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 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.

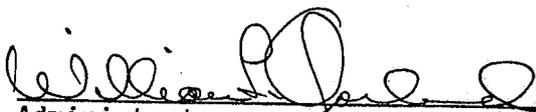
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

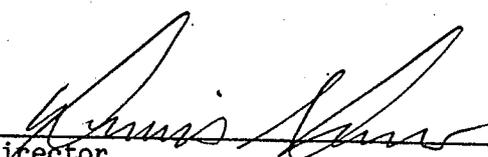
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

April 15, 1991

Date of Issuance

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

SCF/nc

LAND APPLICATION PERMIT
* CONDITIONS *

Permit No. 91-092

Byron/Garland Field Road Application
(Name of Facility)

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

Marathon Oil Company

P. O. Box 2690

Cody, WY 82414

to road apply oil treater sludge mixed with sand and gravel. The application sites are located in Lot 47, T56N, R97W resurvey and Sec. 19, 29, 30, 31, 32, T56N, R97W, Big Horn County and Sec. 13, 24, T56N, R98W in County of Park, in the State of Wyoming. This permit shall be effective for a period of six months (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.

The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division within 48 hours of

the day application will commence and give an estimate of the duration 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, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

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:



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.

JH/jyi

ROAD APPLICATION STANDARD CONDITIONS

1. Waste oil and sludge shall be applied at a rate which will prevent runoff or ponding. Application shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
2. The slope of the roads application shall not exceed 8 percent for vehicular application.
3. Waste oil and sludge application shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.

4. The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Steve Gerber phone number 332-3144, to arrange a field inspection prior to initiation of work. The district engineer should be notified, at least 48 hours in advance of application and must be informed how much waste oil and sludge will be applied (number of truckloads), the specific site of application (to the nearest $\frac{1}{4}$ section) and time of application.
5. Waste oil and sludges applied to a road will be mechanically incorporated into the road bed. Wastes will not be applied during the period from November 1 to April 30.
6. Only the roads designated in this permit are authorized for application of the waste oil and sludge. Additional sections of road meeting the requirements of the application and this permit may be utilized if a written description and maps are received and approved by the Water Quality Division.

PERMIT TO CONSTRUCT

New

Permit No. 91-093

Renewal

Modified

Garrett SWTF
(Name of Facility)

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

L. R. and Virginia Garrett

P. O. Box 366

Lovell, WY 82431

to construct a septic tank and leachfield facility according to the procedures and conditions of the application No. 91-093. The facility is located in Sec. 18, T57N, R96W in the County of Big Horn, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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, 250 Lincoln, Lander, WY 82520; telephone, 332-3144.

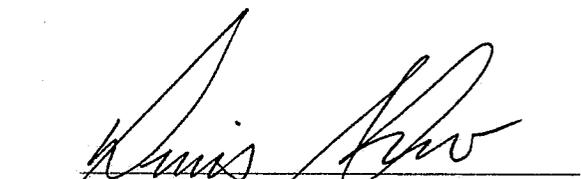
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

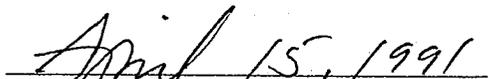
AUTHORIZED BY:



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.

SG/jyi

PERMIT TO CONSTRUCT

New

Permit No. 91-094

Renewal

Modified

Louisiana Land & Exploration Man Camp Septic System
(Name of Facility)

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

Louisiana Land & Exploration Co.

One Civic Center, Suite 1200

1560 Broadway

Denver, CO 80202

to construct a septic tank and leachfield facility according to the procedures and conditions of the application No. 91-094. The facility is located in Sec 36, T39N, R91W in the County of Fremont, in the State of Wyoming. This permit shall be effective for a period of one (1) years from the date of issuance of this permit.

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

The authority to construct granted by this permit does not mean or imply that the Wyoming Department of Environmental Quality guarantees or 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, 250 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.

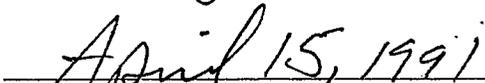
AUTHORIZED BY:



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.

SG/jyi

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-095
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

JACK SCOTT PROPERTY - MONITOR WELLS

This permit hereby authorizes the applicant:

Jack Scott
P O Box 1000
Evansville, WY 82636

to construct, install or modify a Groundwater Monitor Well System according to the procedures and conditions of the application number 91-095. The facility is located in NW/NW Section 10 Township 33 North Range 79 West in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of two years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

April 15, 1991

Date of Issuance

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

CONDITIONS FOR MONITOR WELLS

1. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study. Results of the initial site investigation will be reviewed by the Department of Environmental Quality, Water Quality Division (DEQ/WQD) to determine whether or not further investigatory work or remedial actions be required at the site.
2. DEQ/WQD personnel shall be given at least 24 hours notice prior to the installation of the monitor wells and sample collection. Additional wells installed at the site must have prior approval from the DEQ/WQD.
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. All wells must have a unique number.
4. Within 30 days of issuance of this permit, a report on the subsurface investigation must be submitted to the DEQ/WQD. The report must include the following items:
 - a. A chronology of events leading up to the investigation;
 - b. A site map showing physical features, well locations and elevations;
 - c. A potentiometric surface map showing the direction of groundwater movement;
 - d. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;

Conditions to Permit 91-095 (continued)

- e. A description of the subsurface geologic conditions;
 - f. Construction details and logs of all monitor wells;
 - g. Sample collection procedures, QA/QC information and analytical methods;
 - h. Static water level, product thickness and analytical results; and
 - i. Interpretation of data and conclusions including recommended remedial actions.
5. After the monitoring wells have fulfilled their useful purpose, and upon approval by DEQ/WQD, they shall be abandoned according to procedures specified in Chapter XI, Part G, Section 70 of the Wyoming Water Quality Rules and Regulations.

SCF/mad

RF

PERMIT TO CONSTRUCT

PERMIT NO. 91-096
SEE SPECIAL CONDITIONS

X New
Renewal
Modified

SPIDLE SALES MONITORING WELLS

This permit hereby authorizes the applicant:

Spidle Sales Company
1382 North Seven Road
P. O. Box 1990
Mills, Wyoming 82644

to construct, install or modify a system of monitor wells according to the procedures and conditions of the application number 91-096. The facility is located in Section 32 SE $\frac{1}{4}$, Township 34 North, Range 80 West 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.

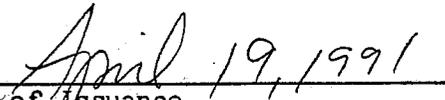
AUTHORIZED BY:



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 ON PERMIT TO CONSTRUCT 91-096

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 91-096. Additional wells meeting the requirements of 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 the 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 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 using either a stamp to permanently engrave the number into the steel top or by writing the number in the wet concrete of the base.
5. The issuance of this permit does not relieve the permittee from obligations to complete the extent of contamination study and any further remedial work which may be required. Depending on the results of the subsurface investigation, additional site investigations or remedial actions may be required by the WQD. An adequate number of wells shall be installed to define the extent of the contamination.

Conditions to Permit 91-096 (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. The borehole diameter shall be at least 4 inches larger in diameter than the casing diameter;
 - b. The screened interval shall extend at least 2 feet above the highest expected groundwater level and at least five feet below the lowest expected groundwater level. Factory slotted casing is recommended for the perforated interval;
 - c. If PVC casing is used, the casing shall be installed using mechanical connectors without the use of solvents or glues to hold the casing sections together. This mechanical connection may use set screws, threads, or other types of couplings.
 - d. 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;
 - e. A top and bottom cap shall be installed to prevent sediment and surface water from entering the well;
 - f. The monitoring well shall be developed by the use of a pump or bailer so that representative groundwater samples can be collected;
 - g. A seal of bentonite or bentonite grout is required from the surface to a foot or two above the top perforation. After the bentonite has been placed in the annular space, it shall be hydrated to insure an proper seal. Protective casing shall be cemented into a sloping concrete cap; and
 - h. All monitor wells shall be designed to contain a minimum of 3 feet of water at all times of the year.
7. DEQ/WQD personnel shall be given at least two weeks notice prior to the installation of 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 of investigation shall be submitted to WQD. This report shall contain at a minimum:
 - a. A site map showing the physical features, well locations and sea level elevations;
 - b. Final location, construction details and logs of monitor wells. Casing elevations as elevation above mean sea level shall be provided for all wells;
 - c. Geohydrologic maps and/or cross sections that clearly describe the sub-surface distribution of geologic materials and groundwater occurrence;
 - d. Water level and product thickness measurements;
 - e. Sample collection procedures;
 - f. Sampling analytical results;

Conditions to Permit 91-096 (continued)

- 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 the data and conclusions including recommended remedial measures.
9. Proper well evacuation shall include removal of a minimum of 3 casing volumes prior to sampling or pumping the well dry once, whichever occurs first. Sample collection, preservation, transportation and chemical analytical procedures shall be completed in accordance with WQD and EPA standard procedures.
10. All monitor wells associated with this facility shall be sampled and the groundwater analyzed quarterly for the following listed parameters:
- a. Of the Purgeable Hydrocarbons using EPA Method 624, analyze specifically for 1,1,1-Trichloroethene (TCE), 1,1,2,2-Tetrachloroethene (PCE), and 1,2-Dichloropropane (DCP);
 - b. Selenium, using EPA Method 270.2;
 - c. Total Dissolved Solids using EPA Method 160.1;
 - d. Nitrate as N by EPA Method 353.2;
 - e. The permittee may use alternate methods provided that the method chosen provides a detection limit as low or lower than the methods listed above, and that the accuracy of the method chosen is at least as good as the accuracy of the above listed methods;
 - b. After the first monitoring event, the WQD may substitute a shorter list for the above parameters, depending on the results of the first monitoring event. WQD may substitute less expensive methods for the above listed methods depending on the results of the first monitoring.
 - c. 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, 1991.
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.

RL/jn

xc: Jake Strohman, DEQ/WQD

PERMIT TO CONSTRUCT

New

PERMIT NO. 91-097

Renewal

Modified

L & M TRUCKING SEPTIC SYSTEM
(Name of Facility)

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

L & M Trucking, Inc.
P.O. Box 100
Newcastle, Wyoming 82701

to construct, install or modify a small wastewater facility according to the procedures and conditions of the application No. 91-097. This facility is located in Section 26, T45N, R62W in the County of Weston in the State of Wyoming. This permit shall be effective for a period of one (1) years (five (5) years maximum) from the date of issuance of this permit.

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

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

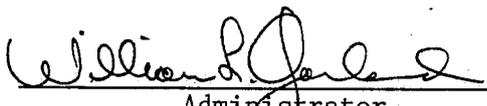
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

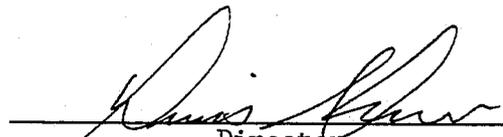
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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.

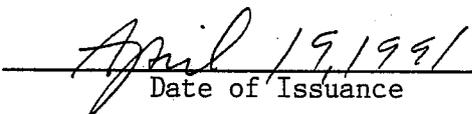
AUTHORIZED BY:



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.

GPB:pr



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

Land Quality Division
(307) 777-7756
FAX (307) 634-0799

Solid Waste Management Program
(307) 777-7752

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

May 24, 1991

Ms. Sharon Parill
P. O. Box 5676
Chéyenne, WY 82003

RE: Permit to Construct Application Number 91-098

Dear Ms. Parill:

The Department of Environmental Quality, Water Quality Division, has reviewed your application (#91-098) for a permit to construct a septic system at the Clown's Den Bar. The Water Quality Division has determined that the system meets the minimum design standards for the treatment system serving the bar/lounge and the double-wide trailer located to the south of the bar/lounge. Any other connection to the system will violate the conditions of this authorization and subject you to penalties as provided by the Environmental Quality Act (not to exceed \$10,000 per day per violation). The trailer currently located to the west of the bar/lounge cannot be connected to the system unless the drainfield is modified. Any modification being considered must be authorized by this department prior to construction of the modifications. Further, you may wish to consult an attorney about revealing the conditions of this authorization to any prospective purchaser of the property. It is requested that you provide the department with proof that you have in fact revealed these conditions to any purchaser prior to a closing on the property. This request shall be a condition of this authorization.

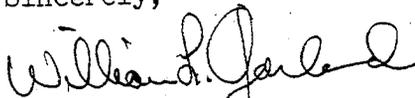
Nothing in this letter constitutes an endorsement of the construction or the design of the facility described herein. This letter indicates only that standards of design and construction required by the Environmental Quality Act have been met. The state assumes no liability for and does not in any way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

Since your system has already been constructed, a permit to construct cannot be issued. This letter is your record that the septic as installed but connected only to the double wide trailer and bar/lounge meets minimum state specifications and has been approved by the Wyoming Department of Environmental Quality, Water Quality Division.

L. Sharon Parill
May 24, 1991
Page 2

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

Sincerely,



William L. Garland
Administrator
Water Quality Division

WLG/mad

cc: Gary Hickman, Laramie County Environmental Health
James Murphy, AVI Engineers

PERMIT TO CONSTRUCT

PERMIT NO. 91-099

X New
Renewal
Modified

DOUGLAS WATER AND SEWER IMPROVEMENTS

This permit hereby authorizes the applicant:

City of Douglas
101 North 4th Street
Douglas, WY 82633

to construct, install or modify Distribution and Collection System Improvements according to the procedures and conditions of the application number 91-099. The facility is located in Section 9 Township 32 North Range 71 West in the county of Converse, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

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

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

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In this permit shall be construed to preclude the institution of any legal
relieve the permittee from any responsibilities, liabilities or penal-
ished pursuant to any applicable state law or regulation.

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

May 10, 1991
Date of Issuance

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

SCF/jt

PERMIT TO CONSTRUCT

PERMIT NO. 91-100

X New
Renewal
Modified

BROOKS WATER & SEWER DISTRICT - WATER SYSTEM IMPROVEMENTS

This permit hereby authorizes the applicant:

Brooks Water & Sewer District
P O Box 2080
Mills, WY 82644

to construct, install or modify a Distribution System according to the procedures and conditions of the application number 91-100. The facility is located in NW Section 1 Township 33 North Range 80 West in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (5 years maximum) from the date of issuance of this permit.

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

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

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

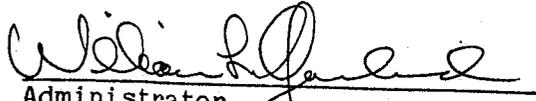
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

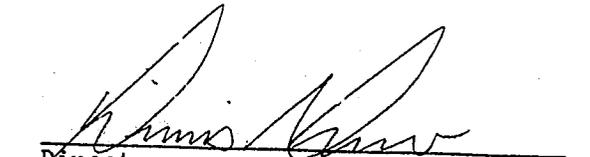
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federal, state, or local laws or regulations.

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

May 17, 1991

Date of Issuance

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

SCF/jt

cc: Colin Cunningham, Worthington Lenhart & Carpenter, Inc., 632 South David,
Casper, WY 82601