



THE STATE OF WYOMING

RECEIVED

JAN 27 1995



MIKE SULLIVAN
GOVERNOR

WATER QUALITY DIVISION
WYOMING

Department of Environmental Quality

3030 Energy Lane • Suite 200 • Casper, Wyoming 82602

SOLID & HAZARDOUS WASTE DIVISION
(307) 473-3450

AIR QUALITY DIVISION
(307) 473-3455

ABANDONED MINES
(307) 473-3460

October 4, 1994

Mr. Stephen Brinkman
USPCI Project Manager
Union Pacific Railroad Company
5665 Flatiron Parkway
Boulder, CO 80301

RE: Permit No. 93-451 conditions
Facility located in SW1/4 Section 16, T21N, R87W, 6th P.M. in
Carbon County, Wyoming

Dear Mr. Brinkman:

Mr. Robert Lucht of the Cheyenne DEQ/WQD office has forwarded your request (letter dated August 1, 1994 to Bob Lucht) to delete the requirement to analyze for EPA Method 625 in the monitor wells included in the above referenced permit. After reviewing the two most recent reports, in which the analyses for the Semi-volatile Organics were included, I have noted that all analytes were reported as not detected except at trace amounts (below detectable limits) or interpreted as a result of sample contamination (indicated by the presence of the analyte in a field blank). Based on this information, you are hereby authorized to discontinue analyzing for EPA Method 625 in all existing wells.

Future correspondence or any questions you might have should be directed to Lynda Fivas, WDEQ/WQD, 3030 Energy Lane, Suite 200, Casper, WY 82604, telephone (307) 473-3465.

Sincerely,

Lynda Fivas

Lynda Fivas
Senior Analyst
Central District

cc: Kevin Frederick
Jake Strohman
Robert Lucht
Archives
Permit No. 93-451 file

175



THE STATE OF WYOMING



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

3030 Energy Lane • Suite 200 • Casper, Wyoming 82602

SOLID & HAZARDOUS WASTE DIVISION
(307) 473-3450

AIR QUALITY DIVISION
(307) 473-3455

ABANDONED MINES
(307) 473-3460

November 22, 1994

Mr. Stephen Brinkman
USPCI Project Manager
Union Pacific Railroad Company
5665 Flatiron Parkway
Boulder, CO 80301

RECEIVED

NOV 28 1994

RE: Permit No. 93-451 conditions
Facility located in SW1/4 Section 16, T21N, R87W, 6th P.M. in
Carbon County, Wyoming

**WATER QUALITY DIVISION
WYOMING**

Dear Mr. Brinkman:

WDEQ received your letter dated November 1, 1994, in which you requested authorization to use the weekly discharge samples taken for compliance with the Rawlins City discharge permit (EPA method 413.1) for the analysis required under the WDEQ Permit No. 93-451 (EPA method 418.1). Unfortunately, although both of these analyses test for similar products, one is designed to detect light oils and the other the heavier greases and oils. Since the two different analyses test for different (although similar) products, authority to replace one with the other cannot be granted without additional evidence that the alternate testing method will continue to address the major concerns of the WDEQ/WQD.

If you have any questions or comments regarding this subject, please contact Lynda Fivas, WDEQ/WQD, 3030 Energy Lane, Suite 200, Casper, WY 82604, telephone (307) 473-3465.

Sincerely,

Lynda Fivas

Lynda Fivas
Senior Analyst
Central District

cc: Kevin Frederick
Jake Strohmman
Archives
Permit No. 93-451 file

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-451
SPECIAL CONDITIONS

Union Pacific Railroad - Rawlins Monitoring Wells

This permit hereby authorizes the applicant:

Union Pacific Railroad
1416 Dodge Street, Room 930

Omaha, NE 68179

to construct, install or modify a system of environmental monitoring wells according to the procedures and conditions of the application number 93-451. The facility is located in SW1/4 Section 16, T21N, R87W, 6th P.M. in the county of Carbon, in the State of Wyoming. This permit shall be effective for a period of five (5) years from the date of issuance of this permit.

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

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

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

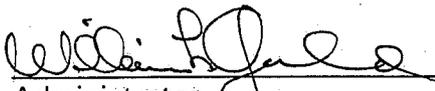
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

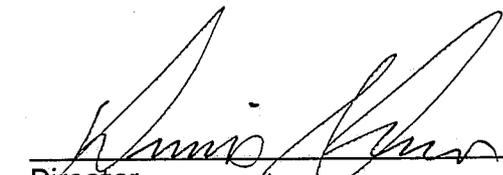
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

11-18-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 11. 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 93-451. Additional wells meeting the requirements of this permit may be installed if prior approval is received from the Water Quality Division (WQD).
- 2 of 11. 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 of 11. 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.

PERMIT NO. 93-451

- 4 of 11. 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 of 11. 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.
- 6 of 11. 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.

PERMIT NO. 93-451

- 7 of 11. DEQ/WQD personnel shall be given at least five days notice prior to the installation of monitor wells and sample collection so that DEQ/WQD personnel may be on site if deemed necessary.
- 8 of 11. 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 chronology of events leading up to the investigation;
 - b. A site map showing the physical features, well locations and sea level elevations for the ground surface and for the top of the casing accurate to .01 feet;
 - c. The permittee shall provide the exact state plane coordinate for each of the monitor wells being constructed under this permit. These figures shall be accurate to the nearest one whole foot;
 - d. Final location, construction details and logs of monitor wells;
 - e. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geologic materials and groundwater occurrence;
 - f. Water level and product thickness measurements;
 - g. Sample collection procedures;
 - h. Sampling analytical results;
 - i. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - j. A potentiometric surface map showing the direction of groundwater movement; and
 - k. Interpretation of the data and conclusions including recommended remedial measures.
- 9 of 11. 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 of 11. All monitor wells associated with this facility shall be sampled and the groundwater analyzed at least once for the following listed parameters:
- a. Total Petroleum Hydrocarbons using EPA Method 418.1;
 - b. Acid, Neutral and Base Extractable Hydrocarbons using EPA Method

625;

c. Wells which encounter free product need not be sampled until such free product has been eliminated by the product recovery system;

d. 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 quarter. The first set of results are due by the last day of April, 1994. After review of the results submitted, and after consultation with Union Pacific Railroad, the Water Quality Division will determine future monitoring frequency; and

f. The Water Quality Division, after consultation with Union Pacific Railroad and its consultants, and after review of the data submitted will set target restoration values for all wells drilled under this permit and previous permits for the Rawlins railyard.

11 of 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.

RFL/mad 35603.LTR

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 93-452R
* CONDITIONED *

Northwest Rural Water District - Lovell Service Area
(Name of Facility)

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

Northwest Rural Water District

William Sheets, Mgr.

P.O. Box 2344

Cody, WY 82414

to construct several miles of water distribution system according to the procedures and conditions of the application No. 93-452R. The facility is located in Several Sections, T56N, R95W & 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

4/20/94

Date of Issuance

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

GL

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.
2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-452R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. No

B. Chapter XII. Yes

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

Statement of Basis
93-452R
April 11, 1994

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

N/A

- VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

GL/bb/41630.1tr

PERMIT TO CONSTRUCT

New

Permit No. 93-453
* **CONDITIONED** *

Renewal

Modified

UPRC Patrick Draw Gas Plant, Initial Free Product Recovery
(Name of Facility)

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

Union Pacific Resources Company

P.O. Box 7, MS 2807

Fort Worth, TX 76101-0007

to construct a free product recovery system, initial phase according to the procedures and conditions of the application No. 93-453. The facility is located in SE 1/4 Sec. 25, 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.

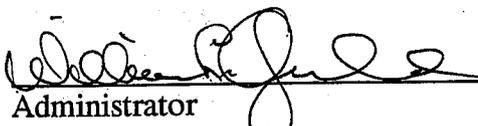
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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.

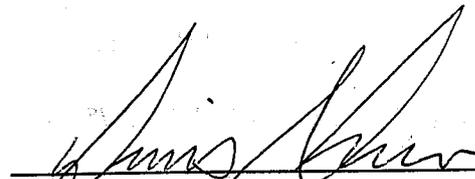
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
Department of Environmental Quality

12/20/93

Date of Issuance

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

DG: 36095.LTR

SPECIAL CONDITIONS 1 through 6

1. of 6 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 6 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

Permit to Construct 93-453

Union Pacific Resources Company, Patrick Draw Gas Plant

Free Product Recovery System, Initial Phase

Page 3

3. of 6 Within thirty (30) days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln Street, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
- a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an Professional Engineer if appropriate.
4. of 6 This permit is authorized as a preliminary attempt to recovery free product. Within a diligent time frame, Union Pacific Resources Company shall submit an application for a Permit to Construct a recovery system that addresses the full extent of free-phase hydrocarbon contamination.
5. of 6 This Initial Free-Phase Hydrocarbon Recovery System shall be operated continuously, except during routine maintenance. If the system is turned off for more than 24 hours and for any reason other than for routine maintenance, WDEQ/WQD, Lander, shall be notified verbally within five (5) working days, and the problem shall be documented.
6. of 6 In addition to the reporting format described in paragraph four, page 7 of the workplan, an annual report summarizing all work done in the previous year and describing plans and schedules for further work will be required. Monthly reports and quarterly reports will be submitted as soon as available following the end of the reporting period, and any downtime during this period shall be reported. An annual summary report will be submitted within 30 days of the anniversary date of system start-up.

This format will be adhered to until subsequent full scale free product recovery begins, at which time the reporting format will be reviewed and updated.

THE STATE



OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

250 Lincoln Street • Lander, Wyoming 82520-2848 • Fax (307) 332-7726

ABANDONED MINES
(307) 332-5085

AIR QUALITY
(307) 332-6755

LAND QUALITY
(307) 332-3047

SOLID & HAZARDOUS WASTE
(307) 332-6924

WATER QUALITY
(307) 332-3144

December 2, 1993

John Rector, Staff Supervisor
Environmental Affairs
Union Pacific Resources Company
P.O. Box 7
Fort Worth, TX 76101-0007

Re: UPRC Patrick Draw Gas Plant, Sweetwater County
Permit to Construct #93-453

Dear John,

Please find attached a review of the Initial Free-Phase Hydrocarbon Recovery System for the above referenced site. The Permit to Construct will be issued shortly through the Department of Environmental Quality, Water Quality Division (DEQ/WQD) Cheyenne office.

Permit to Construct #93-453 is being issued with the understanding that this system is an initial attempt at free product recovery through existing monitoring wells and that additional efforts will have to be undertaken to fully address the large amount of free-phase hydrocarbon at the site.

Specifically, the DEQ/WQD is concerned that wells PD-2 and PD-29 are not adequately constructed to serve as recovery wells since the screened interval is below the static water level. Also, while well PD-27 is constructed appropriately to collect product, it only contains 0.4 feet of hydrocarbon. Well PD-11 is the only well that has a reasonable chance of recovering appreciable amounts of product because of its construction and the presence of approximately 22 feet of hydrocarbon on the water table.

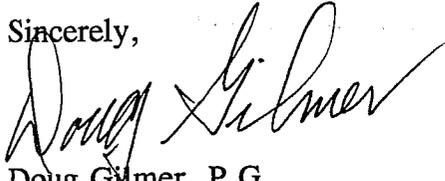
During a phone conversation this afternoon you asked if it would be possible to shift pumps around to different wells should product be exhausted from any of the wells described above. This is acceptable so long as you inform the DEQ/WQD verbally and in writing prior to moving the pumps. So long as there is no significant change to the physical recovery system, switching pumps between wells will not cause any problems that would require modification of the workplan.

Another concern that we discussed was the capacity of the above ground storage tanks to be used

to hold recovered product; my calculations show that a pumping rate of one gallon per minute per pump would fill the two tanks (one 500 gallon and one 1500 gallon) in about eight hours. You assured me that the problem had been discussed and larger tanks have been specified at the site. Also, Plant crews have access to a vacuum truck seven days a week and will "babysit" the tanks to make sure they are kept pumped off so that the system will operate with as little down-time as possible.

Please contact me should you have any questions or concerns.

Sincerely,



Doug Gimmer, P.G.
Hydrogeologist
Water Quality Division

xc: UPRC Patrick Draw Gas Plant file, Sweetwater County GPC
Chronological file

DG: UPRESOUR\REVIEW.LTR

GROUNDWATER SECTION REVIEW OF PROPOSALS/PLANS

**WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION**

250 Lincoln Street
Lander, Wyoming 82520
(307) 332-3144

PROJECT: Union Pacific Resources Co. Patrick Draw Gas Plant, Sweetwater Co.

APPLICANT: Union Pacific Resources Co.
John Rector, Staff Environmental Affairs Supervisor
P.O. Box 7
Fort Worth, TX 76101-0007
(817) 877-7013 phone
(817) 877-6316 fax

CONSULTANT: U.S. Pollution Control, Inc. (USPCI)
5665 Flatiron Parkway
Boulder, CO 80301
(303) phone
(303) fax

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: **93-453**

TITLE: Workplan: Initial Free-Phase Hydrocarbon Recovery System, Patrick Draw Gas Plant

PROPOSAL PLANS REPORT (Check each that applies)

DATE ON PROPOSAL/PLANS/REPORT: November 10, 1993

IS THIS PROPOSAL SUBMITTED PURSUANT TO 'CONDITIONS OF THE ABOVE PERMIT?

YES NO

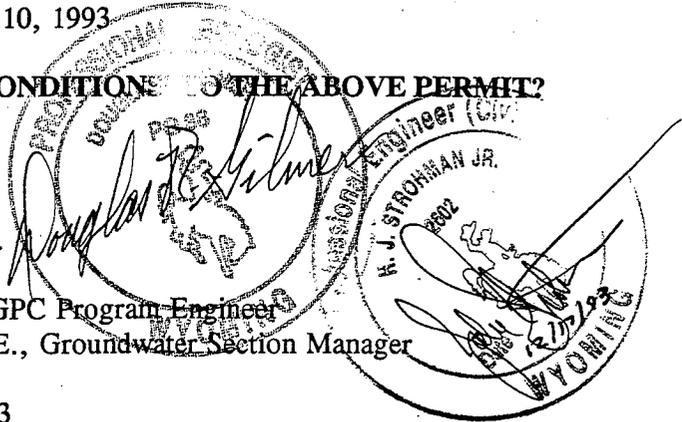
REVIEWING GEOLOGIST: Doug Gilmer, P.G.

REVIEWING ENGINEER: P. J. Phil Stump, EIT, GPC Program Engineer
Jake Strohman, P.E., Groundwater Section Manager

DATE OF LAST REVIEW: September 28, 1993

DATE OF THIS REVIEW: December 2, 1993

ACTION: RECOMMENDED FOR AUTHORIZATION



COMMENTS: GROUNDWATER SECTION

I. SUMMARY OF EXISTING CONTAMINATION: See review form for Extent of Contamination study done under P to C 91-319.

II. CONCLUSION OF ADEQUACY OF WORK COMPLETED TO DATE: No appreciable quantities of free product have been recovered to date.

III. REQUEST/REQUIREMENTS/RECOMMENDATIONS: This proposed free product recovery system will be permitted as an initial phase of a remedial system that will be expanded to more adequately recover the free product known to exist at the site.

In addition to the reporting format included in the workplan, an annual report summarizing all work done in the previous year and delineating plans and schedules for further work will be required.

XC: Copy to each Application For Permit To Construct #93-453
File: Union Pacific Resources Patrick Draw Gas Plant, Sweetwater Co. GPC
1993 Southwest District Review Forms
Chronological
Kevin Frederick, Supervisor, GPC Program, WQD/Cheyenne
John Rector, UPRC Env. Affairs Staff Supervisor

DG: UPRESOUR93-453.REV

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 93-456
*** CONDITIONED ***

Cottonwood Park Sewerline Extension
(Name of Facility)

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

Oliver & Associates

P.O. Box 453

Jackson, WY 83001

to construct about 485 LF of 8-inch diameter PVC sewerline and three manholes according to the procedures and conditions of the application No. 93-456. The facility is located in NW1/4 Section 6, T.40N., R.116W 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.

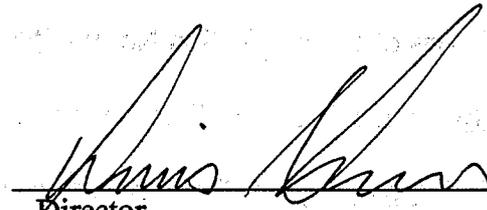
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

2/10/94

Date of Issuance

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

JH:fi

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.
2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-456

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. Yes

B. Chapter XII. No

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

Statement of Basis

November 18, 1993

N/A

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. *See footnote*¹

Not

VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

¹ Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-457
SPECIAL CONDITIONS

Nolan Septic System

This permit hereby authorizes the applicant:

Daniel P. Nolan
Box 943
Sundance, Wyoming 82729

to construct, install or modify a septic system according to the procedures and conditions of the application number 93-457. The facility is located in NE/4 of Section 6, Township 51 North, Range 62 West in the county of Crook, in the State of Wyoming. This permit shall be effective for a period of one year from the date of issuance of this permit.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum applicable 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: Northeast District, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Annex, Sheridan, Wyoming 82801; telephone (307) 672-6457.

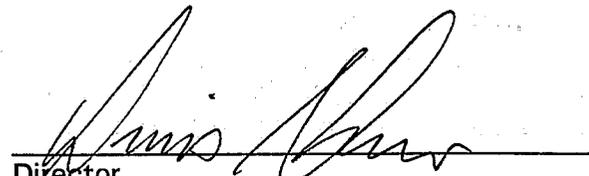
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

6-1-94

Date of Issuance

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

STANDARD CONDITIONS

- 1 of 4. The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 4. The applicant will provide immediate oral and/or written notice to the Northeast District Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 4. Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Northeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and

Nolan Septic System
Permit #93-457

- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of 4. The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

BDM/pr:05/25/94
b/42232.ltr

Attachments: Notification Post Card
Certification of Completion Form
Statement of Basis

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-457

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. yes

B. Chapter XII. no

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

no

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

no

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

not applicable

B. Briefly state the basis for the deviation.

not applicable

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

not applicable

V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

not applicable

VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

- A. Facility will not allow a discharge to groundwater. Briefly describe:
- B. Quality of wastewater is such that it will not cause a violation of groundwater standards. Briefly describe:
- C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:
- D. Basis of facility design is that it will be operated so as not to violate groundwater standards (example: maintenance of manure pack at animal waste treatment facility). Briefly describe:
- E. Discharge will result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d)(vi), Chapter VIII. Briefly describe:
- F. If water quality exceedances are allowed, briefly describe the parameter limits, property boundaries, places of withdrawal and any other information documenting that any users of affected aquifer will not be impacted.
- G. Briefly describe monitoring system (parameters, frequency, etc.). Clearly state the parameters to be utilized for determining compliance, what constitutes a violation and steps to be followed by the permittee in the event of a violation.

VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

BDM/bb/42232.ltr



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

November 24, 1993

Ms. Amy C. King
1316 Ivinson Ave.
Laramie, WY 82070

RE: Permit to Construct #93-458

Dear Ms. King:

Your application is being returned as you requested in your letter dated November 20, 1993. Your letter indicated that you do 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 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 Steele, PE
District Engineer
Water Quality Division

GLS/bb/35714.1tr
Enclosure
cc: IPS

1316 Ivinson Avenue
Laramie, Wyoming 82070

November 20, 1993

RECEIVED

NOV 22 1993

Clary

WATER QUALITY DIVISION
WYOMING

Wyoming Department of Environmental Quality
Water Quality Division
Herschler Building, 4 West
Cheyenne, Wyoming 82002

Dear Sirs:

For purposes of identification I enclose a copy of the Review of Plans and Specifications for a monitoring well for which I signed an Application for Permit last week as trustee for the owners of the property involved.

I wish to withdraw the application submitted in my name, effective immediately, and to thank you for furnishing the information which instructs me that further study and research is needed before submitting a new application.

Yours truly,

Spring Creek Trustees

Amy C. King

By Amy C. King, Trustee

cc: ACPE Federal Credit Union
1256 North 4th Street
Laramie, Wyoming 82070

KLH Engineering Group
1050 North 3rd Street, Suite N
Laramie, Wyoming 82070

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

PROJECT: ACPE Credit Union (Monitor Well)

ENGINEER: Steven Rea
KLH Engineering Group
1050 N. 3rd. Suite N.
Laramie, Wyoming 82070

APPLICANT: Amy C. King
1316-1/2 Ivinson Ave.
Laramie, Wyoming 82070

WATER QUALITY REFERENCE NUMBER: 93-458

APPROVING ENGINEER: Gary Steele 

DATE OF REVIEW: 11-18-93

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS, PROBLEMS, INADEQUACIES, and QUESTIONS:

The Permit Application package as submitted is incomplete and needs to include the design information. The design needs to meet the requirements of Part G, Chapter XI of the Water Quality Rules and Regulations. The design should also be consistent with the Recommended Conditions for Monitor Well/Piezometer Permits (copy attached).

/nc 35642.LTR

Enclosure

LAND APPLICATION PERMIT

- New
 Renewal
 Modified

PERMIT NO. 93-459
Reference # 93-192
SEE SPECIAL CONDITIONS

MUSH CREEK ROAD APPLICATION
(Name of Facility)

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

Western Production Company
923 Grieves Road
Newcastle, WY 82701

to land apply hydrocarbon contaminated solids, sludge, and water according to the procedures and conditions of the application No. 93-459. The application site is located in Section 7, T42N, R64W and Section 12, T42N, R65W in the County of Weston in the State of Wyoming.

This permit shall be effective until December 31, 1993.

The issuance of this permit provides that the Department of Environmental Quality has evaluated and determined that the application meets minimum application 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 will meet applicable state requirements.

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

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

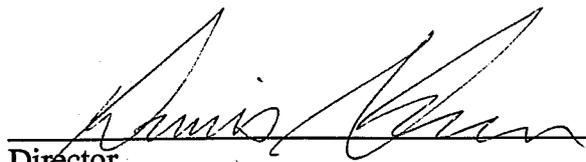
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

11/18/93

Date of Issuance

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

DRM/pr:11/17/93 nc/35629.LTR

SPECIAL CONDITIONS

- 1 of 9. The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division (DEQ/WQD) of the anticipated project commencement and completion dates with the attached post card. At least 48 hours advance notice is required. The authorized representative in your area can be reached at the following address: Wyoming DEQ/WQD, Sheridan District Office, 2161 Coffeen Avenue, Annex, Sheridan, Wyoming 82801, telephone number 307/672-6457.
- 2 of 9. The permittee shall provide immediate oral and/or written notification, in accordance with Section 9 of Chapter III, to the Sheridan District Office of any changes or modifications to the approved permit package.
- 3 of 9. The permittee shall provide certification that the project was completed in accordance with the terms and conditions of the permit within sixty (60) days of the project completion to the Sheridan District Office on the attached Certification Of Completion form.
- 4 of 9. The permittee shall submit a contour map depicting only those sections of road that actually received hydrocarbon contaminated waste(s) within sixty (60) days of the project completion to the Sheridan District Office.

Special Permit Conditions
Permit 93-459

- 5 of 9. The review and approval of this permit is based upon the items identified in the attached Statement Of Basis.
- 6 of 9. The hydrocarbon contaminated wastes shall be incorporated into the roadbed by first ripping and then grading the road down the center, resulting in a windrow of roadbed material on each side of the road, placing the waste between the windrows, and working the waste and roadbed material back and forth across the road until a uniform distribution is achieved.
- 7 of 9. The application of the hydrocarbon contaminated wastes shall not be conducted at times when saturated soil conditions exist or when the ground is frozen.
- 8 of 9. The application site slope shall not exceed eight percent (8%) for vehicular application.
- 9 of 9. The application of hydrocarbon contaminated wastes shall be terminated within 300 feet of the definable high water mark of perennial and intermittent drainages, irrigation canals, lakes and reservoirs.

Attachments: Notification Post Card
Certification Of Completion Form
Statement Of Basis

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-459

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. No

B. Chapter XII. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

No

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

There are no numeric standards or criteria in Chapter XI for road application. W.S. 35-11-301 (a) (iii) requires a permit to be issued when any disposal system capable of causing or contributing to pollution is constructed, installed, modified, or operated.

B. Briefly state the basis for the deviation.

Road application is permitted when DEQ authorized disposal facilities are not readily available, a beneficial use of the waste to be applied is possible, and significant impact to waters of the State is minimized.

- C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

District Policy numbers 10.1 (4/9/91), 10.2 (10/17/86), 10.3 (8/91), 10.4 (10/24/91), and 10.6 (1/18/91) address the statutory authority to regulate the road application of waste, establish the criteria for characterizing the waste, and determine acceptable conditions for the application of the waste to roadbeds to minimize impact to waters of the State.

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

Applicable

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

- A. Facility will not allow a discharge to groundwater. Briefly describe:

The opportunity for direct or indirect discharge, percolation, or filtration to groundwater is minimized by uniformly applying the hydrocarbon contaminated wastes into the roadbed. Repeated applications of hydrocarbon contaminated wastes to the same sections of road will be monitored by roadbed analyses.

- B. Quality of wastewater is such that it will not cause a violation of groundwater standards. Briefly describe:

N/A

- C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:

N/A

- D. Basis of facility design is that it will be operated so as not to violate groundwater standards (example: maintenance of manure pack at animal waste treatment facility). Briefly describe:

N/A

- E. Discharge will result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d)(vi), Chapter VIII. Briefly describe:

N/A

- F. If water quality exceedances are allowed, briefly describe the parameter limits, property boundaries, places of withdrawal and any other information documenting that any users of affected aquifer will not be impacted.

N/A

- G. Briefly describe monitoring system (parameters, frequency, etc.). Clearly state the parameters to be utilized for determining compliance, what constitutes a violation and steps to be followed by the permittee in the event of a violation.

N/A

VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

PERMIT TO CONSTRUCT

X New
Renewal
Modified

PERMIT NO. 93-460
SPECIAL CONDITIONS

Interstate Detroit Diesel, Inc. - Gillette Monitoring Wells

This permit hereby authorizes the applicant:

Interstate Detroit Diesel, Inc.
7900 International Drive
Suite 800
Minneapolis, MN 55425-9825

to construct, install or modify a system of environmental monitoring wells according to the procedures and conditions of the application number 93-460. The facility is located in Section 24, T50N, R72W, 6th P.M. in the county of Campbell, in the State of Wyoming. This permit shall be effective for a period of five (5) years from the date of issuance of this permit.

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

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

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

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

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

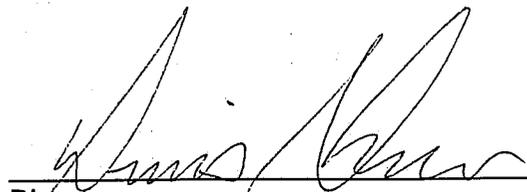
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12/2/93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 10. 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 93-460. Additional wells meeting the requirements of this permit may be installed if prior approval is received from the Water Quality Division (WQD).
- 2 of 10. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells prevented by physical limitations to adherence to the requirements on minimum depths of seal below the ground surface as detailed in Chapter XI, Part G. However, a sufficient seal shall be installed according to normal engineering practice.
- 3 of 10. 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.

PERMIT NO. 93-460

- 4 of 10. 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 of 10. 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.
- 6 of 10. DEQ/WQD personnel shall be given at least five working days notice prior to the installation of monitor wells and notice prior to sample collection so that DEQ/WQD personnel may be on site if deemed necessary.

PERMIT NO. 93-460

- 7 of 10. 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 accurate to .01 feet;
 - b. The permittee shall provide the exact state plane coordinate for each of the monitor wells being constructed under this permit.
 - c. Final location, construction details and logs of monitor wells;
 - d. Water level and product thickness measurements;
 - e. Sample collection procedures;
 - f. Sampling analytical results;
 - g. A map delineating the extent of any subsurface contamination discovered, including free product, soil and dissolved groundwater contamination and concentrations; and
 - h. A potentiometric surface map showing the direction of groundwater movement;
- 8 of 10. 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.
- 9 of 10. All monitor wells associated with this facility shall be sampled and the groundwater analyzed quarterly for the following listed parameters:
- a. Cadmium using EPA 200 series methods;
 - b. Lead using EPA 200 series methods;
 - c. Chromium using EPA 200 series methods;
 - d. Selenium using EPA 200 series methods;
 - e. Purgeable Aromatic and Halogenated Hydrocarbons using EPA Method 624 or Methods 601 and 602, or Methods 501.1 and 501.2;
 - 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; and

PERMIT NO. 93-460

- g. The results of these analyses shall be submitted to the Cheyenne office of the Water Quality Division 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 February, 1994.

10 of 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.

RFL/jn - 35778.ltr

PERMIT TO CONSTRUCT

New
Renewal
 Modified

PERMIT NO. 93-461
REF.# 93-371, 80-123
SPECIAL CONDITIONS

Sun Valley 14th Filing

This permit hereby authorizes the applicant:

City of Cheyenne Board of Public Utilities
2406 Snyder Avenue
Cheyenne, WY 82001

to construct, install or modify publicly-owned distribution and collection system according to the procedures and conditions of the application number 93-461. The facility is located in SW 1/4 SE 1/4 Section 35, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit.

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

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

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

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

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

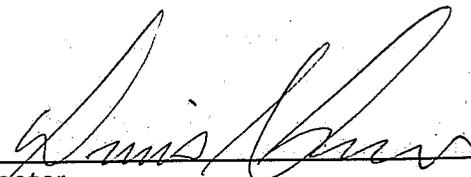
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12-9-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 5 The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 5 The applicant will provide immediate oral and/or written notice to Southeast District in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 5 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Southeast District on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and

- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of 5 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

5 of 5 If the waterline on Atlantic Drive does require encasement, the encasement shall be extended until the new water main is either greater than 18 inches above the parallel sewer main or 10 feet horizontally from the sewer main.

GLS/mad 35870.LTR

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-461/REF 93-371 & 80-123

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. Yes

B. Chapter XII. Yes

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

N/A

V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

N/A

VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

N/A

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

33954.DOC

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 93-462
* **CONDITIONED** *

Fitch Septic Tank/Leach Field
(Name of Facility)

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

Allan and Debra Fitch

708 10th Avenue North

Greybull, WY 82426

to construct a septic tank/leach field according to the procedures and conditions of the application No. 93-462. The facility is located in Section 4, T52N, R93W 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.

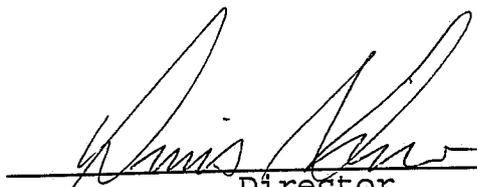
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

12-1-93

Date of Issuance

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

JH/jyi

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-462

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. YES

B. Chapter XII. NO

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

YES

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

NO

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

NO

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

- D. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

N/A

- V. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected.

- A. Facility will not allow a discharge to groundwater. Briefly describe:

UNKNOWN

- B. Quality of wastewater is such that it will not cause a violation of groundwater standards. Briefly describe:

UNKNOWN

- C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:

UNKNOWN

- D. Basis of facility design is that it will be operated so as not to violate groundwater standards. Briefly describe:

Facility meets groundwater separation requirements.

- E. Discharge may result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d) (vi), Chapter VIII. Briefly describe:

Upon abandonment of the disposal field, groundwater quality will return to background.

- F. If water quality exceedances are allowed, briefly describe the parameter limits, property boundaries, places of withdrawal and any other information documenting that any users of affected aquifer will not be impacted.

The disposal field meets the site separation distance requirements which are intended to protect aquifer users from impact.

Statement of Basis
93-462
November 24, 1993

- G. Briefly describe monitoring system. Clearly state the parameters to be utilized for determining compliance, what constitutes a violation and steps to be followed by the permittee in the event of a violation.

NONE

VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

b/35739.LTR

RF

PERMIT TO CONSTRUCT

X New
Renewal
Modified

PERMIT NO. 93-463
SPECIAL CONDITIONS

Wyoming Dept. of Transportation -
Chugwater Maintenance Camp Monitoring Wells

This permit hereby authorizes the applicant:

Wyoming Dept. of Transportation
P.O. Box 1708
Cheyenne, Wyoming 82003

to construct, install or modify a system of environmental monitoring wells according to the procedures and conditions of the application number 93-463. The facility is located in SE1/4 Section 30, T21N, R66W, 6th P.M. in the county of Platte, in the State of Wyoming. This permit shall be effective for a period of five (5) years from the date of issuance of this permit.

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

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

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

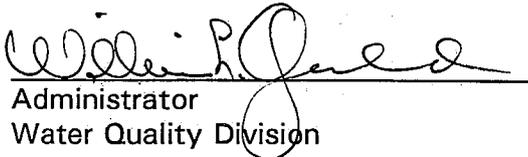
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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

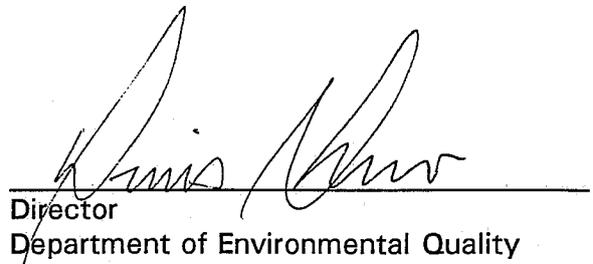
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12-1-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 11. 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 93-463. Additional wells meeting the requirements of this permit may be installed if prior approval is received from the Water Quality Division (WQD).
- 2 of 11. 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 of 11. 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.

PERMIT NO. 93-463

- 4 of 11. 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 of 11. 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.
- 6 of 11. 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.

PERMIT NO. 93-463

- 7 of 11. 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 of 11. 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 chronology of events leading up to the investigation;
 - b. A site map showing the physical features, well locations and sea level elevations;
 - c. The permittee shall provide the exact state plane coordinate for each of the monitor wells being constructed under this permit. This survey shall comply with W.S. 34-24-101 through W.S. 34-24-108 which specifies the accuracy and survey methods to be used;
 - d. Final location, construction details and logs of monitor wells;
 - e. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geologic materials and groundwater occurrence;
 - f. Water level and product thickness measurements;
 - g. Sample collection procedures;
 - h. Sampling analytical results;
 - i. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - j. A potentiometric surface map showing the direction of groundwater movement; and
 - k. Interpretation of the data and conclusions including recommended remedial measures.
- 9 of 11. 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 of 11. All monitor wells associated with this facility shall be sampled and the groundwater analyzed quarterly for the following listed parameters:
- a. Total Phenolic Hydrocarbons using EPA Method 420.1;

PERMIT NO. 93-463

- b. Cadmium using EPA 200 series methods;
- c. Lead using EPA 200 series methods;
- d. Chromium using EPA 200 series methods;
- e. Purgeable Aromatic and Halogenated Hydrocarbons using EPA Method 624;
- f. Acid, Neutral and Base Extractable Hydrocarbons using EPA Method 625;
- g. 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; and
- h. The results of these analyses shall be submitted to the Cheyenne office by the last day of the month following the end of each quarter. The first set of results are due by the last day of April, 1994.

11 of 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.

RFL/bb/35748.ltr

R7



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

Fleischli Oil Company
P.O. Box 487
Cheyenne, WY 82003

RE: Rock Springs Aquifer Remediation System
Permit UIC 93-464
Sweetwater County, Wyoming

Dear Sir:

Enclosed please find the signed Underground Injection Control permit for the above facility. This permit sets cleanup standards and limitations on the quality of the injected water. Please understand that all provisions of this permit are enforceable as written.

The public notice period for this permit ended January 25, 1994 with no comments received.

Please provide one copy of each quarterly report to the Lander District Office of the Water Quality Division and one copy to the UIC Program Supervisor in Cheyenne.

Sincerely,

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

RL/mad 40468.LTR

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

(XX) New
() Modified

Permit Number UIC 93-464
UIC Class 5X26 (Aquifer Remediation)

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),

Fleischli Oil Company
P.O. Box 487
Cheyenne, Wyoming 82003
(307) 634-4466

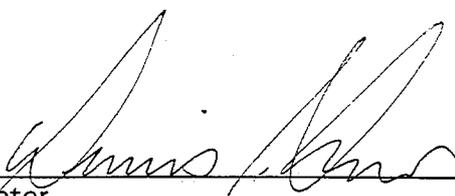
is authorized to operate the Rock Springs Bulk Plant Aquifer Remediation System and Reinjection Wells according to procedures and conditions of the application UIC 93-464 and requirements and other conditions of this permit. This system is located in T19N, R105W, Section 15 SE1/4SE1/4 in Sweetwater County, Wyoming.

This permit shall become effective on date of issuance.



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

1-28-94
Date



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

1-31-94
Date

A. Discharge (Injection) Zone and Area of Review

Discharge Zone:

This injection well is authorized to inject into the alluvial aquifer along Killpecker Creek which is found at this location from 0 to 20 feet below the ground surface.

Area of Review

The facility authorized by this permit is located in:

Township 19 North, Range 105 West, 6th Principal Meridian
Section 15: SE1/4 SE1/4

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

Township 19 North, Range 105 West, 6th Principal Meridian
Section 15: S1/2 SE1/4
Section 22: N1/2 NE1/4

B. Groundwater Classification

The groundwater in the alluvial aquifer of Killpecker Creek is class IV(b) under Chapter VIII, Wyoming Water Quality Rules and Regulations. This permit is designed to prevent further degradation of this water. This classification is made because:

1. The Total Dissolved Solids content of the groundwater at this location is significantly above 10,000 mg/l;
2. The Sulfate content of the groundwater at this location is significantly above 15,000 mg/l;
3. The Chloride content of the groundwater at this location is significantly above 6,000 mg/l; and
4. The Nitrate as N content of the groundwater at this location is significantly above 10 mg/l in all samples and significantly above 100 in several samples.

C. Authorized Operations

The permittee is authorized to inject treated groundwater and/or Rock Springs city water at any rate up to the capacity of the system to accept the flow. This system consists of two separate infiltration galleries located on the western edge of the Fleischli property. Under this permit, any evidence that injected water is surfacing is a violation of the permit.

The permittee is authorized to inject at a pressure of no more than atmospheric pressure as measured at the wellhead.

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 the permit;
3. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), and practice, or operations regulated or required under this permit; and
4. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the appropriate rules and regulations of the Department, any substances or parameters at any location.

F. Environmental Monitoring Program for Groundwaters of the State

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

e. The analytical techniques or methods used; and

f. The results of such analyses.

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

The following wells shall be sampled and analyzed as shown on the following table. The Target Restoration Values shown shall be met at the conclusion of this project.

WELL NAME OR NUMBER	SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	TARGET RESTORATION VALUE (TRV)*
FO-1, FO-2, FO-3, FO-4, FO-5, FO-6, FO-6A, FO-6B, FO-7, FO-8, FO-9, FO-10, FO-11, FO-11A, FO-11B, FO-12, FO-13 FO-14, FO-15, FO-16, FO-17, FO-18, FO-19, FO-20, FO-21, FO-22, FO-23, FO-23A, FO-24, FO-25, FO-26, FO-27, FO-28, FO-29, FO-30, FO-31, FO-32, FO-33, FO-33, FO-34, FO-35, FO-36, FO-37, FO-38, FO-39, FO-40, FO-41, FO-42, FO-43, FO-44, FO-45, FO-46, FO-47, FO-48, FO-49	Annual	EPA Method 524.2	Benzene	.005
			1,2-Dichlorobenzene	.600
FO-6, FO-19, FO-20, FO-21, FO-31, FO-37, FO-38, FO-39, FO-41	Annually	Gas Chromatograph with Flame Ionization Detector and appropriate standards	Methanol	15.0

WELL NAME OR NUMBER	SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	TARGET RESTORATION VALUE (TRV)*
FO-1, FO-2, FO-6, FO-6A, FO-6B, FO-11, FO-11A, FO-11B, FO-13, FO-19, FO-20, FO-23, FO-23A, FO-24, FO-27, FO-28, FO-29, FO-30, FO-32, FO-33, FO-34, FO-35, FO-36, FO-37,	Quarterly for two quarters after any violation of the UCL's or LCL's for Benzene found in Section G of this permit.	EPA Method 524.2	Benzene	.005
FO-6, FO-19, FO-20, FO-21, FO-31, FO-37, FO-38, FO-39, FO-41	Quarterly for two quarters after any violation of the UCL's or LCL's for Methanol found in Section G of this permit.	Gas Chromatograph with Flame Ionization Detector and appropriate standards	Methanol	15.0

*All chemical concentrations in this permit are expressed in mg/l unless otherwise noted. pH is always expressed in standard units and conductivity is expressed in mmhos/meter or umhos/cm.

In addition to the above, wells FO-1, FO-2, FO-3, FO-4, FO-5, FO-6, FO-6A, FO-6B, FO-7, FO-8, FO-9, FO-10, FO-11, FO-11A, FO-11B, FO-12, FO-13, FO-14, FO-15, FO-16, FO-17, FO-18, FO-19, FO-20, FO-21, FO-22, FO-23, FO-23A, FO-24, FO-25, FO-26, FO-27, FO-28, FO-29, FO-30, FO-31, FO-32, FO-33, FO-33, FO-34, FO-35, FO-36, FO-37, FO-38, FO-39, FO-40, FO-41, FO-42, FO-43, FO-44, FO-45, FO-46, FO-47, FO-48, and FO-49 shall be probed quarterly and the elevations shall be determined for the top of the floating product, the static water level, and the top of any sinking product. After 4 quarters, if no sinking product has been discovered in any well, the permittee may cease looking for sinking products.

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:

SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT (UCL) *
Monthly	EPA Method 524.2	Benzene	.400
		1,2 - Dichloroethane	.200
	Gas Chromatograph with Flame Ionization Detector and appropriate standards	Methanol	15.0

*All chemical concentrations in this permit are expressed in mg/l unless otherwise noted. pH is always expressed in standard units and conductivity is expressed in mmhos/meter or umhos/cm.

The above Upper Control Limit (UCL) shall apply to a rolling average of 4 consecutive samples on the above schedule. Exceedance of this value in any average of 4 consecutive samples is a violation of this permit.

and

In addition to the above Upper Control Limits, the following Lower Control Limits (LCL) shall apply. Exceedance of any Lower Control Limit is not a violation of this permit, but shall require corrective action on the part of the permittee. Failure to take correction action after exceeding a LCL is a violation of this permit.

SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT (LCL) *
Monthly	EPA Method 524.2	Benzene	.400
		1,2- Dichloroethane	.200
	Gas Chromatograph with Flame Ionization Detector and appropriate standards	Methanol	15.0

*All chemical concentrations in this permit are expressed in mg/l unless otherwise noted. 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. When 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 abandoned 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,
 - 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. Quarterly reports shall be submitted to the administrator within 30 days following the end of each calendar quarter following the issuance of this permit. The first quarterly report shall be due no later than April 30, 1994. Each quarterly report shall contain the following information:
- a. The maximum daily injection rate for each of the infiltration galleries, for each month of the quarter.
 - b. The total injection volume in gallons for each month of the quarter, the total for the quarter, and the total cumulative injected to date for each infiltration gallery separately.
 - c. Any permit exceedances within the quarter.
 - d. Any tests run during the quarter. This includes, but is not limited to, the results on any Slug Tests, Single or Multiple well pump tests, or any geophysical logging or other geophysical work.
 - e. The analytical results for sampling for the injected water and any groundwater sampling results required under Section G.
 - f. The analytical results for sampling for any monitor wells required to be sampled under Section F4.
 - g. Quarterly reports are due in the Lander office of the Water Quality Division no later than 30 days after the end of each calendar quarter.

The annual report of operations on these wells shall be filed at the time when the fourth quarterly report is due and shall include the fourth quarterly report and the following additional information:

- a. Graphical representations of the quality of the injected water over time. These graphs shall show the injected quality for the previous five year's operation and shall be prepared on appropriate scales to show the variation.
- b. For any well required to be monitored under Section F4, a graphical representation is required for the concentration of each monitored parameter (including static water level, thickness of free product, and free product level) over time.
- c. Monitoring results shall be reported in the annual reports unless otherwise specified.

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.

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.

Mechanical Integrity

This permit covers only the operation of infiltration galleries to be operated at atmospheric pressure. For this reason, there are no mechanical integrity requirements for this permit.

L. Abandonment

The permittee shall notify the administrator at least 180 days before well abandonment. Immediately following the permit 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.

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 permittee 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; and

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

There are no financial responsibility requirements for this permit.

O. Special Measures the Director Finds Necessary

In the event that EPA requires additional monitoring beyond that required by this permit, the permittee shall report any and all such additional monitoring performed along with the first quarterly report required after receiving the results.

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.

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;

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.

RL/nc 40350.LTR

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 93-465R
* **CONDITIONED** *

Clucas #1 Septic/Leach
(Name of Facility)

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

Jack L. Clucas

1710 Hwy 14

Shell, WY 82441

to install a 1000 gallon septic tank and a leach field of 230 lineal feet according to the procedures and conditions of the application No. 93-465R. The facility is located in NW1/4, SW1/4, Section 24, T53N, R91W 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.

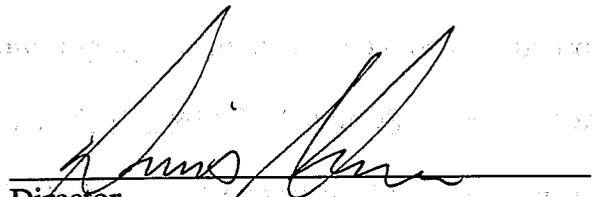
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
Department of Environmental Quality

1-26-94

Date of Issuance

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

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-465R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. Yes

B. Chapter XII. No

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

N/A

VI. Documentation of Statement of Basis.

A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

GL/nc 40358.LTR

PERMIT TO CONSTRUCT

New

Permit No. 93-466R

Renewal

*** CONDITIONED ***

Modified

Willow Street Waterline Extension

(Name of Facility)

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

Town of Lyman

P.O. Box 300

Lyman, WY 82937

to construct a 4" PVC waterline to loop the system according to the procedures and conditions of the application No. 93-466R. The facility is located in NW/4, Section 32, T16N, R114W 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.

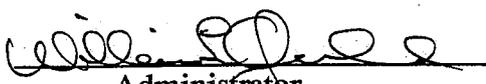
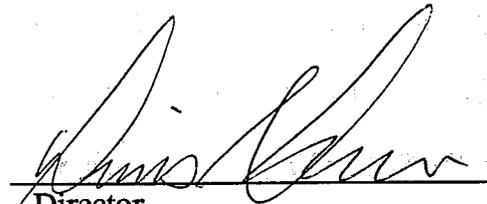
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

12-17-93
Date of Issuance

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

KLE/mad

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-466R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. NO

B. Chapter XII. YES

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

YES

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

NO

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

NO

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

Statement of Basis
93-466R
December 16, 1993

N/A

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. *See footnote¹*

N/A

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected.

N/A

- VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

¹ Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

PERMIT TO CONSTRUCT

New

Permit No. 93-467R
* **CONDITIONED** *

Renewal

Modified

Clucas #2 Septic/Leach
(Name of Facility)

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

Jack L. Clucas

1710 Hwy 14

Shell, WY 82441

to install a 1000 gallon septic tank and leach field of 260 lineal feet according to the procedures and conditions of the application No. 93-467R. The facility is located in NW1/4SW1/4 Section 24, T53N, R91W 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.

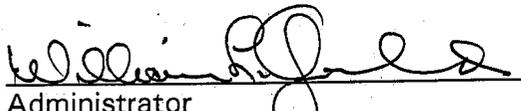
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

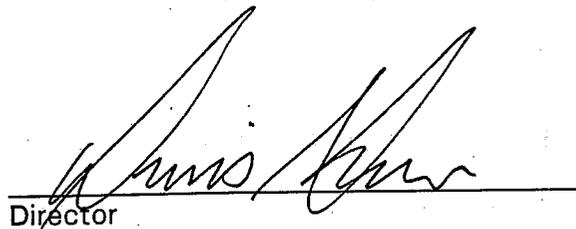
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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
Department of Environmental Quality

12-29-93

Date of Issuance

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

GL
36237.ltr

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

3. of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4. of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-467R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. Yes

B. Chapter XII. No

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

Statement of Basis
93-467R
December 22, 1993

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

N/A

- VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.



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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May 9, 1994

CITY OF LARAMIE
406 IVINSON STREET
LARAMIE WY 82070

RE: **PERMIT CONDITION COMPLIANCE** - Construction Schedule Card
Facility: **CITY OF LARAMIE WTP**
Permit Number: **93-468**

Dear Facility Owner:

According to our records it has been over 60 days since the above referenced "Permit To Construct" was issued. One of the specified permit requirements was that the applicant/owner notify the appropriate district office of the Water Quality Division (WQD) via the post card attached to the permit, of the estimated dates that construction will begin and end. Please complete the attached post card and return it to the WQD right away. If the project has already been completed, please complete the required "CERTIFICATION OF COMPLETION" form which was included with the permit when issued.

To be in compliance with the permit these requirements must be followed. If you have any questions please call me at 777-7088.

Sincerely,

Gary Steele
SE District Supervisor
Water Quality Division

GS/nc 42011.LTR

Enclosure: Replacement Schedule Card
cc: Permit Compliance Tracking File

MEMO

To: Permit To Construct File - # 93-468

From: Gary L. Steele



Date: July 1, 1994

Subject: Permit #93-468 VOID

The City of Laramie submitted revised plans for the ozone modifications at the water treatment plant which were approved as permit #94-265.

Therefore, the plans approved by permit #94-265 officially replace and make void the plans previously approved by permit #93-468.

RP

PERMIT TO CONSTRUCT

New
Renewal
 Modified

PERMIT NO. 93-468
SPECIAL CONDITIONS
Ref. Nos. 85-198, 88-469, 92-416

City of Laramie Water Treatment Plant

This permit hereby authorizes the applicant:

City of Laramie
406 Ivinson Street
Laramie, WY 82070

to construct, install or modify public water supply according to the procedures and conditions of the application number 93-468. The facility is located in NW 1/4, Section 23, R76W, T1N in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit.

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

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

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

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

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

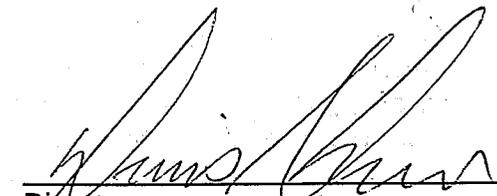
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12-17-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 5 The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 5 The applicant will provide immediate oral and/or written notice to Southeast District in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 5 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Southeast District on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and

- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of 5 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

5 of 5 This Construction Permit is for the Phase I modifications of the Ozonation process only. The Phase I construction includes the concrete modifications and wall piping. A separate Construction Permit will be required prior to the installation of the mechanical equipment for the Ozonation process.

GLS/mad 36068.LTR

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-468

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. No

B. Chapter XII. Yes

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

No

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

Yes

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

Chapter XII, Section 10(k), Paragraph (vi)(D) states that the contact time shall be not less than 30 minutes.

B. Briefly state the basis for the deviation.

The design indicates that a contact time of 20 minutes will be provided. The ozonation is being added to the plant and will be used in conjunction with the existing chlorination system. The ozonation will replace the prechlorination at the plant.

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

N/A

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

N/A

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

N/A

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

33954.DOC

R7

REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

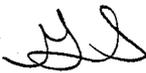
Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: City of Laramie Water Treatment Plant

ENGINEER: William D. Bellamy, CH2M Hill, P.O. Box 22508, Denver, CO 80222

APPLICANT: City of Laramie, 406 Iverson Street, Laramie, WY 82070

WATER QUALITY REFERENCE NUMBER: 93-468

APPROVING ENGINEER: Gary Steele 

DATE OF REVIEW: 12-01-93

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS, PROBLEMS, INADEQUACIES, and QUESTIONS:

- 1 of 4 Chapter III Section 6(b)&(c) of the Water Quality Rules and Regulations indicates that the specifications are to carry the signature or seal of the designing engineer. They also state that three copies of the application package are to be submitted for review. The plans are also to be final construction plans and the statement "FOR REVIEW ONLY - NOT FOR CONSTRUCTION" needs to be removed.
- 2 of 4 Chapter XI Section 7(d) requires that the specifications include the following items.
1. Construction and installation procedure for materials and equipment.
 2. Requirements and tests of materials and equipment to meet design standards.
 3. Performance tests for operation of completed works and component units.
- 3 of 3 Please provide design information indicating that the 20 minute detention time is adequate to reduce the THM to the desired levels.
- 4 of 4 The proposed process is a modification of the water treatment facility and will require that an O&M manual be submitted to this office. The Construction Permit issued for this project will have a condition on it requiring that the O&M manual be submitted to this office and approved prior to the Ozone process being placed in operation.



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

250 Lincoln Street • Lander, Wyoming 82520-2848 • Fax (307) 332-7726

ABANDONED MINES
(307) 332-5085

AIR QUALITY
(307) 332-6755

LAND QUALITY
(307) 332-3047

SOLID & HAZARDOUS WASTE
(307) 332-6924

WATER QUALITY
(307) 332-3144

December 2, 1993

Aspen Mountain, Inc.
507 5th Street
Rock Springs, WY 82901
Attn: Harry Kessner

Re: DEQ Application No. 93-469
Rock Springs-Sweetwater Co. Airport Septic/Leach System

Dear Mr. Kessner:

Since this septic/leach system will service less than 2,000 gpd it must be permitted through the Sweetwater County Sanitarian, Al Emden. DEQ has delegated this authority to the county, as you are probably aware. I led Mark Rehwaldt astray by having him permit the system through our DEQ office.

Enclosed, I am returning the application packages which were submitted to this office. I have discussed this matter with Mark Rehwaldt and Al Emden. Sorry for any inconveniences that I may have caused.

Sincerely,

A handwritten signature in cursive script that reads "Keith L. Estenson".

Keith L. Estenson
Water Quality
Engineering Evaluator

KLE

COPY: IPS, Cheyenne



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

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

Solid Waste Management Program
(307) 777-7752

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

December 2, 1993

Pilot Corporation
ATTN: Mark Alford
P.O. Box 10146
Knoxville, Tennessee 37939

RE: As-Built Approval #93-470: Pilot Travel Center in Laramie, Wyoming - Monitoring Wells

Dear Mr. Alford:

This letter is As-Built Approval #93-470 for the monitoring wells installed at your Laramie, Wyoming - Pilot Travel Center. After reviewing the post construction engineering and sampling report supplied by Pilot for these wells, as-built approval #93-470 is being issued on the basis that these monitoring wells meet the DEQ Water Quality Division Chapter XI well construction standards. This as-built approval is being issued as part of the resolution to a Letter of Violation (LOV) issued to Pilot because these monitoring wells were installed prior to obtaining the proper permits. In order to fully abate this LOV all conditions of the as-built approval, as listed below, must be complied with; especially condition #1 which requires that a **CERTIFICATION OF COMPLETION** form be completed and submitted to this office. Since a "Permit To Construct" cannot be issued for facilities which have already been constructed, this letter will serve as your final as-built approval document. However, this approval is contingent upon compliance with the following conditions:

- 1 of 11. Within twenty days of receipt of this as-built approval letter, the applicant will submit to the Southeast District Office on the form provided (**CERTIFICATION OF COMPLETION**), the following information:
 - a. Date that construction of the facility was completed; and

- b. Date that the facility was placed in operation; and
- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

2 of 11. Monitoring well/piezometer construction must meet the requirements of Chapter XI Wyoming Water Quality Rules and Regulations. Monitoring well/piezometer casings shall meet the conditions provided in Chapter XI, Section 67. All monitoring wells/piezometers must be constructed from materials free of material having the potential to contaminate groundwater samples.

3 of 11. Pursuant to Wyoming Water Quality Rules and Regulations, Chapter XI, Section 63(A), a deviation is hereby granted for those wells/piezometers 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.

4 of 11. After the monitoring wells/piezometers 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. In addition, borings in public use areas, particularly paved streets and alleys, shall be abandoned in accordance with City and/or Highway Department requirements. No monitoring well/piezometer shall be abandoned without prior approval from the Water Quality Division.

5 of 11. Well caps shall be kept locked at all times other than for monitoring purposes. Any tampering with the monitor wells/piezometers 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.

6 of 11. The applicant is responsible for obtaining any Permits required by the State Engineer's Office (777-7354).

7 of 11. Depending on the results of the subsurface investigation, additional site investigations or remedial actions may be required by the WQD.

- 8 of 11. All monitor wells/piezometers associated with this facility shall be sampled and the groundwater analyzed and the results submitted to WQD:
- a. The results of these analyses shall be submitted to the Cheyenne office as soon as they are available.
- 9 of 11. Water which is collected during monitoring well/piezometer development or sampling must be disposed of properly. The Applicant must contact the City for authorization to dispose into the local storm sewer, sanitary sewer, wastewater treatment plant, or other facility.
- 10 of 11. The results of any analyses conducted on soil or water removed from these wells/piezometers or boreholes shall be provided to the department as soon as they are available.
- 11 of 11. The review and approval of this as-built approval is based upon the items identified in the attached "Statement of Basis".

Sincerely,



William L. Garland
Administrator, Water Quality Division

WLG/RLE/nc 35838.LTR

STATEMENT OF BASIS

I. General information.

A. As-Built Approval # 93-470

B. Facility Name: Pilot Travel Center, Laramie - Monitoring Wells

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. Yes Part G - Well Construction Standards

B. Chapter XII. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes - Based on post construction reports, as-built approval.

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

NOT Applicable

B. Briefly state the basis for the deviation.

NOT Applicable

- C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

NOT Applicable

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. Note that sediment ponds, public water supplies, sewerage systems, and small wastewater systems are exempt from the requirements of Section 15. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

NOT Applicable

- VI. Deleted

- VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

RLE/nc 35838.LTR

CERTIFICATION OF COMPLETION

In accordance with the condition of "Permit to Construct" No. _____, requiring submittal of this Certification of Completion within sixty (60) days of completion of the facility, I hereby certify the following to be an accurate and correct statement of the current status of the project authorized by the above referenced permit:

1. Construction of the permitted facility was completed on _____ (DATE) and the facility was placed in operation on _____ (DATE).

2. Construction was completed in accordance with the following: (Check the appropriate option)
 - The facility was constructed in compliance with all terms and conditions of the permit including the design report, plans and specifications, design data or other information submitted in support of the application.

 - The facility was constructed with changes or modifications in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations. As-built plans and specifications, certified by a registered professional engineer (certification by an engineer is not required if the original application was not certified by an engineer) are enclosed.

Facility Owner (print or type)

Owners Signature

Date

Engineer (print or type)

Engineers Signature

Date



MIKE SULLIVAN
GOVERNOR

Department of Environmental Quality

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

Administration
(307) 777-7937

Air Quality Division
(307) 777-7391

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

Solid Waste Management Program
(307) 777-7752

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

December 21, 1993

Pilot Corporation
Attn. Mark Alford
P.O. Box 10146
Knoxville, Tennessee 37939

RE: Satisfactory Resolution of LOV dated October 14, 1993

Dear Mr. Alford:

With the issuance of As-Built Approval #93-470 and the receipt of the CERTIFICATION OF COMPLETION for these facilities, the steps necessary to resolve the Letter of Violation (LOV) have been satisfactorily completed. Therefore, this letter serves as official notice that this LOV case is hereby closed and requires no further action by Pilot Corporation. Thank you for your cooperation in resolving this issue.

Sincerely,

A handwritten signature in cursive script that reads "Ronald L. Ewald".

Ronald L. Ewald
Engineering Evaluator
SE District, Water Quality Division

RLE/bb/36200.LTR

cc: SE District Files
Charles Lowe, Professional Services Industries
Manager - Pilot Travel Center, Laramie, Wyoming

ROAD APPLICATION PERMIT

PERMIT NO.: 93-471R
SEE SPECIAL CONDITIONS

Happy Springs Unit Road Application
(Name of Facility)

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

Wold Oil Properties, Inc.

139 West 2nd Street, Suite 200

Casper, WY 82601

to road apply about 5 yards³ of crude oil contaminated soils. The application site is located in SW¼ Section 4, T28N, R93W in the county of Fremont in the State of Wyoming. This permit shall be effective for a period of one (1) year from the date of issuance of this permit.

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

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

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

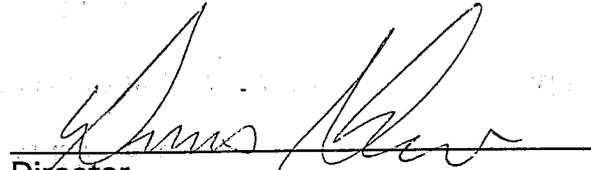
Nothing in this permit shall be construed to preclude the constitution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

6-27-94

Date of Issuance

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

ROAD APPLICATION STANDARD CONDITIONS 1 through 10

This permit is issued with the requirement that the following conditions are met:

1. of 10 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date the road application will begin and the estimated completion date.
2. of 10 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 10 Within sixty days of completion of the road application, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.

- a. Date that the road application was completed; and
 - b. Certification the road application was done in accordance with the terms and conditions of the permit; or
 - c. Certification the road application was completed with changes or modifications. Submit the information necessary to clearly indicate the road application as actually performed.
4. of 10 Waste oil and sludge shall be applied by a method and at a rate which will prevent runoff or ponding after incorporation into the road. Applications shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.
5. of 10 The slope of the roads application shall not exceed 8 percent.
6. of 10 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.
7. of 10 The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Jeff Hermansky phone number 307-332-3144, 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 1/4 section) and time of application.
8. of 10 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.
9. of 10 Only the roads designated in this permit are authorized for application of the waste oil and sludge. Additional or alternate 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.
10. of 10 The review of this permit and the authorization is based upon the items identified in the attached Statement of Basis.

JH/jyi - 42645.LTR

cc: Lynn Harrison, BLM, Lander Resource Area

STATEMENT OF BASIS

General information.

A. Permit Number: 93-471R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. NO

B. Chapter XII. NO

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

NO

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

NO

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

NO

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

There are no numeric standards or criteria in Chapter XI for road application. W.S. 35-11-301(a)(iii) requires a permit to be issued when any disposal system capable of causing or contributing to pollution is constructed, installed, modified, or operated.

B. Briefly state the basis for the deviation.

Road application is permitted when DEQ authorized disposal facilities are not readily available, a beneficial use of the waste to be applied is possible, and significant impact to waters of the State is minimized.

C. Permit based on general or statewide deviation contained in approved policy statement.

Statement of Basis

93-471R

June 23, 1994

District Policy numbers 10.1 (4/9/91), 10.2 (10/17/86), 10.3 (8/91), 10.4 (10/24/91), and 10.6 (1/18/91) address the statutory authority to regulate the road application of waste, establish the criteria for characterizing the waste, and determine acceptable conditions for the application of the waste to roadbeds to minimize impact to waters of the State.

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

Applicable

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected.

- A. Facility will not allow a discharge to groundwater. Briefly describe:

The opportunity for direct or indirect discharge, percolation, or filtration to groundwater is minimized by uniformly applying crude oil contaminated soil onto the roadbed. Repeated applications of crude oil waste on the same sections of road will be monitored by roadbed analyses as required for any future applications.

- B. Quality of wastewater is such that it will not cause a violation of groundwater standards. Briefly describe:

N/A

- C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:

N/A

- D. Basis of facility design is that it will be operated so as not to violate groundwater standards. Briefly describe:

N/A

- E. Discharge will result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d)(vi), Chapter VIII. Briefly describe:

N/A

- VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

To: Patti Burns
IPS
Cheyenne

[Handwritten mark]



THE STATE OF WYOMING

MIKE SULLIVAN
GOVERNOR



Department of Environmental Quality

1043 Coffeen Avenue, Suite D • Sheridan, Wyoming 82801

AIR QUALITY
(307) 672-6457
Fax (307) 674-6050

LAND QUALITY
(307) 672-6488
Fax (307) 672-2213

WATER QUALITY
(307) 672-6457
Fax (307) 674-6050

October 19, 1994

Mr. Jim Neiman
P.O. Box 218
Hulett, WY 82720

RE: Evaporation Basin For Devil's Tower Sawmill
DEQ/WQD Permit Application 93-472

Dear Mr. Neiman:

Six months have passed since my April 15, 1994 review of the referenced permit to construct application package. Your application is now considered inactive and is being returned under the assumption you do not wish to proceed with the permit to construct process.

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

Yours truly,

Donald R. McKenzie

Donald R. McKenzie
NE District Engineering Supervisor
Water Quality Division

DRM/pr
Enclosure: Permit Application 93-472

xc: John Wagner, DEQ/WQD, Cheyenne

RECEIVED

JAN 19 1995

**WATER QUALITY DIVISION
WYOMING**

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-473
SPECIAL CONDITIONS

Pennant Service Company - Casper Monitoring Wells

This permit hereby authorizes the applicant:

Pennant Service Company
600 17th Street, Suite 1615N
Denver, Colorado 80202-5416

to construct, install or modify a system of environmental monitoring wells according to the procedures and conditions of the application number 93-473. The facility is located in NE1/4 Section 32, T34N, R80W, 6th P.M. in the county of Natrona, in the State of Wyoming. This permit shall be effective for a period of five (5) years from the date of issuance of this permit.

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

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

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

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

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

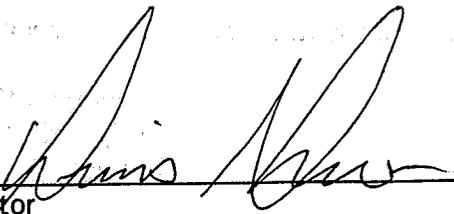
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

2-25-94

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 12. 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 93-473. Additional wells meeting the requirements of this permit may be installed if prior approval is received from the Water Quality Division (WQD).
- 2 of 12. 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 of 12. 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 of 12. 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.

PERMIT NO. 93-473

- 5 of 12. 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.
- 6 of 12. 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 of 12. 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 of 12. 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 chronology of events leading up to the investigation;

PERMIT NO. 93-473

- b. A site map showing the physical features, well locations and sea level elevations;
 - c. The permittee shall provide the exact state plane coordinate for each of the monitor wells being constructed under this permit. This survey shall comply with W.S. 34-24-101 through W.S. 34-24-108 which specifies the accuracy and survey methods to be used;
 - d. Final location, construction details and logs of monitor wells;
 - e. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geologic materials and groundwater occurrence;
 - f. Water level and product thickness measurements;
 - g. Sample collection procedures;
 - h. Sampling analytical results;
 - i. A map delineating the extent of the subsurface contamination including free product, soil and dissolved groundwater contamination and concentrations;
 - j. A potentiometric surface map showing the direction of groundwater movement;
 - k. Interpretation of the data and conclusions including recommended remedial measures; and
 - l. Failure to submit the report required by condition 8 of this permit is a violation of this permit to construct and Administrative Order 2369-92.
- 9 of 12. 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 of 12. All monitor wells associated with this facility shall be sampled and the groundwater analyzed quarterly for the following listed parameters:
- a. Barium using EPA 200 series methods;
 - b. Cadmium using EPA 200 series methods;
 - c. Chromium using EPA 200 series methods;
 - d. Lead using EPA 200 series methods;
 - e. Mercury using EPA 200 series methods;

PERMIT NO. 93-473

- f. Selenium using EPA 200 series methods;
- g. Purgeable Aromatic and Halogenated Hydrocarbons using EPA Method 624, or EPA Methods 601 and 602 together or EPA Methods 501.1 and 501.2 together;
- h. Acid, Neutral and Base Extractable Hydrocarbons using EPA Method 625;
- i. Total Petroleum Hydrocarbons using EPA Method 418.1;
- j. 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. NOTE: Item 1 of Administrative Order 2369-92 required that Pennant Service Company provide an analyses of the waste for all of the above parameters. Pennant never submitted the waste analyses required. A partial analyses done by the department showed that there were detectable contaminants from all of the organic analyses shown above. Metals analyses done by the department suffered from severe matrix problems caused by the high levels of organics. The Administrative Order required that monitor wells be analyzed for all of the parameters on the above list which were detected in the waste analyses. After the first monitoring event, the department will assume that any parameters not detected in the wells were also not present in the waste; and
- k. The results of these analyses shall be submitted to the Cheyenne office by the last day of the month following the end of each quarter. The first set of results are due by the last day of April, 1994.

11 of 12. The results of any analyses conducted on soil or water removed from these wells or boreholes shall be provided to the department as soon as they are available.

12 of 12. In accordance with Administrative Order 2369-92 the monitor wells permitted under this permit to construct shall be installed within 30 days of the date of issuance of this permit. Failure to install these wells within this time period is a violation of this permit and the terms of Administrative Order 2369-92.

RFL/jn - 40874.ltr

**REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION**

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: Pennant Well Service, Industrial Drainfield Monitor Wells.

ENGINEER: NONE

APPLICANT: Pennant Well Service, 600 17th Street, Suite 1615N, Denver, Colorado 80202-5416

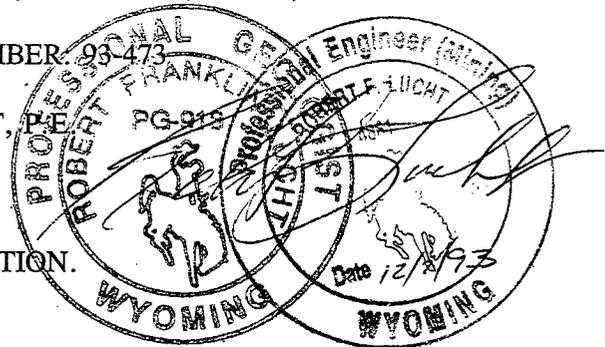
WATER QUALITY DIVISION REFERENCE NUMBER: 93-473

REVIEWING ENGINEER: ROBERT F. LUCHT,

DATE OF REVIEW: December 7, 1993

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.

COMMENTS:



1. The Water Quality Division normally does not specify exact locations for monitor wells to be installed. This is because the ultimate responsibility for well placement rests with the applicant. Nevertheless, I have enclosed a sketch map showing locations which would be acceptable to this department. Pennant Well Service is responsible for obtaining utility locations and insuring that existing facilities will not be disturbed. On the attached sketch map, this department has specified distance ranges which will allow a great deal of flexibility in actual siting of the wells.
2. Since Pennant has refused numerous attempts at compromise in settling this issue, and has now exhausted all administrative appeals, the Administrative Order, Docket 2369-92 must be complied with exactly as written. This Order requires the installation of one monitor well up gradient and three wells down gradient. As determined by the company next door to the south, the gradient is easterly or slightly north easterly. The attached sketch map shows the approximate locations for four wells which will satisfy the Order as written. Construction of these wells does not relieve you from the obligation to perform a complete extent of contamination study in the event that groundwater contamination is detected.
3. The application for a permit to install monitor wells is incomplete as submitted. Documents lacking include: 1) A map showing the approximate locations of the wells to be installed. 2) A commitment to perform quarterly sampling for one year as required by the Administrative Order. 3) A plan to insure that samples are taken in a technically correct and legally defensible way.
4. In order to correct these deficiencies, Pennant should submit a map and the required commitment to perform the sampling. If Pennant wishes, the plan to insure that samples are correctly taken can be included in the permit by permit conditions. Your response to this review should be received by this department by January 15, 1994 in order to allow processing of the permit application as required by the Order.



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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May 23, 1994

Lt. Col. Tony Zuber
Base Civil Engineer
Wyoming Air National Guard
Headquarters 153rd TAG
P. O. Box 2268
Cheyenne, WY 82003-2268

RE: Remedial Investigation/Feasibility Study Work Plan (Draft Final)
WQD Reference No. 93-474

Dear Col. Zuber:

Attached are the department's comments to the above referenced document. Also attached is an application form for a permit to construct for the proposed monitor wells, as was discussed in the review.

Please feel free to contact me with any questions or comments you may have.

Sincerely,

John C. Kleinschmidt, P.G.
Senior Analyst
Water Quality Division

JCK/mad 42195.LTR

Enc: RI/FS Review
Application Form for a Permit to Construct

cc: Paul Wheeler, ANGR/CEVR
Charles Sanchez, EPA, 8HWM-SM
Kevin Frederick

REVIEW COMMENTS:
PLANS/SPECIFICATIONS/PROPOSALS/REPORTS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: **SITE CHARACTERIZATION: CONTAMINANT ORGANICS (Chlorinated Solvents) AND INORGANICS (Metals & Common Anions), Wyoming Air National Guard, 153rd Tactical Airlift Group Base, Cheyenne Municipal Airport**

APPLICANT: **Wyoming Air National Guard, 153rd Tactical Airlift Group Base, Cheyenne Municipal Airport**

ENGINEER/
CONSULTANT:

AEPCO, Inc.
Suite 300
15800 Crabbs Branch Way
Rockville, Maryland 20855

TETRA TECH, Inc.
Suite 340
10306 Eaton Place
Fairfax, Virginia 22030

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: **93-474**

TITLE: **Remedial Investigation/Feasibility Study Work Plan
(Draft Final)
(Responses to the WQD's December 1, 1993 review)**

PLANS SPECS PROPOSAL REPORT

DATE ON PROPOSAL/PLANS/REPORT: **January 25, 1994**

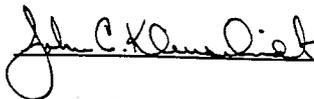
DATE SUBMITTED TO DEPARTMENT: **April 15, 1994**

IS THIS PROPOSAL SUBMITTED PURSUANT TO:

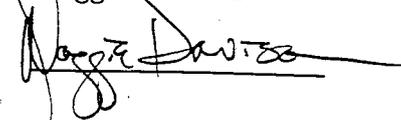
'CONDITIONS' TO ANY WQD PERMIT? NO YES

AN LOV, NOV OR OTHER ENFORCEMENT? NO YES

REVIEWING OFFICIALS: **John C. Kleinschmidt, P.G.**



Maggiè Davison



DATE OF PREVIOUS REVIEW: **December 1, 1993**

DATE OF THIS REVIEW: **May 23, 1994**

ACTION: **Not approved for implementation as submitted**

COMMENTS:

1 and 2). The forms for the WQD's permit to construct are attached to this review. The owner/operator must obtain the appropriate forms for a State Engineer's permit from the State Engineer.

3). The Wyoming Air National Guard (WANG) has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the Remedial Investigation/Feasibility Study (RI/FS) work plan (WP).

4). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

5). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

6). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

7). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

8). Analytical results from background monitor well (MW) #1 indicate that this area (e.g., the location of MW #1) may be contaminated. Section 4.5.1 on page 85 of the RI/FS WP states that several organic compounds and elevated levels of beryllium were in the subsurface soils from this boring. Therefore, this well will probably be better used as a site control well which is situated to differentiate site specific contamination from contamination migrating from sources upgradient of the facility (e.g., F.E. Warren Air Force Base, The Cheyenne Airport, etc.) rather than a background well. If natural conditions cannot be obtained on-site, the WDEQ/WQD will require the WANG to find an off-site location which is not contaminated and can be used to establish background levels for natural occurring inorganics and organics. (Please refer to Risk Assessment General Comment with regards to the need for multiple background groundwater monitor wells and/or soil borings)

9). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

10). Even though a confining layer has yet to be detected beneath the facility, it is the WANG's responsibility to determine the vertical as well as the horizontal extent of contamination. One of the facility's contaminants, TCE, is a DNAPL and will preferentially migrate vertically. Therefore, if the proposed wells do not determine the vertical extent of contamination, the WANG will be required to drill additional cluster wells to determine the vertical extent of contamination. In addition, WANG must include a standard operating procedure (SOP) which will minimize the potential of cross contamination from the construction of deep wells.

11). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

12). If the WANG logs all new monitor wells or soil borings using the same procedure as during the Site Investigation (SI) (e.g., core two (2) foot samples every five (5) feet) and log the upper fifteen (15) feet then every five feet and any changes in lithology as proposed on page 43 of the RI/FS WP, then the WANG has completely and technically adequately addressed this comment. However, the WDEQ/WQD does question why the WANG does not collect a five (5) foot long split spoon core when they are already collecting split spoon samples. Please justify collecting a two (2) foot core rather than a five (5) foot core.

13). Neither the contractor or WANG are a third party, this proposal is unacceptable.

14). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP. However, the WQD will require the WANG to present documentation to the department that verifies that all ethylene glycol has been disposed of appropriately.

15). Determining if contamination is from the site or from a source upgradient and off-site is essential. The WDEQ/WQD agrees that site control wells can be installed at a later date, but it is in the WANG's interest to identify upgradient contamination as soon as possible. If information concerning upgradient contamination is unknown, the WDEQ/WQD will require the WANG cleanup and/or remediate the site to natural conditions (e.g., background for inorganics, and non-detect for organics). In addition, how will the need for upgradient wells be determined?

16). Though the specific conductance data is presented in Appendix B of the SI, Table 3.4 of the SI states the electrical conductivity is zero (0) for all the wells at the site. Table 3.4 must be corrected to reflect the data located in Appendix B.

17). Even though Dry Creek is not located on the site, there is potential for contaminated groundwater from the facility recharging Dry Creek, specifically from Site 3. Placement of well 3-MW7 will aid in the definition of the known TCE and TRPH plumes at Site 3. However, well 3-MW7 may not be sufficient to determine the complete lateral extent of the plume. Though the concentration of TCE for all Site 3 wells was less than 7 micrograms/liter during the last sampling period, the TCE plume may extend downgradient further than hypothesized by Figure 4-7 of the RI/FS WP and therefore require additional wells to determine the lateral extent of contamination. In addition, the WANG has yet to determine the extent of vertical contamination of the Site 3 TCE and TRPH plumes, therefore, the WDEQ/WQD will require the WANG to construct cluster wells to determine the vertical extent the plume downgradient of this site.

18). The WANG has addressed the issue regarding the arbitrariness of the multiplication factor used to determine whether headspace VOC's indicate soil samples must be collected. However, the WDEQ/WQD will require the WANG to use a factor of five (5) times background rather than ten (10). How is background for VOC's going to be determined (What is background for VOC's (e.g., non-detect)?)? In addition, the WANG has not specified a method or procedure on how a specific interval will be correlated to the elevated VOC's in the head space. If the WANG cannot provide a specific and

acceptable method or procedure, the WDEQ/WQD will require the WANG to collect composite samples from five (5) foot intervals for the well's entire depth.

What does the WANG's response "We can delete any requirements for optional/additional samples" mean?

19). In Section 4.4.2.3 of the RI/FS WP how is "significant contamination" defined when determining whether optional wells 4-MW13 and 4-MW14 are drilled? In Section 4.3.2.3 how are the plumes at Site 3 going to be verified? For any new wells at Site 3, what is the rationale being used to determine the screened interval and the depth? For any other optional wells/borings, specific methods and procedures (e.g., define nebulous terms like "significant contamination") for determining if a well is to be drilled must be included in the RI/FS WP.

20). The discussions on the WANG's rationale for the depth of and the screened interval for proposed wells are not complete. The WANG must include cross-sections which diagram the proposed monitor well/soil boring and its relationship to the lithology, to the other monitor wells/soil borings and to the analytical data which describes the plume (e.g., Figure 4-10 describes these relationships for 4-MW6, 4-MW7 and 4-MW12). In addition, the WANG must include contingencies to account for any unforeseen occurrences (e.g., extremely thick clay layer, etc.) while drilling any new well/boring.

21). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

22). The appropriate analytical methods which will include the required inorganics and organics to classify groundwater and that are to be used by the WANG during the remedial investigation must be specified in the RI/FS WP. In addition, with regards to sampling groundwater for classification under Chapter VIII of the WDEQ/WQD rules and regulations, this sampling must be done from wells which have not been contaminated by operations at this facility or any facility up or downgradient.

23). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

24). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

25). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal are incorporated in the final draft of the RI/FS WP.

26). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994 submittal are incorporated in the final draft of the RI/FS WP, specifically any state ARARs.

27). As stated in the WDEQ/WQD's earlier review of the RI/FS WP, the WANG must propose tighter acceptance criteria for water quality analytical data in order to reduce the degree of uncertainty associated with data which will be obtained during the remedial investigation.

28). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP. However, if the WANG plans to use the analytical data collected during the SI, the WDEQ/WQD will require that the WANG resubmit the analytical data correctly flagged.

29). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

30). The MSDS sheet for PD-680 (type II) is not attached. The WDEQ/WQD is not requiring the WANG to include the compound's MSDS sheet, just indicate the compound's composition.

31). WQD Chapter 1, Section 18 provides health based quantitative standards for surface waters not groundwater. Therefore the standards upon which these conclusions are based are inappropriate and invalid, such as SVOC's are not COC's for this facility. There are numerous additional references which will provide quantitative standards (e.g., IRIS, DWHA, WQD Chapter XVII(proposed) and federal MCLs) which you can use to evaluate the analytical results of the SI.

In addition, the following are state statutory or regulatory citations which are applicable or relevant and appropriate to contaminants encountered in soils and groundwater at the site:

- a. The Wyoming Environmental Quality Act, §35-11-3011a) states that "no person, except when authorized by a permit issued pursuant to the provisions of this act, shall: (i) cause, threaten or allow the discharge of any pollution or wastes into waters of the state; (or) (ii) Alter the physical, chemical, radiological, biological or bacteriological properties of any waters of the state";
- b. Wyoming Water Quality Rules and Regulations, Chapter VIII, Section 3.c. states that "protection shall be afforded all underground water bodies (including water in the vadose zone). Water being used for a purpose identified in W.S. 35-11-102 and 103(c)(i) shall be protected for its intended use and uses for which it is suitable. Water not being put to use shall be protected for all uses for which it is suitable";
- c. W.S. 35-11-102 states that "whereas pollution of the air, water and land of this state will imperil public health and welfare, create public or private nuisances, be harmful to wildlife, fish and aquatic life, and impair domestic, agricultural, industrial, recreational and other beneficial uses; it is hereby declared to be the policy and purpose of this act to enable the state to prevent, reduce and eliminate pollution; to preserve, and enhance the air, water and reclaim the land of Wyoming; to plan the development, use, reclamation, preservation and enhancement of the air, land and water resources of the state; to preserve and exercise the primary responsibilities and rights of the state of Wyoming; to retain for the state the control over its air, land and water and

to secure cooperation between agencies of the state, agencies of other states, interstate agencies, and the federal government in carrying out these objectives";

d. Water uses described in W.S. 35-11-103(c)(i) include "... domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses ... ";

e. Wyoming Water Quality Rules and Regulations, Chapter IV, Section 3.(d) identifies activities conducted at WANG as releases as defined in this section. Section 4 describes responses which must be taken by the responsible party when a release has occurred. Section 5 states that "in no case shall there be a violation, or threat of violation, of Wyoming surface water or ground water standards";

The ramifications of these citations are that pollutants or wastes present in soils in the vadose zone constitute discharges or threats of discharges to groundwater. Unauthorized discharges or potential discharges are prohibited, as is described in the citations. Based on the listed statutory and regulatory references, pollutants or wastes in the vadose zone must be eliminated; and

The development of Wyoming Water Quality Rules and Regulations, Chapter XVII (proposed) which institutes the state's underground storage tank program incorporates the development of procedures for establishing environmental restoration standards. These regulations are relevant and appropriate to contamination at WANG and offer an alternative to remediation goals established under existing statutes and regulations in that cleanup can be accomplished according to site specific standards developed to protect groundwater and human health, rather than eliminating all contamination to below detection limits or background.

32). The WDEQ/WQD must permit/approve any site remediation technologies/alternatives that are selected by the WANG and its contractors.

33). The response to this comment does not state the WANG will consider any WDEQ ARARs which have been or will be proposed. This statement must be changed to address the WDEQ/WQD's concerns on this issue. To reiterate the ramifications of the above cited statutes and regulations, even though Chapter XVII has yet to be approved, the state can use COC's background levels (for organics, background levels equal non-detect) as ARARs until such time Chapter XVII is approved.

34). Correction of the headings for the Table 3-1 on Page 21 of the RI/FS WP partially addresses the WDEQ/WQD's concerns. However, this table does not include any of the WDEQ/WQD Drinking Water Equivalent Levels (DWEL) proposed by the WDEQ/WQD in Chapter XVII. These standards are to apply only where federal EPA MCLs or more stringent state standards do not exist. (Please see comment #31 above)

35). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

36). As stated above comments #31 and #33, the state will use background as ARARs for soils if Chapter XVII is not approved. As also stated in Comment #8 above, the WANG may be required to collect background samples off-site.

37). Though the state does not have primacy for RCRA at this time, the State does have legislative authority to pursue primacy and is attempting to obtain authorization by the fall of 1995.

38). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

39). The bullet for the object for the groundwater restoration program should state, groundwater will be remediated or restored to WDEQ/WQD Chapter VIII standards (e.g., background) or alternately approved state ARARs (e.g., proposed Chapter XVII standards).

40). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

41). The response does not address the WDEQ/WQD's concerns. Where will the two representative groundwater samples be collected (e.g., per well, per site, etc.)? Are two rounds of sampling being proposed in for the analyses of groundwater? If so, how do the sampling events relate chronologically? Are they intended to represent conditions relating to seasonal fluctuations in groundwater levels?

42). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

43). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

44). The response to this comment is inadequate. Turbidity, as discussed in the original comment is used as an indicator of whether the quality of a water sample is adequate for analysis, not criteria to apply federal MCLs. For any sample collected from a well with a turbidity greater than five (5) NTUs, the validity of the analytical results will be considered questionable. In addition, the WDEQ/WQD will not accept results from filtered samples unless unfiltered results for the same constituents are also determined. Therefore, if the wells are constructed with the improper materials (e.g., incorrect filter pack) and if the WANG cannot collect a water sample from a well with a turbidity of five (5) NTUs or less, the WDEQ/WQD will require the WANG to construct a new well. Therefore, it is the WANG's best interest to perform sieve analyses (please see comment #51) on site soil samples and provide the results to the WDEQ/WQD to demonstrate the wells have been constructed with the correct filter pack rather than arbitrarily assuming that a variable sized filter pack material (e.g., material between No. 200 sieve and the No. 4 U.S. standard sieve) is adequate. The sieve analysis data must be more detailed than the data presented on page A-84 of Appendix A of the SI.

45). EPA currently has RCRA primacy in the State of Wyoming; therefore determination of the investigation derived waste's (e.g., produce water during pump testing) hazardous waste status (e.g., listed or characteristic) will be resolved by the EPA. However, if your waste has detectable concentrations of any contaminants, the WANG must obtain the WDEQ/WQD's authorization or a permit (e.g., NPDES) to discharge/dispose of this waste.

46). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

47). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

48). A completeness criteria of 90 to 95% is customarily seen for hazardous waste site investigation. Additionally, the role of results from critical sampling sites must be addressed. In some instances, the numeric criteria for completeness may be met but the data inadequate to characterize the site or meet the DQOs for the project.

49). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

50). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

51). Use of a variable sized based grained filter pack may not be appropriate for all wells/piezometers constructed at the facility. The WANG must provide alternate materials for those occasions where a coarser or finer grained material should be used. The WDEQ/WQD also requests the WANG provide detailed sieve analyses on soil boring samples that demonstrate the filter pack material selected is appropriate. (Please see comment #44)

52). Since samples were only collected from selected intervals during the SI, this does not preclude contamination occurring in the intervals not sampled. In addition, the rationale for selected depth for soil samples does not account for changing site conditions (e.g., changes in lithology). Therefore, the WDEQ/WQD will require that each new well/soil boring/piezometer have three (e.g., upper middle and lower) soil samples collected for analysis per lithology (e.g., sandstone, gravel, silty clay, etc.) and one (1) sample collected one (1) foot above the known water table. The WDEQ/WQD will also require that the narrative on soil sampling include at what depths there were non-detects. This information is important in that it allows the determination of the vertical as well as lateral extent of soil contamination.

53). Referencing pages of the appendices aids in the review of submitted documents. It may not be the WANG policy to reference pages in the appendices, however, it will be required by the WDEQ/WQD that all references to appendices include the page or pages. Additionally, this document must easily facilitate field activities conducted during the RI. Field personnel must readily be able to locate a reference which provides information on how work is to be conducted.

Sites

General Comment: The WANG's response to the WDEQ/WQD comment regarding PCB's and pesticides states that samples collected at the facility were not analyzed for these compounds. Due to the history

of the site it is unlikely that pesticides were ever stored on-site. However, there is the possibility of a transformer or similar equipment containing PCB's being stored at the facility. Therefore, the WDEQ/WQD will require all samples be analyzed for PCB's as well as the compounds listed below unless the WANG can document devices containing PCB's have never been stored at the facility.

Site 1

1). Since the WANG only sampled selected soil depths and the soil samples from these depths were non-detect for the chlorinated and aromatic compounds that were detected in the headspace soil vapors, this does not preclude that the soils in the individual soil boring are not contaminated. Therefore, the WDEQ/WQD will require any new well/boring/piezometer have soil samples collected and analyzed for the compounds discussed in the previous review (e.g., VOC's, TPH, SVOC's and metals) in the manner described above in Comment #52. In addition, the WDEQ/WQD will still require groundwater to be analyzed for the above-listed constituents.

Site 2

1). If the results from the analyses of the groundwater and soil samples collected from the new well which was to be drilled at this site and was agreed upon by both the WANG and the WDEQ/WQD during the July 16, 1992, SI report meeting are non-detect, then this site will be considered to have been adequately addressed by the WDEQ/WQD.

Site 3

1). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

Site 4

1.) What is the reasoning that diethyl-phthalate, naphthalene and 2-methyl-naphthalene have been deleted from further analysis? The data collected during the SI is inadequate for excluding detected contaminants from further consideration.

Risk Assessment

General Comment: The WDEQ/WQD will require that multiple background samples, soils and groundwater, be collected so that deviations from background can be evaluated if they are statistically variant. As stated in Comment #3 the t-test can only be used on parametric data. Since groundwater and soil data are generally non-parametric, the t-test will more than likely be inappropriate to be used as the statistical test to evaluate the data collected during the RI.

2. The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

3. The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP. However, please see general comment above.

4. Please see Sites: General Comment above.

5). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

6). The WANG has completely and technically adequately addressed this comment. It is the responsibility of the WANG to ensure any changes proposed by the April 25, 1994, submittal be incorporated into the final draft of the RI/FS WP.

END OF REVIEW



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 5, 1993

Lt. Col. Tony Zuber
Base Civil Engineer
Wyoming Air National Guard
Headquarters 153d TAG
P. O. Box 2268
Cheyenne, WY 82003-2268

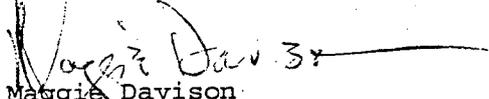
RE: Remedial Investigation/Feasibility Study Work Plan (Draft Final) - WQD
Reference No. 93-474

Dear Col. Zuber:

Attached are department comments on the above reference document. Also attached is an application form for a permit to construct for the proposed monitor wells, as was discussed in the review.

Please feel free to contact me with any questions or comments you may have.

Sincerely,


Maggie Davison
Senior Analyst
Water Quality Division

cc: Paul Wheeler, ANGRC/CEVR
Charles Sanchez, EPA, 8HWM-SM
Kevin Frederick

REVIEW OF PROPOSALS/PLANS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

**Herschler Bldg., 4 West
Cheyenne, Wyoming 82002**

**PROJECT: EXTENT OF CONTAMINATION INVESTIGATION - Wyoming Air National Guard,
153rd Tactical Airlift Group Base, Cheyenne Municipal Airport**

APPLICANT: Wyoming Air National Guard

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: 93-474

TITLE: Remedial Investigation/Feasibility Study Work Plan (Draft Final)

PROPOSAL PLANS REPORT (Check each that applies)

DATE ON PROPOSAL/PLANS/REPORT: March, 1993

IS THIS PROPOSAL SUBMITTED PURSUANT TO 'CONDITIONS' TO THE ABOVE PERMIT?

YES **NO**

REVIEWING OFFICIAL: Maggie Davison 

DATE OF LAST REVIEW: Not Applicable

DATE OF THIS REVIEW: December 1, 1993

ACTION: Not approved for implementation as submitted

COMMENTS:

General Comments:

1. An application for a permit to construct to address monitor wells to be installed is included as an attachment to this review. It must be completed and submitted to the department in triplicate in order for construction of monitor wells to be authorized. In addition, two additional copies of the report must be provided;
2. Water appropriation permits must be obtained from the State Engineer's Office to authorize the installation of monitor wells;
3. Use method 8015 (modified gasoline and diesel ranges) to analyze TPH in soils and water samples;

4. Include specific conductance measurements for groundwater as field determinations to be made;
5. Review proposed methods for analyzing groundwater. The inorganic methods referenced will not address whether or not MCLs are exceeded for a number of constituents. Specific deficiencies which were noted in this area include antimony, beryllium and thallium. It is recommended that methods identified in 40 CFR Part 136 or the Safe Drinking Water Act be used in order to ensure that MCLs are addressed;
6. The justification provided for excluding semivolatile organics from analyses is not acceptable. Soils and groundwater samples must be analyzed for this suite of contaminants;
7. Include methylene chloride, semivolatile contaminants and Site 2 contaminants in Table 2-1;
8. Proposed background concentrations for inorganics are not acceptable due to the fact that organic contaminants were encountered in samples of soils and groundwater collected from the designated background location. Since the purpose of background sampling locations is to represent naturally occurring concentrations of inorganics, detectable concentrations of organic substances indicate that potential introduction of increased inorganic constituents may have taken place. Distinctions should be made between site control wells, which are situated to differentiate site specific contamination from contamination migrating from sources upgradient of the site, and background soil borings or wells which are used to establish naturally occurring inorganic concentrations. For these reasons, selections of background sampling locations must be made carefully and must address the need for appropriate statistical evaluations when background data sets are compared to site data sets.

**Note that due to the issues discussed in the previous paragraph, it is not possible to determine from the SI field investigation whether or not inorganic contamination is present at the base;
9. In Table 2-2, include the minimum and maximum range for all inorganics detected during the SI investigations. The values included in the column describing MCLs need to be reviewed and corrected as several inaccuracies are apparent. Delete the column describing background values which have not been established at this point in time. Correct the units of measure for the soils concentrations columns to mg/kg;
10. Consideration must be given to lithology in the completion and location of screens in monitor wells. Since the major contaminants detected so far at the base have greater densities than water and low solubilities, screen wells such that the zone immediately above a confining layer is intercepted by the well screen. Cluster wells which better profile contaminants at various zones in the formation are needed, again with screening just above a confining layer as a priority for the deepest well of a given cluster. The number of wells contained in the cluster should be determined by the thickness of the water-bearing zone that is being profiled;
11. Reduce the depth of the surface soil sampling zone to 0-0.5 feet;
12. Provide continuous lithologic descriptions for strata encountered when drilling wells and soil borings. A detailed understanding of site geology is essential to predicting contaminant migration routes and conducting feasibility study evaluations;

December 1, 1993

Page 3

13. Data validation should be conducted by a party not employed by the laboratory doing the analytical work or by the contractor responsible for the field work;
14. If there is a possibility of ethylene glycol being present as a contaminant at site 3 or site 4, a method for analysis should be included to address this fact;
15. Since it appears that a number of potential sources upgradient of all identified sites may exist, it would be prudent to install several site control wells along the upgradient boundary of the facility;
16. Conductivity data from the SI is not included in Table 3.4 of the SI report. What are the specific conductance measurements for groundwater made during the SI?
17. The potential for surface water impacts has not been adequately addressed in the work plan. Mention is made of the possibility of Dry Creek being recharged by groundwater in the area. How will it be determined if contaminants detected in groundwater at the base are being discharged to the creek and/or associated wetlands?
18. The plan states that a photoionization detector will be used to detect volatile organics in the borehole headspace, and if they exceed background readings by ten times, a "representative" sample of soils will be collected. What is the justification for using a factor of ten as the determining factor in this process? How will a specific interval of the borehole be correlated to the appearance of elevated VOCs at the surface?
19. How will it be determined that "optional" wells or soil borings will be drilled?
20. Include in the discussion for the proposed investigation for each site, the rationale for the depths of the proposed wells as relates to observed lithology, profiling of the water bearing zone and addressing contaminant characteristics of solubility and density;
21. No such document is known to exist that meets the description of WY DEQ, 1990b contained in the list of references. Is the document known by another title? Please provide a copy of the document being referenced;
22. A more complete set of inorganic analyses must be done which addresses all of the inorganic constituents regulated under the Federal Safe Drinking Water Act. Additionally, a number of constituents regulated under Wyoming Water Quality Rules and Regulations, Chapter VIII must be addressed in order to establish the classification of the aquifer and to determine where degradation by constituents which may not have impacts on human health are presenting a risk to the use or potential use of groundwater;
23. Section 6.0, page 94 - it appears that the last item to be listed in the description of the RI report contents has not been included;

24. Include in Sections 7.0 through 7.3, which discuss the contents of the FS report, a better representation of the role that ARARs play in screening of technologies and assembled alternatives. Take into consideration language contained in Section 121 of CERCLA which states that criteria established by ARARs which are more stringent than remediation goals determined by the risk assessment process must be met, in addition to 40 CFR Part 300.430 which states that remedial actions selected in a ROD must attain ARARs that have been identified at the time of the ROD signature unless a waiver has been granted;
25. Sections 7.2 (page 98) and 7.2.2 (page 99) discuss special considerations to be given the Solid Waste Disposal Act. CERCLA 121(d)(2)(A)(ii) specifically identifies drinking water standards established under the Safe Drinking Water Act (SDWA) as ARARs. Is the intent of these sections to describe this fact? If not, what is the basis for special consideration being given to the Solid Waste Disposal Act as an ARAR?
26. Identify in this document specific federal and state statutes and regulations which function as potential ARARs. State statutes and regulations which must be identified include the Wyoming Environmental Quality Act, Wyoming Air Quality Standards and Regulations, Wyoming Water Quality Rules and Regulations, Wyoming Solid and Hazardous Waste Rules and Regulations and Wyoming State Engineer's Rules and Regulations, at a minimum. These items must be assessed for potential applicability and/or relevance and identified in the work plan. State law includes ARARs in the chemical specific, action specific and location specific categories;
27. The acceptance criteria for analytical data for water are very lenient for accuracy and precision. Propose tighter criteria in these areas of data quality objectives in order to reduce the degree of uncertainty associated with data which will be obtained during the remedial investigation;
28. Flagging as non-detect data values for which contamination was also encountered in the associated trip and/or method blanks, as was done for data obtained during the SI, **is not acceptable**, regardless of the relative concentrations. Data which falls into this category can be flagged to indicate blank contamination, but must not be flagged as being not detected unless it truly was not detected. ***This is absolutely critical to the acceptance by this department of the data set which will be produced by the field effort being proposed;***
29. Provide an explanation of the difference between a feasibility study and a focused feasibility study including a description of conditions where each would be preferred to the other;
30. What is the chemical composition of PD-680 (type II)?
31. What is the source of the "state action levels" described in the first paragraph on page 18?
32. Section 3.1.2, page 20 - What is the difference in activities described in items 5 and 6 of this section?
33. Section 3.1.2, page 20 - The last sentence on this page states that "additional ARARs will be issued by EPA" which will be incorporated in Table 3-1. What is meant by this statement?

34. Table 3-1, page 21 - Revise the title of this table to address that these are preliminary or potential chemical specific ARARs. A number of inaccuracies exist in the table; for example, the MCLs described. Wyoming doesn't have surface drinking water regulations. The values described are human health surface water criteria for ingestion of both water and fish. Methylene chloride (also known as dichloromethane) has an associated MCL of 5 $\mu\text{g}/\text{l}$. What is the source of the values described in the columns labeled as Wyoming Groundwater Quality Criteria? The point of this table is that standards established under such regulations as the Federal Primary Drinking Water Regulations, Wyoming Water Quality Rules and Regulations, Chapters I and VIII will be used to derive remediation goals which will be used to evaluate the need for remedial action and the technologies which will be effective;
35. Page 22 - The statement is made in the second paragraph on this page, regarding Table 3-1 that criteria which is not an MCL is guidance criteria. What is meant by this statement?
36. Page 22 - The first sentence in the Soils discussion states that no federal or state soils cleanup criteria exists. However, Wyoming will have more than likely promulgated Wyoming Water Quality Rules and Regulations, Chapter XVII prior to the completion of the remedial investigation. This set of regulations establishes soils cleanup criteria at the state level;
37. The following should be kept in mind in evaluating jurisdiction for various activities at the site: Wyoming has primacy for NPDES (point discharges to surface waters) and UIC (underground injection permitting). Wyoming does not have primacy for Safe Drinking Water Act or RCRA at this point in time;
38. Review statements made in the discussion on ambient air quality standards for accuracy;
39. Page 23, Section 3.2 - The objective of groundwater restoration must be included in the discussion on scoping remedial alternatives;
40. Will soils moisture content be determined by weight or volume?
41. Page 26 - What is the intent of the first sentence in the introductory paragraph on groundwater?
42. Page 27, Section 3.4.2.1 - Please provide copies of items referenced in numbers 2 and 3 in this section;
43. Is one trip blank included in each cooler for shipment? What is the rationale for excluding trip blanks from soils samples for volatiles?
44. What criteria will be used to assess potential impacts of elevated turbidities on water samples?
45. Why is TCLP being proposed to assess investigation derived wastewaters?
46. Disposal of any produced waters into the storm sewer system must be coordinated and authorized through the state's NPDES program;

47. Soils which are contaminated which are not hazardous wastes must be disposed in a landfill approved for such purposes. Disposal of non-hazardous waste contaminated soils on site is prohibited by state law;
48. How was a completeness criterion of 80% derived as meeting data quality objectives?
49. Calibration of instruments should be accomplished based on manufacturer's suggestions, rather than once a day. Refer to the operations manual for each instrument being used to determine adequate frequency of calibration;
50. Mud rotary is acceptable as a drilling method only under very stringent conditions which involve fairly extensive analyses of the drilling fluids. It is recommended that air rotary or water rotary methods or some other drilling methods be implemented when hollow stem auger is not feasible before mud rotary methods are used;
51. Well screen and filter pack materials selection should be designed based on the characteristics of the strata being screened rather than as proposed in the document;
52. Provide the rationale for the proposed soil sampling intervals identified for each site;
53. When sections of appendices are referenced, the appropriate page numbers should be included to facilitate location of information;

Comments specific to Site 1:

1. Since samples collected from this site were analyzed for VOCs and TPH only, it would be prudent to collect both soils and groundwater samples to be analyzed for VOCs, TPH, semivolatile organics and metals. The presence of chlorinated compounds in groundwater and soil gases at this site suggests the need for further investigation of both soils and groundwater. Additionally, based on site history, there is a likelihood of semivolatile contaminants existing at the site;

Comments specific to Site 2:

1. Although soils contamination associated with the underground storage tank formerly located at this site has been addressed, groundwater contaminants not related to the UST were detected in the well at this site. It must be determined if these contaminants are originating from Site 2 or from an upgradient source;

Comments specific to Site 3:

1. Section 4.3.2.3, page 78 - 3-MW5 & 6 are described as optional in this section. However, Figure 4-1 does not show these wells as optional. Provide clarification to this discrepancy;

Comments specific to Site 4:

1. Section 4.4.1, page 78 - The first paragraph describes dimethylhexane as being detected at this site. However, no mention of this contaminant is made in other sections and appendices describing contaminants found during the SI investigations. Diethyl phthalate was included in other discussions of contaminants encountered at site 4 but is not included in this section. Please clarify these discrepancies;

Comments specific to the section on risk assessment:

1. Wyoming law does not require that decisions for remediating contaminant sites include a risk assessment in the fashion of CERCLA. While cleanup goals are established with the protection of human health as an objective (proposed Wyoming Water Quality Rules and Regulations, Chapter XVII), the main objective of Wyoming's environmental programs is the protection of resources and the maintenance of uses or potential uses of those resources. For this reason, no CERCLA risk assessment would be required by the state for this base.

However, if under the IRP program a risk assessment done in conformance to EPA's Risk Assessment Guidance for Superfund is required, the following inconsistencies were noted:

2. The risk assessment proposal states that risks associated with polynuclear aromatic hydrocarbons (PAHs) are to be evaluated for the base. However, as was discussed previously in these comments, no monitoring for semivolatile organics was included in the work plan. In order to determine what health risks are imparted by PAHs present at the site, samples must be analyzed for semivolatile organics;
3. The discussion on background comparisons states that a t-test will be used to compare data collected from potentially contaminated sites with background data, when possible, to determine if significant contamination is present at a site. The data sets must be evaluated to determine what statistical methods can be applied appropriately in comparing the data. Since data obtained from environmental samples is frequently non-parametric, statistical methods other than the t-test may have to be used to make comparisons;
4. This section states that pesticides and PCBs were investigated as potential contaminants at the base under SI activities. Analytical results for these contaminants types have not been included in data summary tables. Please provide the results of these analyses;
5. The report contains very little discussion on ecological assessments and environmental risk assessment. What discussion is provided is very vague as to how environmental, or potential environmental, impacts will be evaluated. Provide more detail in this area;
6. The residential scenario must be evaluated as a future land use possibility using concentrations of contaminants detected during the SI and RI investigations. This will possibly include the use of groundwater at the base for domestic drinking water, depending on how the aquifer is classified.

End of Review

PERMIT TO CONSTRUCT

New

Permit No. 93-475RRRR

* CONDITIONED *

Renewal

Modified

Nordic Ranches Water System

(Name of Facility)

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

Clarence Reinhart

P.O. Box 258

Alpine, WY 83128

to construct Well No. 2, a distribution system, and storage tanks according to the procedures and conditions of the application No. 93-475RRR . The facility is located in S25 and S26, T36N, R119W in the County of Lincoln, in the State of Wyoming. This permit shall be effective for a period of two 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.

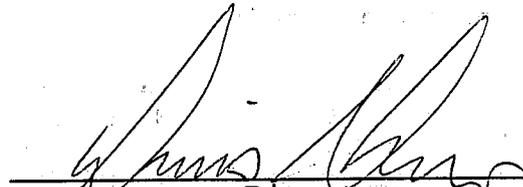
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

6-21-94

Date of Issuance

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

RRT/bb/42509.1tr

CONDITIONS 1 through 5

1. of 5 The planned distribution system is dependent upon the completion of Well No. 2 with a sustained water production of a minimum of 60 gpm, and the installation of the planned storage tanks, in order to provide an adequate water supply. Actual well flow rate capacity data is to be submitted to the DEQ, Water Quality

Division office in Lander along with water quality data from the new well. The water quality data is to be for the parameters required to be monitored by the EPA for this drinking water supply.

2. of 5 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.
3. of 5 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
4. of 5 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
5. of 5 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-475RRRR

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. No

B. Chapter XII. Yes

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

B. Briefly state the basis for the deviation.

C. Permit based on general or statewide deviation contained in approved policy statement.

Statement of Basis
93-475RRRR
May 26, 1994

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote¹

Not Applicable

- VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

RRT/bb/42509.ltr

¹ Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

ROAD APPLICATION PERMIT

PERMIT NO. 93-476RR
SEE SPECIAL CONDITIONS

Texaco - Garland Battery Road Application
(Name of Facility)

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

Texaco Exploration and Production, Inc.

P O Box 46510

Denver, Colorado 80301

to road apply about 150 yd³ crude oil pit bottom residue. The application site is located in Lot 60, T55N, R97W in the county of Big Horn in the State of Wyoming. This permit shall be effective for a period of one (1) year from the date of issuance of this permit.

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

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

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

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

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

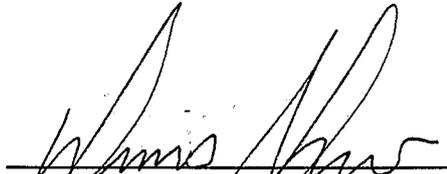
AUTHORIZED BY:



Administrator
Water Quality Division

3/29/94

Date of Issuance


Director
Dept. of Environmental Quality

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

ROAD APPLICATION STANDARD CONDITIONS 1 through 10

This permit is issued with the requirement that the following conditions are met:

1. of 10 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date the road application will begin and the estimated completion date.
2. of 10 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 10 Within sixty days of completion of the road application, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that the road application was completed; and
 - b. Certification the road application was done in accordance with the terms and conditions of the permit; or
 - c. Certification the road application was completed with changes or modifications. Submit the information necessary to clearly indicate the road application as actually performed.
4. of 10 Waste oil and sludge shall be applied by a method and at a rate which will prevent runoff or ponding after incorporation into the road. Applications shall not be initiated during the spring runoff period or other periods where saturated soil conditions exist.

-
5. of 10 The slope of the roads application shall not exceed 8 percent.
 6. of 10 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, except as noted in the application.
 7. of 10 The permittee will contact the Department of Environmental Quality, Water Quality Division District Engineer, Jeff Hermansky phone number 307-332-3144, 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 1/4 section) and time of application.
 8. of 10 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 March 30.
 9. of 10 Only the roads designated in this permit are authorized for application of the waste oil and sludge. Additional or alternate 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.
 10. of 10 The review of this permit and the authorization is based upon the items identified in the attached Statement of Basis.

JH/jm
b/41348.ltr

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-476RR

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. NO

B. Chapter XII. NO

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

NO

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

NO

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

NO

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

There are no numeric standards or criteria in Chapter XI for road application. W.S. 35-11-301 (a) (iii) requires a permit to be issued when any disposal system capable of causing or contributing to pollution is constructed, installed, modified, or operated.

B. Briefly state the basis for the deviation.

Road application is permitted when DEQ authorized disposal facilities are not readily available, a beneficial use of the waste to be applied is possible, and significant impact to waters of the State is minimized.

C. Permit based on general or statewide deviation contained in approved policy statement.

District Policy numbers 10.0 (4/9/91), 10.2 (10/17/86), 10.3 (8/91), 10.4 (10/24/91), and 10.6 (1/18/91) address the statutory authority to regulate the road application of waste, establish the criteria for characterizing the waste, and determine acceptable conditions for the application of the waste to roadbeds to minimize impact to waters of the State. However, a deviation to the 300 foot separation between waterway and roadbed is granted for roadbed less than 300 feet to irrigation ditches. Deviation is granted since runoff will be away from these ditches and the waste contains no free oil.

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

Applicable

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected.

- A. Facility will not allow a discharge to groundwater. Briefly describe:

The opportunity for direct or indirect discharge, percolation, or filtration to groundwater is minimized by uniformly applying the pit sludge onto the roadbed. Repeated applications of sludge on the same sections of road will be monitored by roadbed analyses required for any future applications.

- B. Quality of wastewater is such that it will not cause a violation of groundwater standards. Briefly describe:

N/A

- C. Existing soils or geology will not allow a discharge to groundwater. Briefly describe:

N/A

- D. Basis of facility design is that it will be operated so as not to violate groundwater standards. Briefly describe:

N/A

- E. Discharge will result in groundwater concentrations in excess of standards but post discharge water quality can be returned to standards in accordance with Section 4 (d)(vi), Chapter VIII. Briefly describe:

N/A

Statement of Basis
93-476RR
March 24, 1994

- F. If water quality exceedances are allowed, briefly describe the parameter limits, property boundaries, places of withdrawal and any other information documenting that any users of affected aquifer will not be impacted.

N/A

- G. Briefly describe monitoring system. Clearly state the parameters to be utilized for determining compliance, what constitutes a violation and steps to be followed by the permittee in the event of a violation.

VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

JH/jm/b/41348.ltr



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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May 9, 1994

BRIAN TOWLER
P O BOX 1738
LARAMIE WY 82070

RE: PERMIT CONDITION COMPLIANCE - Construction Schedule Card
Facility: TOWLER RESIDENTIAL SEPTIC SYS
Permit Number: 93-477

Dear Facility Owner:

According to our records it has been over 60 days since the above referenced "Permit To Construct" was issued. One of the specified permit requirements was that the applicant/owner notify the appropriate district office of the Water Quality Division (WQD) via the post card attached to the permit, of the estimated dates that construction will begin and end. Please complete the attached post card and return it to the WQD right away. If the project has already been completed, please complete the required "CERTIFICATION OF COMPLETION" form which was included with the permit when issued.

To be in compliance with the permit these requirements must be followed. If you have any questions please call me at 777-7088.

Sincerely,

Gary Steele
SE District Supervisor
Water Quality Division

GS/nc 42011.LTR

Enclosure: Replacement Schedule Card

cc: Permit Compliance Tracking File

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-477
Reference #93-230
SPECIAL CONDITIONS

Towler Residential Septic System

This permit hereby authorizes the applicant:

Brian Towler
P.O. Box 1738
Laramie, Wyoming 82070

to construct, install or modify a residential septic system according to the procedures and conditions of the application number 93-477. The facility is located in SE 1/4 Section 06 T15N R73W in the county of Albany, in the State of Wyoming. This permit shall be effective for a period of two (2) years from the date of issuance of this permit.

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

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

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

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

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

address: Southeast 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

12-9-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 7. The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 7. The applicant will provide immediate oral and/or written notice to Southeast District Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 7. Within sixty days of completion of construction of the authorized facility, the applicant will submit to the Southeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or

PERMIT NO. 93-477
Reference #93-230

- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
- 4 of 7. Previous Plans #93-230 Void - The plans approved by this permit hereby officially replace and make void the plans previously approved by permit number 93-230.
- 5 of 7. Septic Tank Risers - The two (2) surface risers shown on the septic tank shall have a minimum diameter of at least six (6) inches.
- 6 of 7. Inspection - The permittee shall notify the Albany County Planning Office, 405 Grand Avenue, Laramie, Wyoming 82070, phone number (307) 721-5286 or 721-5283, of the estimated day of completion of this project. Inspection of the installed system is required prior to backfilling. At least one working day (24 hours) notice is required prior to backfilling.
- 7 of 7. The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

RLE/nc 35898.LTR

12/8/97

OK - Albany county requested
assistance on this permit.

93-477

JK

STATEMENT OF BASIS

I. General information.

- A. Permit Number: 93-477, Reference Permit #93-230
- B. Facility Name: Towler Residential Septic System

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

- A. Chapter XI. Yes Part D - Septic Tanks and Soil Absorption Systems
- B. Chapter XII. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

- A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

- B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

- C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

- A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

NOT Applicable

- B. Briefly state the basis for the deviation.

NOT Applicable

- C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

NOT Applicable

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. Note that sediment ponds, public water supplies, sewerage systems, and small wastewater systems are exempt from the requirements of Section 15. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

NOT Applicable

- VI. Deleted

- VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

RLE/nc 35898.LTR

cc: Albany County Planning Office

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-478
SPECIAL CONDITIONS

Missile Drive Fire Line Improvements

This permit hereby authorizes the applicant:

Cheyenne Board of Public Utilities
2406 Snyder Ave.
Cheyenne, WY 82001

to construct, install or modify publicly-owned distribution system according to the procedures and conditions of the application number 93-478. The facility is located in NE 1/4 Section 1, T13N, R67W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit.

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

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

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

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

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

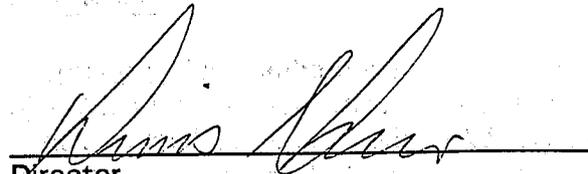
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12-15-93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of The applicant will provide immediate oral and/or written notice to Southeast District Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of Within sixty days of completion of construction of the authorized facility, the applicant will submit to Southeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and

-
- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

GLS/mad 35972.LTR

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-478

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. NO

B. Chapter XII. Yes

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

No

V. Application requires review to determine groundwater impacts in accordance with Section 15, C.M.A.
See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from
the Statement of Basis.)

N/A

VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected.
(Fill out only the applicable sections and indicate sections that are not applicable.)

N/A

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are
exempt from the requirements of Section 15.

33954.DOC

REVIEW OF PLANS AND SPECIFICATIONS

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

PROJECT: Missile Drive Fire Line Improvements

ENGINEER: Herman Noe
Cheyenne Board of Public Utilities
P.O. Box 1469
2406 Snyder Ave.
Cheyenne, WY 82001

APPLICANT: Cheyenne Board of Public Utilities
P.O. Box 1469
2406 Snyder Ave.
Cheyenne, WY 82001

WATER QUALITY REFERENCE NUMBER: 93-478

APPROVING ENGINEER: Gary Steele



DATE OF REVIEW: 12-07-1993

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS, PROBLEMS, INADEQUACIES, and QUESTIONS:

- 1 of 2 Please provide pressure and flow information showing that a minimum of 20 psi pressure can be maintained under all flow conditions, as specified in Chapter XII Section 14 (b).
- 2 of 2 Please provide a description of the fire suppression system in the building to be serviced by the fire line. Also please provide information showing that the cross connection device in the building meets the requirements of AWWA Manual M-14. It must also be shown that the cross connection device is approved by the Foundation for Cross-Connection Control, University of Southern California.

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 93-479
* **CONDITIONED** *

Conoco Rock Springs Terminal Monitoring Wells
(Name of Facility)

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

Conoco, Inc.

6855 Havana Street, Suite 200

Englewood, CO 80112

to install a series of soil borings and monitoring wells according to the procedures and conditions of the application No. 93-479. The facility is located in SE 1/4 Sec. 6, T18N, R105W, approximately three miles west of Rock Springs 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.

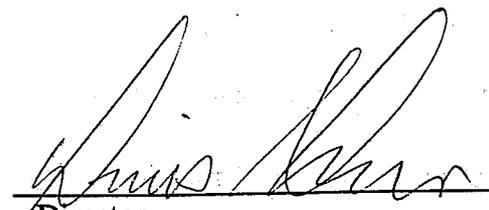
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

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	Director
Water Quality Division	Dept. of Environmental Quality

12-15-93
Date of Issuance

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

DG

CONDITIONS 1 through 7

1. of 7 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 7 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

3. of 7 Within thirty (30) days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln Street, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
 - d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4. of 7 It will be necessary to obtain authorization to drill borings/wells along the highway frontage road from the Wyoming Department of Transportation (WDOT) prior to drilling. Please contact Don Kinder, WDOT Rock Springs, at (307) 352-3032.

5. of 7 All wells and borings shall be surveyed for **location and elevation**.

6. of 7 **Work to assess the site should begin as soon as possible.** This will allow a sampling event at low seasonal groundwater levels and a follow-up sampling event in the Spring during high seasonal groundwater levels.

7. of 7 Once the level and extent of contamination is defined a long term sampling and reporting routine will be prescribed by DEQ/WQD, and discussions about remediation will begin.



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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February 3, 1994

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

**Re: Permit to Construct #93-480
Soil-Vapor Extraction System Expansion (LARCO's East Property Boundary)
LARCO Refinery, Casper, WY**

Dear Mr. Williams:

The Water Quality Division (WQD) has reviewed the referenced Permit to Construct application materials. Comments and requirements are summarized on the enclosed Groundwater Pollution Control (GPC) Program review form.

Please contact me directly should you have any questions.

Sincerely,

Phillip Stump
Phillip Stump
GPC Program Engineer
Water Quality Division

PS/jn - 40541.ltr

enclosures: Groundwater Section Review Form
Applications for Permit to Construct

xc: 1994 Southeast District Review Forms
Kevin Frederick, Supervisor, GPC Program, WQD/Cheyenne
IPS Section, Cheyenne
Tom Aalto, U.S. EPA Region VIII, Denver

GROUNDWATER SECTION REVIEW OF PROPOSALS/PLANS

**WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION**

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002
(307) 777-7781

PROJECT: Soil-Vapor Extraction System Expansion (LARCO's East Property Boundary)

APPLICANT: Little America Refining Co.
P.O. Box 510
Evansville, WY 82636
(307) 265-2800

**APPLICANT'S
ENGINEER:** Klane F. Forsgren
Sinclair Oil Corporation
550 S. Temple
Salt Lake City, UT 84102
(801) 524-2745

WATER QUALITY DIVISION REFERENCE (PERMIT) NUMBER: **93-480**

TITLE: Application for the Permit to Construct Soil-Vapor Extraction Expansion

PROPOSAL **PLANS** **REPORT**

DATE ON PROPOSAL/PLANS/REPORT: November 18, 1993

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

YES **NO**

REVIEWING GEOLOGIST:

Kevin Frederick
Kevin Frederick, P.G., Supervisor, GPC Program
Don Fischer
Don Fischer, Environmental Senior Analyst

REVIEWING ENGINEERS:

Phillip Stump
Phillip Stump, E.I.T., GPC Program Engineer
Jake Strohm
Jake Strohm, P.E., Groundwater Section Manager

DATE OF LAST REVIEW:

N/A

DATE OF THIS REVIEW:

February 3, 1994

ACTION:

NOT AUTHORIZED FOR CONSTRUCTION

I. CONCLUSIONS OF ADEQUACY OF WORK COMPLETED TO DATE:

Presently, substantial free product thicknesses do not appear to exist at the eastern property boundary of Little America Refinery although dissolved hydrocarbon constituents exist in the groundwater. Soil-vapor extraction (SVE) systems can successfully remove adsorbed and vapor phases of contamination in the vadose zone, but typically do not have significant effects on dissolved hydrocarbon constituents in the groundwater. Depending upon site and contaminant-specific conditions, SVE systems can successfully remove LNAPL phase contamination. This proposed SVE expansion will not completely contain the migration of dissolved and LNAPL phase contamination at Little America Refinery's eastern property line.

II. REQUEST/REQUIREMENTS/RECOMMENDATIONS:

1. The authorization of this permit is **contingent on the WDEQ/Air Quality Division (AQD) approval**. Prior to issuance of this permit, WDEQ/WQD, Cheyenne, shall be notified in writing of WDEQ/AQD's approval for permitting or waiving permitting requirements to operate this SVE system expansion.
2. The application for the Permit to Construct needs to be signed by the owner. Please sign the enclosed applications.
3. The Operation & Maintenance (O & M) Manual for the existing SVE system in the Brookhurst area will need to be appended to contain provisions for this expansion. Items to be included in the O & M Manual are set forth in the Groundwater Section Review of Permit No. 92-195 dated February 3, 1994.
4. The permit application must include a proposed **operational monitoring plan** for the expansion to the SVE system that includes the following:
 - a. Perform initial **pilot-scale tests** on the SVE system expansion at various flow rates and vacuums to determine the most efficient operation conditions and the radius of influence of the SVE wells.
 - b. **Existing monitoring wells and SVE wells** located within the radius of influence of the SVE wells that measure:
 - (1) static water levels measured before and after each pilot-scale test to detect any mounding and collapse of the water table, and;
 - (2) dissolved contaminant levels in groundwater (same analytical parameters as in as-built SVE system) and free product thicknesses.

[NOTE: Background contaminant concentrations need to be established before system start-up. Also, measure the water temperature of groundwater samples.]

- c. **Soil-vapor monitoring points** located at differing horizontal distances away from each SVE well and within the anticipated radius of influence. The twelve (12) existing soil-vapor monitoring wells (VM-1 through VM-12) located between the SVE wells along the eastern property line could be utilized as soil-vapor monitoring points. During the initial

Little America Refining Co.
Soil-Vapor Extraction System Expansion
Application for Permit to Construct #93-480
Page 3

pilot-scale tests, the soil-vapor monitoring points shall measure the air pressure/vacuum within the soil-vapor point at the wellhead.

(NOTE: Monitoring wells/ piezometers with screens extending into the vadose zone can also be used as soil vapor points for monitoring vadose zone pressures/vacuums.

- d. During initial pilot-scale tests and weekly thereafter, the vacuum/pressure levels at each SVE wellhead shall be measured.
5. In the permit application, Little America Refinery shall propose to submit a report after the first three months of operation of this expansion to the SVE System. The report shall summarize and document all monitoring data and provide an evaluation of the performance of the pilot-scale tests. At a minimum the report shall contain the following:
- a. A description of the pilot-scale SVE tests and an analysis of the empirical data from the tests which includes:
 - (1) performance results (radius of influence of SVE wells, effects on free product and dissolved contaminants, water table mounding, etc.);
 - (2) documentation of any shut-downs or downtime (problems encountered and responses taken).
 - b. Empirical data shall be presented in tabular form (dissolved benzene, oil & grease, and lead concentrations, distillation curve data from hydrocarbon sampling, etc.) and in graphical form (soil vacuum levels in soil-vapor monitoring points vs. the horizontal distance from the SVE well and vs. the duration of the pilot-scale test), and;
 - c. Plan view maps of the site illustrating:
 - (1) the radius of influence of the SVE wells;
 - (2) potentiometric surface illustrating any mounding or collapse of the water table attributed to the operation of the SVE system;
 - (3) locations of all existing SVE and monitoring wells, piezometers, and soil-vapor monitoring points;
 - (4) dissolved contaminant concentrations at respective locations from the monitoring well sampling data, and;
 - (5) if present, free product thickness contours.

6. Provide material and design specifications for the equipment of the SVE system expansion, such as the knockout pot, valves, flow and pressure meters, piping, etc.. Provide the operating constraints and the basis for design and sizing of the treatment processing units (i.e., average and maximum air flow rates, maximum operating vacuums, etc.) and submit copies of manufacturers' specification sheets.
 - a. Document that the existing SVE system (i.e., blowers, ARI unit, etc.) can handle the additional capacity of the expansion.
 - b. Document the compatibility of the materials (i.e., piping, valves, etc.) to the anticipated contaminants.
7. Clarify the following design considerations of the expansion to the SVE system illustrated in the 'East Boundary to Brookhurst Extension' plan submitted with the application materials.
 - a. The knock-out pot for the expansion does not appear to be connected to a storage tank or to lines leading to the wastewater treatment facility for draining accumulated liquids.
 - b. Is the main piping line connecting the SVE wells to the knockout pot, and the pipe connecting each SVE well sloped to prevent accumulation of condensed liquids? Please document the direction of slope and the reasons for sloping the pipes.
 - c. Has permission been granted to install piping below Rawhide Rd. and to cross the Evansville water line?
8. As outlined in the WDEQ/WQD review of Permit No. 92-195RR dated February 3, 1994, Little America Refinery shall propose to submit an annual report summarizing all monitoring of SVE System in the Brookhurst Subdivision. The monitoring of the East Property Boundary Expansion to the SVE System shall also be proposed for inclusion in this annual report. This report shall describe plans and schedules for future operation of the system. This annual reporting schedule shall be adhered to, unless changes are required upon WDEQ/WQD's reviews of submitted reports.

RF



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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July 17, 1995

Wyoming Air National Guard
ATTN: Capt. Roy W. Hockenberry
Headquarters 153rd Airlift Group
217 Dell Range Blvd.
Cheyenne, Wyoming 82002

RE: O&M Manual Required for Permit To Construct: 93-481

Dear Capt. Hockenberry:

The Water Quality Division(WQD) of the Wyoming Department of Environmental Quality received a Certification of Completion form for permit # 93-481 in March 1995 which indicated that the facility was constructed in compliance with the terms and conditions of the permit. However, a review of our files indicates that one of the permit conditions (condition 5 of 5) was that "An Operation and Maintenance Manual shall be submitted and approved by this office prior to placing the Deicing Pad in service." Our records also indicate that no such O&M manual was ever received by this office.

To be in compliance with the terms of the permit this O&M manual must be submitted for review. Therefore, within 30 days of receipt of this letter submit the required O&M manual.

If you have any questions, please call me at (307) 777-7088.

Sincerely,

Gary Steele
SE District Engineer
Water Quality Division

GS/RLE/nc 53089.LTR
cc: Permit To Construct File 93-481
Permit Compliance Tracking File



THE STATE OF WYOMING

MIKE SULLIVAN
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 10, 1994

WYOMING AIR NATIONAL GUARD
217 DELL RANGE BLVD
CHEYENNE WY 82009-4799

RE: **PERMIT CONDITION COMPLIANCE** - Construction Schedule Card
Facility: WY AIR NAT GUARD DEICING PAD
Permit Number: 93-481

Dear Facility Owner:

According to our records it has been over 60 days since the above referenced "Permit To Construct" was issued. One of the specified permit requirements was that the applicant/owner notify the appropriate district office of the Water Quality Division (WQD) via the post card attached to the permit, of the estimated dates that construction will begin and end. Please complete the attached post card and return it to the WQD right away. If the project has already been completed, please complete the required "CERTIFICATION OF COMPLETION" form which was included with the permit when issued.

To be in compliance with the permit these requirements must be followed. If you have any questions please call me at 777-7088.

Sincerely,

Gary Steele
SE District Supervisor
Water Quality Division

GS/nc 42467.LTR

Enclosure: Replacement Schedule Card
cc: Permit Compliance Tracking File

M

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

PERMIT NO. 93-481
SPECIAL CONDITIONS

Wyoming Air National Guard Deicing Pad

This permit hereby authorizes the applicant:

Wyoming Air National Guard
217 Dell Range Blvd
Cheyenne, WY 82009-4799

to construct, install or modify Wastewater Facility according to the procedures and conditions of the application number 93-481. The facility is located in SW 1/4 Section 19, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit.

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

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

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

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

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

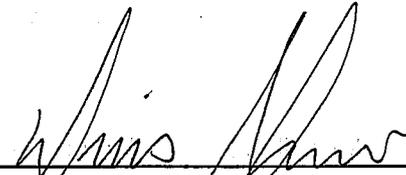
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

4-5-94

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 5 The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 5 The applicant will provide immediate oral and/or written notice to Southeast District Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 5 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Southeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and
 - c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or

d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of 5 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

5 of 5 An Operation and Maintenance Manual shall be submitted and approved by this office prior to placing the Deicing Pad in service.

GLS/nc 41438.LTR

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-481

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. Yes

B. Chapter XII. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

N/A

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

N/A

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

- C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

N/A

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

N/A

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

N/A

- VII. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

GLS/nc 41438.LTR

REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: Wyoming Air National Guard Deicing Pad

ENGINEER: Daryl G. Johnson, PE
AVI PC
2035 Westland RD.
Cheyenne, WY 82001

APPLICANT: Wyoming Air National Guard

WATER QUALITY REFERENCE NUMBER: 93-481

APPROVING ENGINEER: Gary Steele



DATE OF REVIEW: 12-27-93

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS, PROBLEMS, INADEQUACIES, and QUESTIONS:

The application package as submitted is incomplete. A complete review can not be done until the following items have been submitted.

- a) A permit application signed by the owner needs to be submitted in accordance with Chapter 3 Section 6 of the Water Quality Rules and Regulations.
- b) A design report that provides the information required in Chapter XI Section 6 of the Water Quality Rules and Regulations. The design report should include all rainfall and flow data and calculations to show that the mechanical and piping systems are sized properly. The operation of the Deicing operation should be addressed in detail in the report.
- c) Specifications in accordance with Chapter XI Section 7 for the installation and testing of the mechanical and piping systems needs to be provided.

A brief review of the plans indicates the following items need to be addressed.

- a) The plans need to be stamped by a Registered Professional Engineer in accordance with Chapter XI Section 7 of the Water Quality Rules and Regulations.

- b) The water service connection needs to have a cross connection device placed in the line in accordance with Chapter XII, Section 14(i) of the Water Quality Rules and Regulations. The cross connection device is to be in accordance with AWWA Manual M-14 and approved by Foundation for Cross-Connection Control, University of Southern California.
- c) The plans need to indicate the surface discharge point of the storm sewer that the deicing pad is hooked to. If the surface discharge point is not the existing collection pond on the airport an NPDES permit will be required.
- d) Additional elevations for the top of the deicing pad need to be provided. It appears on the plans that the southeast corner of the deicing pad is low and that the pad will have very little containment on this area.

As indicated previously an O&M Manual will be required for this facility and it will need to be approved by this office prior to placing the deicing pad into operation. It will also be required that the O&M Manual address a direct discharge of glycol to both the storm sewer and the sanitary sewer.

Please address the items given above and submit 3 copies of a permit application, design report, specifications and revised plans.

/nc 36267.LTR

PERMIT TO CONSTRUCT

New

PERMIT NO. 93-482
(SEE SPECIAL PERMIT CONDITIONS)

Renewal

Modified

HALLIBURTON PROPERTY MONITORING WELLS (UST FAC ID# N/R)
(Name of Facility)

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

Stanley Mundorf
P.O. Box 1456
Casper, Wyoming 82602

to construct, install or modify test holes and monitoring well facilities according to the procedures and conditions of the application No. 93-482. The facility is located in the SESW & SWSE Sections 3, 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 one (1) year from the date of issuance of this permit.

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

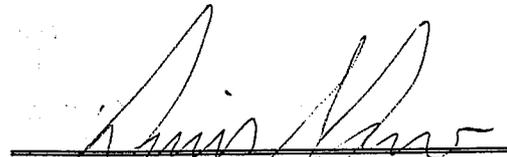
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

3-11-94

Date of Issuance

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

Standard UST/LUST Monitoring Well (Subsurface Investigation) Conditions

- 1 of 14. 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 93-482. Additional wells meeting the requirements of this permit may be installed during the term of this permit if prior approval is received from the Water Quality Division (WQD).
- 2 of 14. The applicant is responsible for obtaining any permits required by the State Engineer's Office (307/777-7354).
- 3 of 14. DEQ/WQD district personnel shall be given at least two (2) weeks notice prior to the scheduled installation of groundwater monitoring wells and prior to groundwater sample collection events to allow DEQ/WQD personnel to be on site if deemed necessary.
- 4 of 14. Monitoring well construction must meet the requirements of Chapter XI Wyoming Water Quality Rules and Regulations. Monitoring well casings shall meet the conditions provided in Chapter XI, Section 67. All

Permit #93-482

Halliburton Property Monitoring Wells (FAC ID# N/R)

monitoring wells must be constructed from materials free of material having the potential to contaminate groundwater samples.

- 5 of 14. All downhole equipment shall be de-contaminated between wells (borings) to minimize the potential for cross-contamination. Decontamination water and well development water shall be collected and disposed of at a facility approved by the WQD.
- 6 of 14. Borehole cuttings must be screened and disposed of properly. Cuttings containing petroleum hydrocarbon contaminants with concentrations greater than the Wyoming UST/LUST allowable limits must be disposed of at a site approved by the DEQ's Solid and Hazardous Waste Management Division (307/777-7752).
- 7 of 14. 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. At least one of the monitoring wells or devices shall intercept the original underground storage tank (UST) installation excavation zone or be as close to it as is technically feasible;
 - b. The borehole diameter shall be at least four (4) inches larger in diameter than the casing diameter;
 - c. When PVC casing is used, the casing shall be installed using threaded joints, couplings, or mechanical connectors without the use of solvents or glues to hold the casing sections together;
 - d. For water table (unconfined) aquifers, the screened interval shall extend at least two (2) feet above the highest expected groundwater level and at least two (2) feet below the lowest expected groundwater level. Monitoring wells installed in confined and semi-confined aquifers shall be constructed in accordance with Chapter XI, Section 68 of Water Quality Division Rules and Regulations. Factory screen or slotted casing is recommended for the perforated interval;
 - 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. The filter pack shall extend to a minimum of one (1) foot above the screened interval;

- f. Filter pack, annular seal, and surface seal material shall be entered into the annular space in a manner such that no voids or bridging occur;
- g. A minimum two (2) foot thickness of bentonite or bentonite grout is required at the top of the filter pack to serve as an annular seal. After the bentonite has been placed in the annular space, it shall be hydrated to insure a proper seal;
- h. The annular space above the bentonite seal to within one foot (1') of the surface will be sealed with Portland cement, sand-cement grout, or bentonite grout;
- i. A protective casing shall be cemented into place when the upper one (1) foot of the annular space is completed with cement, and a concrete apron will be formed around the protective casing that slopes away from the well;
- j. A top and bottom cap of the same material as the well casing shall be installed to prevent sediment and surface water from entering the well casing;
- k. 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 Water Quality 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 at the base; and
- l. The monitoring well shall be developed using one of the following methods: Overpumping, water surging, air surging, or jetting. Well development should settle the filter pack, alleviate bridging, and remove any fines from the pack and casing.

8 of 14. 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.

9 of 14. The groundwater monitoring wells installed in accordance with this permit to construct will be used to perform the following actions and determinations:

- a. determine the depth to groundwater prior to each sampling event;

Permit #93-482

Halliburton Property Monitoring Wells (FAC ID# N/R)

- b. determine product thickness at those wells having floating product;
- c. collect groundwater samples twice, if no floating product is evident, with the second sampling event occurring a minimum of thirty (30) days after the first sampling event;
- d. field filter samples of groundwater if they are to be analyzed for metals;
- e. analyze groundwater samples for the following parameters (laboratory must be EPA certified to perform analyses under the Safe Drinking Water Act):

LOCATIONS WHERE UNLEADED GASOLINE IS/WAS STORED:

- 1. TPH for gasoline range organics (EPA Method 8015)
- 2. BTEX (EPA Method 8020)

LOCATIONS WHERE LEADED GASOLINE IS/WAS STORED:

- 1. TPH for gasoline range organics (EPA Method 8015)
- 2. BTEX (EPA Method 8020)
- 3. Total Lead (EPA Method 239.2)

LOCATIONS WHERE FUEL OILS ARE/WERE STORED (Incl. Diesel):

- 1. TPH for diesel range organics (EPA Method 8015)

LOCATIONS WHERE USED/WASTE OIL IS/WAS STORED:

- 1. TPH for diesel range organics (EPA Method 8015)
- 2. BTEX (EPA Method 8020)
- 3. Total Lead (EPA Method 213.9)
- 4. Total Cadmium (EPA Method 213.2)
- 5. Total Chromium (EPA Method 218.1)

ALL LOCATIONS:

- 1. Volatile Organic Compounds [VOC's] (EPA Method 524.2)

10 of 14. Proper monitoring well evacuation for groundwater sample collection shall include removal of a minimum of three (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 QA/QC procedures.

11 of 14. Water collected during monitoring well development or well evacuation which contains petroleum hydrocarbon concentrations above the Wyoming UST/LUST allowable limits must be disposed of properly. The

permittee must contact the city for authorization to dispose into the local storm sewer, sanitary sewer, wastewater treatment plant, or other facility.

- 12 of 14. Within ninety (90) days of completion of site work the permittee shall submit an installation/investigation report to the appropriate WQD district office. This report shall contain at a minimum:
- a. A chronology of events leading up to the well installations;
 - b. A site map showing the physical features, monitoring well/borehole locations, and mean sea level elevations of the top of the well casings and/or measuring points to the nearest 0.10 of a foot;
 - c. Documentation demonstrating that contaminated soil and water from wells and from drilling operations has been disposed of at approved sites;
 - d. The exact surveyed locations of the center of monitoring well casings being installed under this permit. The locations will be given using the Wyoming State Coordinate System, or tied to the nearest permanent state land survey marker, and shall provide horizontal accuracy to the nearest 0.10 of a foot;
 - e. The final surveyed location, construction details, and lithologic logs of monitoring wells, and boreholes not completed as wells, using the format shown on the WQD's "Borehole Completion Diagram" and "Monitoring Well Completion Diagram" forms;
 - f. Geohydrologic maps and/or cross sections that clearly describe the subsurface distribution of geologic lithology, depth to water, and groundwater occurrence;
 - g. Sample collection and QA/QC procedures used;
 - h. Photocopies of laboratory reports;
 - i. A map delineating the extent of the subsurface contamination including LNAPL (free product), soil and dissolved groundwater contamination and concentrations;
 - j. A potentiometric surface map showing the direction and gradient of groundwater flow; and
 - k. An interpretation of the data and conclusions of the investigation, including additional recommended investigation

Permit #93-482

Halliburton Property Monitoring Wells (FAC ID# N/R)

and remedial measures, and a schedule for implementation of these measures if applicable.

13 of 14. 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 intent and/or 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 nature and extent of the contamination.

14 of 14. 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. In addition, borings in public use areas, particularly paved streets and alleys, shall be abandoned in accordance with city, county, and/or highway department requirements. No monitoring well shall be abandoned without prior approval from the Water Quality Division.

SCF:3/1/94
b/41060.LTR

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-482

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. Yes

B. Chapter XII. No

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

Yes

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

Chapter XI, Section 63 - Deviation granted for wells prevented by physical limitations (shallow depths) to adherence to the requirements on minimum depths of seal below the ground surface.

B. Briefly state the basis for the deviation.

Shallow depth of well.

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

N/A

V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

Applicable - The permit is to determine if site is contaminated from USTs removed previously.

VII. Documentation of Statement of Basis.

A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

PERMIT TO CONSTRUCT

X New
Renewal
Modified

PERMIT NO. 93-483
SPECIAL CONDITIONS

Oak Valley Subdivision - 2nd Filing

This permit hereby authorizes the applicant:

Cheyenne Board of Public Utilities
2100 Pioneer Ave.
Cheyenne, WY 82001

to construct, install or modify public water distribution system and wastewater collection system according to the procedures and conditions of the application number 93-483. The facility is located in NE 1/4 Section 19, T14N, R66W in the county of Laramie, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit.

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

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

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

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

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

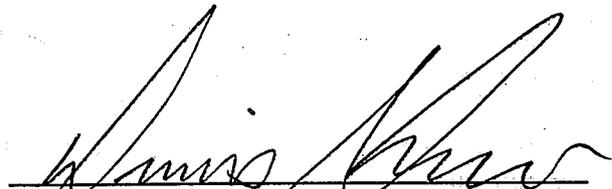
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable state law or regulation.

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

12/20/93

Date of Issuance

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

SPECIAL CONDITIONS

- 1 of 4 The applicant will notify the appropriate district office of the Water Quality Division, Department of Environmental Quality, by the attached post card of the date construction will begin and the estimated completion date.
- 2 of 4 The applicant will provide immediate oral and/or written notice to Southeast District Office in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
- 3 of 4 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Southeast District Office on the form provided (CERTIFICATION OF COMPLETION), the following information:
 - a. Date that construction of the facility was completed; and
 - b. Date that the facility was placed in operation; and

- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4 of 4 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

GLS/jn - 36106.ltr

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-483

II. Application reviewed for compliance with the following regulations. (Indicate yes or no for each section.)

A. Chapter XI. Yes

B. Chapter XII. Yes

III. Basis for issuing permit. (Indicate yes or no for each section.)

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations. (Indicate the section number of the regulations and briefly summarize the regulation.)

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement (indicate the policy number and briefly summarize the nature of the deviation).

N/A

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III. See footnote. (Indicate either applicable or not applicable. If not applicable delete all of section VI. from the Statement of Basis.)

N/A

- VI. If Section 15 of Chapter III is applicable, indicate the basis of determining groundwater will be protected. (Fill out only the applicable sections and indicate sections that are not applicable.)

N/A

Footnote: Sediment ponds, public water supplies, sewerage systems and small wastewater systems are exempt from the requirements of Section 15.

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 93-484R
*** CONDITIONED ***

Community Bible Church Water & Sewer
(Name of Facility)

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

Community Bible Church

Russell M. Wood, VP

P.O. Box 7700

Jackson, WY 83001

to construct a four (4) inch diameter water service line, and two (2) - six (6) inch sewer lines according to the procedures and conditions of the application No. 93-484R. The facility is located in SW1/4NW1/4, Section 6, T40N, R116W, Town of Jackson 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.

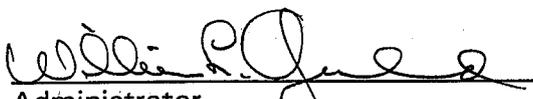
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

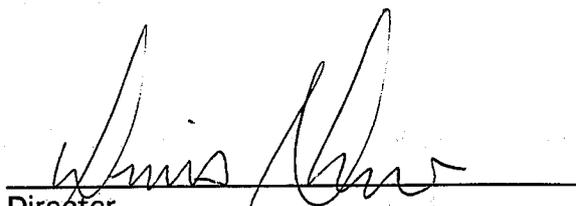
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

1-27-94

Date of Issuance

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

GL - 40392.LTR

STANDARD CONDITIONS 1 through 4

1. of 4 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.

2. of 4 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.

3. of 4

Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.

- a. Date that construction of the facility was completed; and
- b. Date that the facility was placed in operation; and
- c. Certification the facility was constructed in accordance with the terms and conditions of the permit; or
- d. Certification the facility was completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.

4. of 4

The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-484R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. Yes

B. Chapter XII. Yes

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

Yes

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

No

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

No

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

Statement of Basis
93-484R
January 26, 1994

- V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

N/A

- VI. Documentation of Statement of Basis.

- A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

REVIEW OF PLANS AND SPECIFICATIONS
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION

Herschler Bldg., 4 West
Cheyenne, Wyoming 82002

PROJECT: Energy Fuels Nuclear, Reno Creek ISL Project Treatment Ponds

ENGINEER: Allan J. Breitenbach, WESTEC, 5600 South Quebec Street, Suite 319-B,
Englewood, Colorado 80111

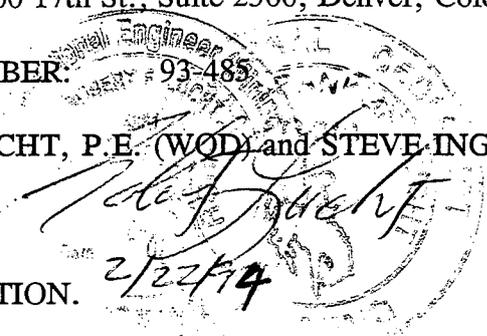
APPLICANT: Energy Fuels Nuclear, Inc., 1200 17th St., Suite 2500, Denver, Colorado 80202

WATER QUALITY DIVISION REFERENCE NUMBER: 93-485

REVIEWING ENGINEER: ROBERT F. LUCHT, P.E. (WQD) and STEVE INGLE (LQD)

DATE OF REVIEW: 02/22/1994

ACTION: NOT AUTHORIZED FOR CONSTRUCTION.



COMMENTS:

1. The company has done little to describe the quality of the water to be placed in the irrigation reservoir and in particular, the 0.06 mg/l estimate for selenium. At the end of mining Ruth contained over 4 mg/l, and Irigaray had over 3 mg/l. The company has not supplied any measured data concerning the permeability of the underlying material and as such the leakage rate from the pond cannot be determined. Reclamation plans for the irrigation reservoir and the barium chloride ponds are not included in this document. (Steve Ingle)
2. Page 5. No provision has been made for pond cleanout for the radium settling ponds. (Steve Ingle)
3. Please include a discussion of the NRC involvement relative to the barium chloride ponds and byproduct disposal requirements. (Steve Ingle)
4. Figure 1.5. Please explain the purpose of the use of the RO unit, when the brine stream is added to the water entering the Radium Settling Ponds. (Steve Ingle)
5. Figure 1.4. This figure should show the location in the circuit of the reverse osmosis unit. (Steve Ingle)

6. Page 7. The company has made the assumption that the selenium levels will be .06 mg/l. This value is extremely low when compared to other operations. Please provide justification for this value. (Steve Ingle)
7. Page 9. Please provide the geophysical logs for the drill holes used to describe the lithology beneath the irrigation reservoir. (Steve Ingle)
8. Page 9. The text states that seepage rates to the Upper Aquifer will be low, "and movement of water will take a very long time." Please provide the technical information used to justify this statement. The values presented on page 10 are assumptions. (Steve Ingle)
9. Page 10. How was the vertical permeability for the mudstone unit determined? How was the effective porosity determined? (Steve Ingle)
10. Page 10. The approximate travel time to the first aquifer does not appear to account for sands between the bottom of the reservoir and the aquifer. Please clarify or correct this calculation. (Steve Ingle)
11. Page 10. The test pit information provided in Appendix B indicates that the irrigation pond is not uniformly underlain by clay material. These units were not considered in the leakage volume calculations. (Steve Ingle)
12. Section 8, page 16. The text states that the diversion designs are presented in Appendix F. Appendix F contains the hydrographs and runoff calculations, but the diversion ditch sizing could not be found. Please provide the size, cross-sectional area and freeboard for the ditches. (Steve Ingle)
13. Section 4, page 11. The regional well proposed to detect and quantify changes in groundwater quality attributable to the waste disposal operation is located too far from the operation to provide meaningful data. The monitoring well should be located proximal to the waste system. (Steve Ingle) This well is not acceptable for monitoring the underlying aquifer. The proposed permit conditions included with this review propose three monitoring well locations. Please comment on these proposed locations. (Bob Lucht)
14. The company has committed to sample the material beneath the pond for suitability. The suitability criteria should be based on Guideline 1 criteria. (Steve Ingle)
15. The stability analysis is for a partially saturated embankment, with water leaving the toe of the embankment. Commitments to emplace shallow monitor wells and sample soils and vegetation adjacent to the down-dip portion of the reservoir should be made. (Steve Ingle)

Proposed Conditions for
Permit to Construct 93-485
(all by Bob Lucht)

Note: Conditions 1 through 4 apply to the lined Barium Chloride Treatment Ponds.

- 1 of 13. The issuance of this permit requires the permittee to completely contain the in situ mining bleed stream wastes within the primary liner of the two cell barium chloride treatment impoundments at the Reno Creek ISL facility. Any discharge past the secondary liner is a violation of this permit.
- 2 of 13. Any wastewater detected in the secondary liner leak detection system shall be reported to the DEQ by telephone at 777-7095 within 24 hours after discovery and the permittee shall implement a department authorized corrective action plan to repair the cause of the leakage within thirty days. Correction of cause of the release shall be accomplished within ninety (90) days unless another acceptable time frame is agreed to by the DEQ/WQD at the time of detection report. The permittee shall follow up with a written report within sixty (90) days to the DEQ/WQD, 122 West 25th Street, Cheyenne, WY 82002, ATTN: UIC Program Supervisor providing the cause of the leakage, actions taken or completed to correct the cause and the status of the leak detection system.
- 3 of 13. Energy Fuels Nuclear shall install a metering device on the outfall end of the barium chloride treatment pond in conformance to Chapter XI, Section 30(g). Meter readings showing the total volume of water from the totalizer on this meter shall be reported for each quarter as part of the quarterly report on the Permit to Mine.
- 4 of 13. Energy Fuels Nuclear shall sample the effluent from the Barium Chloride Ponds on a quarterly basis for Radium 226. At no time shall the effluent from the Barium Chloride treatment ponds contain more than 30 pCi/l of Radium 226. Exceedance of this value is a violation of this permit.

Note: Conditions 5 through 13 apply to the unlined Purge Storage Reservoir:

- 5 of 13. The issuance of this permit allows the permittee to discharge wastes from the unlined Purge Storage Reservoir at Reno Creek to the subsurface provided the groundwater quality concentration of any constituent in the aquifer immediately below the facility does not exceed the class of use standard for class III groundwater as contained in Chapter VIII, Wyoming Water Quality Rules and Regulations. A permit violation exists when analytical results of samples taken from the compliance monitor wells installed for this purpose exceed the class of use standards for class III groundwater of the state. These monitoring wells shall be located within 25 feet of the following coordinates as shown on Westec Drawing 35701-05 which as submitted as part of the application:

Monitor Well Pond-1	1,094,000 N	371,500 E
Monitor Well Pond-2	1,093,500 N	372,250 E
Monitor Well Pond-3	1,094,000 N	372,500 E

6 of 13. The permittee shall monitor the wells for the parameters and at the frequency listed in the table below. The compliance monitoring reports and any other monitoring accomplished shall be submitted to the District Engineer, Land Quality Division, 2161 Coffeen Avenue, Sheridan, WY 82801, and the UIC Program Supervisor, Water Quality Division, 122 West 25th Street, Cheyenne, WY 82002 within thirty (30) days following the end of the sampling period. This report shall be made a part of the quarterly report required by the Permit to Mine issued by this department. Any analytical result above the limit in this table is a violation of the permit.

WELL NAME OR NUMBER	SAMPLING SCHEDULE	ANALYTICAL METHOD	PARAMETER ANALYZED	PERMIT LIMIT
Pond Monitor Wells 1,2, and 3	Annually	EPA Method 270.2	Selenium	0.05
		EPA Method 206.2	Arsenic	0.20
		EPA Method 908.1	Uranium	5.0
		EPA Method 160.1	Total Dissolved Solids	5,000
		EPA Method 375.2	Sulfates	3,000
		EPA Method 903.1	Radium 226 result in pCi/l	30 pCi/l

All analytical results are in mg/l unless otherwise indicated.

7 of 13. Energy Fuels Nuclear shall install a metering device on the outfall from the purge storage reservoir in conformance to Chapter XI, Section 30(g). Meter readings showing the total volume of water from the totalizer on this meter shall be reported for each quarter as part of the quarterly report on the Permit to Mine.

8 of 13. At this time, the quality of the water to be stored in the purge storage reservoir can be projected, but its exact composition is unknown. Within 90 days of placing these ponds in operation, Energy Fuels Nuclear shall analyze the wastewater in the purge storage reservoir for all parameters listed in Guideline 8 for Uranium Insitu operations. These analyses shall be reported to the Land Quality Division and the Water Quality Division with the first quarterly report after they become available. The quarterly report referred to is the report required by the Mining Permit. The department reserves the right to add parameters to the list of parameters being analyzed under conditions 4 and 6 of this permit if information is submitted which would indicate that other parameters should be analyzed. In conjunction with any addition of parameters the department may add additional permit conditions to this permit.

- 9 of 13. Reclamation of the sites of both reservoirs shall be in accordance with the reclamation section of the Permit to Mine issued by the department. In the event that seepage from the Purge Storage Reservoir affects any soil, causing it to be unusable for reclamation purposes, Energy Fuels Nuclear shall follow provisions covered in the Permit to Mine issued by the department.
- 10 of 13. This permit does not authorize any discharge of water to the surface and does not authorize land application of the wastewater in the Purge Storage Reservoir. Any such discharge or land application of wastewater shall be covered by a separate permit issued by the Water Quality Division.
- 11 of 13. Energy Fuels Nuclear shall perform soil sampling near the toe of the dam on the Purge Storage Reservoir for baseline data prior to operation of the system. Energy Fuels Nuclear shall obtain soil samples from at least two sites near the toe of each dam of the reservoir and submit the data in the next Annual Report to the Land Quality Division. This information is to be used in the event that seepage occurs through the dike and causes soils outside of the stripped area to become unusable for reclamation.
- 12 of 13. The Wyoming State Engineer's Office requires a permit approval before any surface impoundment can be used. Energy Fuels Nuclear shall submit a copy of an approved reservoir permit, issued to EFN, to the DEQ before the reservoir is used.
- 13 of 13. Prior to use of any facility authorized by this permit, Energy Fuels Nuclear shall obtain either: 1) title to the property; or 2) a valid easement from the surface owner allowing the use of this property; or 3) written consent from the landowner.

/jn - 40879.ltr

cc: Glenn Mooney, District III
Georgia Cash
Jim Luther
Jake Strohman, WQD

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 93-486R
* **CONDITIONED** *

Teton Village Water Supply Project - Well Drilling
(Name of Facility)

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

Teton Village Water and Sewer District

P. O. Box 586

Teton Village, WY 83025

to construct one exploration and two 1000-gpm water supply wells according to the procedures and conditions of the application No. 93-486R. The facility is located in SW and NW¼'s Section 19, T42N, R117W 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.

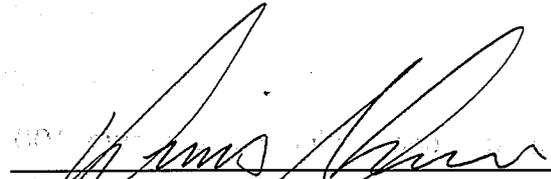
Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities or penalties established pursuant to any applicable State law or regulation.

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

AUTHORIZED BY:



Administrator
Water Quality Division



Director
Department of Environmental Quality

2-15-94

Date of Issuance

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

JH/jyi-40703.ltr

CONDITIONS 1 through 6

1. of 6 The applicant will notify the appropriate district office of the Department of Environmental Quality, Water Quality Division, by the attached post card of the date construction will begin and the estimated completion date.
2. of 6 The applicant will provide immediate oral and/or written notice to Water Quality Division, 250 Lincoln, Lander, WY 82520, (307) 332-3144, in accordance with the provisions of Section 9, Chapter III, Wyoming Water Quality Rules and Regulations of any changes or modifications which are not consistent with the terms and conditions of this permit.
3. of 6 Within sixty days of completion of construction of the authorized facility, the applicant will submit to Water Quality Division, 250 Lincoln, Lander, WY 82520, on the form provided (CERTIFICATION OF COMPLETION), the following information.

- a. Date that construction of the wells were completed; and
- b. Date that the wells were placed in operation; and
- c. Certification the wells were constructed in accordance with the terms and conditions of the permit; or
- d. Certification the wells were completed with changes or modifications. Submittal of as-constructed plans and specifications for the system as it was constructed, certified by an engineer if appropriate.
- e. All well pump test data and drilling logs.
- f. Copies of the water quality testing data required by the EPA.
- g. Well screen selection justification.

4. of 6 Piping, control, valves, chlorination system backup generator and other appurtenances necessary to bring the wells into service in accordance with the Water Quality Division regulations, must be permitted under a separate application.

5. of 6 Distribution system piping upgrades as referenced in the Teton Village Water Supply Study, Level 1 dated October, 1991, must be permitted and constructed in order to bring the system into compliance with the supplying and pressure requirements of the Water Quality Rules and Regulations, Chapter XII.

6. of 6 The review and approval of this permit is based upon the items identified in the attached "Statement of Basis".

STATEMENT OF BASIS

I. General information.

A. Permit Number: 93-486R

II. Application reviewed for compliance with the following regulations.

A. Chapter XI. NO

B. Chapter XII. YES

III. Basis for issuing permit.

A. Review of application package indicates proposed facility will be in compliance with applicable regulations identified in Section II.

YES

B. Permit includes deviation from applicable regulations in accordance with Section 5, Chapter XI, or XII.

NO

C. Permit based on deviation from applicable regulations in accordance with approved policy statement.

NO

IV. Facilities not specifically covered by regulations.

A. Identify specific sections of the regulations for which a deviation is approved and briefly summarize the regulation.

N/A

B. Briefly state the basis for the deviation.

N/A

C. Permit based on general or statewide deviation contained in approved policy statement.

N/A

V. Application requires review to determine groundwater impacts in accordance with Section 15, Chapter III.

NOT

VI. Documentation of Statement of Basis.

A. The archives file for this permit will include adequate documentation of all sections of this Statement of Basis.

THE UNIVERSITY OF CHICAGO

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