

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 81-951  
SEE SPECIAL CONDITION

Sheila Cooper Building  
(Name of Facility)

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

Sheila Cooper  
1311 Bon Avenue  
Casper, WY 82602

to construct, install, or modify a subsurface sewage disposal facility according to the procedures and conditions of the application No. 81-951. The facility is located in Section 20, T34N, R75W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

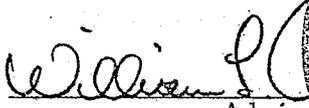
The permittee shall allow authorized representatives from the Department of Environmental Quality, Water Quality Division, upon the presentation of credentials and during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions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

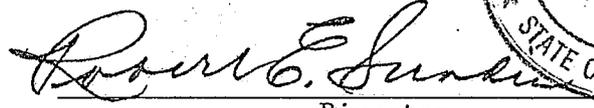
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of the project. The authorized representative in your area can be contacted at the following address: Water Quality Construction Projects Control Officer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 30, Sheridan, Wyoming 82801; telephone, 672-6457.

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

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

AUTHORIZED BY:

  
WILLIAM L. GARLA  
PE # 1479  
Administrator  
Water Quality Division  
STATE OF WYOMING  
December 30, 1981  
Date of Issuance

  
ROBERT E. SUNDIN  
NO. 285  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF WYOMING  
Director  
Dept. of Environmental Quality

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

cc: Ed S. Rate, Jr.  
Western Construction  
P.O. Box 930  
Casper, WY 82602

Conditions to Permit to Construct

The intent of the construction authorized by this permit is to provide facilities for the interim treatment of wastewater until such time that treatment is available through a regional wastewater system. The Casper Urban Water Quality Management Plan requires that treatment be provided through a regional system. The facilities authorized by this permit will be operated until services are available through the approved regional system. At that time these facilities will be abandoned or integrated into the regional system in accordance with the requirements of the Casper Urban Water Quality Management Plan and the Final 201 Facility Plan.

5-27-82

PERMIT TO CONSTRUCT

- New  
 Renewal  
 Modified

Permit No. 81-952RR

Webb Creek Ranches  
(Name of Facility)

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

Webb Creek Homeowner's Association

5049 Alcova Rt., Box 19

Casper, WY 82601

to construct, install, or modify a public water supply source development well facility according to the procedures and conditions of the application No. 81-952RR. The facility is located in Section 28, T33N, R80W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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

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

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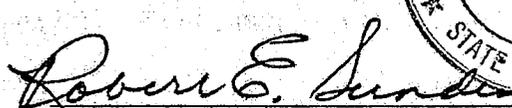
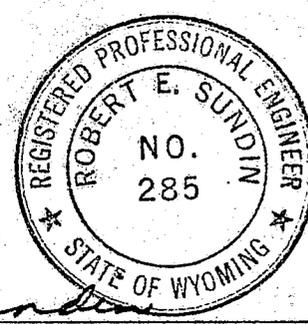
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AUTHORIZED BY:

  
WILLIAM L. GARLAND  
Administrator  
Water Quality Division  
E.# 1479  
May 18, 1982  
Date of Issuance  


  
ROBERT E. SUNDIN  
Director  
Dept. of Environmental Quality  


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

cc: C. K. Wolz  
Wolz & Associates  
933 W. 14th St.  
Casper, WY 82601

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1111 East Lincolnway  
Cheyenne, Wyoming 82002

PROJECT: Webb Creek Ranches, Natrona Co.

ARCHITECT OR ENGINEER: C.K. Wolz, Wolz & Assoc.  
933 W. 14 St., Casper, WY 82601

APPLICANT: Webb Creek Homeowners Assoc.  
Box 19, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 81-952R

REVIEWING ENGINEER: *LeRoy C. Feusner*  
LeRoy C. Feusner, P.E.

DATE OF REVIEW: April 27, 1982

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Permit to Construct cannot be issued until results of drinking water quality parameters for Well #2 have been provided to us. Inorganic chemicals - arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, fluoride, TDS, pH, nitrate (as N), chlorides, sulfates, iron and manganese; turbidity, microbiological; radiological (gross alpha/combined Radium 226/228).
2. Submit two copies of all water quality data. Need one more copy of your revised page 2/2 of plans.
3. How will well pump #2 operate? Indicate pump operating time. Do pump testing results from proposed well #2 verify that 38 gpm can be sustained over above specified pumping period?
4. What is actual pumping rate and time period for well #1?
5. Will both wells supply enough potable water for domestic use as well as any fire flow or lawn watering demands?

M  
1-6-82

Review of Plans and Specifications

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
1111 East Lincolnway  
Cheyenne, Wyoming 82002

PROJECT: Webb Creek Ranches, Natrona Co.

ARCHITECT OR ENGINEER: C.K. Wolz, Wolz & Assoc.  
933 W. 14th St., Casper, WY 82601

APPLICANT: Webb Creek Homeowners Assoc.  
5049 Alcova Rt., Box 19, Casper, WY 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 81-952

REVIEWING ENGINEER: *LeRoy C. Feusner*  
LeRoy C. Feusner, P.E.

DATE OF REVIEW: January 6, 1982

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. How many homes (ranches) will the total water system be serving?
2. Permit to Construct #78-350R authorized the water tank storage facility.
3. What will be the system water pressures?
4. Is auxiliary power available for the Webb Creek-Pursel No. 2 well?
5. Provide results of the water quality parameters for Well #2. Inorganic chemicals - arsenic, barium, cadmium, chromium, lead, mercury, selenium, silver, fluoride, and nitrate (as N); turbidity; microbiological; radiological - gross alpha and combined radium 226/228.
6. What areas are adjacent to the Well No. 2? How will it be protected from any existing or future pollution sources?
7. How can the submersible pump be changed, if necessary, in the future?
8. Will the well casing be grouted? How will the gravel pack be protected from grout leakage?
9. What type and class of pressure PVC pipe will be used from the well to the storage tank?

LCF/nc

1-25-82

PERMIT TO CONSTRUCT

New

Permit No. 81-953R

Renewal

Modified

EVANSTON WYOMING ELKS LODGE NO. 2588

(Name of Facility)

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

Evanston Elks Club

PO Box 268

Evanston, WY 82930

to construct, install, or modify a \_\_\_\_\_

septic tank - leach field

\_\_\_\_\_ facility according to the procedures and conditions of the

application No. 81-953R. The facility is located in \_\_\_\_\_

Sec. 23, T15N, R120W

\_\_\_\_\_ in the County of Uinta,

in the State of Wyoming. This permit shall be effective for a period of Two (2)

years (five (5) years maximum) from the date of issuance of this permit.

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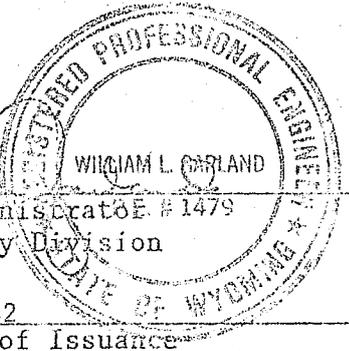
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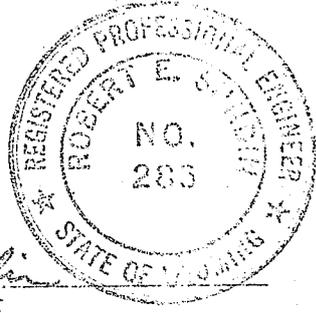
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction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

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AUTHORIZED BY:

  
WILLIAM L. GARLAND  
Administrator # 1479  
Water Quality Division  
  
January 18, 1982  
Date of Issuance

  
ROBERT E. SUNDIN  
Director  
Dept. of Environmental Quality  


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

FL:ch  
1/19

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION  
210 LINCOLN  
LANDER, WYOMING 82520

PROJECT: EVANSTON WYOMING ELKS LODGE NO. 2588

OWNER: Evanston Elks Club  
P.O. Box 268, Evanston, WY 82930

ARCHITECT OR ENGINEER: Uinta Engineering & Surveying, Inc.  
P.O. Box 746  
Evanston, WY 82930

WATER QUALITY DIVISION REFERENCE NUMBER: 81-953

REVIEWING ~~ENGINEER~~: EVALUATOR: Frank LaBarge *FL*

DATE OF REVIEW: January 4, 1982

ACTION: NOT AUTHORIZED

COMMENTS: A review of your application has been completed. Before a "Permit to Construct" can be approved the following points need to be resolved.

- 1.) Is a public sewage collection line available? If not, how soon is one expected?
- 2.) Will there be any meals served in the lodge? If so the daily volume of wastewater per patron must be increased accordingly.
- 3.) A wastewater figure of 8 gallons per day per patron appears to be low. My reference, i.e. Medcalf & Eddy, Inc., indicates a figure of approximately 20 gallons per day per patron should be used for this type of facility.
- 4.) It is stated that a large capacity tank is to be installed here to availability. Please clarify, by this I mean is a 2500 gallon tank to be used in place of a 1500 gallon tank or is a tank larger than 2500 gallons to be used.
- 5.) Is the proposed leach field to be placed in fill? Are there any slope breaks within fifteen feet of the proposed leach field?
- 6.) Please show the distances from the proposed leach field to the property lines.
- 7.) Where is the parking area to be? The septic tank should be protected from excessive loads and the leachfield should not be in a parking area.

*ABC*

Review of Plans and Specifications  
Evanston Wyoming Elks Lodge No. 2588  
81-953  
January 4, 1982  
Page Two

- 8.) The Disposal Field Detail Sheet shows absorption trenches eighteen inches wide but the Check List Sheet calls for trenches two and one-half feet wide. Please correct this discrepancy. The same situation applied to the Profile View of the distribution lines shown on the Disposal Field Detail Sheet and comments made on the Check List Sheet.

Please submit the required information and revised drawing, in triplicate, to this office. Upon receipt of a satisfactory reply a Permit to Construct will be approved. If you have any questions, please call me.

FL/db

1-12-82

PERMIT TO CONSTRUCT

New

Permit No. 81-954

Renewal

Modified

Fearn Small Wastewater Facility  
(Name of Facility)

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

Edwin Fearn  
c/o Carlton & Carlton Assoc.  
748 Lombard Street

Evanston, WY 82930

to construct, install, or modify a \_\_\_\_\_  
septic tank - leach field

\_\_\_\_\_ facility according to the procedures and conditions of the  
application No. 81-954. The facility is located in \_\_\_\_\_

Sec. 18, T16N, R120W

\_\_\_\_\_ in the County of Uinta,

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

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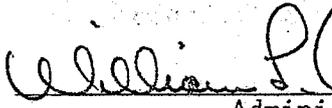
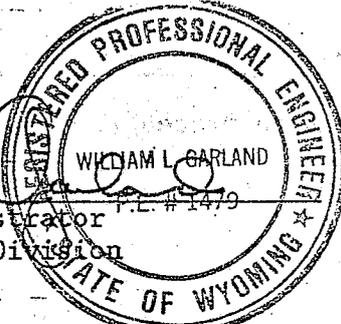
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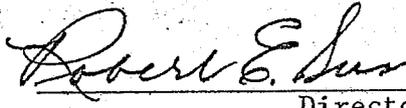
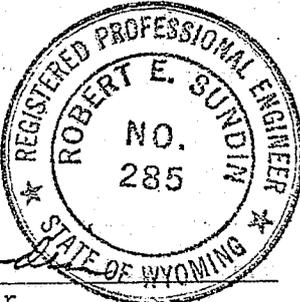
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AUTHORIZED BY:

  
WILLIAM L. GARLAND  
P.E. #1479  
Administrator  
Water Quality Division  


  
ROBERT E. SUNDIN  
NO. 285  
Director  
Dept. of Environmental Quality  


December 29, 1981

Date of Issuance

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

FL:ch  
12/30



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 this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction Projects Control Officer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone 332-3144.

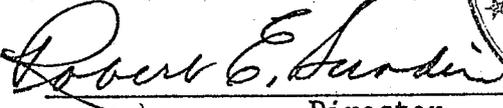
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AUTHORIZED BY:

  
\_\_\_\_\_  
WILLIAM J. GARLAND  
Administrator 1479  
Water Quality Division  
STATE OF WYOMING

October 7, 1982  
\_\_\_\_\_  
Date of Issuance

  
\_\_\_\_\_  
ROBERT E. SUNDIN  
NO. 285  
REGISTERED PROFESSIONAL ENGINEER  
STATE OF WYOMING

Director  
Dept. of Environmental Quality

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AJB:ch



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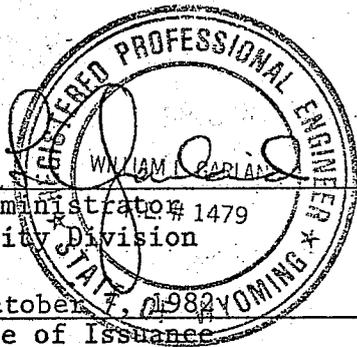
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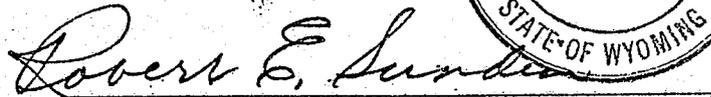
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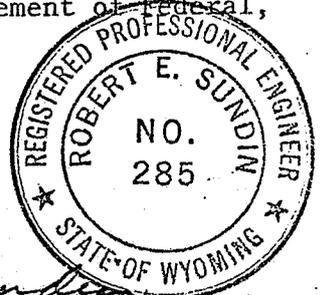
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AUTHORIZED BY:

  
\_\_\_\_\_  
Administrator # 1479  
Water Quality Division  
October 7, 1982  
Date of Issuance



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



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

AB:dp

*Sheep*

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

210 Lincoln

LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: CRC PLACE MOBILE HOME SUBDIVISION

ENGINEER: L. Wayne Shepherd  
1200 Main  
Evanston, WY 82930

OWNER: CRC Colorado Well  
Carlton & Carlton  
748 Lombard  
Evanston, WY 82930

WATER QUALITY DIVISION REFERENCE NUMBER: 81-955

REVIEWING ENGINEER: Al Berreth *ajt*

DATE OF REVIEW: January 15, 1982

ACTION: Not authorized.

COMMENTS: Before a permit can be issued the following items need to be addressed:

1. It is preferred that only ASTM 3034SDR35 sanitary sewer pipe be specified.
2. Has a soils analysis been performed for the storage tank foundations? Will expansive soils be a problem? Is possible slippage a problem?
3. What weight and grade steel is to be used for the tank?
4. What weight casing was used on the well?
5. At what intervals and how is the conduit to be connected to be drop pipe?
6. What material is the drop pipe?
7. Will cathodic protection around the tanks be needed?
8. Will a splash pad be used at the overflow for the reservoir?
9. Do you think ice action will affect your 4 inch stand pipe?

.../2

AC

10. What size is the vent pipe on the reservoir?
11. The 3/4 inch pressure relief valve is pointed in the direction of the electrical control panel. An elbow needs to be incorporated directing the flow down.
12. Of what material is the vertical section of pipe below the pumphouse floor to be constructed?
13. The manhole vent for the wells needs to be at least 18 inches above ground.
14. To what depth are the wells grouted?
15. How are the wells finished, gravel pack, screen or ...?
16. Will the wells influence one another?
17. At what point will the level controls be initially set? What affect will the turn-on setting have on time of fire flow?
18. From the test pump data supplied, it seems that Well No. 1 should be more conservatively estimated at 30 gpm.
19. Normally a peak hourly factor of 4 is needed.
20. What will be the minimum sewerline flow velocity? Is it adequate to convey solids?
21. The well water turbidity seems to be very high. Will additional treatment be needed? Are there taste and odor problems? Well No. 2 appears to have high iron.
22. Three sets of final plans are needed for approval.
23. Has the County approved this development? Correspondence from Dennis Farley would be helpful.

AB:ch

cc: Dennis Farley  
Cheyenne DEQ/WQD  
File (4)

1-12-82

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 81-956  
SEE SPECIAL CONDITIONS

Grant Oil Tool  
(Name of Facility)

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

Grant Oil Tool  
1136 Falcon Avenue  
Mills, WY 82644

to construct, install, or modify a two subsurface wastewater disposal facilities according to the procedures and conditions of the application No. 81-956. The facility is located in Section 34, T34N, R80W in the County of Natrona, in the State of Wyoming. This permit shall be effective for a period of two (2) years (five (5) years maximum) from the date of issuance of this permit.

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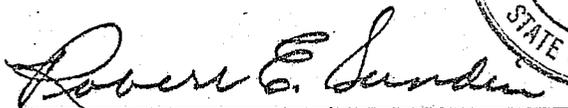
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AUTHORIZED BY:

  
WILLIAM L. GARLAND  
P.E.# 1479  
Administrator  
Water Quality Division  
STATE OF WYOMING  
REGISTERED PROFESSIONAL ENGINEER

  
ROBERT E. SUNDIN  
NO. 285  
DIRECTOR  
Dept. of Environmental Quality  
STATE OF WYOMING  
REGISTERED PROFESSIONAL ENGINEER

January 5, 1982  
Date of Issuance

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

cc: Gray C. Wangelin  
E.I.T.S.  
P.O. Box 4075  
Casper, WY 82604

Conditions to Permit to Construct

The intent of the construction authorized by this permit is to provide facilities for the interim treatment of wastewater until such time that treatment is available through a regional wastewater system. The Casper Urban Water Quality Management Plan requires that treatment be provided through a regional system. The facilities authorized by this permit will be operated until services are available through the approved regional system. At that time these facilities will be abandoned or integrated into the regional system in accordance with the requirements of the Casper Urban Water Quality Management Plan and the Final 201 Facility Plan.

THE STATE



OF WYOMING

ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

February 10, 1982

Mr. Kenneth Walker  
Uinta Engineering & Surveying  
PO Box 746  
Evanston, Wyoming 82930

RE: Chevron Carter Creek Bachelor  
Housing Facility R.O. Unit Permit  
to Construct #81-958R, Change Order  
#1

Dear Mr. Walker:

The above referenced change order has been reviewed and approved. The revised plans have been filed with the original permit and are now considered a part of that permit. One approved copy of the plans is enclosed with this letter for your records.

Yours truly,

*Francis LaBarge*  
Francis LaBarge  
Water Quality Evaluator  
Southwest District

FL:ch

Enclosure

cc: Cheyenne DEQ/WQD  
File (3)



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.

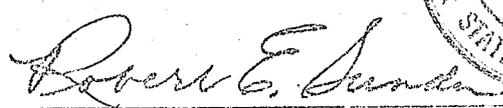
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction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

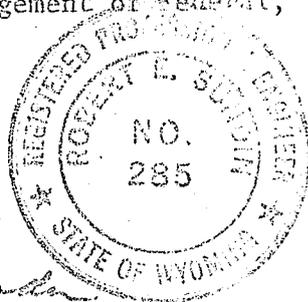
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AUTHORIZED BY:

  
\_\_\_\_\_  
WILLIAM L. GARLAND  
Administrator # 1479  
Water Quality Division  
\_\_\_\_\_  
January 13, 1982  
Date of Issuance

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



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

FL/db

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION  
210 LINCOLN STREET  
LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: Chevron-Carter Creek Project, R.O. Unit

ENGINEER: Uinta Engineering & Surveying, Inc.  
P.O. Box 746  
Evanston, WY 82930  
ATTN: Ken Walker

OWNER: Daniel Construction Co.  
P.O. Box 966  
Evanston, WY 82930

WATER QUALITY DIVISION REFERENCE NUMBER: 81-958

REVIEWING EVALUATOR: Francis LaBarge *FL*

DATE OF REVIEW: 12/31/81

ACTION: Not authorized.

COMMENTS: A review of your application has been completed. Before a permit to modify the water system can be approved the following points need to be resolved.

1. All plan sheets need to be signed by the engineer and revised sheets 2 of 11 and 6 of 11 need current signatures.
2. Rough calculations indicate a R.O. unit wastewater flow of approximately 47,000 gdp or 60% of the current daily wastewater flow to the lagoons. As we discussed it is preferred that this water is not discharged into the existing system but instead is discharged directly to a drainage ditch.

This method of disposal will require a discharge permit modification. Please contact John Wagner to obtain the modification. John has indicated that there should not be any problem in obtaining a revised discharge permit because of the temporary nature of the camp.

3. Please provide a profile of the wastewater discharge line from the R.O. Unit.
4. As we discussed the R.O. Unit wastewater discharge line should be at least six inches in diameter with an adequate number of clean

*AC*

outs for easy maintenance. Be sure to provide a cleanout detail.

5. Specifications are needed which address the materials being used and construction of the water lines and the building. As we discussed referencing the Wyoming Public Works Standards is fine but be sure to reference the R.O. Unit specifications in the Special Provisions.

Please submit the required information and revised drawings, in triplicate, to this office. Upon receipt of a satisfactory reply a permit to modify the water system will be issued. If you have any questions, please call me at this office.

FL/dl  
12/31/81  
cc: Cheyenne DEQ/WQD  
File (4)



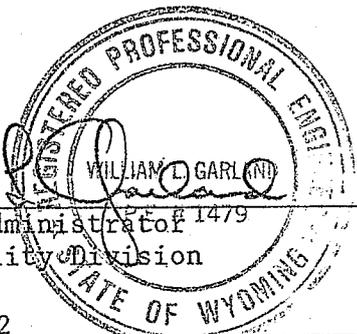
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

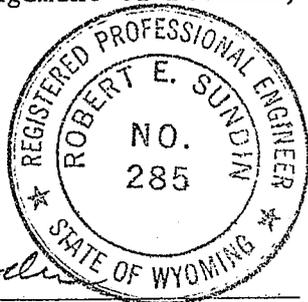
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction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

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

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AUTHORIZED BY:

  
*William L. Garland*  
\_\_\_\_\_  
Administrator # 1479  
Water Quality Division  
STATE OF WYOMING  
April 7, 1982  
Date of Issuance

  
*Robert E. Sundin*  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

AJB:ch

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION  
210 LINCOLN  
LANDER, WYOMING 82520

PROJECT: Evanston Water Treatment Plant

OWNER: City of Evanston

ATTN: Wayne Shepherd; PO Box 130, Evanston, WY 82930

ARCHITECT OR ENGINEER: Eckhoff, Watson & Preator  
1798 South West Temple  
Salt Lake City, UT 84115

WATER QUALITY DIVISION REFERENCE NUMBER: 81-959

REVIEWING ENGINEER: Al Berreth *ajb*

DATE OF REVIEW: January 13, 1982

ACTION: NOT AUTHORIZED.

COMMENTS: The following items need to be addressed before a permit can be issued.

1. What range of flows can be treated (and at what chlorine concentration) by this system? Are they compatible with the treatment plant capacity?
2. Please address chlorine contact time.
3. At what point is chlorine added, before or after filtration? Are chlorinated organics a problem?
4. A north arrow is not shown on the site plans. This makes identifying the elevation views a bit confusing at first glance.
5. Would not maintaining a spare parts inventory be easier for two chlorinators made by the same company?
6. Please describe planned mode of operation. Is an ammoniator currently being used?
7. Will soft water be needed for the chlorine solution feed?
8. How much chlorine can be stored? How many days service will this equal?
9. Are the various feed lines to be color coded?
10. Is respiratory protection equipment available?

Review of Plans and Specifications  
Evanston Water Treatment Plant  
81-959  
January 13, 1982  
Page Two

11. Is a bottle of ammonium hydroxide available?
12. Is there a leak repair kit available for the ton cylinders?
13. Does the lab have a shower and eyewash?
14. The chlorine room inspection window could not be found. This needs to be shatter-proof and installed in the wall.
15. Where is the ammonia stored? It cannot be stored with the chlorine.
16. How many air changes per minute are available in each room?
17. The chlorine room ventilation fan switch needs to be mounted outside the room and have an indicator light.

AB/db  
1/14/82  
cc Cheyenne DEQ/WQD  
File (4)



THE STATE OF WYOMING

*Garland*

ED HERSCHLER  
GOVERNOR

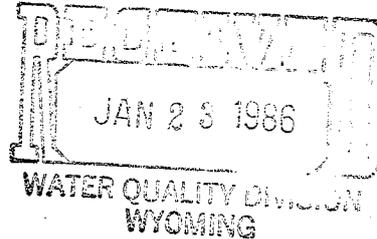
*Department of Environmental Quality*  
*Water Quality Division*

HERSCHLER BUILDING

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

January 17, 1986



Bush & Gudgell, Inc.  
555 S. 3rd East  
Salt Lake City, UT 84111

Dear Gentlemen:

Your application for Energy Park Subdivision (WQD No. 81-960) is considered inactive under the assumption that the applicant does not wish to proceed with the permit to construct process.

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

Sincerely,

William L. Garland  
Administrator

WLG/BL/jw



*Department of Environmental Quality*  
*Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

January 9, 1986

Bush & Gudgeon, Inc.  
555 S. 3rd East  
Salt Lake City, UT 84111

Dear Gentlemen:

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

Facility Name: Energy Park Subdivision  
 DEQ/WQD Reference Number: 81-960  
 Engineering Consultant: Bush & Gudgeon  
 DEQ/WQD Review Engineer: Jack Bedessem/Bill Locke  
 Date of DEQ/WQD Review: 1-14-82

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

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

Page Two

You are reminded that the construction, installation, or modification of any sewage system, treatment works, disposal system, or other facility capable of causing or contributing to pollution, or public water supply system without a Permit to Construct is a violation of Wyoming State Statutes, and is punishable with a fine not to exceed \$10,000 for each day of violation. Unless the Water Quality Division review engineer receives information concerning the status of this project within fifteen (15) days of the receipt of this letter, follow-up action will be taken.

Sincerely,

A handwritten signature in cursive script that reads "Bill Locke".

Bill Locke, P.E.  
Water Quality Engineer

BL/jw

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION  
210 LINCOLN  
LANDER, WYOMING 82520

PROJECT: Energy Park Subdivision

OWNER: Reed Webster

ARCHITECT OR ENGINEER: Bush & Gudgeon, Inc.  
555 South 3rd East  
Salt Lake City, UT 84111

WATER QUALITY DIVISION REFERENCE NUMBER: 81-960

REVIEWING ENGINEER: Al Berreth *ajb*

DATE OF REVIEW: January 14, 1982

ACTION: NOT AUTHORIZED.

COMMENTS: Before a permit can be issued, the following items need to be addressed.

1. A completed permit application form is needed.
2. Three final sets of plans and specifications will be needed.
3. Please show water line profiles.
4. Specifications are needed. If the Wyoming Public Works Standard specifications are to be used, it needs to be noted on the plans.
5. Please show manhole rim elevations.
6. How far is the waterline off the centerline of the roadway?
7. Please show waterline crossings on the sewerline profile.
8. Some sewerline profile between MH #68 and 67 is missing.
9. The radius of curvature shown on sheet 10 of 30 appears to be too small for the waterline joints to accommodate.
10. Please show thrust blocking.

Review of Plans and Specifications

Energy Park Subdivision

81-960

January 14, 1982

Page Two

11. Additional gate valves appear necessary to minimize lost service during waterline breaks.
12. A water system analysis is needed. Please address maximum, average, and minimum pressures both during normal and fire flow situations. For fire flow please use  $Q = 1020 \sqrt{P} (1 - 0.01 \sqrt{P})$  where Q is the fire flow in gpm and P is population in thousands. A minimum of 500 gpm needs to be used. Also, peak day must be added to the fire flow.
13. A sewer system analysis needs to be provided.
14. Please detail connections to the existing water and sewer systems. Dead end waterlines will need some means of blowoff.
15. A letter from Lyman or the proper authority is needed stating that they have reviewed your systems, are satisfied, and have the capacity to provide the necessary services.
16. Please show the fire hydrants on the profile sheets.
17. The details seemed to indicate cleanouts could be used in place of manholes at the end of a line. Our regulations require a manhole if the length of sewerline is over 150 feet in length. This needs to be clarified.
18. Lagoons are shown on the sewerline plan sheet. If these are to be constructed for this project, they must be permitted.

AB/db

1/14/82

cc City of Lyman  
Cheyenne DEQ/WQD  
File (4)



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.

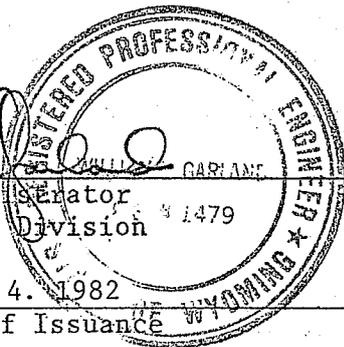
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction Projects Control Officer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 2161 Coffeen Avenue, Suite 301, Sheridan, Wyoming, 82801; telephone 672-6457.

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

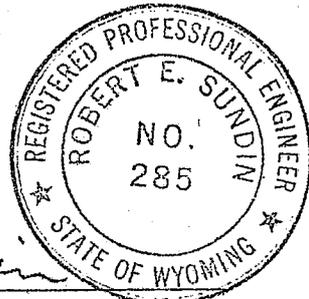
The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

AUTHORIZED BY:

Admin. Director  
Water Quality Division 1479  
May 4, 1982  
Date of Issuance



Director  
Dept. of Environmental Quality



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

CONDITIONS

1. The permitted facility is intended only for the disposal of waste water produced with oil and gas production operations. Use of the facility for disposal or storage of any other type of waste water or waste of any kind is prohibited.
2. Discharge of any wastewater from this facility to any Waters of the State is prohibited.
3. The Water Quality Division reserves the right to impose such future restrictions on the operation of this facility as may be found necessary to protect the quality and current uses of the native groundwater in the area.

xc: Centennial Engineering  
237 North Main, Suite #1  
Sheridan, Wyoming 82801

*Yorma*

Water Quality Division  
Groundwater Section  
Permit Application Review

Application Number 81-961 RR

Date submitted for review 4-16-82

Name and location of facility KISSACK DISPOSAL PITS  
ROZEE, WYOMING

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

Signed *Richard Lunn*  
Title Eng. Eval  
Date 4-20-82

*AS m*  
*4/21/82*

4-8-82

Water Quality Division  
Groundwater Section  
Permit Application Review

Application Number 81-961

Date submitted for review Dec 30, 1981

Name and location of facility KISSACK DISPOSAL PITS  
Sec 4 T 50N R 69W  
Campbell Co.

I have reviewed the plans and specifications with regard to all aspects of groundwater quality and find the following:

- No comment. The submittal is consistent with current groundwater protection procedures and requirements.
- Comments attached.

Signed Phil Pacel  
Title WQ Engineering Evaluator  
Date April 5, 1982

*Plans returned to  
Sheridan  
4-8-82*

*ADM  
4/6/82*



*Department of Environmental Quality*  
*Water Quality Division*

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

MEMORANDUM

TO: Tom Mueller

THROUGH: A. J. Mancini

FROM: Phil Pucel *pp*

DATE: April 8, 1982

SUBJECT: Kissack Disposal Pits, S4, T50N, R69W, Campbell Co., DEQ/WQD Ref. No. 81-961

An evaluation of potential impacts on groundwater resources cannot be completed until the receipt of reliable information in the following areas:

1. The name, depth and hydrogeology of the underlying aquifer; geology of unsaturated units.
2. The fluid chemistry of the aquifer.
3. The type, source and expected chemical, physical, and toxic characteristics of the produced fluids. Characterization of the fluids should include not only total dissolved solids, but also organics, metals, drilling mud constituents, and surfactants.
4. Water quality information, including background water quality data.
5. Compatibility of compacted soils with waste fluids. The permeabilities submitted by Cooper & Clark were based upon remolded soils samples saturated for 19 hours with a fluid of unknown properties (presumably tap water). Since permeability of soils can be adversely affected by salts, drilling mud constituents, and drying, permeability testing should take into account long-term chemical and physical effects. These tests should be representative of field conditions as described in the permit application.
6. The location and identification of each underground water use within at least 1/4 mile of the pits.
7. Reclamation procedures.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY  
WATER QUALITY DIVISION  
2161 Coffeen Ave., Suite 301  
Sheridan, Wyoming 82801



PROJECT: Kissack Disposal Pits

ARCHITECT OR ENGINEER: Mr. Tom Barker  
Centennial Engineering  
237 North Main, Suite 1  
Sheridan, Wyoming 82801

Kissack Water and Oil, Inc.  
c/o Mr. Jerry Keeler  
P.O. Box 928  
Newcastle, Wyoming 82701

WATER QUALITY DIVISION  
REFERENCE NUMBER: 81-961

REVIEWING ENGINEER: Tom Mueller *T.M.*

DATE OF REVIEW: February 22, 1982

ACTION: Not Authorized for Construction

COMMENTS:

The following comments are condensed from those received from the Division's groundwater section, and those originating in this office.

- 1) The only information provided in the application regarding wastewater quality is that it is produced water, between 5,000 and 100,000 mg/l total dissolved solids, and is non-hazardous (presumably under EPA definitions). Before an unlined pond of this type can be approved, considerably more information is required.

If exact wastewater quality cannot be predicted, a "worst case" assumption will be made. If use of the pits is to be restricted to certain wells, those wells must be indicated, and the quality of water from those wells must be provided. (If this approach is taken, a condition limiting source of the wastewater will probably be attached to the Permit to Construct when it is issued.)

Wastewater parameters of particular interest are TDS, Sodium, Chloride, Sulfate, Nitrate, Oil and Grease, Phenols, and Sulfide. Heavy metal concentrations should also be addressed.

- 2) Information on local groundwater conditions must be supplied, unless the pits are to be lined with an appropriate plastic membrane. At a bare minimum, this information must include the name, depth and description of the shallowest water aquifer(s) and any connected aquifer(s); and chemical description of the water in these aquifers. Information on any nearby wells should also be submitted, including logs and water quality.

February 22, 1982

- 3) There is some question that a single remolded sample of the soil along the pond bottom can adequately predict overall percolation of wastewater from the ponds, particularly since there is no indication that pond bottom soils are continuous throughout the area, or that the pond bottoms have been adequately compacted. In addition to this deficiency, no information on soil depth is supplied.

Moreover, even if the permeability rate can be limited to  $5.6 \times 10^{-7}$  cm/sec, this may not be adequate. Justification for the percolation rate must be provided in terms of the wastewater quality and groundwater situation in the area.

- 4) A mass balance for the ponds should be provided, showing the relationship between inflow, evaporation, percolation, and winter storage.
- 5) Side slopes of 2 to 1 in clayey soils will probably be subject to unacceptable erosion.
- 6) In the future, please submit three (3) copies of all plans, specifications and supporting materials.



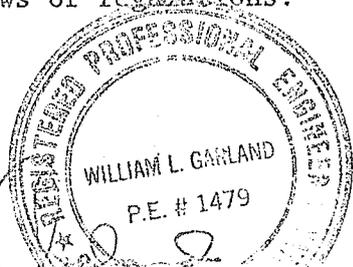
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

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 this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction Projects Control Officer, State of Wyoming, Department of Environmental Quality, Water Quality Division, 210 Lincoln, Lander, Wyoming 82520; telephone 332-3144.

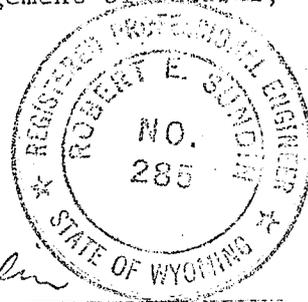
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The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal,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

AUTHORIZED BY:



*William L. Garland*  
\_\_\_\_\_  
Administrator  
Water Quality Division



*Robert E. Sunder*  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

January 15, 1982  
\_\_\_\_\_  
Date of Issuance

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

FL/db

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION  
210 LINCOLN  
LANDER, WYOMING 82520

PROJECT: Anschutz Ranch East Production Facility  
(Nitrogen Plant Sewage Collection Lines)

OWNER: AMOCO, PO Box 17675, Salt Lake City, UT 84117

ARCHITECT OR ENGINEER: EWP Engineering  
1798 South West Temple  
Salt Lake City, UT 84115

ATTN: Steve Reiber

WATER QUALITY DIVISION REFERENCE NUMBER: 81-962

REVIEWING ~~XXXXXXXX~~ EVALUATOR: Frank LaBarge

DATE OF REVIEW: January 5, 1982

ACTION: NOT AUTHORIZED

COMMENTS: A review of your application has been completed. The submittal was very good; however, there is one point that needs to be clarified before a Permit to Construct can be approved. The plans indicate Ductile Iron Pipe is to be used between MH-3 and MH-4. This pipe needs to be speced - as it is not included in Section 401 of the Wyoming Public Works Standards. Be sure to include both the inside and outside coating specifications also.

Please submit the necessary information, in triplicate, to this office. Upon receipt of a satisfactory reply, a Permit to Construct will be approved. I would have liked to call you to go over this review but, as you are aware, budget constraints have dictated that we can no longer make long distance phone calls.

FL/db

AC

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 81-963RR

Camelot Subdivision  
(Name of Facility)

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

FMC Corporation  
1695 Indian Hills Dr.  
Green River, WY 82935

to construct, install, or modify a \_\_\_\_\_

water distribution and sewage collection systems

\_\_\_\_\_ facility according to the procedures and conditions of the

application No. 81-963RR. The facility is located in \_\_\_\_\_

Sec. 35, T18N, R107W

\_\_\_\_\_ in the County of Sweetwater,

in the State of Wyoming. This permit shall be effective for a period of Two (2)

years (five (5) years maximum) from the date of issuance of this permit.

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

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

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

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

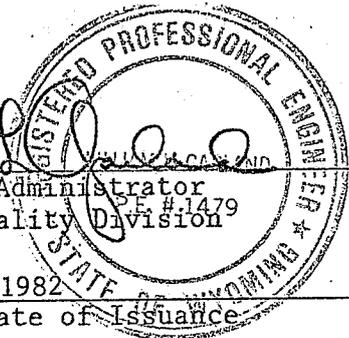
during working hours, to have access to inspect the facilities, at the above location, for the purpose of compliance with the provisions of this construction permit.

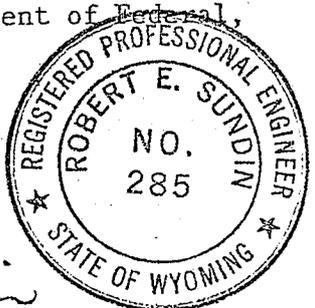
The permittee shall notify representatives from the Department of Environmental Quality, Water Quality Division the day construction commences and give an estimate of completion of this project. The authorized representative in your area can be contacted at the following address: Water Quality Construction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

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

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

AUTHORIZED BY:

  
*William J. DeLoach*  
\_\_\_\_\_  
Administrator  
Water Quality Division  
March 29, 1982  
\_\_\_\_\_  
Date of Issuance

  
*Robert E. Sundin*  
\_\_\_\_\_  
Director  
Dept. of Environmental Quality

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

AJB:ch

*Chey*

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

210 Lincoln

LANDER, WYOMING 82520

PHONE: (307) 332-3144

PROJECT: CAMELOT SUBDIVISION

ENGINEER: Harry Moore  
Johnson-Fermelia & Crank  
PO Box 1633  
Rock Springs, WY 82901

OWNER: FMC Corporation  
1695 Indian Hills Drv.  
Green River, WY 82935

WATER QUALITY DIVISION REFERENCE NUMBER: 81-963R

REVIEWING ENGINEER: Al Berreth *ajf*

DATE OF REVIEW: February 18, 1982

ACTION: Not authorized.

COMMENTS: A letter from the City of Green River was found in our office that is dated June 11, 1981. This can be used provided the City has not changed their position.

Upon receipt of the letter from PP&L, we will be issuing the "Permit to Construct." You should have the permit in hand approximately 2-3 weeks after we receive the letter.

AB:ch

cc: Rick Lamke  
Cheyenne DEQ/WQD  
File (4)

*A*

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

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

PROJECT: CAMELOT SUBIDIVISION

ENGINEER: Harry L. Moore  
Johnson-Fermelia & Crank, Inc.  
PO Box 1633  
Rock Springs, WY 82901

OWNER: FMC Corp.  
1695 Indian Hills Drive  
Green River, WY 82935

WATER QUALITY DIVISION REFERENCE NUMBER: 81-963

REVIEWING ENGINEER: Al Berreth *ajf*

DATE OF REVIEW: January 19, 1982

ACTION: Not authorized.

COMMENTS: Permit processing is being held pending addressing of the following items:

1. Are thrust blocks intended for the 8x8x3 & 2½ inch tees? They are not shown on the drawings.
2. The sewer/water line crossing is not shown between CO-1A and MH1. It appears that separation could be a problem here.
3. Your water system design data appears adequate, however, we normally request justification for anything less than 160 gpcd with a peak hourly of 4.
4. We need letters concerning water and sewer services.
5. Has the Green River City Engineer reviewed the plans?

AB:ch

cc: Rick Lemke  
Cheyenne DEQ/WQD  
File (4)

*ckz*

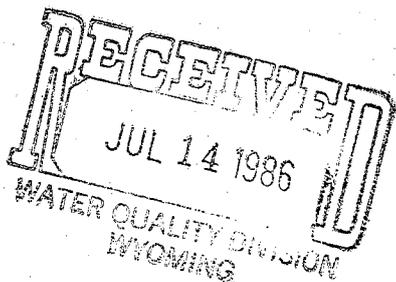
*A.C.*

MEMORANDUM

TO: Running Record, Permit No. 81-964  
FROM: Steve Gerber *SGH*  
SUBJECT: Status of City of Worland Standard Specifications  
DATE: June 7, 1986

I talked with Bob Shelton, City Engineer. Bob said the City of Worland is using the Wyoming Public Works Standards. He said they are not using their standard specifications and have no intent of doing so.

cc. Norma Caulson



81-964



*Department of Environmental Quality*  
*Water Quality Division*

210 LINCOLN STREET

LANDER, WYOMING 82520

TELEPHONE 307-332-3144

December 28, 1981

Al Lambiase, P.E.  
City Engineer  
P.O. Box 226  
Worland, WY 82401



RE: Review of Standard Specifications  
For Water & Sewer Lines - City  
of Worland

Dear Al:

After reviewing the proposed "Standard Specifications for Construction of Water and Sewer Facilities," I would like to offer the following comments for your consideration in referring to these standards on future projects.

General Comment

Recommend standard drawings be incorporated as part of these specifications wherever possible for both the water distribution and sewage collection systems.

Water Distribution

1. New and/or improved pipe and fitting materials should be included as part of the standards, i.e. permastran, A-C, concrete, etc.
2. Recommend at least one half cubic yard of gravel be installed underneath the fire hydrants.
3. Also, recommend general statements on minimizing dead ends, low-pressure areas (below 20 psi) and potential cross-connections be included within this section.
4. Consideration should be given to expanding the pressure and leakage tests specification.

5. Standard drawings for this section could include the following: fire hydrant detail, typical service connection, thrust blocking, air relief valve, typical blow-off, bedding details, valve pits, etc.

Sewer Collection

1. New and/or improved materials should be included as part of the standards, i.e. Perma-Loc, etc.
2. Deflection tests should be specified for all flexible pipes.
3. Recommend a general statement on minimum slope requirements and/or flow velocities be included within this section.
4. You may want to specify maximum manhole separations based on the City's sewer cleaning capabilities.
5. Standard drawings for this section could include the following: manhole details, bedding and trenching details, etc.

I hope this preliminary review may be of assistance. If further information is required, please do not hesitate to contact us.

Respectfully,



M. Robin Collins, P.E.  
Northwest District Engineer

MRC/d1

cc: Johnny Miller, Public Works Superintendent  
Vern Nelson, Donnell & Associates  
✓ Cheyenne DEQ/WQD  
File (2)

Received 2-8-82

Tony



THE STATE OF WYOMING

ED HERSCHLER  
GOVERNOR

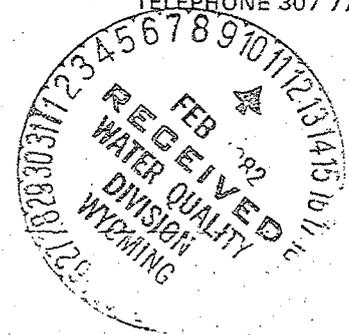
Department of Environmental Quality  
Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

February 2, 1982



CERTIFIED

Thomas P. Yarnick  
Environmental Coordinator  
Exxon Minerals Co.  
Box 3020  
Casper, WY 82602

Dear Mr. Yarnick:

Our records indicate your application for a Groundwater Pollution Control Permit, Reference Number GPC 81-965, Facility Name Exxon Highland Uranium Mine Sump Water Injection, has not been resubmitted to this office. Please indicate below the status of your application.

- The application will not be resubmitted. The application is to be removed from DEQ files.
- The application will be resubmitted within (\_\_\_\_) days.
- Other remarks \_\_\_\_\_

If this letter is not returned within 30 days, your application will be removed from our files.

Sincerely,

W. S. Ewen

W. S. Ewen  
Water Quality Division



Norma  
81-965

ED HERSCHLER  
GOVERNOR

## Department of Environmental Quality

### Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

October 13, 1981

Thomas P. Yarnick  
Environmental Coordinator  
Exxon Minerals Co.  
PO Box 3020  
Casper, Wyoming 82602

RE: Application for Wyoming Groundwater  
Pollution Control Permit; Highland  
Uranium Operations

Dear Mr. Yarnick:

The review is underway for your application to inject open pit mine sump water for reclamation purposes. We have determined that the following information will be needed to complete the review:

- 1) Geologic cross-section(s) of suitable scale showing stratigraphic and/or lithologic sequence, dip of beds, relationship of proposed injection wells to pit walls, and depth of pit (pit floor) and sump. If the total depth of the wells is deeper than the bottom of the pit, the section should show positions of aquifers below the pit floor.
- 2) Piezometric (potentiometric) level(s) of groundwater in the aquifer-receiver or other information demonstrating that the groundwater flow direction is into the open pit.
- 3) Recent water quality information for the receiver (i.e., analytical data). Indicate interval(s) sampled.
- 4) Construction and completion information for the proposed injection wells, to augment whatever information might be obtained from the State Engineer's office.
- 5) Aquifer characteristics of the receiver, to the extent information is available or can reasonably be estimated, such as effective thickness, porosity, permeability; also groundwater conductivity, transmissivity, velocity, direction of movement, etc.

We also request additional information on the proposed operation, such as:

Mr. Thomas P. Yarnick  
Page Two  
October 13, 1981

A more complete description of the injection procedure. Water will be injected at approximately what rate? Will injection be continuous to both wells? Will injection be by gravity or pressure? How will water get to the wells? (A drawing or sketch would be helpful.) How long would this operation take place? Provide estimated dates of start and finish.

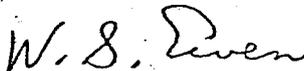
It has been reported to this office that the locations of your wells numbers 3, 16, and 17 as indicated in your submittal are not the same as recorded in the State Engineer's office. Please report or confirm corrected locations. As a convenience to us, do not use a comma between quarter-quarter designations: use the accepted legal description techniques; i.e., NE $\frac{1}{4}$  NW $\frac{1}{4}$  Section 21.

Your submittal indicates that certain wells could be used as monitor wells. This may be a permit requirement. If so, we would also require background water quality data from these wells before injection started, and the periodic reporting of subsequent analytical data.

The open pit mine water may fall into the category of a hazardous waste due to its relatively high radioactive content. The EPA has not yet finalized its hazardous waste regulations.

Upon receipt of the additional requested information, we will continue the review of your application.

Sincerely,



William S. Ewen  
Engineering Evaluator

WSE/kb

Wycon Chemical Company

P. O. BOX 1287 • CHEYENNE, WYOMING 82003 • (307) 634-5981



rec'd by AJM  
3/9/84 -- prob.  
in office. pm  
of 3/2/84

GPC 81-966R

March 6, 1984

William L. Garland  
Administrator  
Department of Environmental Quality  
401 West 19th Street  
Cheyenne, Wyoming 82001

Re: Disposal Well #1

Gentlemen:

Due to heavy snow falls followed by warm temperatures, Wycon went into emergency operating conditions at 10:00 am on Thursday, March 1, 1984. During Saturday and Sunday, March 3rd and 4th, the discharge was allowed to exceed the authorized maximum by 10 and 20 psig respectively. This situation was corrected on Monday the 5th and the well is now in compliance with the emergency permit conditions.

The non-compliance conditions resulted from miscommunication between the plant supervisors and the operating personnel. This situation has been corrected by improving the method of written communications for weekend operating instructions. All personnel involved with well operation have been properly instructed on the emergency conditions.

If you have any questions regarding the above, please feel free to contact me.

Very truly yours,

A handwritten signature in cursive script that reads "M. R. Patton".

Michael R. Patton, P.E.  
Manager, Engineering

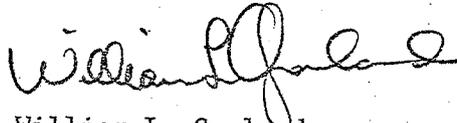
MRP:tb

cc: L. N. Shay  
G. C. Martinez  
R. L. Barber

Mr. Larry N. Shay  
February 27, 1984  
Page 2

6. All data shall be reported within 30 days after the end of the reporting period to the Groundwater Section. The first report under this permit should be for the month of February 1984. The initial quarterly report should be for the first quarter of 1984.

Sincerely,



William L. Garland  
Administrator

WLG/AJM/nc

cc: Michael Patton  
Wycon Chemical Company  
P.O. Box 1287  
Cheyenne, WY 82001

2-27-84

DEPARTMENT OF ENVIRONMENTAL QUALITY

STATE OF WYOMING

GROUNDWATER POLLUTION CONTROL PERMIT  
AUTHORIZATION TO DISCHARGE INTO UNDERGROUND RECEIVERS  
(Permit to Inject)

(X) New (Existing Well and Discharge)

Permit Number:

( ) Modified

GPC 81-966R  
EPA UIC Class I

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

Wycon Chemical Company  
ATTN: Mike Patton  
P.O. Box 1287  
Cheyenne, WY 82003

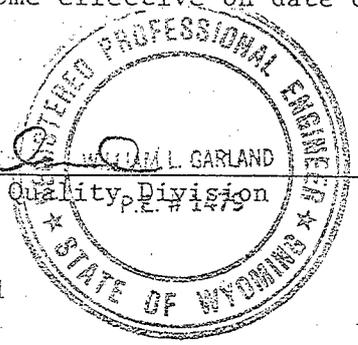
is authorized to operate

The Wycon Chemical Company No. 1 Wycon Disposal Well in the SW1/4 NW1/4 Section 16, T13N, R67W, Laramie County, for the subsurface injection of industrial wastes

according to procedures and conditions of the application GPC81-966R and requirements and other conditions of this permit.

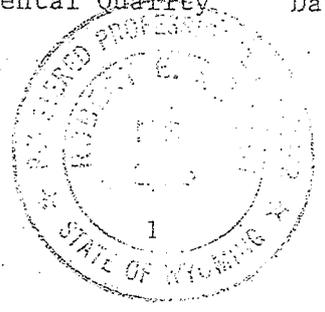
This permit shall become effective on date of issuance.

*William H. Jones*  
Administrator - Water Quality Division  
1111 East Lincolnway  
Cheyenne, WY 82002  
Phone: (307) 777-7781



2-22-84  
Date

*Robert E. Stender*  
Director - Department of Environmental Quality  
401 West 19th Street  
Cheyenne, WY 82002



2-22-84  
Date

A. Discharge (Injection) Zone and Area of Review

Injection is authorized into the Hygiene Sandstone of the Pierre Shale formation in the interval 5831-6305 feet. Injection and disposal into any other interval is not authorized by this permit.

This permit does not authorize wastewater treatment or disposal by any method or procedure other than subsurface injection, nor does it authorize the discharge of plant wastes to the surface or into any surface drainage.

The area of review, based on a volumetric calculation, is a circle with its center at the injection well and a radius of 0.5 mile.\* Due to the proximity of urban areas to the disposal well, a larger area was reviewed for the purposes of evaluating the permit application.

\*Assumptions: Time of operation = 32 years (30 d/yr downtime)  
Average effective porosity = 20%  
Average injection rate = 350 gpm, maximum  
Effective receiver thickness = 216 feet

B. Groundwater Classification

Since 1969 in excess of 27,000,000 barrels (1 barrel = 42 gallons) of wastewater have been injected into the receiver. The groundwater within the area of review is designated a Class VI groundwater of the state, both because it has already become polluted/contaminated in the vicinity of the well bore and beyond, and because the depth location makes normal use economically impractical. There is better quality groundwater at shallower depths which is available, and will be used long before an attempt would be made to utilize small amounts of groundwater which might be available in the Hygiene Sandstone at depths of 5800-6300 feet below the surface.

C. Authorized Operations

The permittee is authorized to inject industrial wastes generated by operations associated with the manufacture of fertilizer, and runoff, into the Hygiene Sandstone member of the Pierre Shale formation at a depth ranging between 5831 feet and 6305 feet. SIC 287; 495.

The composite wastewater stream (injection) presently is composed of:

Source	Average gpm (1)	% Total
Boiler blowdown	35	15.3
Process condensate (2)	20	8.8
Cooling tower blowdown	105	46.0
Monitoring wells	5	2.2
Corlett Creek sump	30	13.2
Interceptor trench	12	5.3
Storm runoff	16	7.0
Area washdown (3)	5	2.2
	228	100.0

- (1) Will vary throughout the year due to plant operating conditions and weather conditions.
- (2) Process condensate is condensed water vapor and/or steam.
- (3) Area washdown is raw plant water.

The composite injection also contains a small amount of Nalco 780 corrosion (scale) inhibitor. Approximately 4-1/2 gallons of inhibitor are used per day, which is approximately 0.003 gpm.

Composition of composite waste stream reported as:

Constituent	Composite Waste Stream (1)
Nitrate (NO3)	4349 ppm (2)
Ammonia (NH3)	2177 ppm (2)
Chloride (Cl)	306 ppm
Sulfate (SO4)	23.1 ppm
Chromium (Cr+6)	2.34 ppm
Total dissolved solids (TDS)	19333 ppm (2)
Conductivity	9200 (3)
Urea	2627 ppm (2)
pH	8.65 su (4)

- (1) Sampled at clear tank immediately preceding well injection in July 1983. The composite waste stream varies in chemical composition.
- (2) From sample collected in October 1983.
- (3) In micromhos per centimeter.
- (4) Standard units.

The authorized maximum injection rate (volume) under normal operating conditions is 185 gallons per minute (gpm) with a maximum surface injection pressure of 930 psig. The maximum rate and pressure under normal operating conditions may not be exceeded without prior written approval of the Administrator.

Emergency operations allowed pursuant to permittee's submission based on report prepared by Elliott Engineering Company: Under conditions other than normal such as during periods of high runoff and/or heavy cooling tower demand; the authorized maximum injection rate (volume) is 350 gpm for a period not exceeding seven days provided a surface pressure of 1040 psig is not exceeded. The minimum period of days of normal operations between periods of emergency operations shall be as approved or determined by the Administrator, on a case-by-case basis, upon request by the permittee.

At such time as the #1 disposal well may be reworked to increase flow efficiency and achieve a greater normal operation injection rate, or another disposal well may be installed to accept some of the industrial wastes herein described, emergency operations will no longer be allowed.

In the event the injection rate and/or pressure exceed authorized limits during either normal or emergency operations, such excessive rate or pressure will be considered permit noncompliance and reported pursuant to Section I.6. of this permit: orally within 24 hours from the time the permittee becomes aware of the circumstances, followed by a written submission within five (5) days.

D. Proper Operation and Maintenance

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

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

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

E. Entry and Inspection

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

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

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

F. Environmental Monitoring Program for Groundwaters of the State

1. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.
2. The permittee shall prepare records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation to be retained for a period of at least three (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 Wycon Water Well #15 (State Engineer Permit No. U.W. 36518) in the NW1/4 SE1/4 of Section 17, T13N, R67W shall be sampled quarterly unless data indicate a need for more frequent sampling and analysis.

Parameters for analysis include, at a minimum:

	<u>Analysis of Sample 6/13/83</u>
Nitrate	BDL
Ammonia	BDL
Chloride	2.3 ppm
Sulfate	13.0 ppm
TDS*	---
Chromium (+6)	---
pH	8.28 s.u.
Urea	---

\*Conductivity (6/13/83) reported as 320 mm/cm

Analytical results shall be reported to the WQD within 30 days of data availability, or in conjunction with reports as specified in Section G of this permit.

G. Requirements for Monitoring the Discharge

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

For normal operations the average and maximum daily injection rate (volume) and pressure shall be reported on a monthly basis.

Accumulative injection volume shall be reported at the same time.

Daily abnormal (emergency) injection rate and pressure shall be reported as daily maximum rate and pressure for the period (refer to Section C of this permit), as a separate part of the monthly report.

The wastewater shall be sampled just before being injected and analyzed. Parameters, at a minimum, shall include:

Nitrate	Total dissolved solids
Ammonia	Chromium (+6)
Chloride	Urea
Sulfate	pH

Analytical results shall be reported monthly. The report shall include the information specified in Section F.3 of this permit.

All data shall be reported within 30 days after the end of the reporting period to the Groundwater Section of the Water Quality Division.

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

7. The permittee shall report all instances of noncompliance not reported otherwise, at the time monitoring reports are submitted; such reports shall contain the information listed in 6. above.
8. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Administrator, it shall promptly submit such facts or information.
9. The permittee shall retain all records concerning the nature and composition of injected fluids until five (5) years after completion of any specified plugging and abandonment procedures. The Administrator may require the owner/operator to deliver the records to the Administrator at the conclusion of the retention period.
10. A subsurface discharge (injection) well may not commence subsurface discharge (injection) until, following public notice and an opportunity for hearing, a Groundwater Pollution Control Permit has been issued by the Department for the proposed operation, and:
  - a. Well construction is complete and the permittee has submitted notice of completion of construction to the Administrator, and
  - b. The Administrator has inspected or otherwise reviewed the subsurface discharge (injection) well and finds it in compliance with the conditions of the permit; or the permittee has not received notice from the Administrator of intent to inspect or otherwise review the facility within thirteen (13) days of the notice of a. above, in which case prior inspection or review is waived, and

c. Well mechanical integrity testing has been proven or demonstrated to the satisfaction of the Administrator.

11. Annual reports shall be submitted to the Administrator within thirty (30) days following the anniversary date of the permit.
12. A comprehensive report for an aborted or curtailed operation authorized by this permit shall be submitted to the Administrator within thirty (30) days of complete termination of the injection (discharge) or associated activity, in lieu of an annual report.

J. Permit Actions

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

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

Each permit is reviewed at least once every five (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 ten (10) years by the Administrator.

K. Mechanical Integrity

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

At a minimum of once every five years and more frequently if required by DEQ/Water Quality Division, the applicant/permittee shall demonstrate the continued sound and unimpaired condition of all components of the injection well by well mechanical integrity testing. An injection well has mechanical integrity if there is no significant leak in the casing, tubing or packer; and there is no significant movement of injected fluid into an underground source of usable water through

vertical channels adjacent to the injection well bore. The absence of leaks will be determined by an acceptable pressure test. Applicant/permittee shall provide WQD sufficient advance notice so that a WQD representative may witness the test if desired by WQD. Written results shall be provided WQD as soon as results are available.

The absence of significant fluid movement will be determined by the results and interpretation of appropriate geophysical log(s), such as a cement-bond, temperature, noise, or other log, or combinations of logs.

Concerning the No. 1 Wycon Disposal Well: The annulus was filled with treated water on February 12, 1969 when the well was originally completed. Annulus pressure between the 4.5 inch tubing and the 7 inch casing has been monitored continuously since injection began.

Pressure tests have been conducted annually. As a result of the pressure test in 1981, it is reported that the integrity of the casing to tubing annulus was confirmed by a 44 hour check of its pressure after filling it liquid full. A closed system reportedly was demonstrated by pressure increase with temperature during shut-in.

Integrity of the packer was also indicated by the pressure test. A "packer test" by radioactive tracer survey was conducted on December 2, 1982. No leaks around the packer were indicated by the tracer survey.

Applicant/permittee has provided a cement-bond log (1969) which indicates the presence of adequate cement to prevent the migration of injection fluid through vertical channels outside the casing. In December of 1982 further testing of the well was conducted, including the running of two types of temperature logs and the use of a high sensitivity flowmeter (and the running of radioactive fluid velocity logs). No movement of fluid along the outside of the casing has been indicated.

The submitted information is accepted as indicative of well mechanical integrity for the permitted operation. If an increase in normal injection rate (volume) and/or pressure is requested by the applicant/permittee, adequate justification must be provided and additional mechanical integrity testing will be required before an increased normal injection rate/pressure will be authorized.

TD: 6305' below ground level.

Casing: 9-5/8", H-40, 32.3#, set at 1101'.  
7", J-55, 23#, set at 5831'.

Tubing: 4-1/2", J-55, 10.5#, 5770.46'; with 60.65' of 4-1/2" Fibercast casing blow the packer. Tubing coated internally with Tube-Cote TK-75.

Packer: Permanent Baker compression packer set at 5740' with 57,000 psi surface compression.

Cementing program: Cement circulated on the surface string with 700 sax of class G cement with 3% CaCl in the last 100 sax.

The 7" casing was cemented in two stages. Cemented first stage (5831-3711) with a spearhead of 500 gallon mud flush, followed by 460 sax 50/50 Pozmix cement with 2% allowed gel. Opened D.V. tool and circulated cement to surface using spearhead of 500 gallon mud flush followed by 900 sax 50/50 Pozmix cement with 2% allowed gel and 2% added gel.

Completion: Open hole completion 5831'-TD with Fibercast tailpipe below packer set at 5770'. (Note: Based on injection logging of December 1-2, 1982, it was reported that the packer and tubing were found to be located 40 feet higher than expected, and the hole was found to be bridged at a depth of 6,007 feet instead of open to approximately 6,275 feet as expected.)

Treatment: Well was acidized with 2000 gallon H.F. acid and fraced with 500 barrels water (Adomall added). Average injection rate 30 BPM. Average pressure 2700 pounds.

Pressure monitoring: Annulus between casing and tubing filled with demineralized corrosion inhibiting water.

Injection pressure, annulus, and injection rate monitored continuously using a chart recorder, and manual recording of pressures and rates.

Plant personnel routinely inspect well monitoring devices. The chart record is compared to gauge readings. If significantly different, an artificial signal is put into the chart recorder and the recorder recalibrated. If necessary, gauges are pulled and reset or replaced.

The operation (discharge) of any well or system will terminate immediately if mechanical integrity of the well or system fails and/or a leak or unauthorized fluid movement occurs. The discharge shall be discontinued until mechanical integrity has been restored and permission to continue the discharge has been obtained from the Administrator.

#### L. Abandonment

The permittee shall notify the Administrator at least 180 days before well abandonment. Immediately following the permanent cessation of subsurface discharge or related activity, or where a well has not been completed, the applicant/permittee shall notify the Director and follow the procedures prescribed by the Director for plugging and abandonment or the discontinuance of related activities:

WQD abandonment requirements shall be coordinated with requirements of the Wyoming State Engineer (and the U.S. EPA if necessary).

WQD requires at a minimum that the injection zone be permanently isolated from overlying and underlying aquifers; that interaquifer commu-

nication be permanently prohibited; and that the well be permanently secured against the injection or disposal of anything after abandonment.

M. Duties of the Permittee

It is a duty of the permittee to:

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

N. Financial Responsibility

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

The required Certification of Financial Responsibility has been submitted by the applicant/permittee.

O. Special measures the Director finds necessary:

This permit neither replaces nor negates any requirements of other State agencies or permits.

P. Special permit conditions:

Pollution or waste which migrates into an aquifer containing a usable groundwater of the State is a violation of the permit.

Mechanical integrity -- operations terminate immediately if mechanical integrity of well or system fails and/or a leak or unauthorized fluid movement occurs.

Q. Signatories Requirement

All reports required by this permit and other requested information shall be signed as follows:

For a corporation -- by a principal executive officer of at least the level of vice-president;

For a partnership or sole proprietorship -- by a general partner or the proprietor, respectively;

For a municipality, State, Federal or other public agency -- by either a principal executive officer or ranking elected official; or

By a duly authorized representative for any of the above. A person is a duly authorized representative only if:

1. The authorization is made in writing by one of the described principals;
2. The authorization specifies either an individual or position having responsibility for the overall operation of the regulated facility or activity; and
3. The written authorization is submitted to the Administrator.

If an authorization is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization must be submitted to the Administrator prior to or together with any reports or information, to be signed by an authorized representative.

Any person signing a report or other requested information shall make the following certification:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment."

R. Noncompliance

Any permit noncompliance constitutes a violation of the permit.

The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification or planned changes or anticipated noncompliance, does not stay any permit condition.

S. Permit Transfer

The owner/operator of record (permittee) is always responsible for permit compliance. A permit holder cannot transfer his permit without approval of the Department Director.

T. Responsibilities

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

U. Property Rights

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

V. Severability

The provisions of this permit are severable, and if any provision of the permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

File Copy

THE STATE OF WYOMING



ED HERSCHLER  
GOVERNOR

*Department of Environmental Quality*  
*Water Quality Division*

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

March 31, 1982

Mr. Larry Shay  
Vice President, Manufacturing  
Wycon Chemical Company  
P.O. Box 1287  
Cheyenne, WY 82001

RE: Application for permit for industrial waste disposal well, GPC 81-966

Dear Mr. Shay:

The subject application has been reviewed by this office. Review comments are provided in this letter. Please respond to specific comments as required.

Comments are as follows:

1. The permit application submitted by a corporation must be signed by a principal executive officer of at least the level of vice president; provide documentation which shows that Wycon's application was signed by a vice president.
2. The applicant is required to submit a Financial Responsibility Statement as part of the application. Complete and return the enclosed Statement (one copy is sufficient).
3. What purpose is served by the diesel oil immediately below the packer? Is oil still used? How is it kept in place?
4. There appears to be conflicting information concerning the tubing packer in use. Figure 6 of the Fenix and Scisson, Inc. evaluation study shows a Baker compression packer set at 5640 feet below ground level, while Figure 5, on Page 1-31 of the application, shows item 28 identified (Page 1-32) as "Tensions packer". If in fact a Tension packer is in use, what pressure applied at the surface will cause the packer to come loose?
5. Describe the newly acquired pressure monitoring equipment and its use (include sketches as appropriate). Has the equipment been installed and is it in use? If not, when will it be operable? Where will records be kept?

6. One of the conclusions of the 1980 well test states that "large increases in reservoir pressure indicate that fluid injection at current rates should not be continued." However, the application states that injections in excess of current (1980) rates would be acceptable. Provide actual data and information for clarification.
7. Provide a copy of the Metcalf & Eddy 1979 investigation of water wells in the vicinity of the Wycon Facility, or make one available for review and copying.
8. What other constituents are present in the injected waste, which account for the relatively high concentration of Total Dissolved Solids? (See the attached Table 1.1 from the application.)
9. On page 2-9 of the application, under 0.), reference is made to the injection of hazardous wastes. What is the significance of this?
10. Provide numbers or estimates for the maximum amounts and/or volumes each of organophosphate and hydrochloric acid which might be injected (gpm).
11. The Facility Closure Plan: provide the actual depth interval at the bottom of the hole which will be cemented. What is the detailed emergency closure plan (as pertains to the disposal well) referred to on page 1-40 of the application?
12. The Fenix & Scisson, Inc. evaluation study included a number of significant conclusions and recommendations. What is Wycon's attitude concerning these conclusions and recommendations? Would Wycon object if any of these were included as WQD permit conditions? If so, why?
13. What is Adomall composed of and what is it used for? How much is used and when?
14. What is a Halliburton D.V. tool?
15. Are additives used in the disposal system to prevent corrosion, scaling and other problems, and improve performance? If so, what is the chemical composition of each one used, and what is the rate and volume of use, for each one?
16. Provide more specifics on the groundwater monitoring to be conducted as part of the post-closure plan:
  - a. Are the wells in existence (identify) or are they to be drilled (where and when)?
  - b. What formations and depth intervals are to be monitored?

Mr. Larry Shay  
March 31, 1982  
Page 3

- c. How will the stated constituents indicate any migration of the injected waste?

Sincerely,

A. J. Mancini  
Groundwater Control Supervisor

AJM/nc

cc: LeRoy Feusner, WDQ, Cheyenne  
Mike Patton, Wycon Chemical Co., Cheyenne

2-27-84

THE STATE OF WYOMING



ED HERSCHLER  
GOVERNOR

## Department of Environmental Quality

### Water Quality Division

1111 EAST LINCOLNWAY

CHEYENNE, WYOMING 82002

TELEPHONE 307 777-7781

February 27, 1984

Mr. Larry N. Shay  
Vice President/Manufacturing  
Wycon Chemical Company  
P.O. Box 1287  
Cheyenne, WY 82001

RE: Permit GPC 81-966R

Dear Mr. Shay:

Enclosed are two copies of the signed permit for the operation of the Wycon Chemical Company #1, Wycon Disposal Well, in the SW1/4 NW/14 Section 16, T13N, R67W, Laramie, County, Wyoming.

Please note the following:

1. Enclosed with this letter are a dozen copies of form GPC 7. One copy of this form must accompany each submittal of information to the Division/Section. This form can be reproduced, or additional copies may be requested as needed. The form is to be signed as specified in Section Q of the permit, Signatories Requirement. All reports are to be signed by an executive officer of at least the level of vice president, or a duly authorized representative as described in Section Q.
2. If the authorized injection rate or pressure is exceeded, this shall be reported as specified in Section I of the permit.
3. For normal operations the average and maximum daily injection rate (volume) and pressure shall be reported on a monthly basis. Accumulative injection volume shall be reported at the same time. Daily abnormal (emergency) injection rate and pressure shall be reported for the period, as a separate part of the monthly report (Section G of the permit).
4. The wastewater shall be sampled just before being injected and analyzed. Analytical results shall be reported monthly (Section G of the permit).
5. The Wycon Water Well #15 shall be sampled, and analytical results submitted, as specified in Section F of the permit.