

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-400RR

Kerr-McGee Section 28-33 Mine Sanitary Disposal System
(Name of Facility)

This permit hereby authorizes the applicant:

Kerr-McGee Nuclear Corporation
(Last) (First) (Middle)
P.O. Box 188
(Street or P.O. Box)
Glenrock Converse Wyoming 82637
(City) (County) (State)

to construct, install, or modify a Septic Wastewater
facility located in Section 21, T37N, R73W
(Legal Description)

in the County of Converse, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Gula
Administrator
Water Quality Division

Robert E. Lundin
Director
Wyoming Dept. of Environmental Quality

December 13, 1977
Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Kerr-McGee, Section 28-33, Sanitary Disposal System,
Section 21, T37N, R73W, Converse County

ARCHITECT OR ENGINEER: Dan E. Marek, P.E. - Kerr-McGee Nuclear Corporation,
P.O. Box 188, Glenrock, WY 82037

WATER QUALITY DIVISION REFERENCE NUMBER: 77-400

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

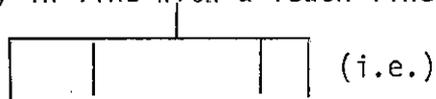
DATE OF REVIEW: 10-26-77

William L. Garland

ACTION: CONSTRUCTION IS NOT AUTHORIZED

COMMENTS: 1. What slope is the leach field installed at? Are the ends tied together with perforated pipe?

2. The pipe from the septic tank should not connect to the header pipe directly in line with a leach line.



3. Flow estimation for shift workers should be 35 gal./person/day. This will increase your septic tank and leach field size.

4. Your present design indicates the leach field is undersized. A 18 in. trench with 970 feet of disposal line gives 1455 sq. ft. of disposal area which is considerably undersized.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

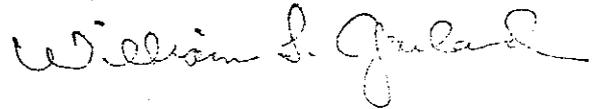
PROJECT: Kerr-McGee, Section 28-33 Mine, Sanitary Disposal System, Sec. 21,
T37N, R73W, Converse County, Wyoming

ARCHITECT OR ENGINEER: Dan E. Marek, P.E. - Kerr-McGee Nuclear Corporation,
P.O. Box 188, Glenrock, WY 82637

WATER QUALITY DIVISION REFERENCE NUMBER: 77-400R

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 11-9-77



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

Again: The leach field is undersized.

An 18 inch trench with 970 feet of disposal lines gives 1455 sq. ft. of disposal area. With 15 minutes per inch percolation rate, an application rate of 1.3 gal per sq. ft. can be utilized.

If 100 people is the number the facility is designed for, 3500 gallons is the requirement for sizing the leach field. The present design will not take 2000 gallons per day.

The new submittal requires the seal or signature of the designing engineer.

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 77-401M

Saratoga 14" Water Transmission Line
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Saratoga

(Last) (First) (Middle)
c/o Western Engineers - Architects
501 N. Sun Drive

(Street or P.O. Box)

Casper

Wyoming 82601

(City)

(County)

(State)

to construct, install, or modify a Water Transmission Main

facility located in Sections 11, 14 & 15, T17N, R84W

(Legal Description)

in the County of Carbon, in the State of

Wyoming. This permit shall be effective for a period of 2 years

from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. O'Connell
Administrator
Water Quality Division

Robert E. Dundin
Director
Wyoming Dept. of Environmental Quality

October 26, 1977

Date of Issuance

cc: The Honorable Kathy Glode, Mayor, Town of Saratoga, P.O. Box 486, Saratoga, WY 82331

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-402MR

Town of Saratoga Water Tank
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Saratoga
(Last) (First) (Middle)
C/O Western Engineers-Architects
501 North Sun Drive
(Street or P.O. Box)

Casper Natrona Wyoming 82601
(City) (County) (State)

to construct, install, or modify a Water Storage Tank
facility located in Section 14, T17N, R84W
(Legal Description)

in the County of Carbon, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. [Signature]
Administrator
Water Quality Division

Robert E. [Signature]
Director
Wyoming Dept. of Environmental Quality

February 1, 1978
Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Saratoga Water Storage Tank

ARCHITECT OR ENGINEER: Western Engineers - Architects, 501 N. Sun Drive,
Casper, Wyoming 82601

WATER QUALITY DIVISION REFERENCE NUMBER: 77-402M

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

William L. Garland

DATE OF REVIEW: 10/21/77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

1. Tank overflow must terminate 12 in. above ground level.
2. The use of a "stop-and-waste" hydrant connected to the system is not acceptable. If a connection is required, it shall be of a design which does not necessitate possible cross-connection.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-403MR

Missle Drive Lift Station - City of Cheyenne
(Name of Facility)

This permit hereby authorizes the applicant:

City of Cheyenne
(Last) (First) (Middle)
c/o Cheyenne Board of Public Utilities
P.O. Box 1469
(Street or P.O. Box)

Cheyenne Laramie Wyoming 82001
(City) (County) (State)

to construct, install, or modify a Sewage Lift Station and Force Main
facility located in Section 36, T14N, R67W
(Legal Description)

in the County of Laramie, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Jones
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

December 19, 1977

Date of Issuance

cc: Banner and Associates, Inc., 309 S. 4th, P.O. Box 550, Laramie, WY 82070

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: City of Cheyenne - Missile Drive Lift Station
Laramie County

ARCHITECT OR ENGINEER: City of Cheyenne, Board of Public Utilities,
Cheyenne, Wyoming 82001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-403M

William L. Garland

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 31, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Plans and specifications shall carry the signature or seal of the registered engineer in the State of Wyoming.
- 2) Two (2) complete sets of plans and specifications are required.
- 3) Enclosed is an application form for a permit to construct, which must be completed and returned to our office.
- 4) Should provide design calculations including design flows (i.e., average flow, peak flow, etc.) Our preliminary review indicates that wet well and emergency overflow storage manhole are not so designed as to satisfy the minimum requirements.
- 5) Size of interconnecting pipes between manholes shown in sheet 1 seem to conflict with those in sheet 4. Please clarify.
- 6) Is the imhoff tank going to be abandoned? If not, how do you regulate the flow?
- 7) Positioning of the lift station underground shown in sheet 4 is not consistent with the manufacturer's detail drawing.
- 8) How can the pumps be protected from clogging or damage without any protecting device being installed?
- 9) Where are the alarm signal and alarm light to be installed?
- 10) What is the elevation of pumps?
- 11) Pump speed of 1196 RPM in pump data seems to conflict with the valve shown in pump performance chart with the TDH of 35.5 feet.

City of Cheyenne - Missile Drive Lift Station, Laramie County

77-403M

- 12) Will the wet well be ventilated? Is the dry well ventilation system operating intermittently or continuously? Mechanical ventilation for lift station shall be installed per 10 State Standards.
- 13) Please show the location of station heater in dry well detail drawing of the manufacturer's data.
- 14) The railroad crossing details submitted are not complete. The specifications should include the type and number of skids and position braces, details of sealing (i.e. - material, thickness, installation, etc.) Type of lubrication to be used when pulling or pushing the sewerline, installation procedures, etc.
- 15) Thrust blocks for the force main were indicated in the specifications, while they are not shown in the plans. Please clarify.
- 16) Please show supports of the suction and discharge lines in the plans.
- 17) Size of bedding and backfilling material should be specified in the specifications.
- 18) Is the ditch to be filled abandoned? Please justify your design by providing more information as to the ditch.
- 19) Water - sewer crossing specifications should be provided. Those specifications shall meet the requirements of State Water Quality Chapter III Rules and Regulations.
- 20) There should be specifications concerning excessive sidefill pressures and ovalation of the pipe. The maximum vertical deflection allowed shall not exceed 5% of the pipes internal diameter.
- 21) Should provide exfiltration-infiltration specifications.
- 22) No alignment specifications for sewerline was provided.
- 23) This cannot be considered a final review.

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 77-404

Country Heights

(Name of Facility)

This permit hereby authorizes the applicant:

<u>Varney</u> (Last) c/o John W. Donnell, P.E. P.O. Box 13	<u>Earl</u> (First)	<u>C.</u> (Middle)
(Street or P.O. Box)		
<u>Worland</u> (City)	<u>Washakie</u> (County)	<u>Wyoming 82401</u> (State)

to construct, install, or modify a Sanitary Sewer
facility located in Tract 70-30
(Legal Description)

in the County of Washakie, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William F. O'Connell
Administrator
Water Quality Division

Robert E. Eundin
Director
Wyoming Dept. of Environmental Quality

October 12, 1977

Date of Issuance

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 77-405

R J Addition

(Name of Facility)

This permit hereby authorizes the applicant:

City of Worland

(Last)

(First)

(Middle)

c/o John W. Donnell and Associates

P.O. Box 13

(Street or P.O. Box)

Worland

Washakie

Wyoming 82401

(City)

(County)

(State)

to construct, install, or modify a Sewer and Water

facility located in the City of Worland

(Legal Description)

in the County of Washakie, in the State of

Wyoming. This permit shall be effective for a period of 2 years

from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. Garland

Administrator

Water Quality Division

Robert E. Scudler

Director

Wyoming Dept. of Environmental Quality

October 12, 1977

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Town of Douglas - Wastewater Interceptor, Sewer, Catchment Area #3.

ARCHITECT OR ENGINEER: Charles A. Haas, Bell, Galyardt, Wells, Inc., 117 So.
2nd Street, Douglas, WY 82633

WATER QUALITY DIVISION REFERENCE NUMBER: 77-407M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: October 24, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Application for a permit to construct should be submitted.
- 2) Depths of new sewer main between M.H. #1 - M.H. #4 are less than 2 feet. Are they deep enough to prevent freezing and damaging from traffic?
- 3) 10 State Standards require trunk lines and laterals to be designed to carry 250% and 400% average daily flow respectively. Our calculations indicate that 24" and 18" lines are adequate but no data has been submitted to prove that 10" laterals which connect existing sewers to new interceptors are large enough to carry 400% of average flow from the existing sanitary sewerline. Please submit design calculations as to 10" lateral lines.
- 4) Sewers 24 inches or less shall be laid with straight alignment between manholes. (See sheet 6 & 7).
- 5) No infiltration - exfiltration specifications were provided. It must meet the minimum requirements of the Ten State Standards.
- 6) Alignment testing specifications for interceptor sewer should be provided.
- 7) This cannot be considered a final review.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-407MR

Town of Douglas - Wastewater Interceptor Sewer, Catchment Area #3
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Douglas
(Last) (First) (Middle)
130 South 3rd
(Street or P.O. Box)
Douglas Converse Wyoming 82633
(City) (County) (State)

to construct, install, or modify a Sewage Collection
facility located in Section 16 - 17, T32N, R71W
(Legal Description)

in the County of Converse, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galone
Administrator
Water Quality Division

Robert E. Sandin
Director
Wyoming Dept. of Environmental Quality

November 28, 1977

Date of Issuance

cc: Charles A. Hass, Bell, Galyardt and Wells, Inc., 117 So. 2nd Street, Douglas,
WY 82633

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 77-408M

Town of Cokeville - Water Improvement Project
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Cokeville
(Last) (First) (Middle)
c/o Uinta Engineering and Surveying
P.O. Box 746
(Street or P.O. Box)
Evanston Wyoming 82930
(City) (County) (State)

to construct, install, or modify a Water Transmission Line
facility located in Section 2, 3, 4, T24N, R119W
(Legal Description)

in the County of Lincoln, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. [Signature]
Administrator
Water Quality Division

Robert E. [Signature]
Director
Wyoming Dept. of Environmental Quality

October 26, 1977

Date of Issuance

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-409RR

Rafter J Ranch Subdivision
(Name of Facility)

This permit hereby authorizes the applicant:

Lewton Charles E.
(Last) (First) (Middle)
P. O. Box 442
(Street or P.O. Box)
Jackson Teton Wyoming 83001
(City) (County) (State)

to construct, install, or modify a Public Water Supplies & Wastewater
facility located in Section 7, 8, 17, & 18, T40N, R116W
(Legal Description)

in the County of Teton, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William S. Galand
Administrator
Water Quality Division

Robert E. Auer
Director
Wyoming Dept. of Environmental Quality

January 9, 1978
Date of Issuance

cc: Nelson Engineering
ATTN: Frank Grimes
P. O. Box 1141, Jackson, Wyoming 83001

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Rafter J Ranch Subdivision, Sections 7, 8, 17 & 18, T40N, R116W,
Teton County, Wyoming

ARCHITECT OR ENGINEER: Albert L. Nelson, P.E. - Nelson Engineering, P.O. Box
1141, Jackson, WY 83001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-409

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: November 7, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

William L. Garland

COMMENTS:

GENERAL

- 1) All plans and specifications must be signed or sealed by an engineer registered in the State of Wyoming.
- 2) An operation and maintenance guide for operating both the water and wastewater system is needed.
- 3) A wastewater sludge disposal plan is needed.
- 4) Sufficient land must be preserved for future use for another wastewater plant location and a future leach field. Please indicate location.

WATER SYSTEM

- 5) Please submit the design calculations including maximum and minimum pressures in the system (i.e. - Hardy - Cross or equiv.)
- 6) No smaller than 6-inch water lines shall be used in any system which provides for fire protection.
- 7) PVC 160 psi pipe meeting ASTM D-1784 and ASTM - 2241 does not meet our standards. All PVC pipe must meet AWWA C900-75 criteria.
- 8) It appears that more valves may be needed throughout the system to minimize inconvenience during repairs. Two lines across the river should be available at all times.
- 9) Detailed plans and specifications are needed for the two under-water crossings. These sections of line must have special flexible, watertight joints. Valves are needed at both ends of the crossing.

Rafter J Ranch Subdivision, Sections 7, 8, 17 & 18, T40N, R116W,
Teton County, Wyoming

77-409

Cont.

- 9) The valve nearest the source shall be in a manhole and provided with taps. (Required by Ten State Standards for sampling and testing purposes).
- 10) Detailed plans and/or specifications are needed of the thrust blocking, fire hydrant installations, valve boxes, etc.
- 11) The water mains shall be installed in accordance to applicable AWWA Standards (AWWA C500 or AWWA C603). Please insert this into the specifications.
- 12) All gate valves shall meet AWWA C500-71.
- 13) All fire hydrants shall meet AWWA Standards.
- 14) All water mains shall be disinfected in accordance to AWWA C601. Please insert this into the specifications.
- 15) The application of chlorine shall be at a rate of no less than 50 mg/l with a residual at the end of 24 hours of no less than 25 mg/l.
- 16) If initial disinfection fails, the procedure shall be repeated. Use of a 0-4 mg/l residual shall not be considered.
- 17) Please indicate where the highly chlorinated water will be disposed to.

WELLS AND CHLORINATION BUILDING

- 18) Complete plans and specifications are needed for the well construction. In accordance to our "Chapter III Rules and Regulations," the wells may be drilled to obtain design information without a permit from DEQ. However, a "Permit to Construct" is needed before the wells can be hooked into the distribution system. The wells must be constructed in accordance to Ten State Standards.
- 19) Bacteriological and chemical analysis are needed for each well upon completion of drilling.
- 20) A bypass is needed around the water meter.
- 21) A tap is needed for obtaining mix water for the hypochlorine solution.
- 22) Separate tanks for mixing and feeding the calcium hypochlorine are recommended.

Rafter J Ranch Subdivision, Sections 7, 8, 17 & 18, T40N, R116W,
Teton County, Wyoming

- 23) A chlorine contact time of at least 30 minutes is required before reaching consumers. Will this be provided?
- 24) Please provide details of the floor drain. Does it daylight or drain to a drainage pit?

WATER STORAGE TANK

- 25) The overflow-drain pipe from the tank should be downturned, screened, and end at least 12-18 inches above the ground surface.
- 26) Indicate where the drain pipes under the tank foundation daylight. It should have an end meeting the same requirement as above.
- 27) Please submit valve pit manhole details.
- 28) Please submit details of the valve pit drainage.
- 29) The storage tank shall be disinfected in accordance to AWWA D102, Section 5. Two or more samples taken at 24 hour intervals shall indicate bacteriologically safe water before the tank can be used.
- 30) A removable silt stop should be provided in the influent-effluent line.

SEWER COLLECTION LINES

- 31) All gravity sewer lines should meet ASTM D-3033 or ASTM D-3034.
- 32) Vitrified clay sewer pipe must meet ASTM C700-74.
- 33) ASTM D-2241 refers to PVC pipe, not perforated clay pipe.
- 34) Sewer saddles will not be allowed. Use 45° "ye" branches.
- 35) More details are needed for the river crossing (i.e. - depth, backfill specifications, etc.)
- 36) A lapping specification is needed for straight alignment between manholes.
- 37) All sewer lines shall be at least ten horizontal feet from water lines. Please insert this into the plans and/or specifications.
- 38) Please submit details of the air testing procedure.
- 39) Detailed specifications are required for bedding and backfilling the sewer pipe in order to prevent excessive sidefill pressures

Rafter J Ranch Subdivision, Sections 7, 8, 17 & 18, T40N, R116W,
Teton County, Wyoming

77-409

Cont.

- 39) or ovalation of the pipe. The use of a deflection testing specification is highly recommended (i.e.- Go - No Go Pig at 5% deflection).

COMMUNUTOR

- 40) Please supply manufacturers information of the communutor.
- 41) The two sewer lines shall come together in a manhole. One sewer line shall enter the communutor pit.
- 42) A bypass is needed around the communutor in case of maintenance and repairs. It shall be an automatic bypass.
- 43) This communutor pit will require frequent entrance by maintenance personnel. Forced venelation, lighting, easy access and easy removing of the communutor will be required.
- 44) Due to the wear of grit on the communutor blades, it is highly recommended that a grit chamber precede the communutor.

LIFT STATION

- 45) Adequate provisions shall be made for power outages. Emergency power appears to be needed.
- 46) Are the shutoff valves installed in each individual pump discharge line? These valves must be accessible from outside of the lift station.
- 47) Fillets of a minimum of 1=1 shall be used in the wet well.
- 48) Surcharging of upstream manholes is not permitted. The float levels should be set accordingly.
- 49) Please submit the manufacturers details of the oxidation ditch package plant.
- 50) The plant shall be designed for a BOD loading of no greater than 12.5 lbs. BOD/1000 ft.³ aeration basin area and no less than a 24 hour detention time.
- 51) The plant must have the capability of a return sludge rate of 200% of the average daily flow. Will the air lift pump supply this?

Rafter J Ranch Subdivision, Sections 7, 8, 17 & 18, T40N, R116W,
Teton County, Wyoming

77-409

- 52) A supernatant drawoff should be used in the aerobic digester.
- 53) Some type of vent is needed in the aerobic digester.
- 54) Fillets are recommended in the tank corners to prevent solids deposition.
- 55) Provide details of the flood control dikes (100 year flood) around the treatment plant site.
- 56) Water shall be provided at the plant site for cleaning and washing purposes.

WASTEWATER CHLORINATION FACILITY

- 57) A chlorine contact period of 15 minutes at peak hourly flow is needed. Will this be provided?
- 58) Please provide details of the chlorine diffuser.
- 59) How will the mixing water be provided?
- 60) A mixing tank and a feed tank is recommended.

LEACHING FIELD

- 61) A complete final design package is needed for our review.
- 62) The bottom of the leaching area shall be at least four feet above the seasonal high groundwater table.
- 63) Due to the number of comments, this cannot be considered a complete review.

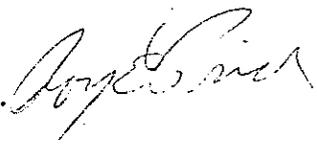
REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Rafter J Ranch Subdivision, Section 7,8,17,18, T40N, R116W
Teton County Wyoming

ARCHITECT OR ENGINEER: Albert L. Nelson, P.E. - Nelson Engineering
P. O. Box 1141 - Jackson, Wyoming 83001

WATER QUALITY DIVISION REFERENCE NUMBER: 77-409R

REVIEWING ENGINEER: David W. Hill - Roy E. Prior, P.E. 

DATE OF REVIEW: December 22, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1). The "sludge disposal plan" alternate 2 is acceptable but we need a letter of agreement from Teton County.
- 2). All PVC water mains must meet AWWA C900-75. To the best of our knowledge, no commercial class 160 psi PVC pipe meets this standard.
- 3). A manhole is needed over the valves on the east side of both Flat Creek water line crossings. Permanent taps shall be made on each side of these valves to allow for insertion of a water meter for testing to determine leakage in the underwater crossings.
- 4). Chlorine shall be applied to water mains at a rate no less than 50 mg/l with a residual at the end of 24 hours of no less than 25 mg/l. This is in accordance to AWWA C601-68.
- 5). Please submit pitless adaptor details.
- 6). To prevent possible back siphonage, a vacuum breaker is needed at the hose bib in the treatment plant building.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-410R

Caballo Mine

(Name of Facility)

This permit hereby authorizes the applicant:

The Carter Mining Company

(Last)

(First)

(Middle)

P. O. Box 209

(Street or P.O. Box)

Gillette

(City)

Campbell

(County)

Wyoming 82716

(State)

to construct, install, or modify a Three Septic Wastewater

facility located in Section 24, T48N, R71W

(Legal Description)

in the County of Campbell, in the State of

Wyoming. This permit shall be effective for a period of 2 years

from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Garland

Administrator

Water Quality Division

Robert E. Lundin

Director

Wyoming Dept. of Environmental Quality

February 8, 1978

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Caballo Mine, Water and Wastewater Systems, P.O. Box 209, Gillette,
WY 82716

ARCHITECT OR ENGINEER: Jerry K. Mueller, P.E.

WATER QUALITY DIVISION REFERENCE NUMBER: 77-410

William L. Garland

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

DATE OF REVIEW: 10-31-77

ACTION: SEWER SYSTEMS - NOT AUTHORIZED FOR CONSTRUCTION. SEE COMMENTS.

COMMENTS:

1. Since it appears that the water system does not have 10 separate service connections, the Water Quality Division has no actual authority over its construction. The system appears to be very well designed.
2. The locations of the septic tanks and leach fields are unacceptable. WQD Regulations require that all septic tanks and leach fields be located at least 25 feet from waterlines.
3. The following additional information concerning the septic systems shall be required:
 - percolation rates, determined in accordance with the enclosed instructions.
 - basis on which the expected daily flow, to the large septic tank, was calculated.
 - a cross section of the leach field trenches, indicating bury depths and backfill materials.
 - total disposal area of each of the leach fields.
 - the ends of the leach lines should be tied together by additional perforated pipe.
4. Drawing No. 99-55-2-002 indicates solids settling chambers and impoundment basins. It is presumed that these will be constructed for the discharge permit (WY-0025755). Complete plans and specifications will be needed for these installations.

Caballo Mine, Water and Wastewater Systems, P.O. Box 209, Gillette, WY 82716
77-410

Included should be plans, sections, inlet and outlet details, valving details, estimated detention times, ground clearing and dike construction specifications, ground percolation information, and any other pertinent information.

- What is the depth of groundwater at the leach field sites? (Should be deeper than 8 feet).

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-411R

University of Wyoming, Recreation Camp, Proposed Septic Tank and Leach Field (Name of Facility)

This permit hereby authorizes the applicant:

Division of Physical Plant

(Last) (First) (Middle)
University of Wyoming

(Street or P.O. Box)
Laramie Albany Wyoming 82070

(City) (County) (State)

to construct, install, or modify a Septic Wastewater
facility located in Section 33, T16N, R79W
(Legal Description)

in the County of Albany, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William S. Janda
Administrator
Water Quality Division

Robert E. Sinden
Director
Wyoming Dept. of Environmental Quality

December 14, 1977

Attention: ^{Date of Issuance} Mr. Fred B. Crowell, P.E.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: University of Wyoming Recreation Camp, Proposed septic tank and leach field

ARCHITECT OR ENGINEER: Fred B. Crowell, P.E. - Assistant Director, Division of Physical Plant, University of Wyoming, Laramie, WY 82071

WATER QUALITY DIVISION REFERENCE NUMBER: 77-211

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E. *William L. Garland*

DATE OF REVIEW: 11-8-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION. SEE COMMENTS.

- COMMENTS:
1. A design flow rate and percolation rates for the leach field are required in order to evaluate the design.
 2. It is recommended that to prevent loading only the upper portion of the leach field, the inverts of the overflow pipes from the Drop Boxes should be lowered below the tops of the lateral pipes, approximately 1 to 2 inches.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-412RR

Bible Camping Inc., Sewage Disposal
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Bible Camping Inc.</u>		
(Last)	(First)	(Middle)
<u>Phil Tubbs</u>		
<u>P. O. Box 846</u>		
	(Street or P.O. Box)	
<u>Pinedale</u>	<u>Sublette</u>	<u>Wyoming 82941</u>
(City)	(County)	(State)

to construct, install, or modify a Septic Tank - Leach Field
facility located in Section 12, T38N, R110W
(Legal Description)

in the County of Sublette, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:
Robert E. Sinden
Director
Wyoming Dept. of Environmental Quality

William P. Boland
Administrator
Water Quality Division

April 5, 1978
Date of Issuance
cc: Rio Verde Engineering, P. O. Box 67, Pinedale, Wyoming 82941
ATTN: Robert Harrower, P.E.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
Hathaway Office Building
Cheyenne, Wyoming 82002

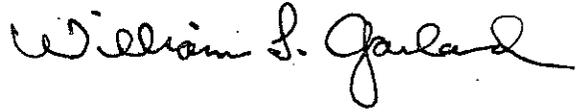
PROJECT: Bible Camp Sewage Disposal, Section 12, T38N, R110W
Sublette County

ARCHITECT OR ENGINEER: Rio Verde Engineering
ATTN: Robert Harrower, P.E.
P. O. Box 67 - Pinedale, Wyoming 82941

WATER QUALITY DIVISION REFERENCE NUMBER: 77-412R

REVIEWING ENGINEER: David W. Hill - William L. Garland, P.E.

DATE OF REVIEW: February 14, 1978



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1). You state that the depth to the groundwater is greater than three feet. Our standards require no less than a four foot separation between the leaching trenches and the seasonal high groundwater table.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

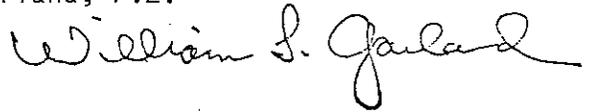
PROJECT: Bible Camp, Sewage Disposal, Section 12, T38N, R110W, Sublette
County, Wyoming

ARCHITECT OR ENGINEER: Robert A. Harrower, B.E. - Rio Verde Engineering, P.O. Box
67, Pinedale, WY 82941

WATER QUALITY DIVISION REFERENCE NUMBER: 77-412

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: October 19, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Please submit two copies of all plans and specifications.
One copy shall be returned to you upon our authorization.
- 2) Complete detailed design data is needed (i.e.- population,
per capita flow, etc.)
- 3) Please state the depth to the groundwater.
- 4) Schedule 40 PVC pipe or cast iron pipe shall be used for the
outlet "Tee" from the septic tank.
- 5) Indicate distance from water well to the leach field.

DWH/jo

cc: Bible Company, Inc., c/o Phil Tubbs, P.O. Box 846, Pinedale,
WY 82941

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-413

Richins Addition

(Name of Facility)

This permit hereby authorizes the applicant:

City of Worland

c/o John W. Donnell, P.E. (Last) (First) (Middle)
P.O. Box 13

(Street or P.O. Box)

Worland Washakie Wyoming 82401
(City) (County) (State)

to construct, install, or modify a Water Extension
facility located in the City of Worland
(Legal Description)

in the County of Washakie, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. [Signature]
Administrator
Water Quality Division

Robert E. [Signature]
Director
Wyoming Dept. of Environmental Quality

October 25, 1977

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: ~~Santa Fe Equipment Shop and Office Wastewater Disposal, Natrona County, Lot 9, Industrial Park Subdivision~~

ARCHITECT OR ENGINEER: Bennett J. Severson , P.E. - Denver Commercial Building,
909 East 62nd Avenue,
Denver, CO 80216

WATER QUALITY DIVISION REFERENCE NUMBER: ~~77-415~~

REVIEWING ENGINEER: Jake Strohman, William L. Garland, P.E.

DATE OF REVIEW: 10-24-77

ACTION: ~~CONSTRUCTION IS NOT AUTHORIZED~~

William L. Garland

COMMENTS:

1. Furnish information to support volumes for each system (i.e. - number of employees, customers, sump uses, etc.)
2. What type of chemicals, oils, greases, if any will be used or stored at the facility?

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 77-415R

Santa Fe Equipment Company - Shop and Office

(Name of Facility)

This permit hereby authorizes the applicant:

Santa Fe Equipment Company

(Last)

(First)

(Middle)

909 East 62nd Avenue

(Street or P.O. Box)

Denver

Colorado 80216

(City)

(County)

(State)

to construct, install, or modify a Commercial Waste Treatment

facility located in Lot #9, Interstate Industrial Park

(Legal Description)

in the County of Natrona, in the State of

Wyoming. This permit shall be effective for a period of 2 years

from the date of issuance of this permit not to exceed five (5) years.

cc: Denver Commercial Builders, Inc., 909 East Sixty-Second Avenue, Denver, CO 80216

Authorized by:

William J. Garland

Administrator

Water Quality Division

Robert E. Sundin

Director

Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

This permit does not supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-416 - Ref. 76-207R

Veach Trailer Court
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Williams</u> (Last)	<u>Veach</u> (First)	<u></u> (Middle)
<u>c/o Walter J, Pilch and Associates</u>		
<u>P.O. Box 6498</u>		
(Street or P.O. Box)		
<u>Sheridan</u> (City)	<u>Sheridan</u> (County)	<u>Wyoming 82801</u> (State)

to construct, install, or modify a Wastewater Treatment
facility located in Section 4, T54N, R84W
(Legal Description)

in the County of Sheridan, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Sturdivant
Director
Wyoming Dept. of Environmental Quality

November 18, 1977
Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

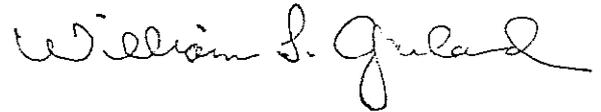
PROJECT: Weiss Waste Treatment Facility, Proposed Sewer, Section 36,
T19N, R105W, Sweetwater County, Wyoming

ARCHITECT OR ENGINEER: William F. Carder, P.E. - Bennett - Carder and Associates,
P.O. Box 1324, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-417

REVIEWING ENGINEER: David W. Hill; William L. Garland, P.E.

DATE OF REVIEW: October 25, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

- COMMENTS: 1) Please submit two copies of all plans and specifications. One set shall be returned to you upon our authorization.
- 2) Please submit complete design criteria (i.e. - capita, flow per capita, percolation rate, etc.)
 - 3) Submit septic tank details.
 - 4) Submit sewer line specifications and sewer line sizes and slopes (Building to septic tank, septic tank to leach field).
 - 5) Please indicate the distance between parallel leach lines and length of leach lines.

cc: Harry Weiss, P.O. Box 1303, Rock Springs, Wyoming 82901

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-417R

Weiss Commercial Wastewater Treatment System
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Weiss</u> (Last)	<u>Harry</u> (First)	<u></u> (Middle)
<u>P.O. Box 1330</u> (Street or P.O. Box)		
<u>Rock Springs</u> (City)	<u>Sweetwater</u> (County)	<u>Wyoming - 82901</u> (State)

to construct, install, or modify a Septic Tank - Leach Field
facility located in Section 36, T19N, R105W
(Legal Description)

in the County of Sweetwater, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William F. Carder
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: Bennett-Carder and Associates, P.O. Box 1324, Rock Springs, WY 82901
Attention: William F. Carder, P.E.

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

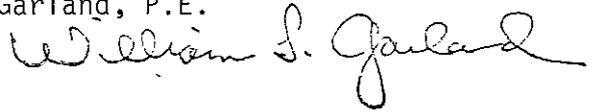
PROJECT: Sutter Waste Treatment Facility, Section 12, T18N, R106W,
Sweetwater County, Wyoming

ARCHITECT OR ENGINEER: William F. Carder, P.E. - Bennett-Carder and Associates,
P.O. Box 1324, Rock Springs, WY 82901

WATER QUALITY DIVISION REFERENCE NUMBER: 77-418

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: October 25, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

- COMMENTS:
- 1) Please submit two copies of all plans and specifications. One set shall be returned to you upon our authorization.
 - 2) Complete design criteria is needed. (i.e. - Capita, flow per capita, percolation rate, amount of leaching area, length of leach lines, etc.)
 - 3) Ends of all parallel leach lines (if any) must be connected.
 - 4) Indicate volume of septic tank.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-419

Downey Septic System Expansion

(Name of Facility)

This permit hereby authorizes the applicant:

Downey	Burdell	
(Last)	(First)	(Middle)
3316 Rock Springs		
(Street or P.O. Box)		
Cheyenne	Laramie	Wyoming 82001
(City)	(County)	(State)

to construct, install, or modify a Septic System
 facility located in Lots 3, 4, 13 & 14, Downey Addition
 (Legal Description)

in the County of Laramie, in the State of
 Wyoming. This permit shall be effective for a period of 1 years
 from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Jones
 Administrator
 Water Quality Division

Robert E. Shindler
 Director
 Wyoming Dept. of Environmental Quality

October 26, 1977

Date of Issuance
 cc: Gary Hickman, City-County Health Unit, 315 W. 20th, Cheyenne, WY 82001
 Wyoming Water, Inc., 1902 Thomes, Room 207, Cheyenne, WY 82001

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-421

City of Riverton - Water System Improvements
(Name of Facility)

This permit hereby authorizes the applicant:

City of Riverton
(Last) (First) (Middle)
c/o William P. Williams, City Engineer
P.O. Box 1700
(Street or P.O. Box)
Riverton Fremont Wyoming 82501
(City) (County) (State)

to construct, install, or modify a Water System Improvements
facility located in the City of Riverton
(Legal Description)

in the County of Fremont, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Lardin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: William A. Peterson, Administrator, P.O. Box 1700, Riverton, WY 82501
Dennis E. Whitehead, Asst. Engineer, P.O. Box 1700, Riverton, WY 82501

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-422 - Ref. 77-395

Big Horn Elementary School
(Name of Facility)

This permit hereby authorizes the applicant:

Sheridan West District #1
(Last) (First) (Middle)

(Street or P.O. Box)

Ranchester Sheridan Wyoming 82839
(City) (County) (State)

to construct, install, or modify a Waste Treatment
facility located in Section 5, T54N, R84W
(Legal Description)

in the County of Sheridan, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Garland
Administrator
Water Quality Division

Robert E. Burdick
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: James H. LeBar, AIA, Johnson-Graham Associates, 644 Grand Avenue, Billings,
Montana 59101

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Wyoming Security Bank, P.O. Box 6499, Sheridan, WY 82801
Attention: J. E. Dowling

ARCHITECT OR ENGINEER: E. P. Hilger, Con'leer Engineering

WATER QUALITY DIVISION REFERENCE NUMBER: 77-423R

William L. Garland

REVIEWING ENGINEER: Tom Mueller, William L. Garland, P.E.

DATE OF REVIEW: 11-28-77

ACTION: NOT AUTHORIZED FOR CONSTRUCTION. SEE COMMENTS.

COMMENTS:

1. If the bottom of the leach trenches will not be 4 ft. above the groundwater table, an elevated leach field or evapotranspiration bed must be installed. The system would have to be redesigned accordingly by your engineer.
2. A percolation rate must be determined. An assumed rate is unacceptable.
3. The ends of leach field lines should be joined together by an additional stretch of pipe.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-424 Ref. 77-243RR

Big Horn Fire Station
(Name of Facility)

This permit hereby authorizes the applicant:

Big Horn Fire District No. 1
(Last) (First) (Middle)

(Street or P.O. Box)

Big Horn Sheridan Wyoming 82833
(City) (County) (State)

to construct, install, or modify a Sewage Treatment
facility located in Section 4, T54N, R84W
(Legal Description)

in the County of Sheridan, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. [Signature]
Administrator
Water Quality Division

Robert E. [Signature]
Director
Wyoming Dept. of Environmental Quality

December 14, 1977

Date of Issuance

cc: Centennial Engineering and Research, Inc., 49 East Loucks, Suite 207,
Sheridan, WY 82801

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-425M

Town of Douglas - Flow Metering Station in Lagoon
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Douglas c/o Stephen Sandvic
(Last) (First) (Middle)
Bell, Calyardt & Wells, Inc.
117 South 2nd Street
(Street or P.O. Box)
Douglas Converse Wyoming 82633
(City) (County) (State)

to construct, install, or modify a Sewage Flow Metering
facility located in Section 17, T32N, R71W
(Legal Description)

in the County of Converse, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Galand
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

January 3, 1978

Date of Issuance

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-426R

Allied Chemical Corporation
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Garland</u> (Last)	<u>Bill</u> (First)	<u>W</u> (Middle)
<u>P. O. Box 551</u> (Street or P.O. Box)		
<u>Green River</u> (City)	<u>Sweetwater</u> (County)	<u>Wyoming 82935</u> (State)

to construct, install, or modify a Water Storage Tank & Water Distribution System
facility located in Section 30, T19N, R109W
(Legal Description)

in the County of Sweetwater, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Ireland
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

January 16, 1978

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

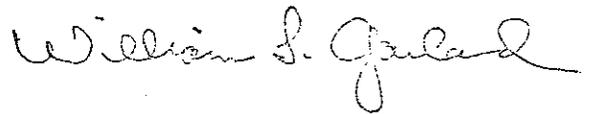
WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Allied Chemical Corporation, Potable Water Distribution System,
Sec. 30, T19N, R109W, Sweetwater Co., WY

ARCHITECT OR ENGINEER: Richard A. Jenkins, P.E. - Allied Chemical Corporation,
Industrial Chemicals Division,
P.O. Box 551, Green River, WY 82935
WATER QUALITY DIVISION REFERENCE NUMBER: 77-426 Attention: B. W. Garland

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: November 8, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Please submit two copies of all plans and specifications. One set shall be returned to you upon our authorization.
- 2) The steel storage tank shall be built in conformance to AWWA D100.
- 3) The tank overflow should end in a downward turn and be covered with wire mesh. It should discharge 12-18 inches above ground level.
- 4) Please submit detailed information on the Drisco-Pipe 7600. (i.e. - standards, outside diameter, wall thickness, etc.)
- 5) The polyethylene pipe shall be NSF approved.
- 6) Submit valve pit and thrust blocking details. (i.e. - applicable standards, sizes, concrete strength, etc.)
- 7) Please submit pipe casing details.
- 8) Pipeline disinfection specifications are needed. The line shall be disinfected in accordance to AWWA C601.
- 9) Please indicate all water-sewer line crossovers if any. Water lines shall cross at least 18 inches above any sewer line if possible. If this separation is not possible the sewer line shall be constructed of water class type material or encased in concrete for at least ten feet on each side of the crossing.
- 10) All water lines shall be at least ten horizontal feet away from any parallel sewer line.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-427R

Big Eagle Mine Wash Building Drain Pond
(Name of Facility)

This permit hereby authorizes the applicant:

Lucky Mc Uranium Corp., Big Eagle Mine
(Last) (First) (Middle)
P. O. Box 450
(Street or P.O. Box)
Jeffrey City Fremont Wyoming 82520
(City) (County) (State)

to construct, install, or modify a Washwater Ponds, Shop Evaporation Ponds and Oil Spill Ponds
facility located in Section 12, T27N, R92W
(Legal Description)

in the County of Fremont, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galaro
Administfator
Water Quality Division

Robert E. Lardin
Director
Wyoming Dept. of Environmental Quality

January 9, 1978

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

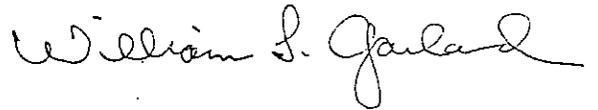
PROJECT: Big Eagle Mine, Wash Building Drain Pond and Shop Evaporation
and Oil Spill Ponds, Section 12, T27N, R92W, Fremont Co., WY

ARCHITECT OR ENGINEER: B. R. Mortensen, P.E. - Lucky Mc Uranium Corporation,
Big Eagle Mine, P.O. Box 450,
Jeffrey City, WY 82310

WATER QUALITY DIVISION REFERENCE NUMBER: 77-427

REVIEWING ENGINEER: David W. Hill; William L. Garland, P.E.

DATE OF REVIEW: November 9, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Please provide details of the diking (i.e. - compaction, soil types, free board, etc.)
- 2) Provide details of the inlet lines to the ponds. Riprap or an equal material is needed to prevent scouring.
- 3) Discuss seepage. Will the bottom of the ponds be compacted or lined?

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

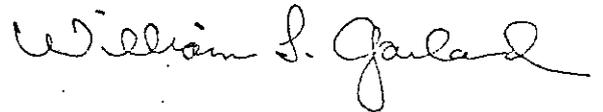
PROJECT: Evertson Well Service, Septic Tank and Leach Field, North of
Rock Springs, WY, Sweetwater Co.

ARCHITECT OR ENGINEER: Albert L. Nelson, P.E. - Nelson Engineering, P.O. Box 365,
Green River, Wyoming 82935

WATER QUALITY DIVISION REFERENCE NUMBER: 77-428

REVIEWING ENGINEER: David W. Hill, William L. Garland, P.E.

DATE OF REVIEW: October 28, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Please have owner or owners designated representative fill out and submit two copies "Application for Permit to Construct, Install....."
- 2) If the residence is also to be hooked into the system, it must be designed for no less than 100 gallons per capita, per day or 350 gallons per household, whichever is greater.

DWH/jo
Enclosure

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-428R

Evertson Well Service
(Name of Facility)

This permit hereby authorizes the applicant:

King Construction Company
(Last) (First) (Middle)
320 Logan Street
(Street or P.O. Box)
Green River Sweetwater Wyoming 82935
(City) (County) (State)

to construct, install, or modify a Commercial Septic Tank - Leach Field
facility located in Section 9, T19N, R105W
(Legal Description)

in the County of Sweetwater, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Gale
Administrator
Water Quality Division

Robert E. Scardin
Director
Wyoming Dept. of Environmental Quality

November 28, 1977

Date of Issuance

cc: Nelson Engineering, P.O. Box 355, Green River, WY 82935

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-429MR

City of Laramie Water & Sewer Improvement, Reynolds & 30th Street
(Name of Facility)

This permit hereby authorizes the applicant:

<u>City of Laramie</u> (Last)	<u></u> (First)	<u></u> (Middle)
<u>c/o L. Lanners</u> <u>P. O. Box C</u>		
(Street or P.O. Box)		
<u>Laramie</u> (City)	<u>Albany</u> (County)	<u>Wyoming 82070</u> (State)

to construct, install, or modify a Water & Sewer
facility located in Section 26, 27, 28, 35, T16N, R73W
(Legal Description)

in the County of Albany, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Lumbkin
Director
Wyoming Dept. of Environmental Quality

January 3, 1978
Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

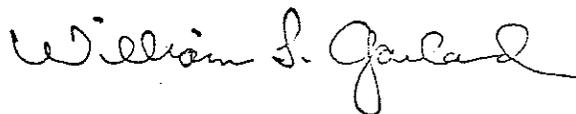
PROJECT: City of Laramie - Water and Sewer Improvements, Reynolds and
and 30th Streets

ARCHITECT OR ENGINEER: Larny Lanners, City Engineer, Box C, Engineering
Department, Laramie, WY 82070

WATER QUALITY DIVISION REFERENCE NUMBER: 77-429M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: November 9, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) Enclosed is an application form for a permit to construct, which must be completed and returned to our office.
- 2) Plans and specifications shall carry the signature or seal of the registered engineer in the State of Wyoming.
- 3) Two (2) complete sets of plans and specifications are required.
- 4) Water valves should be located at not more than 500 foot intervals in commercial districts or 800 foot intervals in other districts.
- 5) No fire hydrants have been provided from Station 205+00 to Water Storage Tank. Justify your design.
- 6) There is another plug required at the point of connection between new manholes and plugged sewer stubs. (See sheet 5 & 6).
- 7) Water-sewer crossing specifications shall be provided. Those specifications must meet the requirements of Chapter III, Section 15 of the Water Quality Rules and Regulations, (see the attached Chapter III Rules).
- 8) Wye branches should be used instead of tees or saddles for sewer service line.
- 9) ASTM D3034-72 specifications for PVC sewer pipe are outdated.
- 10) ASTM C700-71T specifications for VCP are also outdated.
- 11) What type of pipe will be used for 4" sanitary sewer services?
- 12) There should be specifications concerning excessive sidefill pressures and ovalation of the pipe. The maximum vertical deflection allowed should not exceed 5% of the pipes internal diameter.

City of Laramie - Water and Sewer Improvements, Reynolds and 30th Streets

77-429M

- 13) Location map shall be provided. A map showing contours should also be submitted.
- 14) Is the 8" vcp in the downstream of the existing MH at 126+37.64 on Ninth St. capable of carrying additional flows from new sewer lines? Please justify your design by providing design calculations.
- 15) This cannot be considered a final review.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-430M

Town of Evansville-Water Storage Standpipe
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Evansville
(Last) (First) (Middle)
c/o Sigma Engineering
P. O. Box 4060
(Street or P.O. Box)
Casper Natrona Wyoming 82601
(City) (County) (State)

to construct, install, or modify a Water Storage
facility located in Section 1, T33N, R79W
(Legal Description)

in the County of Natrona, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Garland
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

January 9, 1978

Date of Issuance
This permit does not supercede the requirements for obtaining a Septic Tank
Permit from Natrona County Health Department.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-432MR

Town of Sundance - Outfall Line Improvements
(Name of Facility)

This permit hereby authorizes the applicant:

City of Sundance
(Last) (First) (Middle)
c/o Ralph Goodson
SR4, Box 21
(Street or P.O. Box)
Sundance Crook Wyoming 82729
(City) (County) (State)

to construct, install, or modify a Sewer Outfall Line
facility located in Section 18, T51N, R62W
(Legal Description)

in the County of Crook, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. [Signature]
Administrator
Water Quality Division

Robert E. [Signature]
Director
Wyoming Dept. of Environmental Quality

December 15, 1977

Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

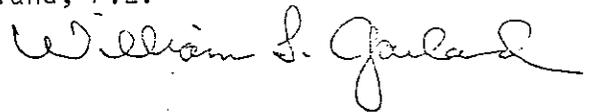
PROJECT: Town of Sundance - Outfall Line Improvements

ARCHITECT OR ENGINEER: Ralph W. Goodson, SR4, Box 21, Sundance, WY 82729

WATER QUALITY DIVISION REFERENCE NUMBER: 77-432M

REVIEWING ENGINEER: Dan H. Kim, William L. Garland, P.E.

DATE OF REVIEW: November 9, 1977



ACTION: NOT AUTHORIZED FOR CONSTRUCTION

COMMENTS:

- 1) 10 State Standards require out-fall sewers to be designed to carry 250% of average daily flow. Please submit design calculations as to 10" line and 16" line to verify this requirement.
- 2) Plans and specifications shall carry the signature or seal of design engineer.
- 3) Maximum distance between manholes is 400 feet.
- 4) Sewer pipe, inserted through a casing, should not rest on bells. How can you achieve this? If skids are employed, please submit detail drawings.
- 5) Are the annular spaces at each end of the casing going to be sealed to prevent flooding and the resulting floatation movement of the inner pipeline? If not, justify your design.
- 6) Backfill specifications are not clear. What is Class "C" bedding? Please provide typical drawings. There is no Class "C" classification in ASTM D2321 specifications. Degree of compaction should be provided in terms of a percentage of maximum density.
- 7) ASTM C700-71T specification for clay pipe is outdated and C200-65T specification has been withdrawn.
- 8) There is no ASTM D3024 specifications for PVC pipe. It should be corrected.
- 9) ASTM C478-72 specifications for manhole is outdated.
- 10) There should be specifications concerning excessive sidefill pressures and ovalation of the pipe. The maximum deflection allowed shall not exceed 5% of the pipes internal diameter.

Town of Sundance - Outfall Line Improvements

77-432M

- 11) Are there any water-sewer crossings in this project? If so, the specifications should be provided,
- 12) This cannot be considered a final review.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-433M

8 inch Sanitary Sewer for Kenneth R. Brandt
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Brandt</u>	<u>Kenneth</u>	<u>R.</u>
(Last)	(First)	(Middle)
<u>c/o Richard E. Myrick, P.E.</u>		
<u>P.O. Box 535</u>		
(Street or P.O. Box)		
<u>Powell</u>	<u>Wyoming</u>	<u>82435</u>
(City)	(County)	(State)

to construct, install, or modify a Sanitary Sewer
facility located in the Town of Lovell
(Legal Description)

in the County of Big Horn, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

NOTE: THE PROPOSED MANHOLE SHALL BE OF THE STANDARD TYPE WITH A 24 INCH DIAMETER COVER AND A MANHOLE DIAMETER OF A MINIMUM OF 42 INCHES.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Lundin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

PERMIT TO CONSTRUCT

- New
 Renewal
 Modified

Permit No. 77-434M

Town of Baggs - Sewage Collection System
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Baggs
(Last) (First) (Middle)
c/o Barbara J. Scott
523 W. 27th Street
(Street or P.O. Box)
Cheyenne Wyoming 82001
(City) (County) (State)

to construct, install, or modify a Sewage Collection System
facility located in Section 5, T12N, R91W
(Legal Description)

in the County of Carbon, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

THIS PERMIT AUTHORIZES REPLACEMENT AND CONSTRUCTION OF SEWAGE COLLECTION SYSTEM ONLY. THE SEWAGE TREATMENT FACILITY WILL BE ADDRESSED ON SEPARATE APPLICATIONS.

Authorized by:

William J. Garland
Administrator
Water Quality Division

Robert E. Aurdin
Director
Wyoming Dept. of Environmental Quality

November 17, 1977

Date of Issuance

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-435

Office and Warehouse - Sanitary Disposal System
(Name of Facility)

This permit hereby authorizes the applicant:

Western Construction, Inc.

(Last) (First) (Middle)
P.O. Box 930

(Street or P.O. Box)
Casper Natrona Wyoming 82601

(City) (County) (State)

to construct, install, or modify a Sanitary Disposal
facility located in Section 31, T34N, R79W

(Legal Description)

in the County of Natrona, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Garland
Administrator
Water Quality Division

Robert E. Menden
Director
Wyoming Dept. of Environmental Quality

November 18, 1977
Date of Issuance

This permit does not supercede the requirements for obtaining a Septic Tank Permit from Natrona County Health Department.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-437

Smith Sheep Company
(Name of Facility)

This permit hereby authorizes the applicant:

Smith Sheep Company
(Last) (First) (Middle)
207 N. 4th Street
(Street or P.O. Box)
Douglas Converse Wyoming 82633
(City) (County) (State)

to construct, install, or modify a Feedlot Wastewater Pond
facility located in Section 5, T32N, R71W
(Legal Description)

in the County of Converse, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galan
Administrator
Water Quality Division

Robert E. Sandin
Director
Wyoming Dept. of Environmental Quality

December 14, 1977
Date of Issuance

cc: Western Engineers - Architects, Inc., 501 N. Sun Drive, Casper, WY 82601

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-438

Wyoming State Bank

(Name of Facility)

This permit hereby authorizes the applicant:

<u>Weber</u> (Last)	<u>Bernard</u> (First)	<u></u> (Middle)
<u>P.O. Box 1768</u> (Street or P.O. Box)		
<u>Cheyenne</u> (City)	<u>Laramie</u> (County)	<u>Wyoming 82001</u> (State)

to construct, install, or modify a Commercial Septic Wastewater
facility located in Section 27, T14N, R66W
(Legal Description)

in the County of Laramie, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galan
Administrator
Water Quality Division

Robert E. Lardin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: Don Pack, Sanitarian, 315 W. 20th, Cheyenne, WY 82001
Norm Carter, County Engineers Office, 706 W. 19th, Cheyenne, WY 82001
McFall & Konkel, 3001 Henderson Dr., Suite M, Cheyenne, WY 82001

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. 77-439

Kover Duplexes

(Name of Facility)

This permit hereby authorizes the applicant:

Kover

(Last)

Eddie

(First)

(Middle)

P.O. Box 1274

(Street or P.O. Box)

Jackson

(City)

Teton

(County)

Wyoming 83001

(State)

to construct, install, or modify a Septic Tank - Leach Field
facility located in Section 3, T39N, R116W
(Legal Description)

in the County of Teton, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. Galand
Administrator
Water Quality Division

Robert E. Sardin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: Nelson Engineering, P.O. Box 1141, Jackson, WY 83001, Attention: Robert L. Farnsworth, P.E.

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-440M

Town of Dayton - Water Main Improvements
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Dayton - Mayor Art Badgett
 (Last) (First) (Middle)

Town Hall
 (Street or P.O. Box)

Dayton Sheridan Wyoming 82801
 (City) (County) (State)

to construct, install, or modify a Water Distribution
 facility located in Section 32, T57N, R86W
 (Legal Description)

in the County of Sheridan, in the State of
 Wyoming. This permit shall be effective for a period of 2 years
 from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William S. Jones
 Administrator
 Water Quality Division

Robert E. Lundin
 Director
 Wyoming Dept. of Environmental Quality

December 14, 1977

Date of Issuance
 cc: Walter Pilch, P.O. Box 6498, Sheridan, WY 82801

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-441M

8 inch Sanitary Sewer for Mr. Gerald Doerr
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Doerr</u> (Last)	<u>Gerald</u> (First)	<u></u> (Middle)
<u>c/o Richard E. Myrick, P.E.</u> <u>P.O. Box 535</u>		
<u>(Street or P.O. Box)</u>		
<u>Powell</u> (City)	<u></u> (County)	<u>Wyoming 82435</u> (State)

to construct, install, or modify a Sanitary Sewer
facility located in the Town of Lovell
(Legal Description)

in the County of Big Horn, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

NOTE: THE PROPOSED MANHOLE SHALL BE OF THE STANDARD TYPE WITH A 24 INCH
DIAMETER COVER AND A MANHOLE DIAMETER OF AT LEAST 42 INCHES.

Authorized by:

William J. Galan
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977
Date of Issuance

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. 77-442

Cody Lumber Company - Wastewater Disposal System
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Cody Lumber Company</u>		
(Last)	(First)	(Middle)
<u>P.O. Box 752</u>		
(Street or P.O. Box)		
<u>Cody</u>	<u>Park</u>	<u>Wyoming 82414</u>
(City)	(County)	(State)

to construct, install, or modify a Septic Tank - Leach Field
facility located in Section 29 & 30, T53N, R101W
(Legal Description)

in the County of Park, in the State of Wyoming. This permit shall be effective for a period of 2 years from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Quinn
Administrator
Water Quality Division

Robert E. Sardin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: Engineering Associates, P.O. Box 1539, Cody, Wyoming 82414

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-443

Town of Shoshoni - Water System Improvements
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Shoshoni
(Last) (First) (Middle)
c/o R. D. Connell and Associates, Inc.
Box 1010
(Street or P.O. Box)
Riverton Wyoming 82501
(City) (County) (State)

to construct, install, or modify a Water System Improvements
facility located in the Town of Shoshoni
(Legal Description)

in the County of Fremont, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Anderson
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: Mrs. Leon Morehouse, Mayor, Town of Shoshoni, P.O. Box 267, Shoshoni, WY 82649

PERMIT TO CONSTRUCT

New

Renewal

Modified

Permit No. (EDA77-444 - Ref. 77-84)

City of Lander - Water System Improvement Project
(Name of Facility)

This permit hereby authorizes the applicant:

City of Lander
(Last) (First) (Middle)
c/o Call Engineering
2211 South 390 West
(Street or P.O. Box)

Salt Lake City Utah 84100
(City) (County) (State)

to construct, install, or modify a Water System Improvement
facility located in the City of Lander
(Legal Description)

in the County of Fremont, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Gale
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

November 18, 1977

Date of Issuance

cc: City Engineer, City of Lander, 183 South 4th, Lander, WY 82520

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-445

Addition to Sewage Treatment Facilities - Wright, WY
(Name of Facility)

This permit hereby authorizes the applicant:

Housing Services, Inc. c/o Robert E. Huff
(Last) (First) (Middle)
1500 Security Life Building
(Street or P.O. Box)
Denver Colorado 80202
(City) (County) (State)

to construct, install, or modify a Waste Treatment Facility
facility located in Section 27, T44N, R72W
(Legal Description)

in the County of Campbell, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William P. Chas. O.
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

November 7, 1977

Date of Issuance

cc: City of Gillette, Department of Planning and Development, P.O. Box 540,
Gillette, WY 82716

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. 77-446

Joyce Elliott Trailer Park
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Elliott</u> (Last)	<u>Joyce</u> (First)	<u></u> (Middle)
<u>c/o John W. Donnell and Associates</u>		
<u>P.O. Box 13</u>		
<u>(Street or P.O. Box)</u>		
<u>Worland</u> (City)	<u>Washakie</u> (County)	<u>Wyoming 82401</u> (State)

to construct, install, or modify a Public Water Supply Distribution
facility located in City of Worland
(Legal Description)

in the County of Washakie, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Gale
Administrator
Water Quality Division

Robert E. Lundin
Director
Wyoming Dept. of Environmental Quality

November 28, 1977

Date of Issuance

January 24, 1978

Honorable Terry Anderson
P. O. Box 22
Albin, Wyoming 82050

SUBJECT: Town of Albin
Wastewater Improvements
77-447M

Dear Mayor Anderson:

In reference to our telephone conversation on January 23, 1978, I am returning the plans relating to the subject project because they are not complete.

As stated in Section 15 of Chapter III Water Quality Rules and Regulations, the well shall be constructed in compliance with Part 3.2 of Recommended Standards for Water Works (Ten States Standards) and Part III, Water Well Minimum Construction Standards published for the State Engineers Office. The distribution system shall also meet the requirements of Part 8 of Ten States Standards.

The above mentioned regulations are enclosed, as well as the application form, which must accompany your final plans and specifications.

In addition, manufacturer's data on pump, design calculations and the information as to existing system shall be provided.

If you have any questions on this matter, please feel free to let me know.

Sincerely yours,

Dan H. Kim
Environmental Engineer
Water Quality Division

DHK/do
cc

PERMIT TO CONSTRUCT

- New
- Renewal
- Modified

Permit No. EDA 77-448RRR

Town of Sundance - Lagoon Improvements
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Sundance
(Last) (First) (Middle)
Box 542
(Street or P.O. Box)
Sundance Crook Wyoming 82729
(City) (County) (State)

to construct, install, or modify a Sewage Treatment
facility located in Section 18, T51N, R62W
(Legal Description)

in the County of Crook, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Jones
Administrator
Water Quality Division

Robert E. Lundin
Director
Wyoming Dept. of Environmental Quality

March 8, 1978
Date of Issuance

REVIEW OF PLANS AND SPECIFICATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY
WATER QUALITY DIVISION
State Office Building
Cheyenne, Wyoming 82002

PROJECT: Town of Sundance - Lagoon Improvements

ARCHITECT OR ENGINEER: Ralph W. Goodson, SR4, Box 21, Sundance, WY 82729

WATER QUALITY DIVISION REFERENCE NUMBER: EDA77-448

REVIEWING ENGINEER: Dan H. Kim, Don Armstrong, ~~DA~~

DATE OF REVIEW: November 25, 1977

ACTION: NOT AUTHORIZED FOR CONSTRUCTION

- COMMENTS:
- 1) Plans and specifications shall carry the signature or seal of the designing engineer.
 - 2) An application for a permit to construct should be filed.
 - 3) Design calculations should be provided.
 - 4) Should provide percolation rate of pond bottom. Will the bottom be sealed? If so, details are required. (Specifications for the liner and installation of the liners).
 - 5) How will the lagoon cells be operated? Will the outlet structure in the existing cell be abandoned or will there be 2 outlets? What about inlets?
 - 6) Influent line, overflow structure and outlet structure are not constructed per 10 State Standards.
 - 7) Influent line should be relocated to minimize short circuiting within the pond.
 - 8) Direction of prevailing wind should be provided.
 - 9) Interconnecting piping and overflow should be of cast iron pipe or corrugated within the pond.
 - 10) Fencing and warning sign details are required.
 - 11) Plan of operation should be submitted.
 - 12) Adequate provisions should be provided to divert storm water runoff around west embankment (from 2+00W to 10+00W).
 - 13) ASTM C700-71T specification for clay pipe is outdated and C200-65T specification has been withdrawn.

Town of Sundance - Lagoon Improvements

EDA77-448

- 14) There is no ASTM D3024 specification for PVC pipe.
- 15) There should be specifications concerning excessive sidefill pressures and ovalation of the pipe. The maximum deflection allowed shall not exceed 5% of the pipes internal diameter.
- 16) This cannot be considered a final review.

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA 77-449R

Storm Sewer, Sewage Lagoon & Water System
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Town of Afton</u>		
(Last)	(First)	(Middle)
<u>c/o BRW/Noblitt</u>		
<u>1709 Carey</u>		
(Street or P.O. Box)		
<u>Cheyenne</u>	<u>Laramie</u>	<u>Wyoming</u>
(City)	(County)	(State)

to construct, install, or modify a Storm Sewer, Sewage Lagoon & Water System
facility located in Section 25,30, T32N, R118W & R119W
(Legal Description)

in the County of Lincoln, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William L. Janda
Administrator
Water Quality Division

Robert E. Sundin
Director
Wyoming Dept. of Environmental Quality

December 28, 1977
Date of Issuance

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-449

Town of Afton - Storm Sewer, Sewage Lagoon & Water System
(Name of Facility)

This permit hereby authorizes the applicant:

Town of Afton
(Last) (First) (Middle)
c/o BRW/Noblitt
1709 Carey Avenue
(Street or P.O. Box)
Cheyenne Wyoming 82001
(City) (County) (State)

to construct, install, or modify a Storm Sewer, Sewage Lagoon and Water System
facility located in the Town of Afton
(Legal Description)

in the County of Lincoln, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Galand
Administrator
Water Quality Division

Robert E. Sandin
Director
Wyoming Dept. of Environmental Quality

November 28, 1977

Date of Issuance

cc: Mayor and Town Council, Town of Afton, P.O. Box 387, Afton, WY 83110

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA 77-450

Green River East Second South Sanitary Sewer
(Name of Facility)

This permit hereby authorizes the applicant:

<u>Town of Green River</u>		
(Last)	(First)	(Middle)
<u>c/o Nelson Engineering</u>		
<u>P. O. Box 365</u>		
(Street or P.O. Box)		
<u>Green River</u>	<u>Sweetwater</u>	<u>Wyoming 82935</u>
(City)	(County)	(State)

to construct, install, or modify a Sanitary Sewer
facility located in Town of Green River
(Legal Description)

in the County of Sweetwater, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Quinn
Administrator
Water Quality Division

Robert E. Lundin
Director
Wyoming Dept. of Environmental Quality

February 3, 1978
Date of Issuance

PERMIT TO CONSTRUCT

New
 Renewal
 Modified

Permit No. EDA77-450

Town of Green River - East 2nd South St. Sanitary
Sewer Interceptor, Elmwood Rd. to Liftstation

This permit hereby authorizes the applicant:

Town of Green River

(Last) (First) (Middle)
c/o Nelson Engineering
P.O. Box 1141

(Street or P.O. Box)
Jackson Wyoming 83001

(City) (County) (State)

to construct, install, or modify a Sanitary Sewer Interceptor
facility located in the Town of Green River

(Legal Description)

in the County of Sweetwater, in the State of
Wyoming. This permit shall be effective for a period of 2 years
from the date of issuance of this permit not to exceed five (5) years.

Authorized by:

William J. Garland
Administrator
Water Quality Division

Robert E. Gordon
Director
Wyoming Dept. of Environmental Quality

November 28, 1977

Date of Issuance
Mayor and Town Council, Green River, P.O. Box 127, Green River, WY 82935
Al Emden