WYOMING

STATE INFORMATION HANDBOOK

URANIUM MILL TAILINGS REMEDIAL ACTION PROGRAM

OCTOBER 1979

PREPARED FOR

U.S. DEPARTMENT OF ENERGY

OFFICE OF NUCLEAR WASTE MANAGEMENT

WASHINGTON, D.C.

CONTRACT NO. EY-76-C-06-1857
(THROUGH UNC NUCLEAR INDUSTRIES, INC.)

BY

POLITECH CORPORATION
1835 K STREET, N.W.
SUITE 600
WASHINGTON, D.C. 20006

(3/01/80)

WYOMING

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LEGAL NOTICE

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INTRODUCTION

With the passage of Public Law 95-604, the "Uranium Mill Tailings Radiation Control Act of 1978," Congress directed the Department of Energy to begin the process of decontaminating the formerly used uranium-processing mill sites and tailings piles. Among the provisions of the Act are requirements that the Department of Energy:

- Identify and locate all formerly used uranium processing facilities and any additional sites where residual radioactive material remains as a result of uranium processing
- Designate which of those sites will require remedial action
- Enter into a cooperative agreement with the state or Indian tribe within whose jurisdiction the site exists
- Perform the necessary remedial actions, with the participation of the State or Indian tribe, in compliance with Environmental Protection Agency regulations soon to be issued

The Department of Energy is required to encourage public participation in the Remedial Action Program and to hold public hearings where appropriate.

It is anticipated that the Department of Energy will designate twenty-two abandoned uranium processing sites in nine states for remedial action. The engineering assessments which have been completed for all twenty-two sites describe the conditions at the site, a range of remedial actions, and the projected costs of each option. A cooperative agreement will be negotiated between the Federal Government and Wyoming.

This volume is one of a series produced under contract with the Department of Energy, Office of Nuclear Waste Management, by Politech Corporation through UNC Nuclear Industries, Inc. to assist the Department of Energy in providing opportunities for public participation in the Remedial Action Program.

The volume is a compilation of information about the Converse County and Riverton sites, in Wyoming. It contains:

- A description of the relevant Wyoming state executive branch structure (Section 1)

- A summary and explanation of present state statutory authority (Section 2)
- A summary and explanation of relevant state regulations (Section 2)
- A description of the structure of the state legislature, identification of officers and committee chairmen, and a summary of recent legislative action (Section 3)
- A description of the structure and jurisdiction of local governments affected by remedial action at the Wyoming sites and a summary of any relevant local ordinances (Section 4)
- An identification of relevant public interest groups (Section 5)
- A list of radio stations, television stations, and newspapers that provide public information to the affected areas or to Cheyenne (Section 6)
- The full text of the relevant statutes, regulations, and ordinances (Appendix)

The loose-leaf format used in these volumes will allow the material to be updated periodically as the Remedial Action Program progresses.

SITE DATA SHEET

URANIUM MILL TAILINGS REMEDIAL ACTION PROGRAM

1. Site: Riverton Site

2. Location: 2 mi. Southwest of Riverton, Wyoming; 120 mi. Southeast of Teton National Park.

3. Ownership: Present: Wind River Indian Reservation (Land)
Solution Engineering Company (Operational Owner)

Former (Operations): Fremont Minerals, Inc. (which became Susquehanna-Western, Inc.)

4. Ore Processed: 900,000 tons (1958 - 1963)

5. Area: Tailings: 72 acres

6. Volume: 28,226,880 cu. ft., approximately (43,560 sq. ft./acre x 72 acres x 9 ft. average depth).

7. Condition of Pile: Stabilized, but requires improvement

8. Off-Site Properties: Yes

9. Mineral Recovery Potential: Group 3 (0.015%); 270,000 lbs.

10. Priority: High

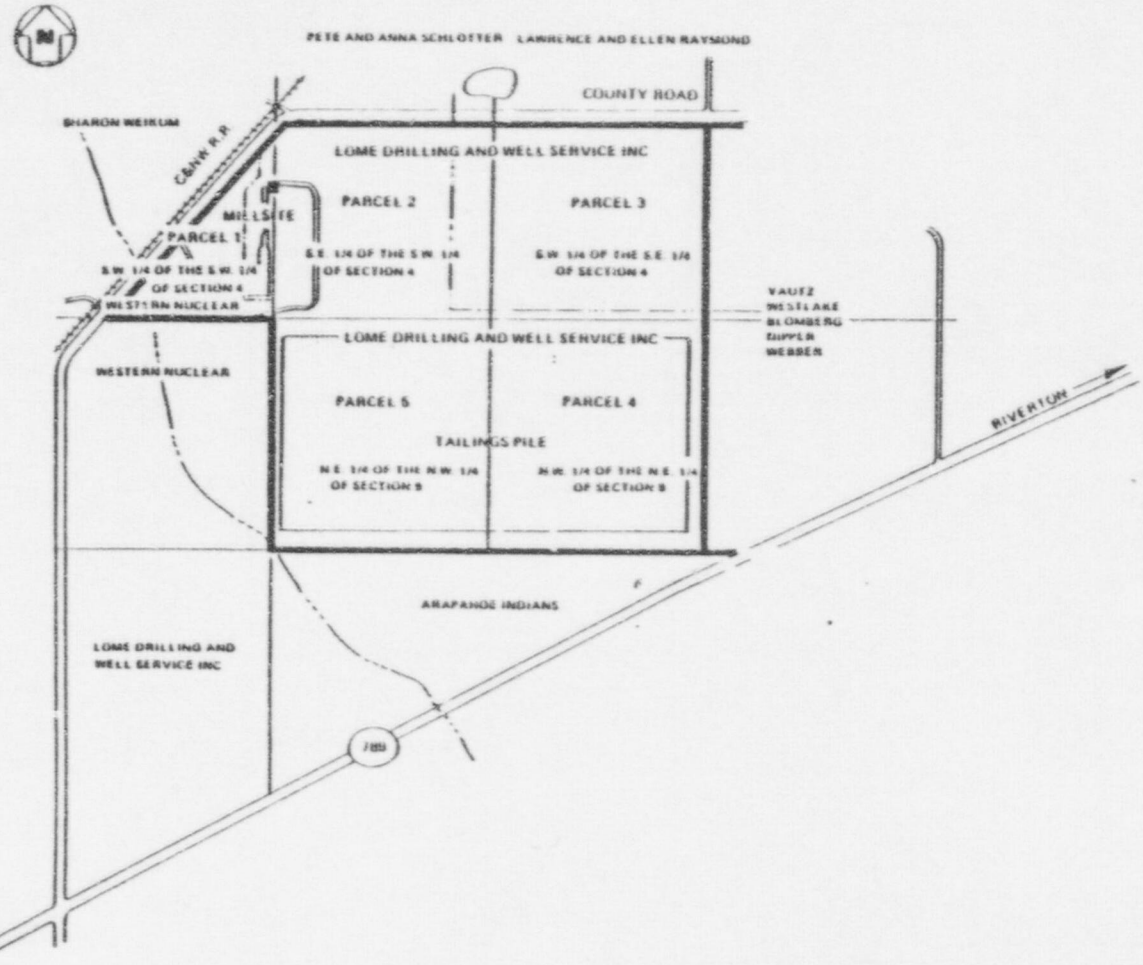
11. EIS/EA: Probable EIS

12. Population: 0 - 3.0 miles: 10,000

13. Projected Increase in Cancer Deaths over Background Radiation: 2.4 (25 year cumulative effect; 4% population growth rate constant; pile-induced cancers; 0 - 3.0 miles from tailings edge.)

14. Options:

	Action	Cost ($000)	100-year avoid	Cases Exist
I	Fencing, maintenance, off-site remedial action.	460	0	10.2
II	Off- and on-site decontamination, stabilization increased to 2-ft., fencing and maintenance.	1,140	0.7	9.5
III	Removal (to an as yet to be chosen long-term long-term storage site, 5 or 10 miles from present site), plus off-site remedial action.	6,000 - 6,400	10.2	0



RIVERTON SITE

SITE CONSISTING OF THE FOLLOWING PARCELS:

PARCEL 1

ALL LAND LOCATED IN THE S.W. 1/4 OF THE S.W. 1/4 OF SECTION 4, T1S, R4E, W.R.M. LYING EASTERLY OF THE EXISTING COUNTY ROAD.

PARCEL 2

ALL LAND LOCATED IN THE S.E. 1/4 OF THE S.W. 1/4 OF SECTION 4, T1S, R4E, W.R.M. LYING SOUTH OF THE EXISTING COUNTY ROAD.

PARCEL 3

ALL LAND LOCATED IN THE S.W. 1/4 OF THE S.E. 1/4 OF SECTION 4, T1S, R4E, W.R.M. LYING SOUTH OF THE EXISTING COUNTY ROAD.

PARCEL 4

ALL LAND LOCATED IN THE N.W. 1/4 OF THE N.E. 1/4 OF SECTION 9, T1S, R4E, W.R.M.

PARCEL 5

ALL LAND LOCATED IN THE N.E. 1/4 OF THE N.W. 1/4 OF SECTION 9, T1S, R4E, W.R.M.

CONTAINS 173 ACRES MORE OR LESS

Prepared For

United States Department of Energy

SITE DESCRIPTION & OWNERSHIPS

Inactive Mill Tailing Sites

RIVERTON, WYOMING

6/15/79

SITE DATA SHEET

URANIUM MILL TAILINGS REMEDIAL ACTION PROGRAM

1. Site: Spook Site

2. Location: 40 miles northeast of Casper, Wyoming

3. Ownership: Present: Western Nuclear, Inc. (subsidiary of Phelps Dodge Corporation)

   Former: Wyoming Mining and Milling Company (operational owner) Mr. D. Hornbuckle (landowner)

4. Ore Processed: 187,000 tons (1962 - 1965)

5. Area: Total site: approx. 50-60 acres; tailings: 5 acres (Area of total site includes areas where mine overburden has been piled).

6. Volume: 2,722,500 cu. ft., approximately. (43,560 sq. ft./acre x 5 acres x 12.5 ft. average depth)

7. Condition of Pile: Unstabilized

8. Off-Site Properties: No

9. Mineral Recovery Potential: Group 3 (0.023%); 86,000 lbs.

10. Priority: Low

11. EIS/EA: Probable EA

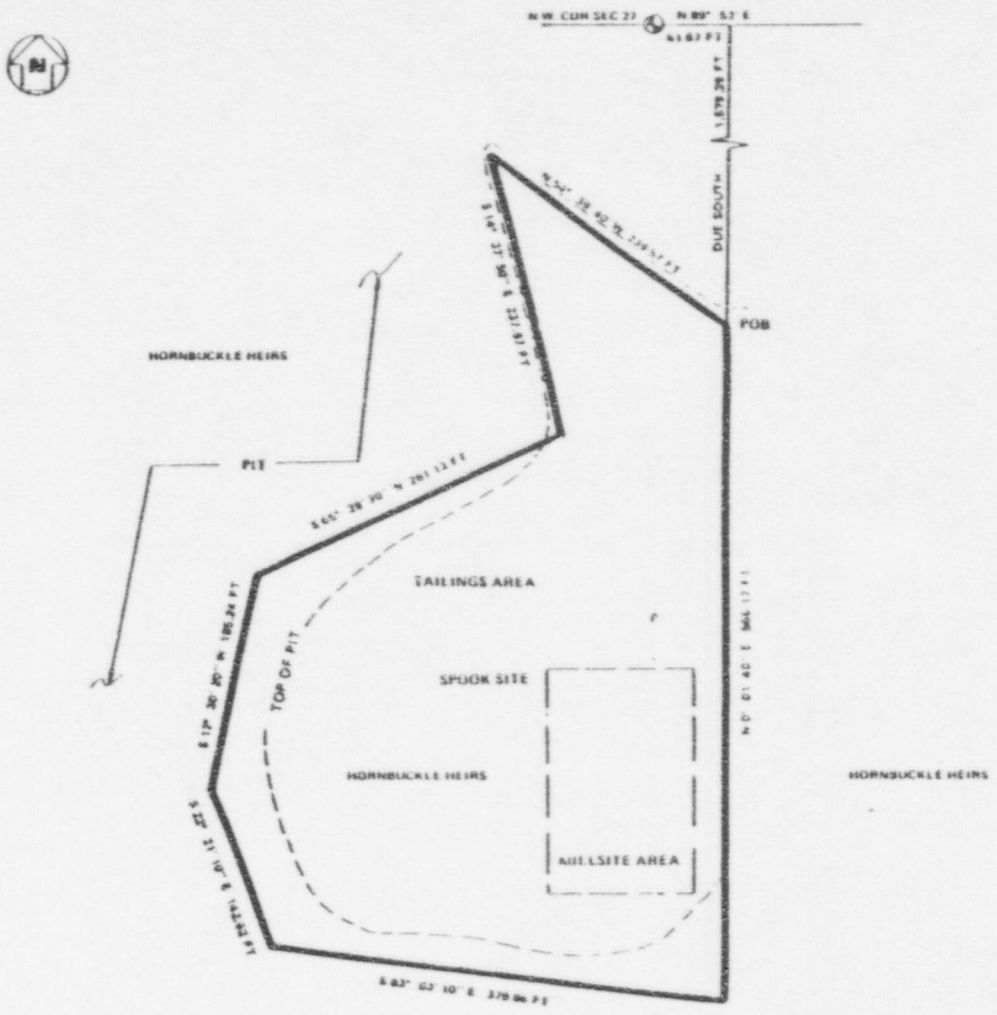
12. Population: 0 - 1.5 miles: 0; at 1.5 mile distance: 70

13. Projected Increase on Cancer Deaths over Background Radiation: 0.004 (100 year cumulative effects; pile induced cancers; 0 - 1.5 miles from tailings edge)

14. Options:

	Action	Cost ($000)
I	Fencing and Maintenance	81
II	Site cleanup, 2-ft. stabilization cover, fencing and maintenance	142

Health effects from the pile are negligible; no cost-benefit analysis of health effects has been perform for this site.



CONVERSE COUNTY SPOOK SITE

BEGINNING AT A POINT N 89°53'E, 81.63 FT ALONG THE SECTION LINE AND DUE SOUTH 1570.25 FT FROM THE N.W. CORNER OF SECTION 27, 13BN, 073W, 6TH PRINCIPAL MERIDIAN CONVERSE COUNTY, WYOMING AND RUNNING THENCE N 84°38 40"W, 230.4 FT THENCE S 14°37'50"E, 237.83 FT, THENCE S 85°38'20"W, 281.13 FT, THENCE S 12°30'20"W, 185.24 FT, THENCE S 32°21'10"E, 143.62 FT, THENCE S 83°03'10"E, 378.86 FT, THENCE N 0° 01' 40" E, 586.17 FT TO POINT OF BEGINNING.

CONTAINING 4.28 ACRES

(WESTERN NUCLEAR OPERATIONAL CONTROLLER)

Prepared For

United States Department of Energy

SITE DESCRIPTION & OWNERSHIPS

Inactive Mill Tailing Sites

CONVERSE COUNTY, WYOMING

6/15/79

I-6

(3/01/80)

SITE DATA SHEET

URANIUM MILL TAILINGS REMEDIAL ACTION PROGRAM

1. Site: Baggs

2. Location: Approximately 6 miles west of Baggs, Wyoming

3. Ownership: Present: Shawano Development Corporation
   Former: Shawano Development Corporation

4. Ore Processed: **

5. Area: The overall site, triangular in shape, covers approximately 11 acres. The effective area of the two tailings piles totals about 0.4 acres.

6. Volume: Tailings quantity 11,400 tons

7. Conditions of Pile: **

8. Off-Site Properties: **

9. Mineral Recovery Potential: **

10. Priority: Low

11. EIS/EA: Probable EA

12. Population: **

13. Projected Increases in Cancer Deaths over Background Radiation: **

14. Options: **

** This information will be provided at a later date.

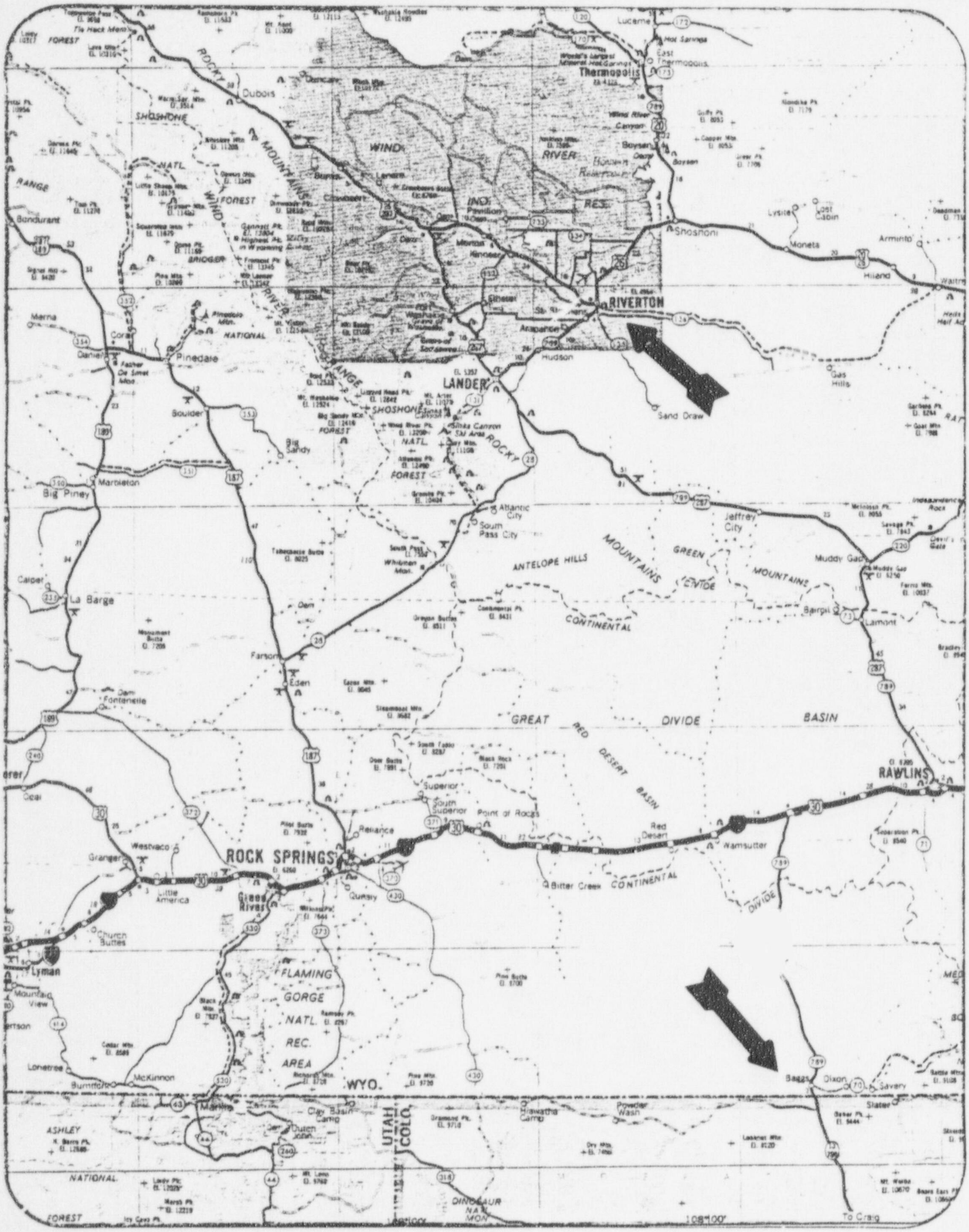
A MAP OF THE

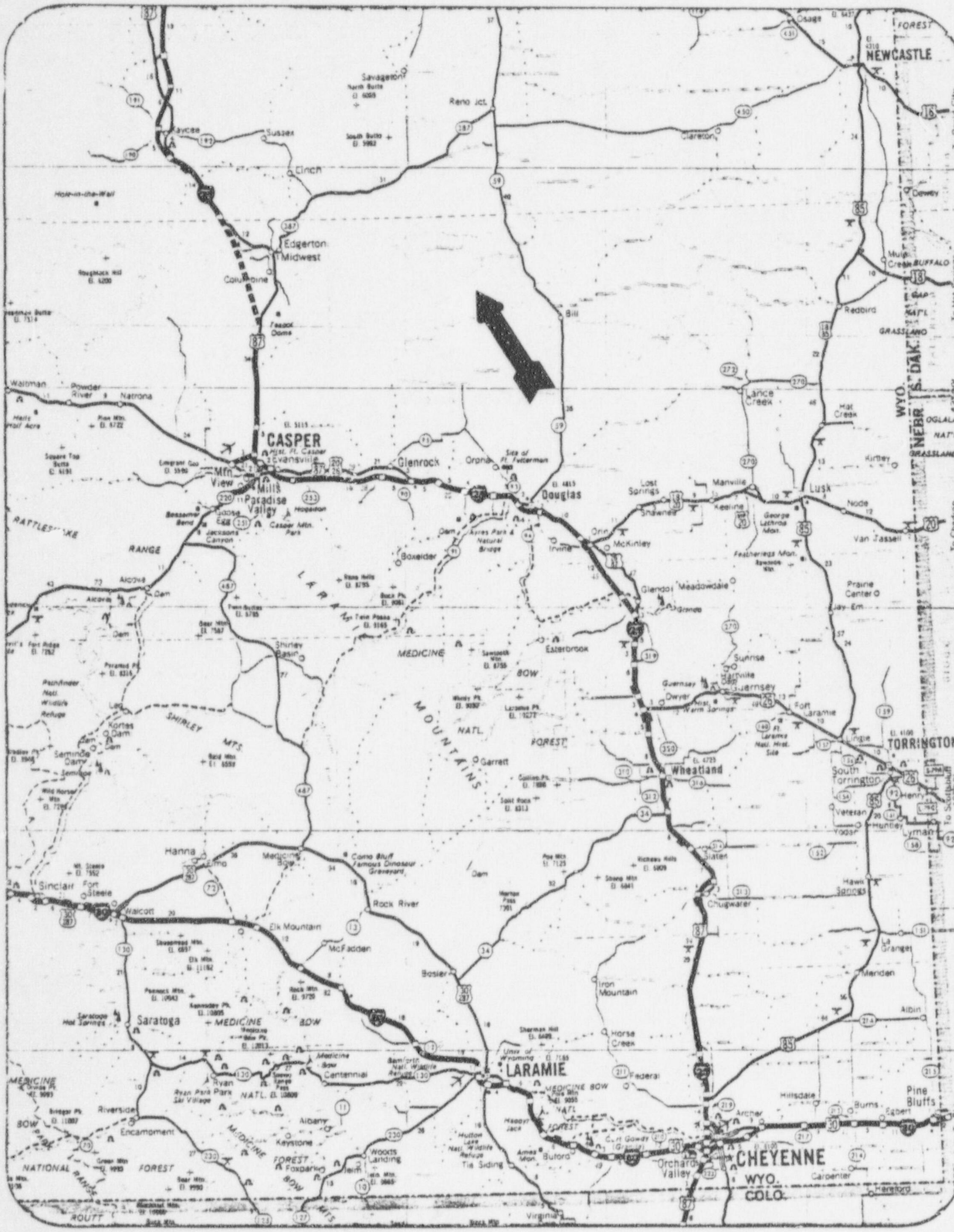
BAGGS, WYOMING SITE

WILL BE INCLUDED IN

THIS VOLUME AT A

LATER DATE


Dubois
SHOSHONE
RANGE
Bondurant
WIND
RIVER
IND.
RES.
Thermopolis
Lucerne
Hot Springs
East Thermopolis
Boysen
Shoshoni
Lysite
Lost Cabin
Moneta
Arminto
Hiland
RIVERTON
Arapahoe
Hudson
LANDER
Sand Draw
Gas Hills
Merna
Cora
Daniel
Pinedale
NATIONAL
Boulder
Big Sandy
SHOSHONE
NATL.
FOREST
ROCKY
Marbleton
Big Piney
Atlantic City
South Pass City
Jeffrey City
ANTELOPE HILLS
MOUNTAINS
GREEN
MOUNTAINS
DIVIDE
CONTINENTAL
Muddy Gap
Bairoil
Lamont
La Barge
Farson
Eden
GREAT
DIVIDE
BASIN
RED
DESERT
BASIN
Fontenelle
RAWLINS
Opal
Superior
South Superior
Point of Rocks
Red Desert
Wamsutter
Granger
Westvaco
ROCK SPRINGS
Reliance
Little America
Green River
Quealy
Bitter Creek
CONTINENTAL
DIVIDE
Church Buttes
Lyman
Mountain View
FLAMING
GORGE
NATL.
REC.
AREA
Lonetree
McKinnon
WYO.
UTAH
COLO.
Baggs
Dixon
Savery
Slater
Manila
Clay Basin Camp
Dutch John
Hiawatha Camp
Powder Wash
ASHLEY
NATIONAL
FOREST
DINOSAUR
108°00'
To Craig


NEWCASTLE
FOREST
Osage
Savageton
Reno Jct.
Kaycee
Sussex
Clareton
Linch
Hole-in-the-Wall
Edgerton
Midwest
Columbine
Teapot Dome
Bill
Dewey
Mule Creek
BUFFALO
GAP
NAT'L
GRASSLAND
Redbird
Lance Creek
Hat Creek
WYO.
NEBR.
S. DAK.
OGLALA
NAT'L
GRASSLAND
Waltman
Powder River
Natrona
CASPER
Evansville
Mills
Mtn. View
Paradise Valley
Glenrock
Orpha
Douglas
Lost Springs
Shawnee
Manville
Keeline
Lusk
Node
Van Tassell
To Chadron
To Rapid City
To Hot Springs
RATTLESNAKE
RANGE
Goose Egg
Jacksons Canyon
Casper Mtn. Park
Boxelder
Irvine
Orin
McKinley
Alcova
Dam
Glendo
Meadowdale
Prairie Center
Jay Em
MEDICINE
BOW
Esterbrook
Shirley Basin
LARAMIE
MOUNTAINS
NATL.
FOREST
Garrett
SHIRLEY
MTS.
Pathfinder Natl. Wildlife Refuge
Leo
Kortes Dam
Seminoe Dam
Sunrise
Hartville
Guernsey
Dwyer
Fort Laramie
Lingle
TORRINGTON
South Torrington
Veteran
Yoder
Huntley
Henry
Lyman
Wheatland
Hanna
Elmo
Medicine Bow
Como Bluff Famous Dinosaur Graveyard
Sinclair
Fort Steele
Walcott
Rock River
Elk Mountain
McFadden
Slater
Chugwater
Hawk Springs
La Grange
Meriden
Bosler
Iron Mountain
Albin
Saratoga
MEDICINE
BOW
Horse Creek
LARAMIE
Federal
Ryan Park
Centennial
Riverside
Encampment
Albany
Keystone
Foxpark
Woods Landing
Tie Siding
Buford
Archer
Hillsdale
Burns
Egbert
Pine Bluffs
CHEYENNE
WYO.
COLO.
Carpenter
Hereford
Orchard Valley
Virginia Dale
NATIONAL
FOREST
ROUTT

EXECUTIVE BRANCH

OVERVIEW

The Governor of Wyoming, Ed Herschler, is the highest elected official in the state, and directs an extensive executive branch structure. Within the Governor's office there are several advisory councils and commissions. Among these are the state Land Use Commission and the Land Use Advisory Committee.

There are four other state elected officials in the executive branch of the government. They are the:

- Secretary of State
- State Auditor
- State Treasurer
- Superintendent of Public Instruction

All these officials, including the Governor, are elected to four-year terms. The current terms expire January 3, 1983. The Governor maintains a very small personal staff, and the government of Wyoming is considered a cabinet form of government. The five elected officials all serve on the following Boards and Commissions:

- Farm Loan Board
- Capitol Building Commission
- Board of Charities and Reform
- Board of Land Commissioners
- Wyoming Legion Commission
- Commission of Prison Labor
- Board of Wills and Trusts

The executive branch agencies are grouped, generally, by their function or their area of statutory responsibility. Wyoming has not assumed regulatory authority over radiation sources and radioactive materials pursuant to Section 274 of the Atomic Energy Act of 1954. The agency which will exercise the major state jurisdiction in this area is the Department of Environmental Quality, one of a group of agencies that concern themselves with resources and recreation. Other agencies in this group are the State Engineer's Office, the Geological Survey, the Recreation Commission, and the Fish and Game Commission.

Within the Division of Health and Medical Services of the Department of Health and Social Services is the Radiological Protection Section, which provides technical expertise but exercises no regulatory authority.

Within the Executive Branch are Boards, Commissions, and Councils, some of which serve as policy-makers and as program agencies, and others which serve in an advisory capacity. The members of these bodies are appointed by the Governor, some with the advice of the Senate, some without. The directors of the nine executive branch Departments carry out statutory responsibilities and government programs, and they serve as advisors to the Governor in matters within their jurisdiction. The directors of the Departments are appointed by the Governor, with the consent of the Senate.

STRUCTURE

The Governor of Wyoming is the highest elected officer of the state, and is the head of the executive branch. There is no Lieutenant Governor in Wyoming, but four other executive branch officers are elected. The remainder of the executive branch officers are appointed by the Governor with the consent of the Senate. The executive branch includes a number of boards, commissions, councils, and departments. Some of these bodies are attached to the Governor's office and others are independent advisory or regulatory bodies within the executive branch. Most of the Departments serve both a policy-making and a policy-enforcing (regulatory) role. Some of the Boards and Commissions play a similar dual role.

Department of Environmental Quality

The Department of Environmental Quality, one of the executive branch Departments, is the government body which has been charged with the responsibility for protecting and preserving Wyoming's environment. The Director of the Department of Environmental Quality, appointed directly by the Governor, is Mr. Robert E. Sundin. He is in charge of the Department's three divisions: Land Quality, Water Quality, and Air Quality. Each has its own division director appointed by the Department Director. Also within the Department is a solid waste management program. None of the three divisions, nor the Department as a whole, has been designated the state radiation control agency because Wyoming has not assumed the regulatory authority available pursuant to Section 274 of the Atomic Energy Act of 1954. The Department is, however, the lead agency for Wyoming's participation in the Uranium Mill Tailings Remedial Action Program.

Within the Department, the Land Quality Division is the body which will have responsibility for the program. Mr. Walter C. Ackerman is the Administrator of the Land Quality Division

Each of the three divisions (Land, Water, Air Quality) within the Department is overseen by a separate Advisory Board. Each Board has five members appointed by the Governor. Each Board reviews the policies and regulations its respective division, suggests changes in the policies or regulations, and monitors the performance of the division.

Figure One is an organization chart for the Department of Environmental Quality.

Environmental Quality Council

The Environmental Quality Council, which was created by the same legislative act that created the Department of Environmental Quality, is charged with monitoring the performance of the Department. The Council also serves as the general policy-direction body for the Department. The Council is a seven-member body appointed by the governor with the consent of the Senate. The Council members sit for terms of four years. The Council's function, in addition to providing policy direction, is to be the hearing examiner for the Department for all cases or issues arising under the Department's laws, rules, or orders.

DEPARTMENT OF ENVIRONMENTAL QUALITY

PROGRAM ORGANIZATION CHART

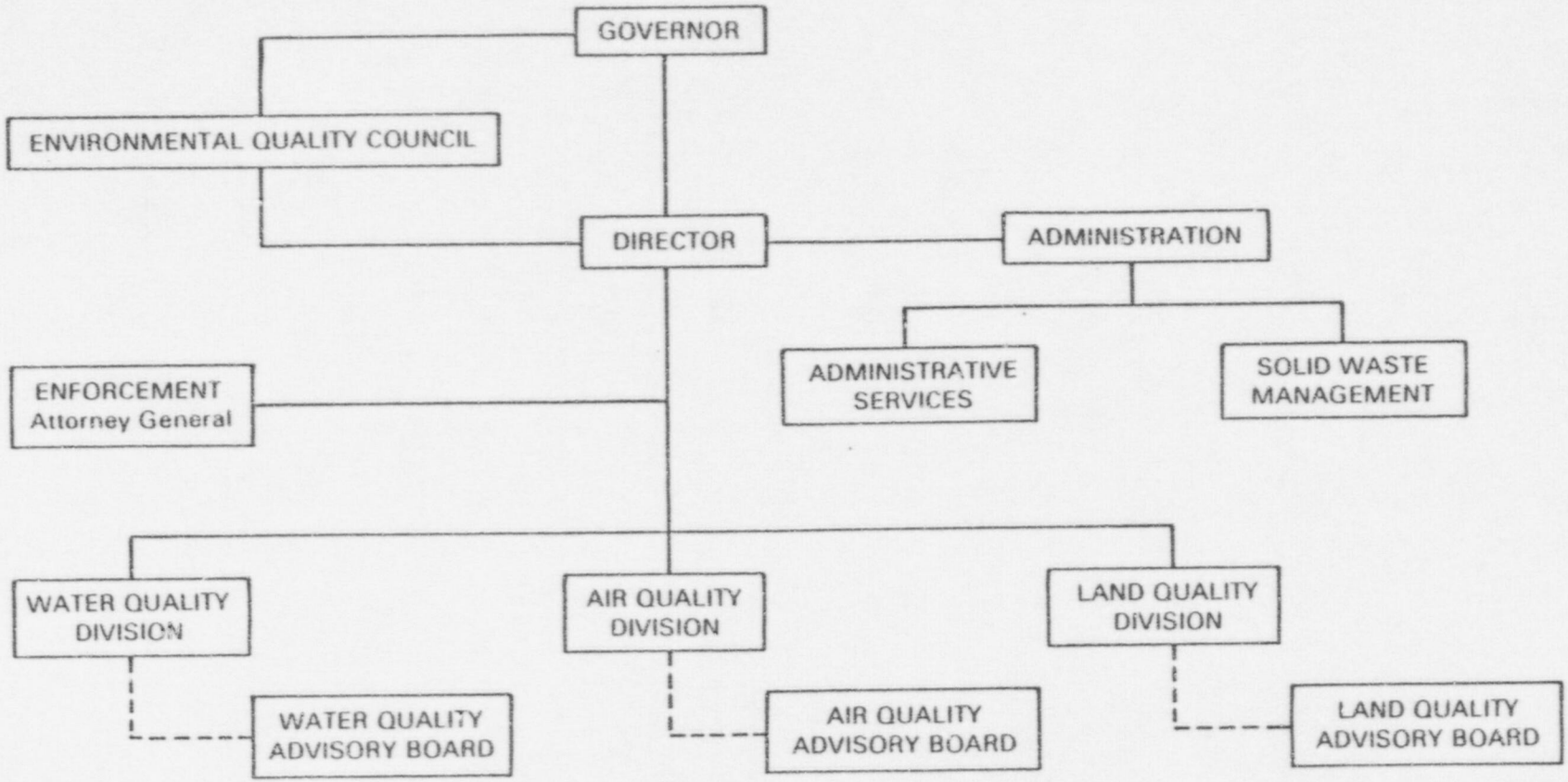


FIGURE ONE

STATE ELECTED OFFICIALS

Inaugurated January 1, 1979. Terms expire January 3, 1983.

(Four-Year Terms)

Ed Herschler (D) ..... **Governor**
Capitol Building
Cheyenne, WY 82002
Phone: 777-7434

Thyra Thomson (R) ..... **Secretary of State**
Capitol Building
Cheyenne, WY 82002
Phone: 777-7378

Jim Griffith (R) ..... **Auditor**
Capitol Building
Cheyenne, WY 82002
Phone: 777-7831

Shirley Wittler (R) ..... **Treasurer**
Capitol Building
Cheyenne, WY 82002
Phone: 777-7408

Lynn Simons (D) ..... **Superintendent of Public Instruction**
Hathaway Building
Cheyenne, WY 82002
Phone: 777-7673

Wyoming has a cabinet form of government. All the elected officials serve on the following Boards and Commissions:

Farm Loan Board
Capitol Building Commission
Charities and Reform, Board of
Land Commissioners, Board of
Liquor Commission, Wyoming
Prison Labor, Commission of
Wills and Trust, Board of

GOVERNOR'S OFFICE

Capitol Building — Ph. 777-7434

Governor	Ed Herschler
Administrative Assistant	C. Richard Skinner
State Planning Coordinator	Richard M. Hartman
Information Coordinator	Adeline McCabe
Secretary/Personal	Bonnie Grivet
Secretary/Financial Officer	Pat Krueger
Secretary/Receptionist	Sandy Ross

ATTORNEY GENERAL

Capitol Building — Ph. 777-7841

Attorney General	John D. Troughton
Deputy Attorney General, Civil Div.	Peter J. Mulvaney
Deputy Attorney General, Criminal Div.	Gerald A. Stack
Senior Ass't. Attorney General	Samuel A. Soule'
Senior Ass't. Attorney General	Thomas C. Bogus
Senior Ass't. Attorney General	Glenn A. Williams
Senior Ass't. Attorney General	Jack D. Palma
Ass't. Attorney General	Michael Schilling
Ass't. Attorney General	Sterling A. Case
Ass't. Attorney General	Christan P. Mai
Ass't. Attorney General	Bernard L. Broderick
Ass't. Attorney General	James W. Gusea
Ass't. Attorney General	E. Michael Weber
Ass't. Attorney General	T. J. Carroll
Ass't. Attorney General	Marta Adams
Ass't. Attorney General	Mary B. Guthrie
Ass't. Attorney General	Kenneth G. Vines
Ass't. Attorney General	Daniel E. White
Ass't. Attorney General	Gay V. Bartels
Special Ass't. Attorney General	Jerry Statkus

ENGINEER, STATE

Barrett Building — Ph. 777-7354

(See Also Control, Board of)

General supervision of surface and underground water.

State Engineer	George L. Christopulos (term expires 2-28-81)
Deputy State Engineer	William Long
Assistant State Engineer	Wayland J. Anderson
Safety of Dams Engineer	John Balog, Jr.
Cooperative Programs Coordinator	Richard C. Petty
Ground Water Geologist	Richard G. Stockdale
Administrative Assistant	Alice L. Wright
Director, Water Planning Program	John W. Jackson
Adjudication Officer	Francis A. Carr
Interstate Streams Engineer	Clement R. Lord

ENVIRONMENTAL QUALITY, DEPARTMENT OF

Hathaway Building — Ph. 777-7391

Department Director	Robert E. Sundin
Air Quality Div. Administrator	Randolph Wood
Land Quality Div. Administrator	Walter C. Ackerman
Solid Waste Mgt. Program	Charles A. Porter
Water Quality Div. Administrator	William L. Garland

Environmental Quality Council

Consists of seven members appointed by the Governor with consent of the Senate. No more than four members shall be of the same political party. The terms of the members shall be for four years except for the initial appointments. The Council shall act as the hearing examiner for the Dept. of Environmental Quality and shall hear and determine all cases or issues arising under laws, rules, standards or orders issued or administered by the Dept.

Name	Address	Pol. Affil.	Expiration
John V. Crow	Encampment	D	6-30-80
Lee E. Keith, V. Chm.	Buffalo	R	6-30-81
Maxine Patterson	Edgerton	D	6-30-83
Timothy Fleming	Lander	I	6-30-81
Glen A. Goss	Glenrock	R	6-30-83
David B. Park	Casper	D	6-30-80
Ronald C. Surdam	Laramie	D	6-30-83

Correspondence to: Robert E. Sundin, Director, Hathaway Building, Cheyenne 82002, Ph. 777-7391

Advisory Boards

There is created within the department three advisory boards, one for each division. Each advisory board consists of five members appointed by the Governor. Each board has one member who represents industry, one member who represents agriculture, one member who represents political subdivisions and two members who represent the public interest. Not more than three members of each board shall be from the same political party.

Air Quality Advisory Board

Name	Address	Pol. Affil.	Expiration
Hugh L. Binford	Sinclair	R	9-30-79
John G. Fanos	Evanston	D	9-30-81
Vincent R. Lee	Wilson	R	9-30-79
Raymond D. Saunders	Gillette	D	9-30-81
Gilbert G. Vondriska	Sundance	D	9-30-79

Correspondence to: Randolph Wood, Air Quality Admin., Hathaway Building, Cheyenne 82002, Ph. 777-7391

Land Quality Advisory Board

Name	Address	Pol. Affil.	Expiration
Kenneth Erickson	Casper	R	9-30-81
Sally Forbes	Sheridan	I	9-30-79
Jerome D. Goodrich	Gillette	R	9-30-79
John Morris	Cheyenne	D	9-30-81
Evan Reese	Evanston	D	9-30-79

Correspondence to: Walter C. Ackerman, Land Quality Admin., Hathaway Building, Cheyenne 82002, Ph. 777-7756

Water Quality Advisory Board

Name	Address	Pol. Affil.	Expiration
Courtenay Davis	Horse Creek	D	9-30-81
Peter Field	Newcastle	D	9-30-79
Walter Reynolds	Douglas	R	9-30-79
Maxine Patterson	Edgerton	D	9-30-81
Robert L. Streeter II	Casper	I	9-30-79

Correspondence to: William L. Garland, Water Quality Admin., Hathaway Building, Cheyenne 82002, Ph. 777-7781

Solid Waste Management Program

Correspondence to: Charles A. Porter, Solid Waste Mgt. Supervisor, Hathaway Building, Cheyenne 82002, Ph. 777-7752

GAME AND FISH COMMISSION

Seven members appointed by the Governor for six-year terms; with Senate confirmation. Not more than four members from the same political party. Powers and duties of board set forth by Wyo. Statutes. Serves as a policy-making board. See page 84 for appointment map.

Name	Address	District	Pol. Affil.	Expiration
John M. Anselmi	Rock Springs	2	D	2-28-83
Frances Osborn	Cheyenne	1	R	2-28-85
C. W. "Wes" Myers	Evanston	3	D	2-28-81
Gene Bondi	Sheridan	4	D	2-28-81
Vincent A. "Buster" Hayes	Cody	5	R	2-28-85
Verne F. Barton, Jr.	Newcastle	6	R	2-28-83
Dave Wheeler	Lander	7	D	2-28-81

Game and Fish Department Staff

5400 Bishop Blvd. — Ph. 777-7631

Director ..... Earl M. Thomas
Assistant Director — Operations ..... W. Donald Dexter
Assistant Director — Services ..... Bill Morris

GEOLOGICAL SURVEY ADVISORY BOARD

The Geological Survey advisory board is established within the executive department of the state government to aid the executive director in formulation and direction of the policies and programs to be carried out by the geological survey. The board consists of five members from the public at large, no more than three of which are from the same political party, who possess knowledge, experience and skill for the position. The Governor, with the consent of the Senate appoints the five members of the board; four-year terms.

Name	Address	Pol. Affil.	Expiration
Dr. D. L. Blackstone, Jr.	Laramie	D	1-7-80
A. Thomas Graham, Jr.	Green River	D	1-3-83
Dr. Robert S. Houston	Laramie	D	1-3-83
Bayard D. Rea	Casper	R	1-7-80
E. L. (Roy) Heisey	Casper	R	1-5-81
Governor Ed Herschler, Ex-Officio			
Edward Jennings, Ex-Officio			
Dr. Daniel N. Miller, Jr., Ex-Officio			
Donald B. Basko, Ex-Officio			

Geological Survey Staff

Box 3008, Univ. Station, Laramie 82071 — Ph. 742-2054

State Geologist and Executive Director	Dr. Daniel N. Miller, Jr.
Staff Geologist, Environmental	Rodney H. DeBruin
State Geologist, Coal	Gary B. Glass
Staff Geologist, Stratigraphy	David R. Lageson
Staff Geologist, Minerals	W. Dan Hausel
Staff Geologist, Petroleum	Alan J. VerPloeg

HEALTH AND SOCIAL SERVICES, DEPARTMENT OF

Hathaway Building — Ph. 777-7657

Director	W. Don Nelson
Adm. Planning & Administration	Joseph S. Golden
Fiscal Control Admin.	Gerald R. Bryant
Administrative Services	Bert D. Morrison
Finance & Accounting	Tom Miyamoto
Public Information Officer	Andrew L. Ruskanen

Advisory Council of Health and Medical Services

Council consists of five members appointed by Governor with Senate confirmation for six-year terms. No more than three members may be of the same political party. Two members must be medical doctors, one must be a doctor of dental surgery, one must be a doctor of veterinary medicine, and one must represent the public.

Name	Address	Pol. Affil.	Expiration
R. E. Fuechsel, D.V.M.	Riverton	R	3-31-79
James Wiebler	Laramie	D	3-31-83
Terry Happel, M.D.	Rock Springs	D	6-30-81
Scott Welch, D.D.S.	Lovell	R	6-30-81
James A. Hecker, M.D.	Cheyenne	D	3-31-83

Division of Health and Medical Services Staff

Hathaway Building — Ph. 777-7121

Administrator	Lawrence J. Cohen, M.D.
Medical Facilities Standards Manager	Fred S. Kellow
State Program Adm., Communicable Disease & Environmental Health	Herman S. Parrish, M.D.
State Program Mgr., Dental Health Services	W. E. Willoughby, D.D.S.
State Program Mgr., Environmental Health	Robert L. Coffman
State Program Mgr., Med. Asst. Services	Ernest A. Rumpf, Jr.
State Program Mgr., Mental Health & Mental Retardation	Charles W. Rodgers, Ph.D.
State Program Mgr., PH Nursing	Mary Cassidy, R.N.
Supervisor, Radiological Protection	Edward D. Johnson, Sr.
State Program Mgr., Emergency Med. Services	James S. (Jimm) Murray
State Program Mgr., Medical Laboratory	Donald T. Lee, Dr. P.H.
State Program Mgr., Vital Records	JoAnn R. Amen
Mgr., Children's Health Services	Stanley Bercich

LAND USE COMMISSION

Commission has nine members appointed by Governor. See page 84 for Appointment District Map. Land Use Act also established a 27 member advisory committee: one from each county and four appointed at-large. Duties of the advisory committee are to assist the commission in carrying out mandates of the act.

Name	Address	District
Howard T. Carroll, Chm.	Laramie	2
Alfred E. Lauber, V. Chm.	Worland	5
H. Clandillon Phibbs, Sec.	Jackson	3
Mrs. Elaine Barton	Newcastle	6
James Willox	Douglas	7
Raymond Saunders	Gillette	4
Vacant		1
William D. Bagley	Cheyenne	At Large
Franklin Bayless	Cheyenne	At Large

Land Use Advisory Committee

Name	Representing
Mrs. Sheila Arnold	Albany
James Kelso	Big Horn
Eric Ohman	Campbell
Sid Weber	Carbon
Andy Tillard	Converse
Paul McKean	Crook
Richard Donelson	Fremont
Raymond Johnson	Goshen
Alfred Graham	Hot Springs
Fred Skiles	Johnson
Norman "Buck" Holmes	Laramie
Truman Julian	Lincoln
Charles Davis	Natrona
Lawrence Kaan	Niobrara
Jack Richard	Park
Howard E. Miller	Platte
Vacant	Sheridan
Paul Scherbel	Sublette
Edward Fermelia	Sweetwater
Robert Corbett	Teton
Hight Proffit	Uinta
Stephen Cole	Washakie
Wilson Burnette	Weston
Phil Marincic	At Large
Ruth Frolander	At Large
John Guthrie	At Large
Charles Jamieson	At Large

Land Use Administration Staff

Boyd Building, 1720 Carey Ave. — Ph. 777-7493

Director	Collin Fallat
Land Use Research Analyst	Rose Wagner
Administrative Assistant	Carolyn Smith
Secretary	Kathleen O'Neill

PUBLIC SERVICE COMMISSION

The Public Service Commission regulates services and rates of intrastate electric, gas, water, steam, pipeline, telephone, telegraph, rail, common motor carrier, common carrier pipeline, and airlines utilities; excepting taxi cabs, municipal water utlities, and municipal gas and electric utilities operating within municipalities. Commission consists of three members appointed by the Governor with Senate confirmation required, for six-year terms, with no more than two members from the same political party.

Name	Address	Pol. Affil.	Expiration
John R. Smyth	Cheyenne	D	2-28-83
C. E. Johnson	Cheyenne	D	2-28-81
G. Keith Osborn	Cheyenne	R	2-28-85

Public Service Commission Staff

Capitol Hill Bldg., 320 W. 25th, Cheyenne — Ph. 777-7427

Chief Counsel & Adm. Secretary	Alex J. Eliopulos
Rate & Tariff Dept.	William A. Johnson, Director
Transportation Dept.	William M. Rooney, Director
Utilities Dept.	Frank Rauchfuss, Director
Commission Engineer	Delbert L. Boyer

RECREATION COMMISSION

Appointed by Governor with the approval of Senate. No more than five may be of the same political party. Governor is an ex-officio member. The commission has overall responsibility to plan, acquire, develop and manage all state parks, state recreation areas and state historical and archaeological sites and administers federal grant-in-aid programs for recreational development and historical preservation. See page 84 for Appointment District map.

Name	Address	District	Pol. Affil.	Expiration
Rick Kilmer	Lusk	6	D	3-31-84
Mrs. Robert Frisby, V. Pres.	Cody	5	R	3-31-82
E. Lawson Schwope, Treas.	Cheyenne	1	D	3-31-81
J. D. Osmond	Thayne	At Large	D	3-31-84
Charles H. Johnson	Rawlins	2	D	3-31-84
Albert Pilch	Evanston	3	R	3-31-81
Jack Fairweather	Sheridan	4	D	3-31-82
Floyd W. Bartling	Douglas	7	R	3-31-82
William Moffat	Riverton	At Large	I	3-31-81

Recreation Commission Staff

604 East 25th Street — Ph. 777-7695

Director	Jan L. Wilson

State Parks, Historical & Archaeological Sites

Park	Phone	Superintendent
Boysen State Park	876-2796	Kenneth Brecht
Buffalo Bill State Park	587-9277	Dave Wilson
Curt Gowdy State Park	632-7946	Allen Cowardin
Ft. Bridger State Historic Site	782-6765	Lloyd Kahus
Ft. Fred Steele State Park	324-6955	Larry Larson
Glendo State Park	735-4433	Dennis Krionderis
Guernsey State Park	836-2334	Bob McCormick
Keyhole State Park	756-3596	Dan Brownell
Medicine Lodge State Archaeological Site	469-2833	Gary Weaver
Seminoe State Park	324-6955	Larry Larson
Sinks Canyon State Park	332-2895	Jerry Gilland
South Pass City State Historic Site	332-3684	Dave McManamen

SECRETARY OF STATE

Capitol Building — Ph. 777-7378

The Secretary of State serves as Acting Governor, Securities Administrator, State Elections Officer, Chairman of the Collection Agency Board, and convenes the State House of Representatives.

Administers laws pertaining to corporations, elections, securities, trade names and trademarks, financing statements, collection agencies and notaries public; maintains the State Registry of Rules of state and local agencies; publishes the Wyoming Official Directory, State Constitution and Election Code; and is custodian of the Great Seal.

The Secretary of State is a member of the Governor's cabinet serving with the other elected officials on the boards and commissions listed on page 5. In addition, the Secretary of State is a member of the Canvassing Board and the Board of Deposits.

Secretary of State	Thyra Thomson
Deputy Secretary of State	Linda Mosley
Head, Elections Division	Steven Sackman
Director, Corporations Division	Jackie Corklin
Assistant Director, Corporations Div.	Linda Dickens
Trademarks Examiner	Kim Oxley
Assistant Securities Administrator	Paul S. Howard

STATUTES

In 1973, Wyoming adopted the "Wyoming Environmental Quality Act", W.S. 1973 §35-11-101 et seq., which created the Department of Environmental Quality. The Act transferred to the new agency all the powers, duties, functions and regulatory authority which had formerly been vested in several other agencies, including the Air Resources Council, the Water Pollution Advisory Council, the Air Quality Section and the Sanitary Engineering Services branches of the Division of Health and Medical Services, and the Open Cut Land Reclamation Section of the Office of the Commissioner of Public Lands. In addition to the transferred duties and powers, the law requires that the Department shall perform any and all acts necessary to carry out the purposes of the act, and that it shall consult and cooperate with other state agencies, other states, and the federal government in carrying out the purposes of the act.

The Department has overall responsibility for environmental quality in Wyoming. Each of its three divisions is charged with the protection, preservation, and regulation of a particular part of the environment. The statutes prohibit persons from detrimentally affecting the quality of the air or water in the state. They require that any use of the land for mining or other mineral removal shall include reclamation of the land so as to allow it to be used for its highest previous use.

Nowhere in the statutes is any agency expressly designated as the Wyoming "radiation control agency". The Environmental Quality Act, for the purposes of water quality, includes radioactive substances in the definition of "wastes", and wastes are then included in the definition of "pollution". For air quality, the definitions of "air contaminant" and "air pollution" include the types of materials which could be interpreted to include radioactive materials, though radiation sources are not specifically listed. The definitions are written in terms of materials which might injure the public health. The Land Quality Division has a similar definition, which is written in terms of "hazardous" materials and "toxic wastes". The Land Quality Division is the program agency which has been designated Wyoming's lead agency for the Mill Tailings Program.

REGULATIONS

The three divisions within the Department of Environmental Quality Department, and the Solid Waste Management Program, have issued regulations, as authorized by the Environmental Quality Act of 1973. The regulations adopted by the Air Quality Council and enforced by the Air Quality Division, do not specifically refer to radiation sources, but such materials could

be included in the definition of "air pollution", which is written in terms of any air contaminant in "such quantity or duration as is materially injurious to human health or welfare..., or unreasonably interferes with the enjoyment of life or property."

The regulations promulgated by the Water Quality Division adopt by reference the definitions in the statute, which specifically refer to radioactive materials as a type of waste, and "waste" as one type of pollution. The division also has adopted a definition of "toxic materials" which could include radiation sources. "Toxic materials" are those which, after discharge into the environment and ingestion into any environmentally significant organism, will cause death, disease, cancer, or genetic or physiological malfunctions. In addition, the Water Quality Division has specifically limited the levels of Radium (5 pCi/l, Radium 226 plus Radium 228) and Strontium (8 pCi/l, Strontium 90) which are permissible in Wyoming surface waters. The regulations require that any "activities of man" shall employ "all controls which are technologically feasible" to prevent levels of radioactive materials from exceeding permissible levels. Finally, the Water Quality Division has adopted regulations covering permits and standards for discharges of wastes into watercourses.

The Division of Land Quality has issued regulations which cover mining operations, land reclamation, and water diversion (uses and impoundments). Land Quality has adopted a definition of "toxic materials" (and a similar term, "hazardous materials") which is essentially the same as the definition used by Water Quality. Waste, including mill tailings, is regulated, and a section of the regulations deals specifically with tailings impoundments. However, the section does not set out specific requirements for impoundments, but says that tailings impoundments shall be approved by the State Engineer's Office, and (for uranium tailings) shall be subject to all applicable state and federal regulations.

The Solid Waste Management Program has promulgated regulations which adopt by reference the statutory and regulatory definition already discussed. The jurisdiction of the Program is over all entities, public or private, which are involved in any aspect of the management, control or disposal of solid waste. "Solid waste" includes the division's definition of "hazardous wastes," which is similar to the previous definitions. The Solid Waste Management Program is charged with protecting the environment from damage caused by the improper or harmful disposal of solid waste materials.

There is overlap in the areas assigned to each of the four programs in the Environmental Quality Department, but the Environmental Quality Council and the director of the Department coordinate the activities and the interactions of the four programs.

LEGISLATURE

OVERVIEW

The Legislature drafts and passes laws providing for the well-being, growth and development of Wyoming, and for the protection of her citizens. The Wyoming legislature has two houses, the Senate and the House of Representatives. The thirty senators are elected to four year terms (sixteen senators stand for election the year when the President of the United States is chosen, the rest two years later) and all sixty-two representatives are up for election every two years.

The general session of the legislature convenes in January of every odd-numbered year (meets biennially) for a period not to exceed forty days. Wyoming has amended its constitution to allow a twenty-day budget session in even-numbered years.

SENATE

Membership

Republicans: 19

Democrats : 11

Leadership:

President : The presiding officer of the Senate, the President, is elected at the beginning of the general session. He is chosen by the Senators from their membership. The President has the power to refer legislation to appropriate committees, and by the party caucus procedure, to appoint committee members and committee chairmen.

Officers:			Term Expires
President:	L.V. "Neal" Stafford	(R - Buffalo)	1981
Majority Floor Leader:	Donald R. Cundall	(R - Guernsey)	1981
Vice-President:	Robert L. Novotny	(R - Kinnear)	1983
Minority Floor Leader:	Wm. G. "Bill" Rector	(D - Cheyenne)	1981

Senators from Districts in which there is a tailings site.

Converse County (Spook Site):

Eddie Moore (R - Douglas) 1983
Senator Moore has served for five years in the Senate.

Fremont County (Riverton Site):

Robert L. Novotny (R - Kinnear) 1981
Senator Novotny is Chairman of the Appropriations Committee. He has served nine years in the Senate, plus two in the House.

Roy Peck (R - Riverton) 1981
Senator Peck has served three years in the Senate, plus four in the House.

Committee Structure

There are twelve Senate committees to which legislation is regularly referred. The committees, and their chairmen, are:

- Judiciary
  Rex O. Arney (R - Sheridan, 3S-4H)
- **Appropriations
  Robert L. Norotny (R - Kinnear, 9S-2H)
- Revenue
  Gerald E. Geis (R - Worland, 5S)
- **Education, Health and Welfare
  L. Donald Northrup (R - Powell, 13S-8H)
- Agriculture, Public Lands & Water Resources
  Earl Christensen (R - Newcastle, 21S)
- Travel, Recreation & Wildlife
  John F. Turner (R - Moose, 5S-4H)
- Corporations, Elections & Political Subdivisions
  Eddie D. Moore (R - Douglas, 5S)
- Transportation and Highways
  Cal S. Taggart (R - Lovell, 7S)
- Mines, Minerals & Industrial Development
  Diemer D. True (R - Casper, 3S-4H)
- Labor and Federal Regulations
  Russell W. Zimmer (R - Torrington, 3S-4H)

- Journal
  David R. Nicholas (R - Laramie, 1S)

- Rules and Regulations
  L.V. "Neal" Stafford (R - Buffalo, 13S)

**Indicates a committee which may be involved with the Mill Tailings Program.

HOUSE OF REPRESENTATIVES

Membership:

Republicans: 42

Democrats : 20

Leadership:

Speaker: The speaker is the presiding officer in the House. He is chosen by the Representatives from their membership at an election at the beginning of the general session. The speaker has the power to refer legislation to appropriate committees, and, through the party caucus procedure, to appoint committee members and committee chairmen.

Officers:

Speaker:	Warren A. Morton	(R - Casper)
Speaker Pro Tempore and Caucus Leader:	Bob J. Burnett	(R - Laramie)
Majority Floor Leader:	Russ Donley	(R - Casper)
Minority Floor Leader:	Walter C. Urbigkit, Jr.	(D - Cheyenne)

Representatives from Districts in which there is a tailings site.

Converse County (Spook Site):	William A. "Rory" Cross Representative Cross has served five years in the House.	(R - Douglas)

Fremont County
(Riverton Site):

John R. Hursh (R - Riverton)
Representative Hursh has served five years in the House.

Gary Jennings (R - Riverton)
Representative Jennings has served seven years in the House.

Committee Structure:

There are twelve committees in the House to which legislation is regularly referred for consideration. The Committees, and their chairmen, are:

- Judiciary
  Ellen Crowley (R - Cheyenne, 5H)
- Appropriations
  Jack A. Sidi (R - Casper, 9H)
- Revenue
  C.R. "Bob" O'Neil (R - Big Piney, 9H)
- Education
  Bill McIlvain (R - Cheyenne, 7H)
- Agriculture, Public Lands & Water Resources
  Gary Jennings (R - Riverton, 7H)
- Travel, Recreation & Wildlife
  John R. Hursh (R - Riverton, 5H)
- Corporations, Elections & Political Subdivisions)
  Patrick H. Meenan (R - Casper, 11H)
- Transportation & Highways
  William A. "Rory" Cross (R - Douglas, 5H)
- Mines, Minerals & Industrial Development
  Bruce McMillan (R - Riverton, 7H)
- **Labor, Health & Social Services
  Milton Hyatt
- Journal
  Tom Kinnison (R - Sheridan, 1H)
- Rules & Regulations
  Warren A. Morton (R - Casper, 13H)

**Indicates a committee which may be involved with the Mill Tailings Program.

LEGISLATIVE SERVICE OFFICE

Capitol Building — Ph. 777-7881

Ralph E. Thomas ..... Director, Service Division
Joseph B. Meyer ..... Assistant Director, Service Division
C. James Orr ..... Assistant Director, Audit Division

Management Council

Council consists of eleven members, which includes presiding officers and the majority and minority floor leaders, or their designees, of the Senate and House; one member from each political party selected at large from the Senate and House; and one member selected at large from either the Senate or House by the ten above-named.

Members from Senate

Name	Pol. Affil.
L. V. Stafford, Chm., *President of the Senate*	R
Donald R. Cundall, *Majority Floor Leader*	R
O. R. Daily	D
L. Donald Northrup	R
D. R. "Dick" Sedar, *Minority Whip*	D

Members from House of Representatives

Name	Pol. Affil.
Warren A. Morton, *Speaker of the House*	R
Russ Donley, *Majority Floor Leader*	R
Jack A. Sidi, *V. Chm.*	R
H. L. Jensen	D
Walter C. Urbigkit, Jr., Sec., *Minority Floor Leader*	D
Gary Jennings	R

STATE SENATE

(4 yr. term)

19 Republicans — 11 Democrats

County		
Albany	David R. Nicholas	Republican
	*June Boyle	Democrat
Big Horn	*Cal S. Taggart	Republican
Campbell-Johnson	*Catherine M. Parks	Republican
	*L. V. "Neal" Stafford	Republican
Carbon	O. R. "Bud" Daily	Democrat
Converse-Niobrara	Eddie Moore	Republican
Crook-Weston	Earl Christensen	Republican
Fremont	Robert L. Novotny	Republican
	*Roy Peck	Republican
Goshen-Platte	*Donald R. Cundall	Republican
	*Russell W. Zimmer	Republican
Hot Springs-Washakie	Gerald E. Geis	Republican
Laramie	*Wm. M. "Bill" Murray	Republican
	*Rodger McDaniel	Democrat
	Milton E. Nichols	Democrat
	J. W. "Jim" Norris	Democrat
	*William G. "Bill" Rector	Democrat
Natrona	Tom Stroock	Republican
	*Diemer True	Republican
	Dick Sadler	Democrat
	*D. R. "Dick" Sedar	Democrat
North Lincoln-Sublette-Teton	John F. Turner	Republican
South Lincoln-Uinta	*Hight M. Proffit	Democrat

*Terms expire January 5, 1981. All others are serving until January 3, 1983.

Park	*Robert W. Frisby	Republican
	L. Donald Northrup	Republican
Sheridan	*Rex O. Arney	Republican
	Fenworth Downing	Republican
Sweetwater	Ford Bussart	Democrat
	*Steve Majhanovich	Democrat

1979 SENATE STANDING COMMITTEES

Agriculture, Public Lands & Water Resources
- Earl Christensen, Chairman
- Russell Zimmer
- John Turner
- Steve Majhanovich
- Hight Proffit

Appropriations
- Robert Novotny, Chairman
- Gerald Geis
- Robert Frisby
- June Boyle
- O. R. "Bud" Daily

Corporations, Elections & Political Subdivisions
- Eddie Moore, Chairman
- Roy Peck
- William Murray
- Ford Bussart
- Dick Sedar

Education, Health & Welfare
- L. Donald Northrup, Chairman
- William Murray
- Fenworth Downing
- Ford Bussart
- Rodger McDaniel

Journal
- David Nicholas

Judiciary
- Rex O. Arney, Chairman
- Diemer True
- David Nicholas
- Milton Nichols
- J. W. Norris

Labor & Federal Relations
- Russell Zimmer, Chairman
- Eddie Moore
- Fenworth Downing
- William Rector
- Hight Proffit

Mines, Minerals & Industrial Development
- Diemer True, Chairman
- Roy Peck
- Catherine Parks
- Rodger McDaniel
- Steve Majhanovich

Revenue
- Gerald Geis, Chairman
- Earl Christensen
- Robert Frisby
- William Rector
- D. R. "Dick" Sedar

Rules & Procedures
- L. V. Stafford
- Donald Cundall
- Earl Christensen
- William Rector
- Dick Sadler

Transportation & Highways
- Cal Taggart, Chairman
- Tom Stroock
- Catherine Parks
- D. R. "Dick" Sedar
- Dick Sadler

Travel, Recreation & Wildlife
- John Turner, Chairman
- Cal Taggart
- Tom Stroock
- Dick Sadler
- Steve Majhanovich

HOUSE OF REPRESENTATIVES

*(2 yr. term)***

42 Republicans -- 20 Democrats

County		
Albany	Bob J. Burnett	Republican
	Patti MacMillan	Republican
	Sheila Arnold	Democrat
	Matilda Hansen	Democrat
	T. A. Larson	Democrat
Big Horn	Esther Eskens (Resigned)	Republican
	Grant L. Sanders	Republican
Campbell	Tom Getter	Republican
	Lawrence J. Hunter	Democrat
Carbon	B. G. "Jerry" Michie	Democrat
	George R. Salisbury, Jr.	Democrat
	Thomas E. Trowbridge	Democrat
Converse	William A. "Rory" Cross	Republican
Crook	Marlene Simons	Republican
Fremont	Frank Dusl	Republican
	John R. Hursh	Republican
	Gary Jennings	Republican
	Bruce McMillan	Republican
	John P. Vinich	Democrat
Goshen	Douglas W. Chamberlain	Republican
	Donald B. Scott	Democrat
Hot Springs	Stanford S. Smith	Republican
Johnson	John P. Marton	Republican
Laramie	Ellen Crowley	Republican
	C. M. Lummis	Republican
	Bill McIlvain	Republican
	Dean T. Prosser, Jr.	Republican
	Pat Tugman	Republican
	William C. Edwards	Democrat
	Carrol P. Orrison	Democrat
	Elizabeth Phelan	Democrat
	Mary K. Schwope	Democrat
	Walter C. Urbigkit	Democrat
	Alvin Wiederspahn	Democrat

**Terms of Representatives expire on January 5, 1981.

Lincoln	Wilford N. Hemmert	Republican
	Alan Stauffer	Republican
Natrona	Bill Bragg	Republican
	William S. Curry	Republican
	Russ Donley	Republican
	Patrick H. Meenan	Republican
	Warren A. Morton	Republican
	Nyla A. Murphy	Republican
	Charles K. Scott	Republican
	Jack Sidi	Republican
	Quincy L. Tarter	Republican
	Mrs. Edness Kimball Wilkins	Democrat
Niobrara	Ken Gropp	Republican
Park	Tom Jones	Republican
	Peg Shreve	Republican
	John "Jack" Winninger	Republican
Platte	Doug Bryant	Democrat
Sheridan	Victor Garber	Republican
	Tom Kinnison	Republican
	Carleton F. Perry	Republican
Sublette	C. R. "Bob" O'Neil	Republican
Sweetwater	Eldon M. Spicer	Republican
	James E. Roth	Democrat
	Ann Strand	Democrat
Teton	H. L. Jensen	Democrat
Uinta	Ron Micheli	Republican
Washakie	David H. Asay	Republican
Weston	Don Thorson	Republican

1979 HOUSE OF REPRESENTATIVES STANDING COMMITTEES

Agriculture, Public Lands & Water Resources
- Gary Jennings, Chairman
- David H. Asay
- Douglas K. Bryant
- Victor Garber
- George R. Salisbury
- Donald B. Scott
- Marlene Simons
- Stanford S. Smith
- Pat Tugman

Appropriations
- Jack Sidi, Chairman
- Kenneth Gropp
- Thomas A. Jones
- T. A. Larson
- Carrol P. Orrison
- Carleton F. Perry

Corporations, Elections & Political Subdivisions
- Patrick H. Meenan, Chairman
- William S. Curry
- Frank J. Dusl
- H. L. Jensen
- Tom Kinnison
- Patti MacMillan
- Donald B. Scott
- Alan C. Stauffer
- John P. Vinich

Education
- Bill McIlvain, Chairman
- William C. Edwards
- Lawrence J. Hunter
- John P. Marton
- C. R. O'Neil
- Elizabeth Phelan
- Alan C. Stauffer
- Quincy L. Tarter
- John J. Winninger

Journal
- Tom Kinnison, Chairman
- Sheila Arnold

Judiciary
- Ellen Crowley, Chairwoman
- Douglas W. Chamberlain
- Matilda Hansen
- John R. Hursh
- C. M. Lummis
- Charles K. Scott
- Eldon M. Spicer
- Walter C. Urbigkit
- Alvin Wiederspahn

Labor, Health and Social Services
- Esther P. Eskens, Chairwoman (Resigned)
- Douglas K. Bryant
- Victor Garber
- John P. Marton
- Bruce McMillan
- Nyla A. Murphy
- Elizabeth Phelan
- Grant L. Sanders
- Mary K. Schwope

Mines, Minerals & Industrial Development
- Bruce McMillan, Chairman
- Sheila Arnold
- Tom Getter
- Lawrence J. Hunter
- Ron Micheli
- Nyla A. Murphy
- Dean T. Prosser
- Ann Strand
- Don Thorson

Revenue
- C. R. O'Neil, Chairman
- Bill Bragg
- Gary Jennings
- Ron Micheli
- B. G. "Jerry" Michie
- Don Thorson
- John P. Vinich
- Edness Kimball Wilkins
- John J. Winninger

Rules & Procedures

Warren A. Morton, Chairman
Bob J. Burnett
Russ Donley
H. L. Jensen
Patrick H. Meenan
C. R. O'Neil
Dean T. Prosser
Donald B. Scott
Walter C. Urbigkit

Transportation & Highways

William A. "Rory" Cross, Chairman
Douglas W. Chamberlain
William S. Curry
Frank J. Dusl
Tom Getter
H. L. Jensen
James E. Roth
Grant L. Sanders
Thomas E. Trowbridge

Travel, Recreation & Wildlife

John R. Hursh, Chairman
Bob J. Burnett
William C. Edwards
Wilford N. Hemmert
Patti MacMillan
George R. Salisbury
Mary K. Schwope
Peg Shreve
Quincy L. Tarter

WYOMING REPRESENTATIVES TO NATIONAL CONFERENCE OF STATE LEGISLATURES

Representing State Senate	Representing State House of Representatives
Committee on Criminal Justice and Consumer Affairs	
O. R. "Rud" Daily	John R. Hursh
Committee on Education	
L. Donald Northrup	Jack Sidi
Committee on Energy	
Diemer True	Gary Jennings
Committee on Government Operations	
Gerald E. Geis	Bruce H. McMillan
Committee on Human Resources	
James W. Norris	Matilda Hansen
Committee on Natural Resources	
Donald R. Cundall	Ron Micheli
Committee on Rural Development	
Russell Zimmer	George R. Salisbury
Committee on Transportation	
Dick Sedar	Thomas E. Trowbridge
Special Task Force on Ethics and Elections	
Rex O. Arney	Bob J. Burnett
Special Task Force on Indian Affairs	
Roy Peck	Gary Jennings
Western States Legislative Forestry Task Force	
Earl Christensen	Marlene J. Simons

LOCAL GOVERNMENT

A description of the structure, jurisdiction, and regulatory authority of local governments affected by remedial action at the Riverton, Converse County, and Baggs sites in Wyoming will be included in this volume at a later date.

PUBLIC INTEREST GROUPS

The Wyoming Outdoor Council (WOC) is an association formed by individuals and organizations dedicated to public action for protection of Wyoming's environment. It is an effective mechanism to reach most environmental public interest groups. WOC maintains offices in two locations:

- Headquarters: Wyoming Outdoor Council
  Peter B. Kozisek, Director
  P.O. Box 1184
  2003 Central
  Cheyenne, Wyoming 82001
  (307) 635-3416

- Field Office: Wyoming Outdoor Council
  Jean Schumaker or Debra East
  Box 28
  Lundra, Wyoming 82520
  (307) 332-2936

Officers:

President:	Jack Pugh
Vice President:	Dave Palmerlee
Secretary:	Laney Hicks
Treasurer:	Ed Strader
Membership:	Craig Thompson
Finance:	Leslie Peterson
Finance:	J.C. Schuetz

Board of Directors:

At Large	Address	Phone
* Colleen Cabot, Student	802 S. 10th Laramie, WY 82070	745-5875
* John Eckhardt, Ranch Manager	A-Bar-A Ranch Encampment, WY 82513	327-5455 (hm) 327-5454 (ofc)
* Laney Hicks, Professional Illustrator	P.O. Box 721 Dubois, WY 82513	455-2293
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WYOMING'S FUTURE DEPENDS ON ITS MOST VALUABLE RESOURCE . . . ITS PEOPLE . . . WORKING TOGETHER FOR A BETTER STATE.

Wyoming Outdoor Council

CITIZEN ACTION

WOC Citizen Action does make a difference. Without it, decision makers hear primarily from special interests who necessarily are limited to looking after their private gains. Your involvement helps make sure that such development will include ecological and aesthetic standards and be compatible with Wyoming's environment.

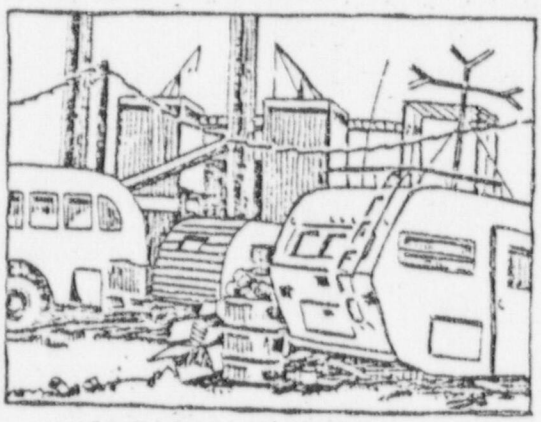
The Wyoming Outdoor Council was founded in 1967 and has established a record of accomplishment and credibility in many areas —

- air quality standards
- water quality and water use
- protecting agricultural land and water
- concern for and maintenance of the livestock industry
- quality wildlife habitat
- industrial siting council and plant siting criteria
- open space easements and reasonable land use planning
- investigative research, monitoring and control standards for coal, uranium and other mining industries
- a voice on socio-economic impacts
- local workshops

In a democratic society, citizen involvement never ends. New laws are passed and old ones revised. New issues and problems develop and old ones change. It is the role of the concerned citizen to watch and participate in this changing society and toward that end WOC endeavors to facilitate citizen efforts in areas of environmental concern.

WHY JOIN?

Wyoming is currently undergoing tremendous growth due to the national demand for energy and raw materials. Wyoming is a state blessed with abundant wildlife, scenic beauty, valuable minerals and fossil fuels, and a high quality of life for its citizens. Yet, unplanned rapid growth often results in the deterioration of the social and environmental systems that make Wyoming such a desirable place to live.



We at the Wyoming Outdoor Council believe expanded use of our many resources must be compatible and harmonize with a continued high quality environment. But, a high quality of life doesn't happen on its own, it happens because citizens want it to happen. Our future is now being shaped by decisions which we must affect if our children are to inherit a state we can be proud of. Citizen action does make a difference!

WOC membership consists of individuals and organizations. Policy and direction is set by a Board of Directors representing these groups and individuals.

W.O.C. ACTIVITY

The Wyoming Outdoor Council is dedicated to maintaining and improving the quality of life for Wyoming citizens. Your membership and contributions to the Council enable us to:

— Maintain a Cheyenne office to lobby the state legislature, monitor state agencies, and co-ordinate citizen action with a full time director and attorney.

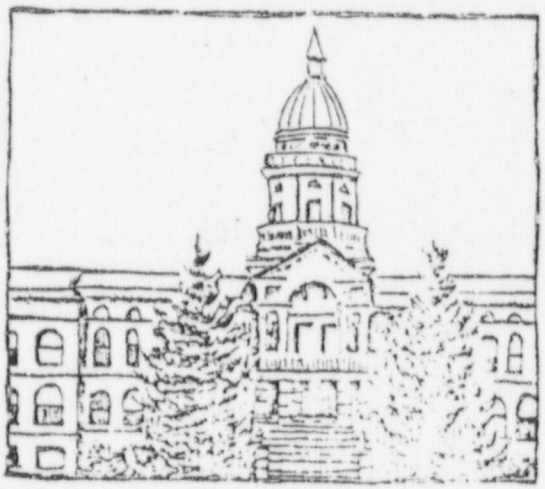
— Provide citizen groups with information and support on local issues

— Publish a newsletter to keep you informed on current issues and how you can participate in them

— Coordinate citizen action on issues of state-wide concern year round as well as during the legislature

— Assure citizen participation in the implementation of important resource laws

— Maintain a field office with two full time staff



Besides lobbying on the state wide level, WOC presents educational films, speakers, and workshops on such diverse issues as river management, the social, environmental, and economic impacts of energy growth, and wildlife protection.

WYOMING NEWSPAPERS

RIVERTON SITE

Riverton Ranger (Daily, M-F)
Box 993
Riverton, WY 82501
(307) 856-2244

SPOOK SITE (CONVERSE COUNTY)

Douglas Budget (Weekly, Thursday)
Drawer 109
Douglas, WY 82633
(307) 358-2965

Glenrock Independent (Weekly, Thursday)
209 S. 4th Street
Glenrock, WY 82637
(307) 436-2211

STATE CAPITAL (CHEYENNE)

Wyoming Eagle (Daily, Monday-Saturday; Mornings)
Wyoming State Tribune (Daily, Monday-Saturday; Evenings)
Sunday Tribune/Eagle (Sunday, combination)
110 E. 17th Street
Cheyenne, WY 82001
(307) 634-3361

RADIO STATIONS

SPOOK (CONVERSE COUNTY) SITE

KATI (AM) - 1400 khz (CBS)
Box 2006
Casper, Wyoming 82601
(307) 266-1400
News Director: Roger Mayer

KAWY (FM) - 94.5 mhz
co-owned with KATI (AM); programming is separate.

KTWO (AM) - 1030 khz (NBC)
Box 2720
Casper, Wyoming 82602
(307) 237-3711
News Director: Pete Williams

KVOC (AM) - 1230 khz (ABC)

Box 2090
Casper, Wyoming 82601
(307) 265-2727
News Director: Terry Manna

KWIV (AM) - 1470 khz

Drawer X
Douglas, Wyoming, 82633
(307) 358-2768
President and
General Manager: Harry Fondren, Jr.

KFBC (AM) - 1240 khz

1806 Capitol
Cheyenne, Wyoming 82001
(307) 634-4461
Program Director: Jerry Gebhart

KFBC-FM - 97.9 mhz

Co-owned with KFBC (AM); duplicates 50% of AM programming.

KRAE (AM) - 1480 khz

Box 189
2109 E. 10th
Cheyenne, Wyoming 82001
(307) 638-8921
News Director: Ralph Graczak

KYWO (AM) - 1590 khz

505 American National Bank
Cheyenne, Wyoming 82001
(307) 634-7975
President: Tony A. Kehl

KSHY (AM) - 1370 khz

1725 Carey Street
Cheyenne, Wyoming 82001
(307) 635-8787
General Manager: Larry Green

KLEN-FM - 106.3 mhz

1370 Southwest Drive
Cheyenne, Wyoming 82001
(307) 635-1111
President: John Hough

RIVERTON SITE

KCWC (FM) - 88.1 mhz (non-commercial; PBS)
Central Wyoming College
Riverton, Wyoming 82501
(307) 856-4441
General Manager: Duncan Harvey

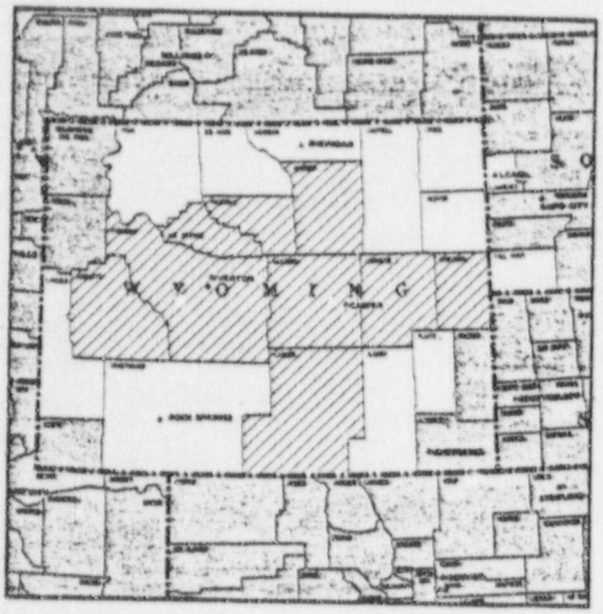
KVOW (AM) - 1450 khz (ABC)
Box 393
Riverton, Wyoming 82501
(307) 856-2251
News Director: Larry Hedrick

KTAK (FM) - 93.5 mhz
Co-owned with KVOW (AM); programming is separate.

KOVE (AM) - 1330 khz (CBS)
Box 430
Lander, Wyoming 82520
(307) 332-5683
President and
News Director: Dan Breece

KDLY (FM) - 97.5 mhz
co-owned with KOVE (AM); programming is separate.

See also the stations listed for the state capital, Boise, under the Spook (Converse County) Site.



Casper-Riverton, Wyo.

ADI TV Households	51,200
Survey Area TV Households	118,200

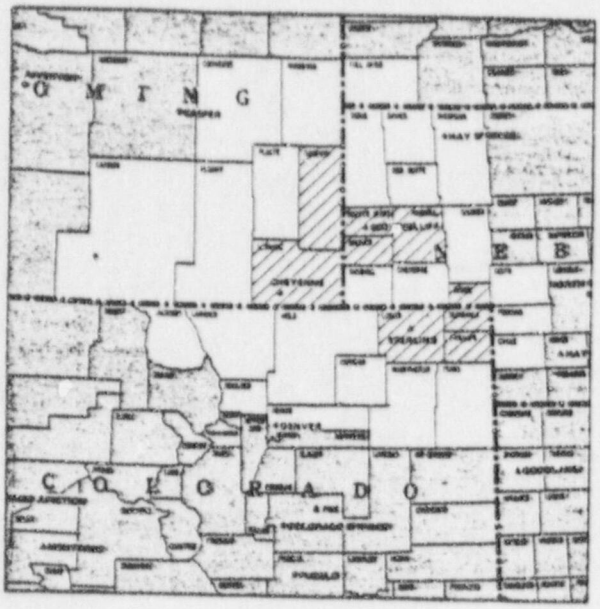
KTWO-TV Casper, Wyo., ch. 2, ABC (NBC, CBS)
KWRB-TV Riverton, Wyo., ch. 10, NBC (CBS)

ADI Counties	State	TV Households
Carbon	WY	8,200
Converse	WY	3,300
Fremont	WY	10,400
Hot Springs	WY	2,000
Johnson	WY	2,500
Natrona	WY	21,300
Niobrara	WY	1,100
Sublette	WY	1,500
Washakie	WY	2,900
Women		**50,100**
Men		**49,100**
Teens		**18,000**
Children		**23,200**

RIVERTON
CONVERSE COUNTY (SPOOK)

KTWO-TV (ABC; NBC; CBS) -- Channel 2
Address: Box 2720
Casper, Wyoming 82602
Telephone: (307) 237-3711
Ownership: Harriscope Broadcasting Corporation
10889 Wilshire Boulevard, Suite 1240
Los Angeles, California 90024
CATV: Yes (24 systems; 47,000 subscribers)

KWRB-TV (NBC; CBS; ABC) -- Channel 10
Address: 500 Arapahoe
Thermopolis, Wyoming 82443
Telephone: (307) 864-2351
Ownership: Joseph P. & Mildred V. Ernst
News Director: Karl V. Kertson
CATV: Yes (7 systems)



Cheyenne, Wyo.

ADI TV Households	55,000
Survey Area TV Households	336,600

KYCU-TV Cheyenne, Wyo., ch. 5, CBS (ABC-NBC)
KTVS Sterling, Colo., ch. 3, satellite to KYCU-TV
KSTF Scottsbluff, Neb., ch. 10, satellite to KYCU-TV

ADI Counties	State	TV Households
Logan	CO	7,000
Phillips	CO	1,900
Sedgwick	CO	1,200
Banner	NE	300
Deuel	NE	1,000
Morrill	NE	2,100
Scotts Bluff	NE	13,000
Goshen	WY	4,900
Laramie	WY	23,600
Women		**54,000**
Men		**53,400**
Teens		**17,600**
Children		**23,600**

CHEYENNE

KYCU-TV (CBS; ABC; NBC) -- Channel 5
Adress: 2923 East Lincolnway
Cheyenne, Wyoming 82001
Telephone: (307) 634-7755
Ownership: Lamb Communications Inc.
General Manger: Carl J. Ochipinti
CATV: Yes (11 systems; 30,697 subscribers)

CONTENTS OF APPENDIX

WYOMING STATUTES ANNOTATED

1977 REPUBLISHED EDITION

Prepared Under the Supervision of the

Services Division of the Legislative Service Office

RALPH E. THOMAS, DIRECTOR

by the Editorial Staff of the Publishers
Under the Direction of
J. H. VAUGHAN, J. P. MUNGER AND G. E. LEGNER

Including acts of the 1977 Session and annotations through 557 P.2d 472.
For complete scope of annotations, see the Preface.

THE MICHIE COMPANY
Law Publishers
CHARLOTTESVILLE, VIRGINIA
1977

§ 35-4-223. Liability for damages.

Compliance with the requirements of this act [§§ 35-4-220 to 35-4-223] shall in no way release the owners or persons responsible for the operation of a sanitary public water supply from any liability for damage to persons or property caused by or resulting from the installation, operation or maintenance of a sanitary public water supply. (Laws 1957, ch. 222, § 4; W.S. 1957, § 35-200.)

Cross reference. — As to criminal offense of poisoning water supply, see § 6-4-603.

ARTICLE 3. RADIOACTIVE ISOTOPES OR MATERIAL

§ 35-4-301. Hospitals, manufacturers, processors, etc., to register with health department.

Each hospital, clinic, manufacturing establishment, research or educational institution, experiment station, processing mill, or other institution or place of business or process where radioactive isotopes or materials are used, manufactured, processed, packaged, refined, produced, disposed or concentrated shall be registered with the state department of public health. The state mine inspector will register with the department of public health any mine, which is producing or has produced radioactive substances. (Laws 1953, ch. 61, § 1; 1955, ch. 153, § 1; W.S. 1957, § 35-201.)

Am. Jur. 2d reference. — 39 Am. Jur. 2d Health §§ 22 to 25.

§ 35-4-302. Application for registration; duties of health department upon receipt of application; issuance of certificate of registration.

It shall be the duty of each manager or officer in charge of any such institution or establishment as set forth in section one (1) of this act [§ 35-4-301], where radioactive isotopes or materials are used, as herein provided, to apply for registration in writing to the director of the department of public health. Upon receipt of such application the director of the state department of public health shall submit to the applicant a registration form calling for such information as may be necessary to determine whether the health of the public or persons working in such establishments may be adversely affected by using, manufacturing, processing, packing, refining, disposing, producing or concentrating of such radioactive isotopes and materials. The director of the department of public health, upon receipt of a properly executed application for registration and upon satisfactory compliance by such applicant with regulations and limits that are or shall be in effect governing the safe exposure to such isotope or material, shall issue to the applicant a certificate of registration. (Laws 1953, ch. 61, § 2; 1955, ch. 153, § 2; W.S. 1957, § 35-202.)

§ 35-4-303. Penalty.

All persons, firms, establishments or institutions as set forth in section 1 of this act [§ 35-4-301] who shall fail to obtain the necessary registration as provided for by this act [§§ 35-4-301 to 35-4-303] shall be deemed guilty of a misdemeanor and shall be punished by a fine of not to exceed one hundred dollars ($100.00) for each offense. (Laws 1953, ch. 61, § 3; 1955, ch. 153, § 3; W.S. 1957, § 35-203.)

ARTICLE 4. FEDERAL MATERNITY BENEFITS

§ 35-4-401. Act of congress accepted.

The state of Wyoming hereby accepts the provisions of the act of congress of the United States approved November 23, 1921, entitled: "An act for the promotion of the welfare and hygiene of maternity and infancy, and for other purposes." (Laws 1923, ch. 32, § 1; R.S. 1931, § 103-241; C.S. 1945, § 63-301; W.S. 1957, § 35-204.)

Cross reference. — As to aid to mothers and dependent children, see §§ 42-1-101 to 42-3-104.

Editor's note. — The federal act, formerly appearing as 42 U.S.C. §§ 161 to 175, referred to in this section, was repealed by act of January 22, 1927, ch. 53, § 2, 44 Stat. 1024, effective June 30, 1929. For present provisions as to the children's bureau and maternal and child health services, see 42 U.S.C. §§ 191 to 194, 701 to 716.

§ 35-4-402. Cooperation with federal bureau.

The state board of health of Wyoming is hereby directed to cooperate with the federal children's bureau in the administration of the benefits of the act of congress aforesaid, and to do all things necessary to entitle the state of Wyoming to receive all the benefits of said act. (Laws 1923, ch. 32, § 2; R.S. 1931, § 103-242; C.S. 1945, § 63-302; W.S. 1957, § 35-205.)

Editor's note. — The powers, duties and authority of the board of health have been transferred to the department of health and social services. See § 9-3-102.

§ 35-4-403. Custodian of funds.

The treasurer of the state of Wyoming is hereby designated as the custodian of all funds allotted to the state of Wyoming from appropriations made by congress under or in pursuance of said act, and he shall receive and provide for the proper custody and disbursement of the same in accordance with law. (Laws 1923, ch. 32, § 3; R.S. 1931, § 103-243; C.S. 1945, § 63-303; W.S. 1957, § 35-206.)

Effective date. — Section 4, ch. 32, Laws 1923, makes the act effective from and after passage. Approved February 20, 1923.

Validity, under federal constitution, of state statute or local ordinance regulating phosphate content of detergents, 21 ALR Fed. 365.

Authority of secretary of army to deny dredging and filling permit for ecological reasons under § 10 of Rivers and Harbors Act of 1899 (33 U.S.C. § 403), 25 ALR Fed. 706.

Federal common law of nuisance as basis for relief in environmental pollution cases, 29 ALR Fed. 137.

What are "land-use and transportation controls" which may be imposed, under § 100 (a) (2) (B) of Clean Air Act of 1970 (42 U.S.C. § 1857c-5 (a) (2) (B)), to insure maintenance of national primary ambient air quality standards, 30 ALR Fed. 156.

Orders or penalties against state or its officials for failure to comply with regulations directing state to regulate pollution-creating activities of private parties, under § 113 of Clean Air Act (42 U.S.C. § 1857c-8), 31 ALR Fed. 79.

39A C.J.S. Health and Environment § 61 et seq.

ARTICLE 1. GENERAL PROVISIONS

§ 35-11-101. Short title.

This act shall be known and may be cited as the "Wyoming Environmental Quality Act." (Laws 1973, ch. 250, § 1.)

Cited in Board of Trustees, Laramie County School Dist. No. 1 v. Spiegel, 549 P.2d 1161 (Wyo. 1976).

Law reviews. – For comment on the Wyoming Environmental Quality Act of 1973, see 9 Land & Water L. Rev. 65 (1974).

See article, "Federal Mineral Reservations," 10 Land & Water L. Rev. 1 (1975).

§ 35-11-102. Policy and purpose.

Whereas pollution of the air, water and land of this state will imperil public health and welfare, create public or private nuisances, be harmful to wildlife, fish and aquatic life, and impair domestic, agricultural, industrial, recreational and other beneficial uses; it is hereby declared to be the policy and purpose of this act to enable the state to prevent, reduce and eliminate pollution; to preserve, and enhance the air, water and reclaim the land of Wyoming; to plan the development, use, reclamation, preservation and enhancement of the air, land and water resources of the state; to preserve and exercise the primary responsibilities and rights of the state of Wyoming; to retain for the state the control over its air, land and water and to secure cooperation between agencies of the state, agencies of other states, interstate agencies, and the federal government in carrying out these objectives. (Laws 1973, ch. 250, § 1; 1977, ch. 132, § 1.)

The 1977 amendment substituted "state" for "State" preceding "of Wyoming."

Effective date. — Section 3, ch. 132, Laws 1977, makes the act effective May 27, 1977.

§ 35-11-103. Definitions.

(a) For the purpose of this act, unless the context otherwise requires:

(i) "Department" means the department of environmental quality established by this act;

(ii) "Council" means the environmental quality council established by this act;

(iii) "Director" means the director of the department of environmental quality;

(iv) "Board" means one (1) or more of the advisory boards in each division of air, land or water quality;

(v) "Administrator" means the administrator of each division of air, land and water quality;

(vi) "Person" means an individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or any other political subdivision of the state, or any interstate body or any other legal entity;

(vii) "Aggrieved party" means any person named or admitted as a party or properly seeking or entitled as of right to be admitted as a party to any proceeding under this act because of damages that person may sustain or be claiming because of his unique position in any proceeding held under this act;

(viii) "Interstate agency" means an agency of two (2) or more states established by or pursuant to an agreement or compact approved by the United States Congress or any other agency of two (2) or more states, having substantial powers or duties pertaining to the control of air, land or water pollution;

(ix) "Municipality" means a city, town, county, district, association or other public body;

(x) "Point source" means any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged;

(xi) The singular includes the plural, the plural the singular, and the masculine and feminine or neuter, when consistent with the intent of this act and necessary to effect its purpose;

(xii) "This act" means sections 35-502.1 through 35-502.56 [§§ 35-11-101 to 35-11-403, 35-11-405, 35-11-406, 35-11-408 to 35-11-1104] of the statutes.

(b) Specific definitions applying to air quality:

(i) "Air contaminant" means odorous material, dust, fumes, mist, smoke, other particulate matter, vapor, gas or any combination of the foregoing, but shall not include steam or water vapor;

(ii) "Air pollution" means the presence in the outdoor atmosphere of one (1) or more air contaminants in such quantities and duration which may be injurious to human health or welfare, animal or plant life, or property, or unreasonably interferes with the enjoyment of life or property;

(iii) "Emission" means a release into the outdoor atmosphere of air contaminants.

(c) Specific definitions applying to water quality:

(i) "Pollution" means contamination or other alteration of the physical, chemical or biological properties of any waters of the state, including change in temperature, taste, color, turbidity or odor of the waters or any discharge of any acid or toxic material, chemical or chemical compound, whether it be liquid, gaseous, solid, radioactive or other substance, including wastes, into any waters of the state which creates a nuisance or renders any waters harmful, detrimental or injurious to public health, safety or welfare, to domestic, commercial, industrial, agricultural, recreational or other legitimate beneficial uses, or to livestock, wildlife or aquatic life, or which degrades the water for its intended use, or adversely affects the environment. This term does not mean water, gas or other material which is injected into a well to facilitate production of oil, or gas or water, derived in association with oil or gas production and disposed of in a well, if the well used either to facilitate production or for disposal purposes is approved by authority of the state, and if the state determines that such injection or disposal well will not result in the degradation of ground or surface or water resources;

(ii) "Wastes" means sewage, industrial waste and all other liquid, gaseous, solid, radioactive, or other substances which may pollute any waters of the state;

(iii) "Sewerage system" means pipelines, conduits, storm sewers, pumping stations, force mains, and all other constructions, devices, appurtenances and facilities used for collecting or conducting wastes to an ultimate point for treatment or disposal;

(iv) "Treatment works" means any plant or other works used for the purpose of treating, stablilizing or holding wastes;

(v) "Disposal system" means a system for disposing of wastes, either by surface or underground methods, including sewerage systems, treatment works, disposal wells, and absorption fields;

(vi) "Waters of the state" means all surface and ground water within Wyoming;

(vii) "Discharge" means any addition of any pollution or wastes to any waters of the state;

(viii) "Public water supply" means any water supply being distributed by ten (10) or more service connections utilized to furnish water for human consumption either in preparing foods or beverages for inhabitants of residences or business establishments.

(d) Specific definition applying to solid waste management:

(i) "Solid waste" means garbage, and other discarded solid materials, materials, including solid waste materials resulting from industrial, commercial, and agricultural operations, and from community activities, but does not include solids or dissolved material in domestic sewerage or other significant pollutants in water resources, such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flows or other common water pollutants.

(e) Specific definitions for land quality:

(i) "Reclamation" means the process of reclaiming an area of land affected by mining to use for grazing, agriculture, recreational, wildlife purposes, or any other purpose of equal or greater value. The process may require contouring, terracing, grading, resoiling, revegetation, compaction and stabilization, settling ponds, water impoundments, diversion ditches, and other water treatment facilities in order to eliminate water diminution to the extent that existing water sources are adversely affected, pollution, soil and wind erosion, or flooding resulting from mining or any other activity to accomplish the reclamation of the land affected to a useful purpose;

(ii) "Minerals" means coal, clay, stone, sand, gravel, bentonite, scoria, rock, pumice, limestone, ballast rock, uranium, gypsum, feldspar, copper ore, iron ore, oil shale, trona, and any other material removed from the earth for reuse or further processing;

(iii) "Contouring" means grading or backfilling and grading the land affected and reclaiming it to the proposed future use with adequate provisions for drainage. Depressions to accumulate water are not allowed except if approved as part of the reclamation plan;

(iv) "Overburden" means all of the earth and other materials which lie above the mineral deposit and also means such earth and other materials disturbed from their natural state in the process of mining, or mining from exposed natural deposits;

(v) "Underground mining" means the mining of minerals by man-made excavation underneath the surface of the earth;

(vi) "Pit" means a tract of land from which overburden has been or is being removed for the purpose of surface mining or mining from an exposed natural deposit;

(vii) "Adjacent lands" means all lands within one-half mile of the proposed permit area;

(viii) "Operation" means all of the activities, equipment, premises, facilities, structures, roads, rights-of-way, waste and refuse areas, storage and processing areas, and shipping areas used in the process of excavating or removing overburden and minerals from the affected land or for removing overburden for the purpose of determing the location, quality or quantity of a natural mineral deposit or for the reclamation of affected lands;

(ix) "Operator" means any person, as defined in this act [§§ 35-11-101 to 35-11-1104], engaged in mining, either as a principal who is or becomes the owner of minerals as a result of mining, or who acts as an agent or independent contractor on behalf of such principal in the conduct of mining operations;

(x) "Surface mining" means the mining of minerals by removing the overburden lying above natural deposit thereof and mining directly from the natural deposits thereby exposed, including strip, open pit, dredging, quarrying, surface leaching, and related activities;

(xi) "Mining permit" means certification by the director that the affected land described therein may be mined for minerals by a licensed operator in compliance with an approved reclamation plan. No mining may be commenced or conducted on land for which there is not in effect a valid mining permit. A mining permit shall remain valid and in force from the date of its issuance until the termination of all mining and reclamation operations, except as otherwise provided in this act;

(xii) "Spoil pile" means the overburden or any reject minerals as piled or deposited by surface or underground mining;

(xiii) "A license to mine for minerals" means the certification from the administrator that the licensee has the right to conduct mining operations on the subject lands in compliance with this act; for which a valid permit exists; that he has deposited a bond conditioned on his faithful fulfillment of the requirements thereof; and that upon investigation the administrator has determined that the licensed mining operation is within the purposes of this act;

(xiv) "Topsoil" means soil on the surface prior to mining that will support plant life;

(xv) "Exploration by dozing" means the removal of overburden by trenching with a bulldozer or other earth moving equipment to expose possible indications of mineralization;

(xvi) "Affected land" means the area of land from which overburden is removed, or upon which overburden, development waste rock or refuse is deposited, or both, access roads, haul roads, mineral stockpiles, mill tailings, impoundment basins, and all other lands whose natural state has been or will be disturbed as a result of the operations;

(xvii) "Refuse" means all waste material directly connected with mining including overburden, reject mineral, [or] mill tailings, which have passed through a processing plant prior to deposition on affected land. (Laws 1973, ch. 250, § 1; 1974, ch. 14, § 1; 1975, ch. 198, § 2; 1977, ch. 132, § 1.)

The 1977 amendment deleted "railroads" following "roads" near the beginning of paragraph (viii) of subsection (e).

Effective dates. — Section 3, ch. 14, Laws 1974, makes the act effective immediately upon passage. Approved February 12, 1974.

Section 5, ch. 198, Laws 1975, makes the act effective immediately upon passage. Approved March 12, 1975.

Section 3, ch. 132, Laws 1977, makes the act effective May 27, 1977.

§ 35-11-104. Created.

Effective July 1, 1973, there is created a department within the executive branch entitled "The State Department of Environmental Quality." (Laws 1973, ch. 250, § 1.)

§ 35-11-105. Divisions enumerated.

(a) The department shall consist of the following divisions:
(i) Air quality division;
(ii) Water quality division;
(iii) Land quality division. (Laws 1973, ch. 250, § 1.)

§ 35-11-106. Powers, duties, functions and regulatory authority.

(a) All powers, duties, functions and regulatory authority vested in the air resources council, the water pollution advisory council, the air quality section and the sanitary engineering services branches of the division of health and medical services, and the open cut land reclamation section of the office of the commissioner of public lands are transferred to the department, as of the effective date of this act. The performance of such acts or functions by the department of these respective divisions shall have the same effect as if done by the former department, councils, divisions, sections or branches as referred to or designated by law, contract or other document. The reference or designation to the former department, councils, divisions, sections or branches shall now apply to the department.

(b) All rules, regulations and orders of the former department, councils, divisions, sections or branches lawfully adopted prior to the effective date of this act are adopted as the rules, regulations and orders of the department and shall continue to be effective until revised, amended, repealed or nullified pursuant to law. (Laws 1973, ch. 250, § 1.)

Effective date. — Section 5, ch. 250, Laws 1973, makes the act effective on July 1, 1973.

§ 35-11-107. Records and physical properties; rights of personnel; successors.

(a) All records, physical property and personnel including their rights and privileges under the merit system, retirement system and personnel department system, and any appropriated or unused funds of the former councils, divisions, sections or branches shall be transferred to the department as of the effective date of this act. All records, lists or other information which by law are confidential or privileged in nature shall remain as such.

(b) The air quality division is the successor to the powers, duties, regulatory authority and functions of the air resources council and air quality section of the division of health and medical services, and such council, section and branch are abolished as of the effective date of this act.

(c) The water quality division is the successor to the powers, duties, regulatory authority and functions of the water pollution advisory council and the sanitary engineering services branch of the division of health and medical services, which council and branch are abolished as of the effective date of this act.

(d) The land quality division is the successor to the powers, duties, regulatory authority and functions of the open pit land reclamation section of the office of the commissioner of public lands and the department is the successor to the sanitary engineering service branch of the division of health and medical services, which sections and branches are abolished as of the effective date of this act. (Laws 1973, ch. 250, § 1.)

Effective date. — Section 5, ch. 250, Laws 1973, makes the act effective on July 1, 1973.

§ 35-11-108. Appointment of director and division administrators; term; salaries; employment of assistants.

The governor shall appoint a director of the department who will serve at the pleasure of the council and the governor, who is the department's executive and administrative head. The director shall appoint administrators for each of the divisions of air, water and land quality, who are the executive and administrative heads of their respective divisions and are responsible to and under the control and supervision of the director. Each appointee of the director shall serve at the pleasure of the appointing authority and his salary and qualifications shall be determined by the personnel division. The director, with the advice of the respective administrators and the approval of the council, may employ professional, technical and other assistants, along with other employees as may be necessary to carry out the purposes of this act. (Laws 1973, ch. 250, § 1.)

§ 35-11-109. Powers and duties of director.

(a) In addition to any other powers and duties imposed by law, the director of the department shall:

(i) Perform any and all acts necessary to promulgate, administer and enforce the provisions of this act and any rules, regulations, orders, limitations, standards, requirements or permits adopted, established or issued thereunder, and to exercise all incidental powers as necessary to carry out the purposes of this act;

(ii) Advise, consult and cooperate with other agencies of the state, the federal government, other states, interstate agencies, and other persons in furtherance of the purposes of this act;

(iii) Exercise the powers and duties conferred and imposed by this act in such a manner as to carry out the policy stated in section 35-502.2 [§ 35-11-102] of the statutes;

(iv) Conduct, encourage, request and participate in, studies, surveys, investigations, research, experiments, training and demonstrations by contract, grant or otherwise; prepare and require permittees to prepare reports; and collect information and disseminate to the public such information as is deemed reasonable and necessary for the proper enforcement of this act;

(v) Conduct programs of continuing surveillance and of a regular periodic inspection of all actual or potential sources of pollution and of public water supplies with the assistance of the administrators;

(vi) Designate authorized officers, employees or representatives of the department to enter and inspect any property, premise or place, except private residences, on or at which an air, water or land pollution source is located or is being constructed or installed. Persons so designated may inspect and copy any records required to be maintained pursuant to this act at any reasonable time upon reasonable notice for the purpose of investigating actual or potential sources of air, water or land pollution and for determining compliance or noncompliance with this act, and any rules, regulations, standards, permits or orders promulgated hereunder. The owner, occupant or operator shall receive a duplicate copy of all reports made as a result of such inspections;

(vii) Investigate violations of this act or regulations adopted hereunder and prepare and present enforcement cases before the council; to take such enforcement action as set out in articles 6 and 7 of this act; to appear before the council on any hearing under this act;

(viii) Represent Wyoming in any matters pertaining to plans, procedures or negotiations for interstate compacts or other inter-governmental arrangements relating to environmental enhancement and protection;

(ix) Accept, receive and administer any grants, gifts, loans or other funds made available from any source for the purposes of this act. Any monies received by the director pursuant to this paragraph shall be deposited with the state treasurer in the account and fund as provided by the funds consolidation act for the purpose designated;

(x) Serve as executive secretary to the council without vote;

(xi) Designate authorized officers, employees or representatives of the department to monitor the air, water, and land quality, and solid waste management operations of a.. facilities which have been granted permits under W.S. 35-502.75 through 35-502.94 [§§ 35-12-101 to 35-12-121], for assuring continuing compliance with conditions and requirements of their permits and for discovering and preventing noncompliance with the permits or violations of law. (Laws 1973, ch. 250, § 1; 1977, ch. 66, § 2.)

The 1977 amendment added paragraph (xi) of subsection (a).

Effective date. — Section 3, ch. 66, Laws 1977, makes the act effective immediately upon completion of all acts necessary for a bill to become law as provided by art. 4, § 8, Wyo. Const. Approved February 23, 1977.

§ 35-11-110. Powers of administrators.

(a) The administrators, under the control and supervision of the director, shall enforce and administer this act and the rules, regulations and standards promulgated hereunder. Each administrator shall have the following powers:

(i) To serve as executive secretary of their respective advisory boards without vote;

(ii) To issue, deny, amend, suspend or revoke permits and licenses and to determine the amount of bond to be posted by the operator to insure reclamation of any affected lands;

(iii) To supervise studies, surveys, investigations, experiments and research projects assigned by the director and report all information gained therefrom to the director and the appropriate advisory board;

(iv) To determine the degrees of air, water or land pollution throughout the state and the several parts thereof;

(v) To administer, in accordance with this act, any permit or certification systems which may be established hereunder;

(vi) To require the owners and operators of any point source to complete plans and specifications for any application for a permit required by this act or regulations made pursuant hereto and require the submission of such reports regarding actual or potential violations of this act or regulations thereunder;

(vii) To require the owner or operator of any point source to:

(A) Establish and maintain records;

(B) Make reports;

(C) Install, use and maintain monitoring equipment or methods;

(D) Sample effluents, discharges or emissions;

(E) Provide such other information as may be reasonably required and specified.

(viii) To consult with and report to the appropriate advisory board and to make written reports of all the activities of his division to said advisory board at each of its regularly scheduled meetings;

(ix) To recommend to the director, after consultation with the appropriate advisory board, that any rule, regulation or standard or any amendment adopted hereunder may differ in its terms and provisions as between particular types, characteristics, quantities, conditions and circumstances of air, water or land pollution and its duration, as between particular air, water and land pollution services and as between particular areas of the state;

(x) To possess such further powers as shall be reasonably necessary and incidental to the proper performance of the duties imposed upon the divisions under this act. (Laws 1973, ch. 250, § 1.)

§ 35-11-111. Independent environmental quality council created; terms; officers; meetings; expenses.

(a) There is hereby created an independent council consisting of seven (7) members to be known as the environmental quality council. Not more than four (4) of the members shall be of the same political party. Council members shall be appointed by the governor with the advice and consent of the senate. No employee of the state, other than employees of institutions of higher education, shall be a member of the council. At all times, there shall be at least one (1) member from the minerals industry and one (1) member from agriculture. Any member receiving more than ten percent (10%) of his income from any permit applicant shall not act on a permit application from such applicant.

(b) The terms of the members shall be for four (4) years, except that on the initial appointment, members' terms shall be as follows: three (3) shall serve for two (2) years, two (2) shall serve for three (3) years and two (2) shall serve for four (4) years, as designated by the initial appointment. When a vacancy occurs, the governor shall appoint a new member for the remaining portion of the unexpired term.

(c) The first meeting of the council shall be held within sixty (60) days after the effective date of this act at which time a chairman shall be elected from among the members to serve a one (1) year term. The council shall also annually elect from its membership a vice-chairman and a secretary, each for a term of one (1) year, and it shall keep a record of its proceedings.

(d) The council shall hold at least four (4) regularly scheduled meetings each year. Special meetings may be called by the chairman, and special meetings shall be called by the chairman, upon a written request submitted by three (3) or more members. Five (5) members shall constitute a quorum. All matters shall be decided by a majority vote of those on the council.

(e) Each member of the council shall receive the same per diem, mileage and expense allowances while attending and traveling to and from meetings of the council in the same manner and amount as employees of the state. (Laws 1973, ch. 250, § 1; 1977, ch. 132, § 1.)

The 1977 amendment, in subsection (a), inserted "(7)" in the first sentence and "(4)" in the second sentence, deleted "or any of its political subdivisions" following "state" in the fourth sentence and added the last two sentences.

Effective dates. — Section 5, ch. 250, Laws 1973, makes the act effective on July 1, 1973.

Section 3, ch. 132, Laws 1977, makes the act effective May 27, 1977.

§ 35-11-112. Powers and duties of the environmental quality council.

(a) The council shall act as the hearing examiner for the department and shall hear and determine all cases or issues arising under the laws, rules, regulations, standards or orders issued or administered by the department or any division thereof. The council shall:

(i) Promulgate rules and regulations necessary for the administration of this act, after recommendation from the director of the department, the administrators of the various divisions and their respective advisory boards;

(ii) Conduct hearings as required by the Wyoming Administrative Procedure Act [§§ 9-4-101 to 9-4-115] for the adoption, amendment or repeal of rules, regulations, standards or orders recommended by the advisory boards through the administrators and the director. The council shall approve all rules, regulations, standards or orders of the department before they become final;

(iii) Conduct hearings in any case contesting the administration or enforcement of any law, rule, regulation, standard or order issued or administered by the department or any division thereof;

(iv) Conduct hearings in any case contesting the grant, denial, suspension, revocation or renewal of any permit, license, certification or variance authorized or required by this act;

(v) Designate at the earliest date and to the extent possible those areas of the state which are very rare or uncommon and have particular historical, archaeological, wildlife, surface geological, botanical or scenic value. When areas of privately owned lands are to be considered for such designation, the council shall give notice to the record owner and hold hearing thereon, within a county in which the area, or major portion thereof, to be so designated is located, in accordance with the Wyoming Administrative Procedure Act [§§ 9-4-101 to 9-4-115].

(b) The council may contract with consultants having special expertise to assist in the performance of its duties.

(c) Subject to any applicable state or federal law, and subject to the right to appeal, the council may:

(i) Approve, disapprove, repeal, modify or suspend any rule, regulation, standard or order of the director or any division administrator;

(ii) Order that any permit, license, certification or variance be granted, denied, suspended, revoked or modified;

(iii) Affirm, modify or deny the issuance of orders to cease and desist any act or practice in violation of the laws, rules, regulations, standards or orders issued or administered by the department or any division thereof. Upon application by the council, the district court of the county in which the act or practice is taking place shall issue its order to comply with the cease and desist order, and violation of the court order may be punished as a contempt.

(d) The director and his staff shall provide the council with meeting facilities, secretarial or clerical assistance, supplies and such other assistance as the council may require in the performance of its duties.

(e) Upon request, the attorney general shall provide such legal assistance as the council may require in the conduct of its hearings, writing of its decisions or the enforcement of its orders. The council may employ independent legal assistance as necessary to the proper performance of its duties.

(f) All proceedings of the council shall be conducted in accordance with the Wyoming Administrative Procedure Act [§§ 9-4-101 to 9-4-115]. (Laws 1973, ch. 250, § 1; 1977, ch. 184, § 1.)

Cross reference. — As to duties generally of the attorney general, see § 9-2-505.

The 1977 amendment rewrote the first sentence and added the second sentence in paragraph (v) of subsection (a).

Effective date. — Section 2, ch. 184, Laws 1977, makes the act effective immediately upon completion of all acts necessary for a bill to become law as provided by art. 4, § 8, Wyo. Const. Approved March 8, 1977.

§ 35-11-113. Advisory boards created; membership; terms; meetings; expenses.

(a) There is created within the department three (3) advisory boards, one (1) for each division. Each advisory board shall consist of five (5) members appointed by the governor. Each board shall have one (1) member who represents industry, one (1) member who represents agriculture, one (1) member who represents political subdivisions and two (2) members who represent the public interest. Not more than three (3) members of each board shall be from the same political party.

(b) For the initial appointments to each board, the governor shall appoint one (1) member for a six (6) year term, two (2) members for four (4) year terms and two (2) members for two (2) year terms. Thereafter all appointments shall be for four (4) year terms. No officer or employee of the state, other than employees of institutions of higher education, may be appointed to a board. A vacancy occurs if any member ceases to represent the interest group or political party for which he was originally appointed, or if any member becomes unable or fails to serve for any reason. The governor shall fill vacancies by appointment for the unexpired portion of the term.

(c) Each advisory board shall meet within sixty (60) days after the effective date of this act to elect from among its members a chairman and a vice-chairman. Such officers shall be elected annually thereafter. Each board shall hold at least four (4) regularly scheduled meetings each year, and special meetings may be called by the chairman at any time. Three (3) members shall constitute a quorum for the purpose of conducting business, but all decisions must be approved by a majority of the total membership of the board. Each board shall keep a written record of its meetings and proceedings. Each board member shall be reimbursed for per diem, mileage and expenses for attending board meetings in the same manner and amount as state employees. (Laws 1973, ch. 250, § 1.)

Cross reference. — As to per diem and traveling expenses of state employees, see §§ 9-1-115 to 9-1-117.

Effective date. — Section 5, ch. 250, Laws 1973, makes the act effective on July 1, 1973.

§ 35-11-114. Powers and duties of the advisory boards.

(a) The advisory board shall recommend to the council through the administrator and director, comprehensive plans and programs for the prevention, control and abatement of air, water and land pollution and the protection of public water supplies.

(b) The advisory board shall recommend to the council through the administrator and director the adoption of rules, regulations and standards to implement and carry out the provisions and purposes of this act which relate to their divisions, and variances therefrom.

(c) The advisory boards shall counsel with and advise the administrator of their respective divisions in the administration and performance of all the duties of the division and shall make an annual written report to the governor.

(d) The advisory board shall counsel with and advise each other, the public, and the director of the department in order to coordinate the policies and activities of their respective divisions and to achieve maximum efficiency and effectiveness in furthering the objectives of the department.

(e) Each administrator and staff shall provide the appropriate board with meeting facilities, secretarial or clerical assistance, supplies and such other assistance as each board may require in the performance of its duties. (Laws 1973, ch. 250, § 1.)

§ 35-11-115. Power of director to issue emergency orders.

(a) Any other provisions of law to the contrary notwithstanding, if the director finds that a condition of air, water or land pollution exists and that it creates an emergency requiring immediate action to protect human or animal health or safety, the director, with the concurrence of the governor, shall order any persons causing or contributing to such pollution to reduce or discontinue immediately the actions causing the condition of pollution and such order shall fix a time and place for hearing before the council within forty-eight (48) hours thereafter. The council shall affirm, modify or set aside the director's order within forty-eight (48) hours following the adjournment of the hearing.

(b) If the director has evidence that any pollution source presents an immediate and substantial danger to human or animal health or safety, he may institute, through the attorney general, a civil action for immediate injunctive relief to halt any activity causing the danger. The court may issue an ex-parte order and shall schedule a hearing on the matter within three (3) working days from the date the petition for injunctive relief is filed.

(c) Nothing in this section shall be construed to limit any power which the governor or any other officer may have to declare an emergency and act on the basis of such declaration, if such power is conferred by statute or constitutional provision or inheres in the office. (Laws 1973, ch. 250, § 1.)

Cross reference. — As to injunctions, see Rule 65, W.R.C.P.

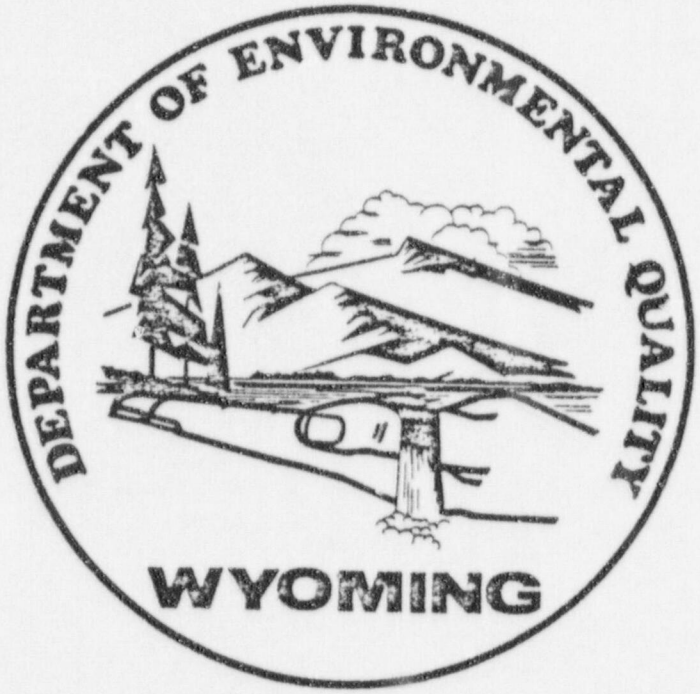
ARTICLE 2. AIR QUALITY

§ 35-11-201. Discharge or emission of contaminants; restrictions.

No person shall cause, threaten or allow the discharge or emission of any air contaminant in any form so as to cause pollution which violates rules, regulations and standards adopted by the administrator after consultation with the advisory board. (Laws 1973, ch. 250, § 1.)

Cited in Board of Trustees, Laramie County School Dist. No. 1 v. Spiegel, 549 P.2d 1161 (Wyo. 1976).

Law review. — For comment on air quality provisions of the Wyoming Environmental Quality Act of 1973, see 9 Land & Water L. Rev. 69 (1974).



Water Quality

Rules & Regulations

CHAPTER I

QUALITY STANDARDS FOR WYOMING SURFACE WATERS

RULES AND REGULATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

WATER QUALITY DIVISION

I certify that the attached is a true and correct copy of Chapter I of the rules of the Wyoming Department of Environmental Quality, Water Quality Division, relating to Quality Standards for Wyoming Surface Waters, adopted in accordance with W.S. 9-4-101 through 9-4-115. These rules were adopted pursuant to W.S. 35-11-112(a)(i) and 35-11-302, and supercede Chapter I of the rules of the Wyoming Department of Environmental Quality, Water Quality Division, which were filed with the Secretary of State on the 6th day of June.

Prior to adoption, this rule was made available for public inspection on the 8th day of March, 1979, and a notice of intended adoption was mailed to the Attorney General on the 6th day of June, 1979, and to the Legislative Service Office on the 11th day of June, 1979.

The rules have been approved by the Governor as indicated below.

The attached rules are effective immediately upon filing with the Secretary of State.

Signed this 27th day of June, 1979.

Robert E. Sundin
Director
Department of Environmental Quality

Reviewed and approved by the Governor

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QUALITY STANDARDS FOR WYOMING SURFACE WATERS

CHAPTER I

QUALITY STANDARDS FOR WYOMING SURFACE WATERS

Section 1. Authority. These regulations are promulgated pursuant to W.S. 35-11-101 through 1104, specifically 302, and no person shall cause, threaten or allow violation of a surface Water Quality Standard contained herein.

Section 2. Definitions. The following definitions supplement those definitions contained in Section 35-11-103 of the Wyoming Environmental Quality Act.

a. Best Management Practices - Those practices or combinations of practices which are determined by the Wyoming Continuing Planning Process after problem assessment, examination of alternative practices and appropriate public participation, to be the most practically effective (including technological, economic and institutional considerations) means of preventing or reducing the quantity or concentration of wastes discharged to surface waters of the State.

Best management practices are contained within a State certified water quality management plan adopted under Section 208 of the Federal Act in accordance with the State's Continuing Planning Process. In certain instances, certified State water quality management plans will not contain specific best management practices but will outline a process to be followed in developing best management practices for individual activities.

b. Biological Water Quality - Refers to the number and type of living organisms existing in a surface water body.

c. Chemical Water Quality - Refers to chemical elements and compounds which are found in ionized, complexed or dissolved states in water (i.e., calcium, sulfate, dissolved oxygen).

d. Cold Water Fishery - A water body which is managed by the Wyoming Game and Fish Department primarily for one or more of the following species: Grayling (Thymallus arcticus); Northern Pike (Esox lucius); Salmon (Oncorhynchus); Sauger (Stizostedion canadense); Trout (Salmo and Salvelinus); Walleye (Stizostedion vitreum); and, Whitefish (Prospium williamsoni).

e. Conventional Water Treatment - Shall be considered to be, in order of application for public water supplies,

the following processes; coagulation, sedimentation, filtration and chlorination.

f. Dissolved Oxygen - A measure of the amount of free oxygen in water.

g. Effluent Limitations - Any restriction established by the State or by the Administrator of the Federal Environmental Protection Agency (EPA) on quantities, rates and concentrations of chemical, physical, biological and other constituents which are discharged from point sources into waters of the State, including schedules of compliance.

h. Eutrophic - Waters abundant in nutrients and having high rates of productivity frequently resulting in oxygen depletion below the surface layer.

i. Existing Quality - The established long-term chemical and biological water quality as of the date of promulgation of these regulations with recognition of the fact that water quality will tend to fluctuate on a seasonal and year-to-year basis depending upon natural fluctuations in water quantity.

j. Fecal Coliform - Those species within the coliform bacteria group which are present in the gut or feces of warm-blooded animals. The group includes organisms which are capable of producing gas from lactose broth in a suitable culture medium within 24 hours at 44.5 degrees C $\pm$ .2 degrees C.

k. Federal Act - The Federal Water Pollution Control Act and subsequent amendments to that Act.

l. Full Body Contact Recreation - Any recreational or other surface water use in which there is prolonged and intimate contact with the water involving considerable risk of ingesting water in quantities sufficient to pose a significant health hazard (i.e., water skiing, swimming).

m. Game Fish - Bass (Micropterus), Catfish (Ictalurus punctatus), Crappie (Pomoxis), Grayling (Thymallus arcticus), Ling (Lota lota), Northern Pike (Esox lucius), Perch (Perca flavescens), Salmon (Oncorhynchus), Sauger (Stizostedion canadense), Sunfish (Lepomis), Trout (Salmo and Salvelinus), Walleye (Stizostedion vitreum) and Whitefish (Prospium williamsoni).

n. LC50 - The "lethal concentration" at which 50 percent of the specified test organisms die within the time specified (i.e., the 96 hour LC50 means that at concen-

tration "x", 50 percent of the test organisms died within 96 hours).

o. Main Stem - This term shall mean the major channel of a river or stream as shown on the latest and most detailed United States Geological Survey map for the area.

p. Milligrams Per Liter (mg/l) - Milligrams of solute per liter of solution - equivalent to parts per million (ppm) in liquids, assuming unit density.

q. Mixing Zone - That portion of a surface water body within which an effluent becomes thoroughly mixed with the water body.

r. Natural Water Quality - That quality of water which would exist without the measurable effects or measurable influence of man's activities.

s. Nephelometric Turbidity Unit (NTU) - The standard unit used to measure the optical property that causes light to be scattered and absorbed rather than transmitted in straight lines through water, as measured by a nephelometer.

t. Net Oil and Grease - Shall mean the residue from an oil and grease test conducted in accordance with the liquid - liquid extraction with trichlorotrifluoroethane (freon) test method found in the latest edition of Standard Methods for the Examination of Water and Wastewaters corrected for elemental sulphur. The test for elemental sulphur shall be capable of measurement at a level of 2 milligrams $\pm$ 1.0 milligram.

u. Non-Point Source - Any runoff from irrigated and non-irrigated lands used for grazing and/or crop production; runoff from forest lands, construction activities; urban areas, solid and hazardous waste disposal sites and recreational activities; indirect discharges from septic tanks and leach fields; and, other sources and activities not subject to regulation under the National Pollutant Discharge Elimination System (NPDES).

v. pH - Term used to express the intensity of acid or alkaline conditions. A pH value of 7 at 25 degrees C is neutral, with pH's of less than 7 progressively more acid and pH's of greater than 7 progressively more basic (alkaline).

w. Pico-Curies Per Liter (pCi/l) - A term describing the radiation level of water or solutions. A pico-curie is equal to 10^{-12} curie; a curie is defined as 3.7×10^{10} disintegrations per second.

x. Point Source - Any discernible, confined and discrete conveyance, including but not limited to any pipe, ditch, channel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation or vessel or other floating craft, from which pollutants are or may be discharged, except those pollutant sources specifically identified as non-point in these regulations.

y. Salinity - The total mineral dissolved constituents, after carbonates have been converted to oxides, organics have been oxidized and bromine and iodine have been converted to chloride. This term is often used interchangeably with the term total dissolved solids.

x. Secondary Body Contact Recreation - Any recreational or other surface water use in which contact with water is either incidental or accidental and in which the probability of ingesting appreciable quantities of water is minimal, such as fishing, hunting and commercial and recreational boating.

aa. Wyoming Continuing Planning Process (CPP) - A planning process involving public participation and political debate and including policies, procedures and programs that result in the definition and implementation of actions that lead to the prevention, reduction and abatement of all forms of water pollution and for the protection and enhancement of water uses in the State of Wyoming. The CPP is continuous in time and is designed to respond to changes in conditions and attitudes. Certified and approved State and areawide water quality management plans prepared pursuant to Section 208 of the Federal Act describe elements of the CPP and are outputs of the CPP. Such plans include but are not limited to the following:

(1) Water quality monitoring requirements and programs;

(2) Definition and assessment of water quality problems;

(3) Identification of alternative solutions, their costs and effectiveness;

(4) Evaluations of their social, economic and environmental impact;

(5) Best management practices or procedures and programs for their determination which lead to the control of non-point sources of pollution;

(6) Definition of institutional roles, responsibilities and assignments for planning and implementation activities;

(7) Priorities for action;

(8) Procedures for public participation, local government involvement, conflict resolution performance, evaluation, plan update and formal amendments.

bb. State Program Plan - A report submitted on an annual basis by the State to the EPA, under the requirements of Section 106 of the Federal Act. This document outlines the State's water pollution control goals for the ensuing fiscal year.

cc. Surface Waters of the State - All permanent and intermittent defined drainages and lakes and reservoirs which are not man-made retention ponds used for the treatment of municipal, agricultural or industrial waste; and all other bodies of surface water, either public or private which are wholly or partially within the boundaries of the State. Nothing in this definition is intended to expand the scope of the Environmental Quality Act, as limited in W.S. 35-11-1104(c).

dd. Toxic Materials - Those materials or combinations of materials including disease causing agents, which, after discharge and upon exposure, ingestion, inhalation or assimilation into any environmentally significant organism, either directly from the environment or indirectly by ingestion through food chains, will, on the basis of information available to the Administrator of the EPA, cause death, disease, behavioral abnormalities, cancer, genetic malfunctions, physiological malfunctions (including mulfunctions in reproduction) or physical deformations in such organisms or their offspring.

ee. Tributary - Those streams or stream segments which flow into or contribute water to another stream, stream segment or other water body.

ff. Warm Water Fishery - A water body which is managed by the Wyoming Game and Fish Department primarily for one or more of the following species: Bass (Micropterus); Catfish (Ictalurus punctatus); Crappie (Pomoxis); Ling (Lota lota); Perch (Perca flavescens); and, Sunfish (Lepomis).

gg. Wyoming Surface Waters - Shall have the same meaning as "surface waters of the State" defined in Section 2cc.

hh. Zone of Passage - A continuous water route which joins segments of a surface water body above and below a mixing zone without passing through the mixing zone.

Section 3. Water Uses. The objectives of the Wyoming Pollution Control Program are outlined in W.S. 35-11-102 and are specifically designed to maintain the best possible quality of waters commensurate with the following uses:

a. Agriculture;

b. Fish and wildlife;

c. Industry;

d. Public water supply;

e. Recreation;

f. Scenic value;

and, to achieve the 1983 goal of the Federal Act, which is to achieve, wherever attainable, surface water quality which provides for the protection and propagation of fish, shellfish and wildlife and recreation in and on the water.

Section 4. Surface Water Classes and Uses. Of the uses listed in Section 3 of these regulations, protection and propagation of fish is, for most parameters, the use which requires the highest water quality. Therefore, Wyoming's surface water classes as defined below are based on this use.

There are 4 classes of surface water in Wyoming:

a. Class I - Those surface waters in which no further water quality degradation by point source discharges other than from dams will be allowed. In designating Class I waters, the Environmental Quality Council shall consider water quality, aesthetic, scenic, recreational, ecological, agricultural, botanical, zoological, municipal, industrial, historical, geological, cultural, archaelogical, fish and wildlife, the presence of significant quantities of developable water and other values of present and future benefit to the people.

b. Class II - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to be presently supporting game fish or have the hydrologic and natural water quality potential to support game fish.

c. Class III - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to be presently supporting non-game fish or have the hydrologic and natural water quality potential to support non-game fish.

d. Class IV - Those surface waters, other than those classified as Class I, which are determined by the Wyoming Game and Fish Department to not have the hydrologic or natural water quality potential to support fish.

In addition to the above basic classes, all Class I, II and III waters shall receive sub-designation by the Wyoming Game and Fish Department as either "cold water" or "warm water" fisheries.

Section 5. Classification of Specific Waters. Those surface waters determined to be Class I shall be included as an integral part of these regulations (see Section 8) and modification of that list may be made only through modification of these regulations.

Classification of all surface waters other than those classified as Class I will be included as a part of each State Program Plan. The State Program Plan is submitted on an annual basis to the EPA and must be presented at a public meeting in the State. This will allow annual revisions and updating of the classifications of the State's surface waters.

The Department will attempt to eventually classify all surface waters. Priority for classification will be given to those surface waters which receive pollutants from a point source or are identified as having significant non-point source pollution problems.

Section 6. Standards Enforcement. The numerical standards contained within these regulations are long term values. These values shall be used to establish effluent limitations for those discharges requiring control via a permit to discharge in the case of point sources. Violation of these Standards by non-point sources shall be cause for development of best management practices.

In cases where a discharge is instantaneous or short term, such as a spill, and is not controlled by a permit to discharge or best management practices, enforcement of the standards contained in these regulations will be direct. In such cases, a single properly preserved grab sample of the receiving water, analyzed in accordance with provisions of Section 9 of these regulations shall be considered to show a

violation if the analysis indicates the parameter concentration to be more than 150% (1.5 times) the long term numerical value contained within these regulations. Exceptions to this rule shall be the parameter dissolved oxygen, where the short term minimum shall be 5.0 mg/l in the case of Class II waters and 3.5 mg/l in the case of Class III waters; and, the parameters temperature and pH where any short term increase which causes harm to existing aquatic life will be considered a violation.

Compliance with the conditions of these regulations does not exempt any discharger from the penalty provisions of W.S. 35-11-901(b).

Section 7. Interstate Compacts, Court Decrees and Water Rights. It is the policy of the Department that the adoption and enforcement of these regulations is not intended to prevent the utilization of water apportioned to the State of Wyoming through any interstate compact or court decree or to prevent the diversion of water under future or existing water rights, however, it is also recognized that the implementation of these regulations may affect the manner in which water can be utilized. In addition, the Department shall, after review and conference with the State Engineer, make recommendations to the State Engineer concerning proposed new diversions which could cause violations of these regulations.

Section 8. Class I Waters.

a. The following surface waters are hereby designated as Class I and shall not be degraded below their existing quality by any point source discharges other than from dams.

(1) All surface waters located within the boundaries of National Parks.

(2) All surface waters located within the boundaries of Congressionally designated Wilderness Areas.

(3) The main stem of the Snake River through its entire length above the U.S. Highway 22 bridge (Wilson Bridge).

(4) The main stem of the Green River including the Green River Lakes from the mouth of the New Fork River upstream to the wilderness boundary.

(5) The main stem of the Wind River from the boundary of the Wind River Indian Reservation upstream to Boysen Dam

(6) The main stem of the North Platte River from the mouth of Sage Creek (approximately 15 stream miles below Saratoga, Wyoming) upstream to the Colorado state line.

(7) The main stem of the North Platte River from the headwaters of Pathfinder Reservoir upstream to Kortes Dam.

(8) The main stem of Sand Creek from the U.S. Highway 14 bridge upstream to the lowermost boundary of the U.S. Fish and Wildlife Service Fish Genetics Laboratory.

(9) The main stem of the Middle Fork of the Powder River through its entire length above the mouth of Buffalo Creek.

(10) The main stem of the Tongue River, the main stem of the North Fork of the Tongue River and the main stem of the South Fork of the Tongue River above the U.S. Forest Service boundary.

(11) The main stem of the Sweetwater River above the mouth of Alkali Creek.

(12) The main stem of the Encampment River from the U.S. Forest Service boundary upstream to the Colorado state line.

(13) The main stem of the Clarks Fork River from the U.S. Forest Service boundary upstream to the Montana state line.

(14) All waters within the Fish Creek (near Wilson, Wyoming) drainage.

(15) The main stem of Granite Creek (tributary of the Hoback River) through its entire length.

(16) Fremont Lake.

b. Point source discharges to Class I waters - No new point sources, other than dams, may discharge and no existing point sources, other than dams, may increase its quantity of pollution discharge to any water designated as Class I.

c. The Department shall impose whatever controls are necessary on point source discharges, other than from dams, to tributaries of Class I waters. Such discharges shall not degrade the quality of any Class I water below its existing quality.

d. Non-point source discharges of pollution to Class I waters or tributaries of Class I waters shall be controlled in the same manner as if the water were not designated as Class I (see Section 13). Designation of any Wyoming water as Class I shall not be interpreted as requiring extraordinary measures for the control of present or future non-point sources of pollution nor the elimination of present or future water development projects which are causing or could cause water quality degradation.

e. In no case shall any pollution discharge to a Class I water be greater than that allowed if the water were not designated as Class I.

Section 9. Policy. It is the policy of the Department that those surface waters not designated as Class I, but whose existing water quality is better than these standards, shall be maintained within these standards and existing instream water uses will be maintained. However, the State of Wyoming shall allow any project or development which would constitute a new source of pollution or an increased source of pollution to these waters as long as the quality will not be lowered below these standards. Any degradation of high quality waters will be allowed only within the framework of Wyoming's Continuing Planning Process.

Section 10. Sampling Points. The following policies will govern the selection of sampling sites.

a. Bacteriological standards which provide protection for public water supply and full body contact recreation will be determined at surface water supply intakes and designated full body contact recreation areas. Bacteriological standards covering secondary body contact and which provide protection for public health in Class IV streams may be determined at any point on the stream.

b. Basic chemical analyses will be determined from samples taken at established United States Geological Survey sampling points, or other points established by the Department.

c. Parameters which are toxic or affect public water supplies, agricultural or industrial waters, plant life, aquatic life, wildlife, etc., will be determined at any point on the stream as indicated by conditions.

d. Except for Sections 15, 16, 17 and 28 of these regulations, compliance with Water Quality Standards shall be determined after allowing reasonable time for mixing. Size of the mixing zone shall be determined after consider-

ation of the effect of the discharge on the biological community, water uses and aesthetic conditions, as well as consideration of the flow conditions and physical nature of the receiving water. The portion of a surface water body designated as a mixing zone shall be limited to that which will not interfere with biological communities or populations of important species to a degree which is damaging to the ecosystem and which will not cause substantial damage to other beneficial uses. In addition, there shall be a zone of passage through the mixing zone sufficient to allow passage of free swimming and drifting organisms in a manner producing no significant effects on their populations, except during periods when stream flows are less than the average of the minimum 7 consecutive day flow which has the probability of occurring once in 10 years.

Section 11. Testing Procedures. For determination of the parameters involved in the standards, analysis will be in accord with test procedures as defined pursuant to: Title 40, Code of Federal Regulations, Part 136, or any modifications thereto. For test procedures not listed in the Code of Federal Regulations, test procedures outlined in the latest editions of: EPA Methods for Chemical Analysis of Water and Wastes; or, Standard Methods for the Examination of Water and Wastewaters; or, A.S.T.M. Standards, Part 31, Water shall be used.

The analytical technique for total Uranium (as U) shall be the flourometric method as referenced in Methods for Determination of Radioactive Substances in Water and Fluvial Sediments, Techniques of Water - Resource Investigations of the U.S. Geological Survey, Book 5, Chapter A-5, pp. 83 - 92.

Where standard methods of testing have not been established, the suitability of testing procedures shall be determined by the Department and the EPA.

Section 12. Flow Conditions. Where stream flow data are available, these standards shall apply at all times except during periods when flows are less than the average of the minimum 7 consecutive day flow which has the probability of occurring once in 10 years.

During periods when stream flows are less than the minimums described above, the Wyoming Game and Fish Department and the Department may require the discharger to institute operational modifications as necessary to insure the protection of aquatic life. Where stream flow data are not available, the Department must take into consideration the possible existence of markedly abnormal flows when determining violations of these standards.

In addition, Sections 15, 16, 17, and 28 shall apply at all stream-flow conditions.

Section 13. Non-Point Source Pollution Control. Non-point sources of pollution in the State of Wyoming include: Runoff from irrigated and non-irrigated lands used for grazing and/or crop production; Runoff from forest lands, construction activities, urban areas, solid and hazardous waste disposal sites and recreational activities; Indirect discharges from septic tanks and leach fields; and, Other sources and activities not subject to regulation under the National Pollutant Discharge Elimination System (NPDES).

Where non-point sources of pollution cause a violation of Water Quality Standards or impair or threaten to impair the use of water within the State, best management practices will be developed in the Wyoming Continuing Planning Process and implemented in accordance with the applicable provisions of certified and approved water quality management plans prepared pursuant to Section 208 of the Federal Act.

Section 14. Dead Animals. In no case shall dead domestic livestock of any description be placed or allowed to remain in Wyoming surface waters. In no case shall dead domestic livestock of any description be placed or allowed to remain in any location which would result in contamination or threaten contamination of Wyoming surface water.

Section 15. Settleable Solids. In all Wyoming surface waters substances attributable to or influenced by the activities of man that will settle to form sludge, bank or bottom deposits shall not be present in quantities which could result in significant aesthetic degradation, significant degradation of habitat for aquatic life or adversely affect public water supplies, agricultural or industrial water use, plant life or wildlife, etc.

Section 16. Floating Solids. In all Wyoming surface waters floating debris, scum and other floating materials attributable to or influenced by the activities of man shall not be present in quantities which could result in significant aesthetic degradation, significant degradation of habitat for aquatic life, or adversely affect public water supplies, agricultural or industrial water use, plant life or wildlife, etc.

Section 17. Taste, Odor and Color. All Class I, II and III waters shall not contain substances attributable to or influenced by the activities of man which produce taste, odor and color and that would:

a. Of themselves or in combination, impart an unpalatable or off-flavor in fish flesh;

b. Visibly alter the natural color of the water or impart color to skin, clothing, vessels or structures;

c. Produce detectable odor; or

d. Directly or through interaction among themselves, or with chemicals used in existing water treatment processes, result in concentrations that will impart undesirable taste or odor to public water supplies.

Section 18. Public Water Supply. All Wyoming surface waters which are used as public water supplies shall be maintained at such quality that, after conventional water treatment, the treated water will meet the most recent Federal Primary Drinking Water Standards published by the EPA or its successor agency.

Degradation of such waters shall not be of such an extent to cause significant increase in raw water treatment costs to the public water supplier.

Section 19. Industrial Water Supply. All Wyoming surface waters which are used for industrial purposes shall be maintained at a quality which allows continued use of such waters for industrial purposes.

Degradation of such waters shall not be of such an extent to cause significant increase in raw water treatment costs to the industrial user(s).

Section 20. Agricultural Water Supply. All Wyoming surface waters which are used for agricultural purposes shall be maintained at a quality which allows continued use of such waters for agricultural purposes.

Degradation of such waters shall not be of such an extent to cause significant decrease in crop or livestock production.

Section 21. Toxic Materials.

a. Ammonia - In all Class I, II and III waters which are designated as cold water fisheries, the concentration of unionized ammonia (as N) shall not exceed .02 mg/l.

b. Benzedine - In all Class I, II and III waters the concentration of benzedine shall not exceed .0001 mg/l.

c. Chlorine - In all Class I and II waters designated as cold water fisheries, the total residual chlorine concentration shall not exceed .002 mg/l. In those Class I and II waters designated as warm water fisheries and in all Class III waters the total residual chlorine content shall not exceed .01 mg/l.

d. Others - All other toxic or potentially toxic materials attributable to or influenced by the activities of man shall not be present in any Wyoming surface waters in concentrations or combinations which would damage or impair the normal growth, function or reproduction of human, animal, plant or aquatic life. Unless otherwise specified in these Standards, maximum allowable concentrations shall be based on the latest edition of Quality Criteria for Water, published by EPA or its successor agency, and/or more generally accepted scientific information.

In those cases where maximum allowable concentrations must be determined through bioassay, the appropriate protocol and application factors as outlined in the latest edition of Standard Methods for the Examination of Water and Wastewater or other methods approved by the EPA shall be used. The bioassay shall be conducted with an ecologically or economically important sensitive resident species in the most sensitive portion of its life cycle, if applicable, as a test organism. Makeup water for the analysis should be constituted so as to approximate the most probable chemical and physical characteristics of the receiving water in question. The observed 96 hour LC50 is then to be multiplied by an application factor, where established by EPA, to determine the "safe" concentrations for the compound in question. Where appropriate application factors have not yet been established, the method for deriving said application factor shall be that described in the latest edition of Standard Methods or other methods approved by EPA.

Toxic substances specifically designed to kill or eliminate problem causing aquatic life (such as mosquito larvae or heavy plant growth in irrigation ditches) may be added to surface waters of the State provided such substances are administered in accordance with label directions. However, compliance with label directions shall not exempt any person from the penalty provisions of W.S. 35-11-901(b).

This Section shall not apply to the use of fish toxicants by the Wyoming Game and Fish Department.

Section 22. Radioactive Material. In all Wyoming surface waters radioactive materials attributable to or influenced by the activities of man shall not:

a. Be present in any amount which reflects failure in any case to apply all controls which are technologically feasible as determined by the Administrator of the Environmental Protection Agency;

b. Exceed a concentration of 5 pCi/l of total Radium 226 plus Radium 228;

c. Exceed a concentration of 8 pCi/l of total Strontium 90;

d. Exceed the radiological limits established in the most recent Federal Primary Drinking Water Standards published by the EPA or its successor agency; or

e. Be present in the water or in sediments in amounts which could cause harmful accumulations of radioactivity in plant, wildlife, stock or aquatic life.

Section 23. Turbidity.

a. In all Class I and II waters the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 10 NTU's.

b. In all Class III waters the discharge of substances attributable to or influenced by the activities of man shall not be present in quantities which would result in a turbidity increase of more than 15 NTU's.

c. Exceptions to parts a and b of this Section may be granted in the following instance:

(1) Where the method of operation of a dam results in violation of the above standards and that method of operation has received specific approval to continue by the Environmental Quality Council in accordance with the following provisions:

(a) The Environmental Quality Council has held a public hearing in the geographic area affected; and

(b) The Environmental Quality Council finds that continuation of the method of dam operation and exception to the above standards is justifiable on the basis of social, economic, aesthetic, scenic, municipal, industrial, recreational, agricultural, ecological, botanical, historical, zoological, geological, cultural, archaelogical, fish and wildlife or other values of present and future benefit to the people.

d. The exception allowed under part c of this Section may be granted only if one or more of the following can be demonstrated:

(1) The standards are not attainable due to natural background;

(2) The standards are not attainable due to irretrievable man-induced conditions;

(3) Attainment of the standards would require application of effluent limitations more stringent than those required by Section 301(b)(2)(A) and (B) of the Federal Act; and, application of these more stringent effluent limitations would result in substantial and widespread adverse economic and social impact.

e. Exceptions granted under parts c and d of this Section shall not be allowed for periods greater than 3 years. At the end of the exception period the entity which was granted the exception must begin compliance or request that the Environmental Quality Council hold another public hearing in the area affected and reevaluate the request for continuance of the exception in accordance with the criteria given in parts c and d of this Section. Exceptions granted under parts c and d of this Section shall not exempt any person from the penalty provisions of W.S. 35-11-901(b).

Section 24. Dissolved Oxygen. In all Class I and II waters wastes attributable to or influenced by the activities of man shall not be present in amounts which will result in death or injury to existing aquatic life or which will result in a dissolved oxygen content of less than 6 mg/l at any time.

In all Class III waters wastes attributable to or influenced by the activities of man shall not be present in amounts which will result in injury or death to existing aquatic life or which will result in a dissolved oxygen content of less than 5 mg/l at any time.

Over spawning areas wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause reduction in the natural dissolved oxygen content, unless such reduction is the result of a thermal discharge allowed under the provisions contained in Section 25 of these regulations.

Section 25. Temperature.

a. For Class I, II and III waters effluent attributable to or influenced by the activities of man shall not be discharged in amounts which change natural ambient water temperatures to levels which are deemed to be harmful to existing aquatic life.

b. For impoundments and waters designated by the Wyoming Game and Fish Department as cold water fisheries effluent attributable to or influenced by the activities of man shall not be discharged in amounts which will result in a change of more than 2 degrees F (1.1 degree C) in existing temperatures.

c. For waters designated by the Wyoming Game and Fish Department as warm water fisheries effluent attributable to or influenced by the activities of man shall not be discharged in amounts which will result in a change of more than 4 degrees F (2.2 degrees C) in existing temperatures.

d. The maximum allowable stream temperatures will be the maximum daily stream temperatures plus the allowable change, provided that this temperature is not lethal to existing fish life, which is considered to be 78 degrees F (25.6 degrees C) in the case of cold water fisheries and 90 degrees F (32.2 degrees C) in the case of warm water fisheries.

e. With the exception of the provisions of Section 10d and 12 of these regulations, temperature standards shall apply at all times and at all depths of the receiving water and may not be violated at any time or at any depth.

f. In all waters supporting warm and/or cold water fish there shall be no induced temperature change over spawning beds. For questions concerning the location of spawning beds the Wyoming Game and Fish Department shall be the final authority.

g. The various requirements of this Section may be waived only under the provisions of Section 316(a) of the Federal Act.

Section 26. pH. For all Wyoming surface waters wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause the pH to be less than 6.5 or greater than 9.0 standard units.

Section 27. Coliform Bacteria.

a. During the entire year wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause fecal coliform concentrations to exceed a geometric mean of 200 fecal coliform groups per 100 milliliters (based on a minimum of not less than 5 samples obtained during separate 24 hour periods for any 30 day period), nor shall 10 percent of the samples exceed 400 groups per 100 milliliters during any 30 day period in any Class IV stream and at all public water supply intakes.

b. During the recreation season (May 1, through September 30) wastes attributable to or influenced by the activities of man shall not be present in amounts which will cause fecal coliform concentrations to exceed a geometric mean of 200 fecal coliform groups per 100 milliliters (based on a minimum of not less than 5 samples obtained during separate 24 hour periods for any 30 day period), nor shall 10 percent of the samples exceed 400 groups per 100 milliliters during any 30 day period in the following waters which have been identified as being suitable for full body contact recreation:

(1) All still surface water bodies which lie at an elevation of less than 7,000 feet above sea level.

(2) The main stem of the North Platte River from the City of Casper's water supply intake upstream to the Wyoming - Colorado state line.

(3) The main stem of the Snake River through its entire length in Wyoming.

(4) The main stem of the Green River through its entire length in Wyoming.

(5) The main stem of the Tongue River through its entire length in Wyoming.

(6) The main stem of the Encampment River through its entire length in Wyoming.

(7) The main stem of the Big Horn River from the Wyoming Highway 172 bridge upstream to the wedding of the waters.

(8) The main stem of Goose Creek through its entire length.

(9) The main stem of Little Goose Creek through its entire length.

(10) The main stem of Clear Creek at the point of intake to the Town of Buffalo's swimming pool.

(11) The main stem of Flat Creek (near Jackson, Wyoming) through its entire length.

(12) The main stem of Fish Creek (near Wilson, Wyoming) through its entire length.

(13) The main stem of the Hoback River through its entire length.

(14) The main stems of the Greys, Gros Ventre and Buffalo Fork Rivers.

c. All surface waters not described in parts a or b of this Section shall be considered suitable for secondary body contact recreation and the following limits shall apply:

During the recreation season (May 1, through September 30) fecal coliform concentrations attributable to or influenced by the activities of man shall not exceed a geometric mean of 1,000 fecal coliform groups per 100 milliliters (based on a minimum of not less than 5 samples obtained during separate 24 hour periods for any 30 day period), nor shall 10 percent of the samples exceed 2,000 groups per 100 milliliters during any 30 day period.

Section 28. Undesirable Aquatic Life. All Wyoming surface waters shall be free from substances and conditions or combinations thereof which are attributable to municipal, industrial or other dischargers or agricultural practices, in concentrations which produce undesirable aquatic life.

Undesirable aquatic life can include the following where they have replaced members of the natural biotic community; rough fish, blue green algae, certain diatoms, fungi, tubificidae worms, syrphidae flies and other organisms generally associated with degraded or eutrophic conditions.

The natural biotic community refers to population structures which were historically or normally present under a given set of chemical and physical conditions or which would potentially exist had not the habitat been degraded.

Section 29. Oil and Grease. In all Wyoming surface waters wastes attributable to or influenced by the activities of man shall not be present in amounts which would cause: The oil and grease content to exceed 10 mg/l; Formation of visible deposits on the bottom or shoreline; or,

Damage or impairment of the normal growth, function or reproduction of human, animal, plant or aquatic life.

In the case of the freon extraction method of determining oil and grease concentration, a "net oil and grease" (see Section 2t) shall be acceptable.

Section 30. Total Dissolved Gases. In all Class I, II and III waters the total dissolved gas concentration immediately below man-made dams shall not exceed 110 percent of the saturation value for gases at the existing atmospheric and hydrostatic pressures.

Section 31. Salinity.

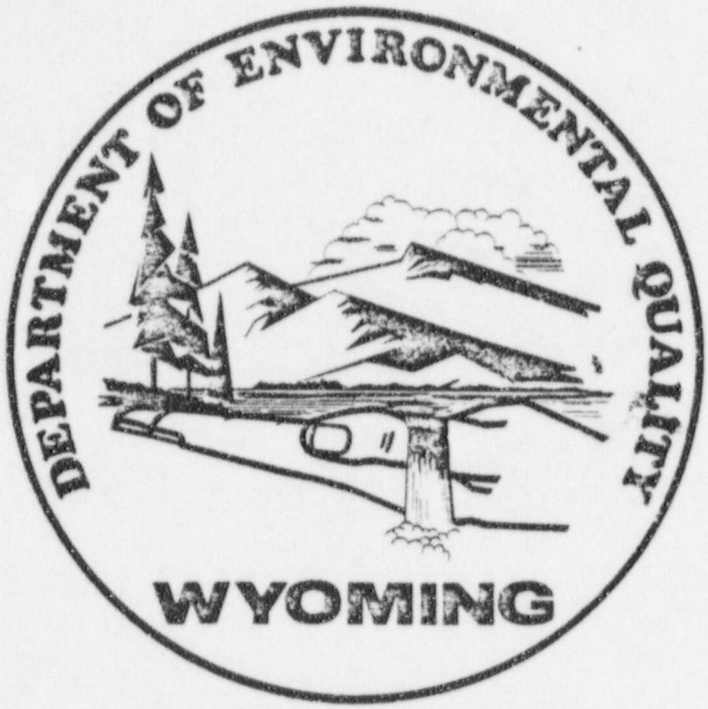
a. High salinity (total dissolved solids) is recognized as an important water quality parameter which may, in some cases, cause adverse physical and economic impact on water users. Salinity concentrations are affected by two processes:

(1) Salt loading - the addition of mineral salts from various natural and man-made sources; and

(2) Salt concentrating - the loss of water from the system through consumptive use, depletion or evaporation.

b. Studies to date have demonstrated that high salinity of stream systems can be alleviated. Although further study may be required to determine the economic and technical feasibility of controlling specific sources, sufficient information is available to develop a salinity control program in which emphasis is placed on controlling high salinity through improved water management and conservation practices.

c. The State of Wyoming is a member of the Colorado River Basin Salinity Control Forum, which includes all states in the Colorado River Basin. This forum has adopted a salinity control program for the basin which has been adopted as Chapter VI of the Wyoming Water Quality Rules and Regulations.



SOLID WASTE MANAGEMENT

Rules & Regulations

1975

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SOLID WASTE MANAGEMENT RULES & REGULATIONS

Section 1. Authority.

a. General provisions - the Wyoming Environmental Quality Act, Article 5, Section 35-502.42 through 44 (Cumulative Supplement 1973) authorizes the Director of Environmental Quality to:

(1) Coordinate the activities of all State agencies concerned with Solid Waste Management and disposal. (35-502.42)

(2) Promulgate Rules and Regulations for operation of Solid Waste disposal sites. (35-502.44)

(3) Request Solid Waste disposal site plans for approval from any person or municipality that proposes to establish or is presently operating a Solid Waste Disposal site. (35-502.43)

b. Existing state statutes regulating solid waste disposal practices.

35-196: Prohibits industries from dumping refuse in any water body.

35-462: Prohibits all waste disposal practices that constitutes either a nuisance or a potential source of water pollution.

35-463: Provides a fine of not less than $50 or more than $200 or a jail term not to exceed six (6) months for violation of Statute 35-462.

35-464: Prohibits the disposal of sawdust in any water body.

35-465: Provides for a fine not to exceed $100 for the improper disposal of dead animals.

35-466: Prohibits the littering of public rights of way.

35-502.16 No person shall cause, threaten or allow the discharge or emission of any air contaminant in any form so as to cause pollution which violates rules, regulations and standards adopted by the administrator after consultation with the advisory board.

35-502.18 No person, except when authorized by a permit issued pursuant to the provisions of this act, shall:

(i) Cause, threaten or allow the discharge of any pollution or wastes into the waters of the state;

(ii) Alter the physical, chemical, radiological, biological or bacteriological properties of any waters of the state;

(iii) Construct, install, modify or operate any sewerage system, treatment works, disposal system or other facility, capable of causing or contributing to pollution;

(iv) Increase the quantity or strength of any discharge;

(v) Construct, install, modify or operate any public water supply.

c. Legislation assisting counties and municipalities.

9-18.13 through 9-18.20 "Wyoming Joint Powers Act". This Act gives two or more agencies the power to jointly plan, create, finance and operate:

(i) Water sewerage or Solid Waste facilities.

(ii) Recreational facilities.

(iii) Police protection agency facilities.

(iv) Fire protection agency facilities.

(v) Transportation systems facilities.

(vi) Public school facilities.

15.1-410(k) Enrolled Act #98.

Improvements authorized: In addition to all other powers provided by law, any city or town may make public improvements, for which bonds may be issued to the contractor, or be sold as provided in this chapter:

(j) To plan, create, construct and equip liquid and solid waste facilities. To carry out this power or to prevent pollution or injury to the environment, any city or town may go beyond its corporate limits and take hold and acquire property by purchase or otherwise, or in joint effort with cities, towns, counties or special districts. Cities or towns may enact ordinances and make all necessary rules and regulations for the government and protection of liquid and solid waste disposal facilities, and fix rates and provide for collection and disposal.

18-330.30 through 18-330.34. Enrolled Act #109. Solid Waste Disposal Districts.

An Act giving county commissioners the authority to:

(1) Establish by resolution one (1) or more solid waste disposal districts.

(2) Exercise all powers granted to cities and towns by W.S. 15-1-3 (19) and (39) to adopt rules and regulations in managing the disposal of solid wastes within the district.

(3) Levy a tax upon the taxable property within a solid waste disposal district.

Section 2. Definitions. For the purpose of these Regulations the following terms shall have the meaning or interpretations set out below and shall be used in conjunction with, and as supplemental to, those definitions contained in W.S. Section 35-502.3.

a. "Cell" means compacted solid wastes that are enclosed by natural soil or cover material in land disposal site.

b. "Construction/Demolition Landfill" means a solid waste disposal site that accepts only construction waste, demolition waste and/or brush. This does not include garbage, liquids, sludges, paints, solvents, putrescibles, dead animals and hazardous or toxic waste which will be prohibited from being disposed of in this type site.

c. "Cover Material" means soil or other suitable material that is used to cover compacted solid wastes in a land disposal site.

d. "Daily Cover" means six inches of cover material that is spread and compacted on the top and side slopes of compacted solid wastes at the end of each operating day in order to control vectors, fire, moisture and erosion and to assure an aesthetic appearance.

e. "Final Cover" means cover material that is used to completely cover the top of a landfill. This cover is at least twenty-four inches thick.

f. "Facility" means any solid waste disposal area, site, process, or system and the operation thereof including, but not limited to personnel, equipment and buildings.

g. "Garbage" means any putrescible solid or sem-solid animal and/or vegetable waste material resulting from the handling, preparation, cooking, serving and consumption of food.

h. "Ground Water" means any water found beneath the surface of the earth.

i. "Hazardous Waste" means any waste or combination of wastes which pose a substantial present or potential hazard to human health, the environment, and plants or animals because such wastes are nondegradable or persistent in nature or because they can be biologically magnified, or because they can be lethal, or because they may otherwise cause or tend to cause detrimental cumulative effects.

j. "Incineration" means the controlled process by which combustible solid, liquid or gaseous wastes are burned and changed into noncombustible gases and other residues.

k. "Incinerator" means a controlled facility consisting of one or more chambers or furnaces in which wastes are burned.

l. "Industrial Landfill" means a disposal facility utilizing an engineered method of disposing of industrial solid waste on land without creating a hazard to the public health, the environment, plants or animals.

m. "Industrial Solid Waste" means waste resulting from, or incidental to, any process of industry, manufacturing, mining or development of any agricultural or natural resources. This does not include waste materials, the discharge of which is subject to the rules and regulations of the Water Quality Division or mining materials subject to the Land Quality Rules and Regulations.

n. "Leachate" means liquid that is the result of the percolations of fluids through solid waste and which consists of chemicals and microbial waste products from the solid waste in a dissolved or suspended state.

o. "Letter of Approval" means the written approval from the Department to construct and/or operate a solid waste disposal facility.

p. "Modified Landfill" means an adaptation of sanitary landfill, differing only in that coverage with a layer of earth is applied to deposited refuse at a frequency less than daily.

q. "Municipality" means a city, town, county, district, association or other public body.

r. "Municipal Solid Waste" means solid waste resulting from or incidental to residential, community, trade or business activities, including garbage, rubbish, ashes, street sweepings, dead animals, abandoned automobiles and all other solid waste other than industrial solid waste.

s. "New Facility" means any facility which requires new or additional construction, such as access roads, fencing, surface water diversion, etc. or the working area is not included in a plan which has been previously submitted to and approved by the Department.

t. "Open Burning" means uncontrolled burning of solid waste in the open.

u. "Open Dump" means an uncontrolled solid waste disposal site at which solid wastes are dumped in the open in such a manner that they present a real or potential hazard to public health and the environment.

v. "Person" means an individual, partnership, firm, association, joint venture, public or private corporation, trust, estate, commission, board, public or private institution, utility, cooperative, municipality or any other political subdivision of the state, or any interstate body or any other legal entity.

w. "Plans" means maps, drawings and narrative description, prepared to describe the solid waste disposal facility and its operation.

x. "Processing Plant" means a facility used or designed to transfer, shred, grind, bale, compost, salvage, separate, reclaim, or provide other treatment of solid wastes.

y. "Promiscuous Dumping" means the unauthorized deposition of solid waste in an area that is not approved by the Department as a solid waste disposal site.

z. "Public Road" means a road which all the people have a right to use, or which all the people have used, or which are under the control of governmental instrumentalities and maintained at public expense.

aa. "Refuse" means any putrescible or nonputrescible solid waste, except human excreta, but including garbage, rubbish, ashes, street sweepings, dead animals, offal and solid agricultural, commercial, industrial, hazardous, institutional, demolition and construction wastes.

ab. "Sanitary Landfill" means a method of disposing of refuse on land without creating nuisances or hazards to public health or safety by utilizing the principles of engineering to confine the refuse to the smallest practical area, to reduce it to the smallest practical volume, and to cover it with a layer of earth at the conclusion of each day's operation or at such more frequent intervals as may be necessary. (American Society of Civil Engineers)

ac. "Salvaging" means the controlled removal of solid waste for the purpose of reuse.

ad. "Scavenging" means the uncontrolled removal of solid waste by unauthorized persons.

ae. "Sludge" means the accumulated semi-liquid suspension of settled solids.

af. "Solid Waste" means garbage, and other discarded solid materials resulting from industrial, commercial and agricultural operations, and from community activities, but does not include solids or dissolved material in domestic sewage or other significant pollutants in water resources such as silt, dissolved or suspended solids in industrial waste water effluents, dissolved materials in irrigation return flows or other common water pollutants.

ag. "Solid Waste Disposal Site" means any facility that processes, transports or disposes of solid waste.

ah. "Vector" means a carrier, usually an arthropod, capable of transmitting a pathogen from one organism to another.

ai. "Water Table" means the upper water level of a body of ground water.

aj. "Working Face" means that portion of the land disposal site where solid wastes are being deposited and are being spread and compacted prior to the placement of cover materials.

Section 3. Applicability. The Rules and Regulations contained herein shall apply to any person, government or governmental subdivision, corporation, organization, partnership, business trust, association, district or other entity involved in any aspect of the management, control or disposal of solid waste.

Section 4. Objectives. The objectives of these Rules and Regulations are to provide minimum standards for the management and disposal of Solid Waste in order to protect the health, safety and welfare of the people and prevent the degradation of the environment.

Section 5. Scope. The Rules and Regulations promulgated herein shall cover all aspects of solid waste management as provided under the authority of the previously cited legislation.

Section 6. Severability. If any section or provision of these regulations, or the application of that section or provision to any person, situation, or circumstance is adjudged invalid for any reason, the adjudication does not affect any other section or provision of these regulations or the application of the adjudicated section or provision to any other person, situation, or circumstance. The Environmental Quality Council declares that it would have adopted the valid portions and applications of these regulations without the invalid part, and to this end the provisions of these regulations are declared to be severable.

Section 7. Operation Classification.

a. The operational standards prescribed in the following sections are the minimum requirements for the various types of solid waste facilities and are based on population density and types of solid waste handled. Facilities are classified according to the amount and degree of treatment required.

b. Types of Operations.

(1) Type I Operation: Type I operations are those facilities which serve a minimum resident population of 3,000 or process a minimum of 2100 tons of solid waste per year. Type I solid waste disposal shall be accomplished by sanitary landfill, incineration, composting, or other acceptable methods which are approved by the Department.

(2) Type II Operation: Type II operations are required as a minimum for municipalities or other areas, or any combination thereof, serving a resident population of less than 3,000 but greater than 1,000. A Type II operation shall not be located within 1,000 feet of any public road, residence, water way, or water well unless the Department, after an on-site inspection, determines that the operation is not and/or will not

create a nuisance or detriment to the environment or public health.

Type II solid waste disposal facility shall be accomplished by a modified landfill (using a minimum of once-per-week compaction and cover) or any other equally acceptable method which is approved by the Department. The Department may require a more frequent application of cover for sites which serve areas with an influx of tourists during certain months of the year.

(3) Type III Operation: Type III operations are required as a minimum for municipalities or other area, or any combination thereof, serving a resident population of less than 1,000. A Type III operation shall not be located within 1,000 feet of any public road, residence, waterway or waterwell unless the Department, after an on-site inspection, determines that the operation is not and/or will not create a nuisance or detriment to the environment or public health. Type III solid waste disposal shall be accomplished by a modified landfill (using a minimum of once-per-month compaction and cover), or any other equally acceptable method which is approved by the Department.

(4) Construction/Demolition/Brush Fill: The construction/demolition fill shall be accomplished as described for a type III landfill.

(5) Industrial Landfill: Each industrial landfill operation must have the written approval of the Department. This can be accomplished by the Department approving plans and design criteria formulated and submitted by a qualified Solid Waste Management person and by an on-site inspection by an employee of the Department. Each industrial site will be evaluated on an individual basis by the Department.

(6) Hazardous Waste Facility: Each hazardous waste facility shall be accomplished as described for an industrial landfill.

Section 8. Facility Construction and Operation Approval.

a. New Facilities - Each person planning to construct and operate a solid waste facility shall submit construction and operating plans to the Department for approval. New facilities are required to have letters of approval for both the construction and operation of the facility. These plans shall include, but not be limited to, the following:

(1) A legal description of the property to be used for a facility.

(2) Map or aerial photograph of the area showing land use and zoning within one-half mile of the solid waste disposal site. The map or photograph shall be of sufficient scale to show all residences, industrial buildings, waterwells, water courses, roads and other applicable details and shall indicate the general topography. Surface ownership of the proposed site and the adjoining lands shall also be indicated on the map or photograph.

(3) Plot plan of the site showing dimensions, location of soil borings, where applicable, proposed trenches and filled areas where

applicable, winter cover stock piles, fencing, and original and proposed fill elevations. The scale of the plan should not be greater than 200 feet per inch.

(4) A written report shall accompany the plans indicating:

(a) The proposed starting date of construction and the estimated completion date.

(b) Population and area normally served by the site. If applicable, give the population served and number of months the site will be affected by the influx of tourists.

(c) Projected life of the site.

(d) Anticipated type (municipal, industrial, commercial, agricultural, hazardous waste), estimated quantity (cubic yards, tons, pounds), and source (city, county, industrial, etc.) of solid waste handled at the site.

(e) Geological formations and soil analysis to a depth of at least 15 feet below proposed excavations and the lowest elevation of the site. Such data shall be obtained by soil borings or other appropriate means. This information can usually be obtained from the Soil Conservation Service, U.S.G.S. or a log from a well in the area. If soil borings are used, there should be a maximum of two per 5 acres in areas of variable topography and geology and/or two per site area in areas of uniform topography and geology. The borings should be taken at the highest and lowest elevations of the proposed use area.

(f) Estimated depth to the highest ground water table and basis on which estimation was made.

(g) Source and characteristic of cover material and method of protecting cover material for winter operation.

(h) Type and amount of equipment to be provided at the site for excavating, earth moving, spreading, compaction and other needs.

(i) Name, address, telephone number of persons responsible (Plant engineer, supervisor, director of public works, city engineers, etc.) for actual operation and maintenance of the site and intended operating procedure.

(j) Method of handling bulky items, dead animals, and other special materials.

(k) Method by which the surface and ground water will be protected from contamination. (Diversion ditches, drain pipes, impermeable liners, etc.)

(l) Type of fire protection which will be provided. (Fire department, water supply, stockpiled soil, fire lanes, etc.)

(m) Reclamation of site and planned reuse.

(5) The design of the solid waste facility shall include one or more topographic maps at a scale of not over 200 feet to the inch with five foot contour intervals. These maps shall show: the proposed fill area (where applicable), any borrow area, access roads, grades for proper drainage of each lift, special drainage devices if necessary; fencing; equipment shelter; existing and proposed utilities; and all other pertinent information to clearly indicate the orderly development, operations, and completion of the facility.

Four copies of these plans shall be submitted to the Department for evaluation and approval. A fifth copy shall be filed in the county clerk's office for public perusal in the county in which the site will be operated. The submitted plans for a new facility will be evaluated and an on-site inspection of the area will be made by an employee of the Department within sixty (60) days after the receipt of the plans by the Department. The person responsible for the facility will be notified in writing within fifteen days after the inspection of the approval or disapproval for the construction of the facility. When the construction phase of the facility is near completion the person responsible will notify the Department and another on-site inspection will be made by a representative of the Department. If the construction phase is satisfactory a letter of approval for operating will be issued within fifteen (15) days from the date of the inspection. If the construction of the proposed site is unsatisfactory, the person responsible will be notified in writing within fifteen days from the date of the inspection as to the deficiencies. The Department will provide the necessary recommendations for correction. The letter of approval for operation will be valid for a period of one (1) year from the date of the letter. Periodic inspections will be made of the facility by representatives of the Department to insure conformity with the plans and the rules and regulations. Letters of approval for operation will be issued on a yearly basis. Operating plans will not be needed after initial approval unless they are requested by the Department.

b. Existing Facilities - All existing facilities will be required to submit operating plans to the Department. These plans should include, but not be limited to, the following:

(1) Map or aerial photograph of the area showing land use and zoning within one-half mile of the solid waste disposal site. The map or photograph shall be of sufficient scale to show all residences, industrial buildings, water wells, water courses, roads and other applicable details, and shall indicate the general topography.

(2) A written report shall accompany the map or photograph indicating:

(a) Location of the site.

(b) Population and area normally served and if applicable, the population served and number of months the site is affected by the tourist trade.

(c) Name, address, telephone number of responsible persons.

(d) The type, estimated quantity, and source (city, county, industries, etc.) of solid wastes handled at the site.

(e) Geological formations and soil analysis to a depth of at least 15 feet below proposed excavations and the lowest elevation of the site.

(f) Depth to the highest ground water table in the area.

(g) Type of cover material and frequency of cover.

(h) Type and amount of equipment provided at the site.

(i) Number and duties of personnel at the site.

(j) Hours and days of operation.

(k) Method of handling bulky items, dead animals and other special materials.

(l) Method by which the surface and ground water is protected from contamination. (Diversion ditches, drainage pipes, liners, etc.)

(m) Type of fire protection available. (Fire department, water supply, stockpiled soil, fire lanes)

(n) Type of access road (is it an all weather road).

(o) Method for controlling blowing material. (Catch fences, watering, etc.)

(p) Is an inclement weather disposal site provided?

(q) Any other pertinent information that may assist the Department in evaluating the site.

After the plans are submitted, they will be evaluated and an on-site inspection will be made by an employee of the Department within sixty (60) days from the date the plans are received. The person in charge will be notified in writing within fifteen (15) days after the inspection as to the results of the inspection. If the evaluation of the site indicates that it is not being operated in compliance with Section 10 of these Rules and Regulations, the person responsible will be notified in writing of the deficiencies and recommended corrections. The person responsible shall reply to the Department in writing as to the steps that will be taken to correct the deficiencies and the expected time period for the corrections. The Department after consultation with the person responsible will issue a compliance schedule for the proposed corrections. If the facility is in compliance with the Rules and Regulations a letter of approval for operation

will be issued which will be valid for a period of one (1) year from the date of the letter. Periodic inspections will be made of the facility by representatives of the Department to insure conformity with the plans and the Rules and Regulations. Letters of approval for operating will be issued on a yearly basis. Operating plans will not be needed after initial approval unless requested by the Department.

c. Preparation of Data - Data presented in support of Types I, II and III operations and data for industrial and hazardous wastes sites shall be prepared by a qualified Solid Waste Management person.

d. Change or Transfer of Letter of Approval - In the event that any person in the possession of a letter of approval for the construction and/or operation of a solid waste disposal facility decides to substantially change or modify construction or operating procedures, or transfer the letter of approval to another person, he must get prior written approval from the Department.

e. Revocation of Approval to Operate - In the event that a person does not comply with the submitted plan, or the Rules and Regulations, the letter of approval for site operation can be withdrawn by written notice from the Department. Such a notification shall include the reasons for the withdrawal of approval and it will become effective twenty (20) days from the mailing date of such notice, unless within that time the holder of the letter of approval requests a hearing before the Environmental Quality Council. Such a request for hearing shall be made in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the Rules of Practice and Procedure of the Department. If the person so notified does not respond within the twenty-day period or the Council judges that the letter of approval should be withdrawn, the site will be considered in noncompliance and will be subject to the penalties as prescribed under Article 9.35-502.49 of the Environmental Quality Act.

f. Research on Experimental Disposal of Solid Waste - Special considerations may be given on an individual basis by the Department for any research or experimental disposal of solid wastes.

Section 9. Public Participation. The Department will post a notice in the area newspaper for a period of one (1) week. A copy of the plans for the site will be on file at the county clerk's office in the area of the proposed site. Any person or persons wishing to comment on the installation of a new solid waste disposal site will have twenty (20) days from the date of the first newspaper publication in which comments can be submitted in writing to the Department. If substantial adverse comments are received, a public hearing will be called by the Department.

Section 10. Minimum Standards of Operation.

a. Sanitary Landfill (Type I operation) - To comply with minimum standards each Type I operation must meet or exceed the following requirements:

(1) Each day's deposits of solid waste shall be compacted to the smallest practical volume and a six-inch layer of acceptable cover material shall be placed and compacted over the solid waste at the end of each working day. A minimum of two feet of acceptable cover material shall be placed over any completed segment or cell of the site in such a manner that effective surface drainage will be obtained.

(2) The working face of the site shall be confined to the smallest practical area in order to control the exposed waste without interferring with operational procedures.

(3) Adequate fencing shall be provided in order to prevent the access to the site by livestock and large wild animals.

(4) Adequate fencing shall be provided to catch windblown material. All windblown material shall be collected by attending personnel and returned to the working face once per week or as necessary to prevent the site from becoming unsightly.

(5) Adequate provisions shall be made for operating during adverse weather conditions. This may be accomplished by providing an emergency disposal area which can be utilized during bad weather.

(6) Surface water shall be prevented from entering onto, into or out of the deposited solid waste.

(7) Solid waste shall not be deposited nearer than 500 feet to a drinking water supply well, stream, reservoir, lake, water treatment plant, or raw water intake which furnishes water to a public water system or for human consumption unless engineering data supplied to the Department shows there is no danger of the contamination of these waters.

(8) Reasonable precautions shall be taken to prevent leachate from the solid waste from entering the surface or ground water.

(9) The Department, at its discretion, may require monitoring wells, provided by the responsible person, in order to observe any changes in the quality of the ground water.

(10) No burning of solid waste shall be conducted at any site without the written permission of the Department.

(11) Adequate equipment shall be provided for excavating, compacting, and covering.

(12) Adequate personnel or signs shall be provided at each site to give directions for the unloading of refuse.

(13) All weather access roads shall be provided at each site.

(14) A fire lane (minimum 10 feet wide around the perimeter of the site) and other fire protection shall be provided at each site. This

may be accomplished by a water supply, stockpiled earth, nearby fire department, or other acceptable means.

(15) Hazardous materials may be disposed of in a municipal solid waste disposal site only if the Department gives special written permission. This permission can be obtained by submitting in writing the type, physical composition and chemical composition of the waste and the special procedures and precautions to be taken in handling and disposing of the hazardous waste. There will be some types of hazardous waste that will not be allowed to be deposited in a municipal site. Special directions for the disposal of these wastes will be given by the Department.

(16) Salvaging and reclamation, if permitted, will be conducted in such a manner as not to interfere with normal operating procedures.

(17) The site shall be operated in such a manner so as to control insects and rodents. Additional control in the form of pesticides may be required.

(18) Scavenging and animal feeding or grazing by domestic livestock shall not be permitted on the site.

(19) Adequate provisions shall be made for the handling and disposal of bulky waste. If this type material cannot be combined with normal municipal refuse, a separate unloading or alternate area shall be provided on-site for the handling and ultimate disposal of large or bulky items. These items (junk cars, tires, tree stumps, appliances, etc.) shall not be stored on-site in such a manner or for periods of time that they will create a public nuisance, fire hazard, public health hazard, or detriment to the environment.

(20) Special provisions shall be made for the acceptable disposal of dead animals. Dead animals should be covered with six inches of cover material upon disposition. Small animals can be worked into the operating face of the landfill, but provisions should be made for the disposal of large dead animals.

(21) When a site is completed or disposal operations are temporarily suspended, all refuse in the area shall be covered with at least two feet of topsoil and reseeded if sufficient vegetation is not available to stabilize the surface. The person who received the written approval of the Department will be responsible for the repair of any eroded, cracked and uneven areas for a period of three (3) years after completion of the site.

(22) The person who was given permission to operate will be responsible for controlling any gases or leachate from a site for a period of five (5) years after completion of the site.

(23) Street sweepings may be stored temporarily or utilized in areas where they do not create public nuisances, aesthetic degradation, or public health hazards.

b. Type II Operation (modified landfill) - To comply with minimum standards, each Type II operation must meet or exceed all standards required of a Type I operation except a six-inch well-compacted cover material will be required only once per week.

c. Type III Operation (modified landfill) - To comply with minimum standards, each Type III operation must meet all the requirements of a Type I and II operation except a six-inch well-compacted cover material will be required only once per month.

d. Demolition/Construction/Brush Landfill - To comply with minimum standards each demolition/construction/brush landfill must meet the requirements of a Type III site plus no putrescible or hazardous waste shall be deposited in this type fill.

Section 11. Industrial and Hazardous Waste Facility Construction and Operation Approval.

a. New Facilities - Each person planning to construct and operate an industrial solid waste land disposal facility or hazardous waste disposal facility shall submit construction and operating plans to the Department for approval. These plans will be for the industrial waste disposal that is not subject to the rules and regulations of the Air, Land and Water Quality Divisions. These plans shall include, but not be limited to, the following:

(1) A detailed map of the area showing land use and/or zoning within one-half mile of the solid waste disposal site. The map shall be of sufficient scale to show all residences, industrial buildings, water wells, water courses, roads and other applicable details and shall indicate the general topography.

(2) A legal description of the property to be used for a disposal site.

(3) A plot plan of the site showing dimensions and describing the working areas of the site.

(4) A written report shall accompany the plans indicating:

(a) The proposed starting date of construction and estimated completion date.

(b) Anticipated number of days the site will be operated per month and/or per year.

(c) Types, characteristics, and quantities of wastes to be handled at the site. Common, trade, and chemical names of materials will be required of the different materials (caustic, toxic, water soluble, flammable, solid, liquid, slurry, etc.), amounts per day, per month, per year.

(d) A description of the working area which gives, in detail, the operations proposed, such as treatment and recovery processes and equipment involved, along with identification of disposal procedures to be used. (Landfill, land farming, etc.)

(e) Projected life of the site.

(f) Geological formations and soils analysis of the proposed site.

(g) Proposed method by which surface and ground water will be protected from contamination. (Drainage plans, control devices, etc.)

(h) Proposed method by which the public and animals will be excluded from the site.

(i) Where applicable, type of fire protection which will be provided.

(j) Depth to the highest ground water table in the area.

(k) Where applicable, method by which blowing material will be controlled.

(l) Will the site be operated during periods of inclement weather? If so, what provisions will be made for inclement weather operations?

(m) Intended points of ingress and egress.

(n) Local wind pattern.

(o) Utilities on site. (If applicable)

(p) Other pertinent information requested by the Department.

These plans will be submitted and processed as described in Section 8-(5) paragraph two.

If a person is planning on installing several small disposal sites of the same type in a general area, an area plan for all sites with the pertinent information (such as water and air pollution abatement processes, method of disposal, amounts and types of waste, etc.) will be acceptable.

b. Existing Facilities - All existing facilities shall submit operating plans upon request to the Department. These plans will be for the industrial waste or hazardous waste disposal that is not subject to the rules and regulations of the Air, Land and Water Divisions.

These plans shall include, but not be limited to, the following:

(1) A detailed map of the area showing land and/or zoning within one-half mile of the solid waste disposal site. The map shall be

of sufficient scale to show all residences, industrial buildings, water wells, water courses, roads and other applicable details and shall indicate the general topography.

(2) A legal description of the property being used for a disposal site.

(3) A plot plan of the site showing dimension and describing the working areas of the site.

(4) A written report shall accompany the plans indicating:

(a) Number of days the site is operated per month and/or per year.

(b) Types, characteristics and quantities of wastes handled at the site. Common, trade, and chemical names of materials will be required of the different materials (caustic, toxic, water soluble, flammable, solid, liquid, slurry, etc.), amounts per day, per month, per year.

(c) A description of the working area which gives, in detail, the operations such as treatment and recovery processes and equipment involved, along with identification of disposal procedures used. (Landfill, land farming, etc.)

(d) Projected life of the site.

(e) Geological formations and soils analysis of the site.

(f) Method by which surface and ground water is protected from contamination. (Drainage plans, control devices, etc.)

(g) Method by which the public and animals are excluded from the site.

(h) Where applicable, type of fire protection provided.

(i) Depth to the highest ground water table in the area.

(j) Where applicable, method by which blowing material is controlled.

(k) Is the site being operated during periods of inclement weather? If so, what provisions are made for inclement weather operations?

(l) Points of ingress and egress.

(m) Local wind pattern.

(n) Utilities on site. (If applicable)

(o) Other pertinent information requested by the Department.

These plans will be submitted and processed as described in Section 8 b. 2. Final paragraph.

c. Minimum Standards of Operation for Industrial Disposal Sites.

(1) Industrial solid waste disposal site - To comply with minimum standards each industrial site shall meet or exceed the following requirements:

(a) All sites shall be fenced or otherwise guarded to prevent the access of the public, wild animals and livestock. This will only be necessary if the site is receiving materials that will be harmful to the public and animals.

(b) All sites shall be located in areas that will not create nuisances, aesthetic degradation or hazards to nearby residents.

(c) Sites shall be constructed in such a manner that surface water will not run onto, into or out of the working area.

(d) Sites shall not be located nearer than 500 feet to a drinking water supply well, stream, reservoir, lake, water treatment plant, or raw water intake which furnishes water to a public water system or for human consumption unless supportive engineering data shows that materials from the site will not enter these areas.

(e) Sites shall be designed and operated in such a manner that fumes, gases, leachates, solids, particulates, or liquids will not enter the water in such quantities as to be in violation of Water Quality standards.

(f) Sites shall be designed and operated in such a manner that fumes, gases, particulates, and other materials will not enter the air in such quantities as to be in violation of the Air Quality regulations.

(g) All sites shall have adequate fire protection.

(h) All sites shall be designed, constructed, and operated in such a manner that the combining of different materials will not create undesirable or dangerous reactions within the area.

d. Minimum Standards of Operation for Hazardous Waste Disposal Sites.

(1) Hazardous waste disposal sites - To comply with the minimum standards each hazardous waste site shall meet or exceed the following requirements:

(a) The responsible person shall take all precautions to prevent unauthorized persons from entering the site.

(b) The responsible person shall take the necessary precautions to prevent animals from entering the site.

(c) All sites shall be located away from flood plains, natural depressions and excessive slopes unless the detailed engineering plans indicate the acceptability of a site in these areas.

(d) Hazardous waste sites shall be located in areas of low population density, low land use value, and low ground water contamination potential unless detailed engineering plans indicated the acceptability of this type site in the area.

(e) Sites shall not be located near a drinking water supply well, stream, reservoir, lake, water treatment or raw water intake which furnishes water to a public water system.

(f) Whenever possible, sites shall be located in areas where impermeable soils are located.

(g) The site shall be located and designed to contain any run-off from accidental spills at the site.

(h) All sites shall be designed and located where there will be no hydraulic surface or subsurface connection between flowing or standing water.

(i) All trenches, ponds, holding tanks, etc. shall be lined with acceptable liners to prevent leaching or transmission of materials from the site.

(j) All sites shall be located, designed and operated in such a manner that they will not create nuisances, aesthetic degradation, or hazards to the surrounding area.

(k) Records of the amounts received, types (chemical analysis), date and locations where these materials are on site will be maintained.

(l) Precautions shall be taken to avoid mixing of materials that are not compatible.

(m) All sites shall be designed, located, and operated in such a manner that the materials will be totally contained on the site.

(n) Prior to the deposition of hazardous wastes at a site, monitoring wells shall be provided by the person responsible and background data shall be provided to the Department.

(o) The site and the different areas within the site shall contain the appropriate hazardous waste signs.

(p) When the site is completed the working areas of the site

shall be properly encapsulated to prevent the migration of water into or out of the material.

(q) The site at completion shall be closed off, signed and permanently isolated from humans and animals.

(r) Before a letter of approval is issued for the operation of a hazardous waste disposal site, the responsible person shall consult with the Department of Environmental Quality as to the length of time that person will be required to monitor for water pollution at the site. The length of time required will depend on the types of materials deposited and their life span.

Section 12. Processing Plants.

a. Solid waste processing plants shall meet the following minimum standards:

(1) All-weather access roads shall be provided.

(2) Surface drainage facilities shall be provided to prevent surface water runoff into, or out of the working area.

(3) Fencing shall be provided in order to control access to the site.

(4) Provisions shall be made to prevent blowing litter in the area.

(5) Personnel and provisions shall be provided at each facility to give directions for unloading of refuse and prevent the blockage of the normal flow of traffic during operating hours.

(6) Fire protection shall be provided at each facility.

(7) No hazardous materials shall be processed unless permission is given by the operator and the Department.

(8) The processing facility shall be constructed in such a manner as to allow it to be thoroughly cleaned by water or steam.

(9) All liquids produced by the process and by cleaning shall be disposed of in compliance with the Wyoming Water Quality Rules and Regulations.

(10) Ventilation and odor control shall be provided at each plant.

(11) The processing plant shall not accumulate solid waste in quantities that cannot be processed before the waste creates a public nuisance, health hazard, fire hazard, odors, or vector habitat.

(12) In the event of extended mechanical breakdown the unprocessed solid waste and incoming waste shall be removed from the site to an approved alternate facility before the solid waste creates a public nuisance, health hazard, fire hazard, odors or vector habitat.

(13) Vector control shall be provided by good sanitation practices and/or pesticides.

Section 13. Compliance Schedules. All persons who have existing solid waste disposal sites that serve 3,000 or more people and/or who are operating industrial or hazardous waste disposal sites shall submit operating plans to the Department by January 1, 1977. All other persons operating solid waste disposal sites (municipal sites serving less than 3,000 population, county sites, private sites, construction/demolition fill, etc.) shall submit operating plans to the Department by July 1, 1977. If a person already has a letter of approval for operating it will not be necessary to submit these plans. If the site or sites are not in compliance with Sections 10 and 11 of these Rules and Regulations the responsible person must include a proposed plan of action with a date or dates when compliance will be obtained. The Department, after consultation with the responsible person, will approve or disapprove the proposed compliance schedule. If the schedule is disapproved, the Department will provide the responsible person with a compliance date. In the event that a person does not agree with the compliance date set by the Department, he can request a hearing before the Environmental Quality Council. Such a request for hearing shall be submitted in writing to the Director and shall state the grounds for the request. Any hearing held shall be conducted pursuant to the Rules of Practice and Procedure of the Department.

The submission of a compliance schedule, operating plans or operating under a compliance schedule does not relieve the operator of a solid waste disposal site of his legal responsibility to operate the facility in a manner which does not create a public nuisance, a health hazard, a fire hazard or does not violate applicable Air and Water Quality standards.

Section 14. Promiscuous Dumping. Persons shall not deposit solid waste in an area that is not designated by the Department as a solid waste disposal facility. This does not apply to a single family unit or household which is disposing of that family unit or household's solid waste on their own property in such a manner that it is not creating a health hazard, public nuisance, or detriment to the environment.

Section 15. Waivers and Exemptions.

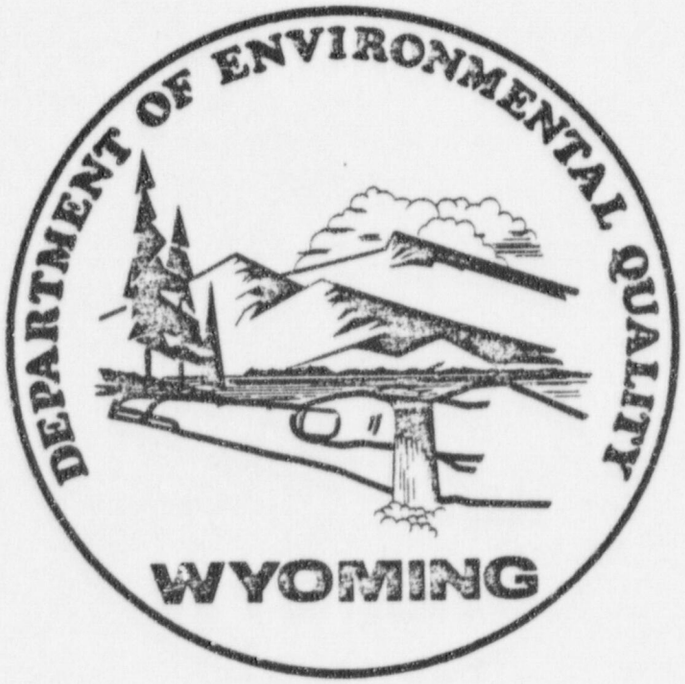
a. Waivers - The Department, upon application, shall grant waivers from the provisions of these Rules and Regulations for solid waste disposal practices and sites which are necessitated by reason of agricultural or industrial operations remote from authorized solid waste disposal sites and which do not create a health hazard, public nuisance or are not a detriment to the environment. Applications for such waiver shall be made and granted by letter, or verbally when the circumstances permit. "Remote" means inaccessible due to distance, natural barriers or inaccessible because of private, public or legal restrictions.

b. Exemptions - The disposal of solid waste at oil industry drilling sites which are presently regulated by the Wyoming Oil and Gas Commission, United States Geological Survey and the Bureau of Land Management shall be exempt from these Rules and Regulations.

Wyoming

LAND QUALITY

Rules & Regulations



1978

RULES AND REGULATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALITY

LAND QUALITY DIVISION

I certify that the attached is a true and correct copy of rules of the Wyoming Department of Environmental Quality, Land Quality Division, adopted in accordance with W.S. 9-4-101 through 9-4-115. Chapters VII, V & VIII

Prior to the adoption, these rules were made available for public inspection on the 7th day of July, 1978, and a notice of intended adoption was mailed to the Attorney General and Legislative Service Office on the 10th day of July, 1978.

These rules have been approved by the Governor has indicated below.

The attached rules are effective immediately upon filing with the Secretary of State.

Signed this 8th day of September, 1978.

Robert E. Sundin

Robert E. Sundin
Director
Wyoming Department of Environmental Quality

Reviewed and Approved by the Governor

STATE OF WYOMING } ss
Office of the Secretary

Filed the 6th day of October
1978 at 8:00a.M.
THYRA THOMSON
Secretary of State

RULES AND REGULATIONS

WYOMING DEPARTMENT OF ENVIRONMENTAL QUALTIY

LAND QUALITY DIVISION

I certify that the attached is a true and correct copy of rules of the Wyoming Department of Environmental Quality, Land Quality Division, adopted in accordance with W.S. 9-4-101 through 9-4-115. These rules are revisions or additions of the chapters shown on the attached table of contents. Chapters: I, II, III, V, VIII, IX XII

Prior to the adoption, these rules were made available for public inspection on the 7th day of July, 1978, and a notice of intended adoption was mailed to the Attorney General and Legislative Service Offce on the 10th day of July, 1978.

These rules have been approved by the Governor as indicated below.

The attached rules are effective immediately upon filing with the Secretary of State.

Signed this 1st day of September, 19___.

Robert E. Sundin

Robert E. Sundin
Director
Wyoming Department of Environmental Quality

Ed Herschler

Reviewed and Approved by the Governor

STATE OF WYOMING } ss
Office of the Secretary }

Filed the 5th day of Sept.
19 78 at 4 P. M.

THYRA THOMSON
Secretary of State

Rules and Regulations

DEPARTMENT OF ENVIRONMENTAL QUALITY

State of Wyoming

I certify that the copy hereto attached is a true copy of the amendment to the standards of the Wyoming Department of Environmental Quality, Land Quality Division, relating to Land Quality Rules and Regulations for Wyoming in accordance with Chapter 9.1, Article 1, Section 35-502.12, Subsection (a)(i) Powers and duties of the Environmental Quality Council and Chapter 9.1, Article 4, Section 35-502.21, Establishment of standards, Wyoming Environmental Quality Act 1973, as amended by Enrolled Act #7, Wyoming House of Representatives, Original House Bill #9, Forty-second Legislature, 1974 Session and Enrolled Act #72, Wyoming Senate, Original Senate File #68, Forty-third Legislature, 1975 Session.

This is an amendment superseding Chapter VIII of the Land Quality Rules and Regulations previously filed.

Section 6 of Chapter VIII was repealed by the Wyoming Environmental Quality Council at their regular meeting on September 11, 1975 under the authority granted by Section 35-502.12(c)(i) of the Environmental Quality Act of 1973.

The effective date of the attached amendment is twenty days after filing by the Secretary of State as indicated by the authenticating file stamp.

Signed this 4th day of November, 1975

Robert E. Sundin, Director
Department of Environmental Quality

STATE OF WYOMING }
5th November
75 11 A.
Secretary of State

Marilyn S. Kite
Approved as to Authority and Substance
Office of the Attorney General

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Rules and Regulations

DEPARTMENT OF ENVIRONMENTAL QUALITY
LAND QUALITY DIVISION

State of Wyoming

I certify that the copy hereto attached is a true copy of the rules of the Wyoming Department of Environmental Quality, Land Quality Division, relating to Land Quality Standards for Wyoming in accordance with Chapter 9.1, Article 1, Section 35-502.12, Subsection (a)(i) Powers and duties of the Environmental Quality Council and Chapter 9.1, Article 4, Section 35-502.21, Establishment of standards, Wyoming Environmental Quality Act 1973, as amended by Enrolled Act #7, Wyoming House of Representatives, Original House Bill #9, Forty-second Legislature, 1974 Session and Enrolled Act #72, Wyoming Senate, Original Senate File #68, Forty-third Legislature, 1975 Session. These are the original rules regarding this subject.

Prior to adoption these Rules were made available for public inspection on the 28 day of June, 1974.

The effective date of the attached Rules is twenty days after filing by the Secretary of State as indicated by the authenticating file stamp. Signed this 5th day of May, 1975.

STATE OF WYOMING }
Office of the Secretary

Filed this 5th day of May
1975, at 2 P.M.

THYRA THOMSON
Secretary of State

Robert E. Sundin, Director
Department of Environmental Quality

Approved as to Authority and Substance
Office of the Attorney General

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CHAPTER I

AUTHORITIES AND DEFINITIONS

Section 1. Authority. These rules and regulations are adopted by the Environmental Quality Council and the Administrator of the Land Quality Division pursuant to the authority granted the Council and the Administrator by the Wyoming Environmental Quality Act, Session Laws of Wyoming, 1973, Chapter 250, Section 1, designated in the said Act as Sections 35-487.1, and redesignated in the compilation of the Wyoming Statutes as Sections 35-11-101 through 35-11-1104, Wyoming Statutes, 1977, as amended, and pursuant to the authority granted by the Council and the Administrator by the Amendment to the Wyoming Environmental Quality Act, adopted as Enrolled Act No. 31, House of Representatives, 44th Legislature of the State of Wyoming, 1978 Session.

Nothing in these regulations relieves an operator of his obligation to comply with the Rules and Regulations of the Water Quality Division of the Department of Environmental Quality and any other State or Federal statute or regulation.

Section 2. Definitions. The definitions included in the Wyoming Environmental Quality Act, Section 35-502.3 Wyoming Statutes, 1957, as amended, are hereby adopted by this reference the same as if fully set forth herein. All references to the "Act" herein refer to the Wyoming Environmental Quality Act, Session Laws, 1973, Chapter 250, as amended.

The applicant must state in his mining plan which mining classification he feels his proposed operation will fall under, as defined in this Section.

(1) "Administrator" means the administrator of the Division of Land Quality.

(2) "Exploration pit" means any pit, cut, or other activity that creates affected land in an effort to locate possible indications of mineralization.

(3) "Subsoil" is any subsurface earthen materials, excluding any material within the topsoil layer, which is capable of supporting plant life.

(4) "Approved reclamation plan" is a reclamation plan which has received the approval of the administrator at the time a mining permit is issued.

(5) "Spoil" means all materials removed from the earth by a mining operation except minerals, subsoil, and topsoil.

(6) "Highest previous use" is a sustainable use of the land which has the greatest economic and social values to the people of the area prior to the commencement of the mining operation.

(7) "Approximate original contours" means that the slopes and other configurations of the land are nearly the same as they were originally, although possibly at a lower elevation.

(8) "Stagnant water" is naturally or artificially impounded water which, because of its poor quality or shallow depth, is unusable for livestock or wildlife watering, wildlife habitat, or recreational uses.

(9) "Subsidence" is the settling of the land surface caused by removal of subsurface material in underground mining.

(10) "Reclaimed land surface" shall mean affected land which has been backfilled, graded, contoured and revegetated in accordance with an approved reclamation plan.

(11) "Hazardous materials" means any material or substance which results from or is encountered in a mining operation which could reasonably be expected to cause physical harm if not controlled in an approved manner.

(12) "Soft rock surface mining" means surface mining of materials deposited within or as sedimentary rock formations which include: coal, uranium, sand and gravel, jade, bentonite, hot springs deposit, placer mining, clay, gypsum, oil shale, and scoria.

(13) "Hard rock surface mining" means surface mining of minerals deposited within or as igneous or metamorphic rocks or surface mining or rocks of sedimentary origin which are extremely well lithified. These include: anorthosite, copper ore, gold ore, uranium, iron ore, dolomite, limestone, marble, serpentinite, phosphate, sandstone, pumice, feldspar, jade, and ballast rock.

(14) "Underground mining" means the mining of all solid minerals by man-made excavation underneath the surface of the earth.

(15) "Small operator" means any mining operation for which not more than four thousand tons of overburden are

removed and the affected land does not exceed two acres in any one year.

(16) "Alluvial valley floors" means the unconsolidated stream-laid deposits holding streams where water availability is sufficient for subirrigation or flood irrigation agricultural activities but does not include upland areas which are generally overlain by a thin veneer of colluvial deposits composed chiefly of debris from sheet erosion, deposits by unconcentrated runoff or slope wash, together with talus, other mass movement accumulations and windblown deposits.

(17) "Aquifer" is a zone, stratum or group of strata that can store and transmit water in sufficient quantities for a specific use.

(18) "Diversion" is a channel, embankment, or other manmade structure constructed for the purpose of diverting water from one area to another.

(19) "Embankment" means an artificial deposit of material that is raised above the natural surface of the land and used to contain, divert, or store water, support roads or railways, or other similar purposes.

(20) "Essential hydrologic functions" means, with respect to alluvial valley floors, the role of the valley floor in collecting, storing, and regulating the natural flow of surface water and groundwater, and in providing a place for irrigated and subirrigated farming, by reason of its position in the landscape and the characteristics of its underlying material.

(21) "Flood irrigation" is irrigation through natural overflow or the temporary diversion of high flows in which the entire surface of the soil is covered by a sheet of water.

(22) "Groundwater" is subsurface water that fills available openings in rock or soil materials such that they may be considered water saturated.

(23) "Hydrologic balance" means the relationship between the quality and quantity of inflow to, outflow from, and storage in a hydrologic unit such as a drainage basin, aquifer, soil zone, lake or reservoir. It encompasses the quantity and quality relationships between precipitation, runoff, evaporation, and the change in ground and surface water storage.

(24) "Hydrologic regime" is the entire state of water movement in a given area. It is a function of the climate and includes the phenomena by which water first occurs as atmospheric water vapor, passes into a liquid or solid form and falls as precipitation, moves thence along or into the ground surface, and returns to the atmosphere as vapor by means of evaporation and transpiration.

(25) "Intermittent or perennial stream" is a stream or part of a stream that flows continuously during all (perennial) or for at least one month (intermittent) of the calendar year as a result of groundwater discharge or surface runoff. The term does not include an ephemeral stream which is one whose channel bottom is always above the local water table and flows for less than one month of a calendar year and only in direct response to precipitation in the immediate watershed.

(26) "Recharge capacity" means the ability of the soils and underlying materials to allow precipitation and runoff to infiltrate and reach the zone of saturation.

(27) "Recurrence interval" is the average interval of time within which an event of specified magnitude will be equaled or exceeded once.

(28) "Runoff" is water that flows overland in response to precipitation before entering a defined stream channel and becoming stream-flow.

(29) "Safety factor" is the ratio of the available shear strength to the developed shear stress on a potential surface of sliding determined by accepted engineering practice.

(30) "Sediment" means undissolved organic and inorganic material transported or deposited by water.

(31) "Sedimentation pond" is any natural or artificial structure or depression used to remove sediment from water and store sediment or other debris.

(32) "Subirrigation" means irrigation of plants with water delivered to the roots from underneath. The water is supplied from stream-laid deposits which are semi-saturated or saturated with water derived from the stream to the extent that plants are able to maintain growth through the growing season without depending upon precipitation except indirectly through stream recharge.

(33) "Surface water" is water, either flowing or standing, on the surface of the earth.

(34) "Suspended solids" means organic or inorganic material carried or held in suspension in water that will remain on a 0.45 micron filter.

(35) "Toxic and acid mine drainage" is water that is discharged from active or abandoned mines and other areas affected by coal mining operations and which contains a substance which through chemical action or physical effects is likely to kill, injure, or impair biota commonly present in the area that might be exposed to it.

(36) "Water table" means the upper surface of a zone of saturation, where the body of groundwater is not confined by an overlying impermeable zone.

(37) "Soil horizons" are contrasting layers of soil material approximately parallel to the land surface and differing from adjacent layers in physical, chemical and biological properties or characteristics.

A Horizon: commonly the uppermost mineral layer in the soil profile often referred to as the surface soil. It is the horizon where humus is accumulative or formed and also called the zone of eluviation.

B Horizon: the master horizon commonly found immediately beneath the A horizon and often called the subsoil or zone of illuviation.

C Horizon: a mineral like layer, excluding bedrock or unconsolidated lithologic materials, that is only slightly affected by pedogenic processes and lacks properties diagnostic of A and B horizons.

(38) "Stabilize" means to control movement or subsidence of soil, spoil and refuse material.

(39) "Mulch" is a natural or introduced layer of plant residue placed upon and anchored to the soil surface.

(40) "Augerhole" is a hole drilled with power-driven augers for mining or exploratory purposes.

(41) "Borehole" is a hole made with a drill, auger, or other tools for exploring strata in search of minerals, for water supply, for blasting purposes, for proving the position of old workings, faults, or for releasing accumulations of water.

(42) "Impoundment" is a closed basin formed naturally or artificially built which is damned or excavated for the retention of water, sediment or waste.

(43) "Acid forming materials" means earth materials that contain sulfide minerals or other minerals which exist in a natural state or if exposed to air, water or weathering processes, will cause acid conditions that may hinder plant establishment or create acid drainage.

(44) "Toxic materials" are earth materials or refuse which, if acted upon by air, water, weather, or microbiological processes, are likely to produce chemical or physical conditions in soils or water that are lethal to biota or would restrict the common uses of water.

(45) "Intensive agricultural use" means lands that have been used for the production of cultivated crops and small grains, alone or in a rotation sequence with sod crops or other management practices.

(46) "Compaction" means the reduction of pore spaces among particles of soil or rock, generally done by running heavy equipment over the earth material.

(47) "Cover" means vegetation, litter, and rock over the soil which intercept rainfall.

(48) "Productivity" means current year's growth of vegetation measured by weight per unit area at a specific time.

(49) "Species diversity" means number of species per unit area.

(50) "Species composition" means number, kinds, amount, and quality of species

(51) "Vegetation type" means a recognizable group of species growing together due to similar requirements and tolerances.

(52) "Range site" is a distinctive kind of rangeland in its ability to produce a characteristic natural plant community. It is capable of supporting a native plant community typified by an association of species that differs from that of other range sites in the kind or proportion of species or in total production (Soil Conservation Service).

(53) "Highwall" means the face of exposed overburden or coal in an open cut of a surface mine or entry to an underground mine.

(54) "Waste" means earth materials which are combustible, physically unstable, acid-forming or toxic forming

and which are discarded or otherwise separated from product coal and are slurried or otherwise transported from coal processing facilities or preparation plants after physical or chemical processing, cleaning, or concentrating of coal.

(55) "Road(s)" means access and haul roads constructed, used, reconstructed, improved, or maintained for use in mining and reclamation operations, including use by vehicles leading to transfer, processing or storage areas. The term includes any such road used and not graded to approximate original contour within 45 days of construction other than temporary roads used for topsoil removal or coal and overburden haulage roads within the pit area.

(56) "Perennial stream" See definition of "Intermittent or perennial stream."

(57) "Acid mine drainage" See definition of "Toxic and acid mine drainage."

(58) "Stream" means a perennial, intermittent or ephemeral drainage.

(59) "Emergency" for the purposes of Section 35-11-412(c) of the Act:

a. The existence of any condition or practice or any violation of a permit or other requirement of the Act or these regulations in a surface coal mining and reclamation operation, which condition, practice, or violation could reasonably be expected to cause substantial physical harm, serious injury or death to rational persons exposed prior to abatement, or

b. Any imminent adverse impact on land, air or water resources, including but not limited to plant and animal life, which is appreciable and not immediately repairable. Such impact is imminent if it exists or may reasonably be expected to exist at any time not more than 90 days from notification to an operator under Section 35-11-412 of the Act.

(60) "Topsoil" is soil which may consist of the A, B, and C soil horizons or any combination thereof and which have been determined through soil surveys, laboratory analysis and field trials to be suitable as a plant growth medium for the postmining land use. Soil is unconsolidated mineral material in the immediate surface of the earth that serves as a natural medium for the growth of plants and differs from material from which it was derived in many physical, chemical, biological and morphological properties and characteristics.

(61) "'T' value" means the maximum rate of soil loss that will permit a desirable level of crop productivity to be sustained economically and indefinitely. This value is often termed soil loss tolerance or permissible soil loss.

CHAPTER II

MINING AND RECLAMATION

Section 1. General requirements. All lands affected by any aspect of a mining operation after July 1, 1973, must be reclaimed to a use equal to or greater than the highest previous use of the land prior to the land being affected by mining. An operator's intentions for accomplishing this goal must be described in detail in the operator's approved reclamation plan.

The applicant shall consult with the local conservation district in preparation of, and review of, the reclamation plan in conformance with technical rules, regulations, specifications, and standards adopted by the State Conservation Commission.

a. Reclamation plan - the operator's reclamation plan must include a detailed description of all of the items indicated under Section 35-502.24(b) of the 1973 Wyoming Environmental Quality Act and those items required in these Rules and Regulations. The plan must be consistent with:

(1) The physical description of the area to be affected (Appendix "D" of the Mining Permit Application).

(2) The major past uses of the proposed permit area and adjacent lands.

(3) The mining plan to be followed during the course of the operation.

The administrator shall approve any such reclamation plan if it is found that such plan contains all of the information required by law and that the proposals for reclamation contained in the plan will, when put into effect, reclaim the land as required by the Wyoming Environmental Quality Act and these Rules and Regulations. If a reclamation plan is rejected by the administrator, the Land Quality Division will provide reasons for the rejection and provide suggestions for making the plan acceptable.

b. Land uses - Previous uses of affected lands must be ranked on an individual basis according to the overall economic or social value of the land use to the community or area in which these lands are found.

(1) Reclamation shall restore the land to a condition equal to or greater than the "highest previous

use". The land, after reclamation, must be suitable for the previous use which was of the greatest economic or social value to the community area, or must have a use which is of more economic or social value than all of the other previous uses.

For surface coal mining operations, on land that was previously mined and not reclaimed prior to August 3, 1977 and not operating under an approved permit, the postmining land use shall be judged on the basis of the highest and best use that can be achieved and is compatible with surrounding areas. The postmining land use for land that has been improperly managed shall be judged on the basis of surrounding lands that have been properly managed. This use shall be compatible with existing resources locally available to restore the land. A reclamation plan for surface coal mining operations which proposes a change from the premining land use must meet the following requirements: (a) That the proposed use is compatible with adjacent land use and existing land use policies, plans and zoning. Written statements which express the view of Land Use Planning Agencies towards the change in land use shall accompany the proposal. The permittee shall obtain any required approval of local, State or Federal land management agencies, including any necessary zoning or other changes necessarily required for the final land use. (b) The reclamation plan must demonstrate the feasibility of the land use regarding needs, projected land use trends, and markets. (c) The reclamation plan must show how the use will be developed, achieved in a reasonable time, and be sustained. Proposals where cropland shall be the postmining land use must be supported with a firm written commitment from the operator, landowner, or land manager that the cropland will receive, after bond release, sufficient management and maintenance to be reasonably sustainable. Before cropland can be approved as the postmining land use, sufficient amounts of water and suitable topsoil must be available to develop and maintain the reclaimed land for crop production. (d) Provision for any necessary public facilities must be assured by letters of commitment if appropriate. (e) Financial attainment and maintenance must be assured by letters of commitment if the parties are other than the permittee. (f) The reclamation plan must show that the proposed use will cause no probable or actual public health or safety hazards nor pose any actual or probable threat to water flow diminution or pollution. (g) Approval of measures to prevent or mitigate adverse effects on wildlife or fish have been obtained from appropriate State and Federal fish and wildlife management agencies. (h) That all plans were designed under the supervision of a registered professional engineer, or other appropriate professional, who will assure that the plans

were developed in accordance with acceptable standards. (i) Public notice for review and comment on the proposed postmining land use change is provided for, and shall include no less than 45 days nor more than 60 days.

(2) The administrator of the Land Quality Division shall bear the responsibility of making a decision on the ranking of land uses in a particular area. This decision must be based on information concerning the economy of the area and the needs and desires of the people living thereon. The Land Quality Advisory Board may be consulted for suggestions or recommendations on the ranking of land uses in a given area.

(3) Operators are required to restore wildlife habitat, whenever possible, on affected land in a manner commensurate with or superior to habitat conditions which existed before the land became affected, unless the land is used for a recreational or agricultural purpose which precludes its use as "wildlife habitat".

(4) Water impoundments used for recreational purposes shall be constructed in accordance with the statutes and Chapter III, Section 6, of these regulations. Recreational lands, other than water impoundments, represent changes in the land which may or may not be suitable for wildlife habitat.

Section 2. Methods of mining--Reclamation required - Surface reclamation of affected lands shall meet the following requirements for soft rock surface mining, hardrock surface mining, and underground mining as described separately below:

a. Soft rock surface mining

(1) If the reclamation plan does not provide for a water impoundment, the final pit area shall be backfilled, graded and contoured to the extent necessary to return the land to the use specified in the approved plan. In preparation of slope specifications in the plan, the operator shall consider an average of the measured slopes in the immediate area of the proposed mine site. The maximum inclination of slopes in the reclaimed area shall not be greater than the average inclination of the natural slopes in the immediate mine area. Slopes greater than the average natural slopes may be approved if the operator can demonstrate to the satisfaction of the administrator that returning the mined area to a slope equal to or less than the average natural slopes would create an unwarranted increase in the amount of affected lands. Individual slope measurements, locations of

the measurements, and the average measurement shall be submitted with the reclamation plan. In determinations of the average natural slope, the Land Quality Division may make an independent slope survey. All backfilling, grading, and contouring will be done in such a manner so as to preserve the original drainage or provide for approved adequate substitutes. No depressions to accumulate water will be permitted unless approved in the reclamation plan as being consistent with the proposed future use of the land.

Terraces or benches may be used only when it can be shown to the administrator's satisfaction that other methods of contouring will not provide the required result. If terracing is proposed, detailed plans indicating the dimensions and design of the terraces, check dams, any erosion prevention techniques, and slopes of the terraces and their intervals will be required.

(2) If the reclamation plan provides for a water impoundment and this use has been approved according to the requirements outlined in these regulations, the exposed pit areas must be sloped, graded, and contoured so as to blend in with the topography of the surrounding terrain and provide for access and revegetation. Riprapping where necessary to prevent erosion will be required. Sloping requirements will be as described above. Under certain conditions wherein it can be demonstrated to the administrator's satisfaction that the pitwall can be stabilized by terracing or other techniques it may be permissible to leave not more than one half (1/2) of a proposed shoreline composed of the stabilized pitwall. The remaining portion of the shoreline must be graded and contoured so as to provide access and blend in with the topography of the surrounding terrain. In the event that a partial pitwall is proposed as final reclamation, the operator must submit a detailed explanation of the techniques to be used to establish the stability of the pitwalls in his reclamation plan. At the administrator's discretion, a study of the proposed pitwall stabilization techniques may be required from an independent engineering company for purposes of verifying the effectiveness of the proposed stabilization techniques. The Land Quality Division will determine the acceptability of the proposed stabilization techniques based on this information and an on-site inspection.

(3) For coal mining operations, surface and groundwater shall not be discharged or diverted into underground mines.

b. Hard rock surface mining

(1) If the reclamation plan does not provide for a water impoundment, all disturbed areas shall be returned to a condition suitable for the use specified in the approved plan. The final pit area shall be backfilled, graded, and contoured as much as possible considering the physical characteristics of the land and rock materials. Whenever possible, pitwalls shall be reduced, graded, and contoured to blend in with the topography of the surrounding terrain. Where it is not possible to reduce pitwalls, based on the character of the rock encountered or economic considerations, the pitwalls must be stabilized by terracing or other acceptable engineering techniques. Plans for pitwall stabilization shall be submitted in compliance with procedures specified in Sections 2 a. (1) and (2) of this Chapter. The base of the pits which will be partially surrounded by highwalls must be graded, contoured and prepared for topsoil placement. Graded and contoured access to the base of such pits must be provided.

(2) If the reclamation plan provides for a water impoundment and this use has been approved according to Section 6, Chapter III, of these Regulations, all sources of possible water contamination within the pit must be covered with overburden or stabilized in such a manner so as not to contaminate the water in the resulting impoundment. Where possible, based on the characteristics of the rock, nature and extent of the mining operation, pitwalls extending above the projected water level within the pit area, must be reduced, graded, and contoured so as to blend in with the topography of the surrounding terrain. Where it is not possible to reduce pitwalls, based on the character of the rock involved or economic feasibility of reducing the highwalls, the highwalls must be stabilized by terracing or other acceptable engineering techniques. Plans for pitwall stabilization must be submitted following the procedure as indicated in Section 2 a. (1) and (2) of this Chapter. Graded and contoured access to the impoundment must be provided. Backfilling, grading and contouring of affected areas above the projected high water line that is not occupied by stabilized highwalls will be required when the physical land characteristics are such that this activity is possible.

c. Underground mining

(1) All surface land affected in conjunction with an underground mining operation will be subject to the appropriate backfilling, grading, and contouring requirements as described under this Section, depending on the physical land description in the permit area and the nature of the surface disturbance.

(2) All shafts and adits to underground mine workings must be sealed in accord with the requirements of the U.S. Bureau of Mines and appropriate federal and state laws.

(3) Portal entries into adits must be backfilled, graded, and contoured so as to blend in with the topography of the surrounding terrain.

(4) The effects of possible mine land subsidence must be described in detail in the reclamation plan along with the proposed measures to be taken to minimize the effects of subsidence, and procedures that will be taken in terms of backfilling, grading, and contouring in the event any subsidence occurs.

(5) Plans for controlled subsidence such as would be the result of mining techniques similar to longwall mining must be explained in detail in the mining and reclamation plans.

(6) All substantial surface disturbances due to subsidence into underground workings within five years after completion of mining must be backfilled, graded, contoured and revegetated so as to blend in with the topography of the surrounding terrain. If conditions prevent such reclamation, the administrator, after considering the conditions, and after consultation with the Advisory Board, will determine the reclamation requirements.

Section 3. Surface preparation. Backfilling, grading, and contouring of affected land shall be accomplished by one or more of the following as detailed in the approved reclamation plan:

a. Re-establishment of the contour of the land in a manner consistent with the proposed future use of the land.

b. Re-establishment of adequate through drainage if such a provision is necessary to prevent erosion, pollution or the accumulation of stagnant water.

c. Contouring of affected land to blend in with the topography of the surrounding terrain unless so doing would create an erosion problem or a hazard to man or beast.

d. Creation of water impoundments for a use certified in an approved plan in accordance with the statutes and Section 6, Chapter III, of these Regulations.

Section 4. Topsoil, subsoil, overburden, and refuse.

a. Topsoil

Topsoil, or an approved substitute, shall be evenly distributed on the surface of all lands affected during the course of the operation. Topsoil shall be so placed during the reclamation of all areas that are to be revegetated in accord with the approved reclamation plan.

(1) All topsoil or approved surface material shall be removed from all areas to be affected in the permit area prior to these areas being affected. The topsoil shall be segregated so as not to become mixed with subsoil and other overburden material, stockpiled in the most advantageous manner and saved for reclamation purposes.

(2) The topsoil or approved surface material shall be stockpiled in such a manner so as to minimize wind and water erosion. In order to accomplish this, the operator shall establish, through planting or other acceptable means, a quick growing cover of vegetation on the topsoil stockpiles. The topsoil shall also be protected from acid or toxic materials, and shall be preserved in a useable condition for sustaining vegetation when placed over affected land.

(3) Reclamation shall follow mining as soon as is feasible so as to minimize the amount of time topsoil must be stockpiled. If topsoil has been stored in a stockpile in excess of one year, the operator shall conduct soil analyses prior to use in order to determine its suitability for revegetation.

(4) Topsoil stockpiles shall be marked with a legible sign containing letters not less than six inches high on all approach roads to such stockpiles. Said signs shall contain the word "Topsoil" and shall be placed not more than 150 feet from any and all stockpiles of topsoil. Such signs must be in place at the time stockpiling is begun.

(5) The operator shall explain how the topsoil will be replaced on the affected land during reclamation, and shall indicate on his maps the locations and sizes of all proposed topsoil stockpiles. This explanation shall include a description of the thickness of topsoil to be placed over the affected land and procedures that will be followed to protect the topsoil from excessive compaction and wind and water erosion until vegetation has become adequately established.

(6) If abundant topsoil is present, and it is not all needed to accomplish the reclamation required in the approved reclamation plan, the administrator may approve of use of this topsoil by this or another operator in another area for reclamation purposes.

(7) Trees, large rocks and other waste material which may hinder redistribution of topsoil shall be separated from the topsoil before stockpiling.

(8) For surface coal mining operations, topsoil occurring on areas identified as prime farmland in accordance with Chapter VI, Section 5.e., of the regulations must be separately segregated and replaced during reconstruction of the prime farmland. The A soil horizon, then the B and C soil horizons, either separately or in combination, or other suitable material that will allow for reconstruction of a root zone of equal or greater productive capability to that existing prior to mining must be separately removed. If stockpiling of the soil horizon material is necessary each horizon or combination of horizons separately removed must be separately stockpiled and properly identified. During replacement, the C horizon material and then the B horizon material or a combination thereof will be replaced first. The A horizon material shall be replaced as the surface layer. The administrator may approve a plan which does not provide for the segregation of soil horizons if the applicant can document by acceptable scientific means that removal of all topsoil in one step would not diminish prime farmland restoration objectives of restoring equivalent or higher cropping yields. Prior to replacement of topsoil the regraded land surface shall be scarified. Excess compaction during topsoil replacement must be avoided so that permeability of the upper 20 inches of the topsoil is not reduced to less than 0.06 inches per hour. Based upon the proposed mining and reclamation plan the administrator must judge the technological capabilities of the applicant to restore the prime farmland prior to approving the permit. The mine and reclamation plan must contain: (a) soil profile descriptions of the soil occurring on the prime farmland; (b) the method and type of equipment to be used for topsoil removal and replacement as required above; (c) the location for stockpiles of soil horizon materials and a conservation plan to control erosion of stockpiles; and (d) seeding and cropping plans for the reclaimed land surface to include conservation practices which will control erosion and sedimentation. The adequacy of the reclamation plan for reconstruction of the prime farmlands shall be reviewed by the Local Conservation District and comments which may assure a more complete restoration plan shall be submitted to Land Quality Division by the Conservation District within

the sixty (60) days after the application has been submitted.

b. Subsoil

(1) If no topsoil is present in the permit area, or in the event that an operator must use subsoil for final cover, the operator shall obtain an adequate number of analyses of the subsoil to show pH, organic material content, available nitrogen, potassium, and phosphorus and such other elements and soil constituents as the administrator shall require, over the entire area of subsoil to be used, in order to determine suitability and fertilizer requirements. If the results of said analyses demonstrate to the satisfaction of the administrator that revegetation can be accomplished using such subsoil, the administrator may approve the use of such subsoil as an addition to or substitute for topsoil for reclamation purposes. The administrator shall require the operator to set up revegetation test plots using subsoil in order to determine the suitability of subsoil for revegetation purposes. Approval for the use of subsoil shall be obtained by the oeprator from the administrator prior to any mixing of topsoil and subsoil and prior to beginning any reclamation work. If the operator suspects that this procedures will be necessary prior to obtaining a permit he should describe the problem and his proposed procedure for eliminating this problem in his reclamation plan. If the problem is not discernible until after the permit is issued, an approved amendment to the reclamation plan will be required describing the operator's plans for accomplishing the above.

(2) Subsoil stockpiles shall be segregated from topsoil and overburden piles and shall be marked with a legible sign containing the word "Subsoil" in letters no less than six inches high on all approach roads to such stockpiles. Said sign or signs shall be placed not more than 150 feet from all stockpiles of subsoil. Such signs shall be in place at the time stockpiling is begun.

(3) The operator shall indicate on his maps the location of all subsoil piles.

(4) If subsoil is to be used in reclamation as a substitute for topsoil, all large rocks and other waste material which may hinder redistribution shall be separated before stockpiling.

(5) If all or some subsoil is not to be used in reclamation as a substitute for or additive to the topsoil, this unused subsoil must be regarded as all other overburden

material and will be subject to the reclamation provisions described under the following subsection.

c. Overburden, spoil and refuse

(1) All overburden, spoil material and refuse shall be segregated from the topsoil and subsoil and stockpiled in such a manner to facilitate the earliest reclamation consistent with the approved reclamation plan.

(2) All overburden, spoil material, and refuse piles must be designed, graded, and contoured so as to blend in with the topography of the surrounding terrain. (Slope requirements will depend on an average of the slopes in the surrounding area as described in Chapter II, Section 2 a. (1) and on the nature of the material.) After the grading and contouring of these stockpiles, topsoil, or approved subsoil must be distributed over them in preparation for the revegetation procedures. The slopes of all spoil areas must be designed so that they will be stabilized against wind and water erosion. This may include terracing, channeling around the toe of the spoil piles or other techniques. Terracing, if necessary, can be used to stabilize the slopes if it can be shown to the administrator's satisfaction that this technique of stabilization will produce the best results. If terracing is proposed, detailed plans indicating the dimensions and design of the terraces, check dams, erosion prevention techniques, slopes of the terraces, and terrace intervals will be required. The terrace design must be based on sloping requirements and the nature of the material involved.

(3) Piles of spoil material or other waste shall be marked with a legible sign containing the word "Spoil" or the words "Waste Material" in letters no less than six inches high on all approach roads to such spoil piles. Said sign or signs shall be placed not more than 150 feet from all stock piles. Such signs shall be in place at the time when piling of spoil or waste material is begun.

(4) All topsoil shall be removed from areas to be used for piling spoil material prior to the beginning of piling this material.

(5) The operator may be required to have analyses made of spoil material in order to determine if it will be a source of water pollution through reaction with leaching by surface water. If it is determined that this condition may exist, the operator shall describe proposed procedures for eliminating this condition.

(6) The operator must also indicate on his maps the location and size of all proposed spoil piles.

(7) All overburden and spoil material, that is determined to be toxic, acid forming or will prevent adequate re-establishment of vegetation on the reclaimed land surface, unless such materials occur naturally on the land surface, must be properly disposed of during the mining operation.

(8) For surface coal mining operations, all overburden and spoil must be selectively placed and compacted wherever necessary to achieve stability of the reclaimed land surface and to prevent leaching of toxic materials into surface and groundwaters.

(9) For surface coal mining operations, all spoil piles must be placed back into the pit, all highwalls eliminated, and the approximate original contours restored unless:

(a) The applicant or permittee can demonstrate that all of the spoil is not required to restore the approximate original contours or to achieve postmining contours which are consistent with an approved change in the postmining land use. Spoil not required to achieve the approximate original contours shall not be placed in disposal areas that contain springs, perennial or intermittent streams, or seep areas. Wherever possible, disposal areas shall be relatively flat or moderately sloping and naturally stable. All spoil piles must be designed by recognized professional standards and certified and inspected by a registered professional engineer for stability. Contouring of the spoil pile must provide for drainage patterns that complement the surrounding terrain and provide for a long-term stability.

(b) The reclamation plan provides for a water impoundment and is in accordance with those requirements outlined in Chapter II, Section 1.b.(1) (a) - (i) of the regulations. Where impoundments are approved, highwalls above the shoreline of the impoundment shall be eliminated by grading to slopes which do not exceed 1:2 (vertical:horizontal), are stable, and can be reclaimed to the postmining land use.

d. Acid forming and toxic materials and refuse resulting from surface coal mining operations

(1) A plan shall be submitted by the permittee for the disposal or treatment of acid forming or toxic mate-

rials, or materials constituting a fire, health, or safety hazard uncovered during or created by the mining process. Disposal or treatment of these materials shall be in a manner to prevent pollution of surface or subsurface water or threats to human or animal health and safety.

(2) Boreholes, shafts, wells and augerholes or other more or less horizontal holes shall be cased, sealed or otherwise managed to prevent mixing of groundwaters of significantly different quality. All boreholes that are within the permit area but are outside the coal mining area or which extend beneath the coal to be mined and into water bearing strata shall be plugged permanently in a manner approved by the Administrator, unless the boreholes have been approved for use in monitoring.

(3) All toxic or hazardous material shall be buried or otherwise treated within thirty (30) days if such materials are subject to wind and water erosion. Storage of such materials, if approved, must be upon impermeable material and be protected from erosion and contact with surface water.

(4) All waste from coal separation plants shall be buried or treated within ninety (90) days after the cessation of filling the disposal area.

(5) Before waste materials from a coal preparation or conversion facility or from other activities conducted outside the permit area such as municipal wastes are used for fill material, it must be demonstrated to the Director by hydrogeologic means and chemical and physical analysis that use of these materials will not adversely affect water quality, water flow, and vegetation; will not present hazards to public health and safety; and will not cause instability in the backfilled area.

(6) All exposed coal seams remaining after mining and any acid forming, toxic and combustible materials, or any waste materials that are exposed, used or produced during mining shall be covered with a minimum of 4 feet of nontoxic and noncombustible material, or if necessary, treated. The Administrator may specify a thicker amount of cover. Backfilled materials shall be selectively placed and compacted wherever necessary. The method of compacting material and the design specifications and plans shall be approved by the Administrator before the toxic materials are covered.

Section 5. Revegetation.

a. Revegetation of all affected lands shall be accomplished in a manner consistent with the approved reclamation plan and the proposed future use of the land.

b. Land which did not support vegetation prior to becoming affected land because of natural soil conditions need not be revegetated unless subsoil from such affected land will support vegetation. The operator shall demonstrate to the administrator's satisfaction that revegetation or reforestation is not possible if he seeks to proceed under the provisions of the Subsection.

c. After backfilling, grading, and contouring and the replacement of topsoil, and/or approved substitute, in such a manner so as to most efficiently accommodate the retention of moisture and control erosion on all affected lands to be revegetated, any fertilizer requirements as determined on the basis of previous analyses must be fulfilled.

Seeding which is accomplished by mechanical drilling shall be on the contour unless specific situations dictate that other methods of seeding should be used.

d. The method of revegetation, including but not limited to species of plants, seeding rates, seeding techniques, mulching requirements, and seeding times to be used in a given area for reclamation purposes, shall be approved by the Land Quality Division. The standards and specifications adopted by the State Conservation Commission for mine reclamation shall be considered by the applicant during the preparation of the reclamation plan. Whenever practicable, the Wyoming Game and Fish Department and the Wyoming Department of Agriculture may be consulted regarding revegetation procedures. Seeding of affected lands shall be conducted during the first normal period for favorable planting conditions after final preparation unless an alternative plan is approved. Whenever a permanent cover of vegetation will not be seeded within 45 days, affected lands that have been topsoiled shall be seeded to a temporary cover or otherwise protected. Any rills or gullies that would preclude successful establishment of vegetation or achievement of postmining land use shall be removed or stabilized. The species of vegetation to be used in revegetation efforts shall be described in the reclamation plan indicating the composition of seed mixtures and the amount of seed to be distributed on the area on a per acre basis. Seed types will depend on the climatic and soil conditions prevailing in the permit area and the proposed use of the land after reclamation. Species to be planted as permanent cover shall be self-renewing. Seeding rates will depend on seed types, climatic and soil conditions and the techniques to be used in seeding.

For surface coal mining operations, mulch or an equivalent erosion control and water conservation technique shall be applied to all topsoiled areas.

e. More suitable species of vegetation may be substituted if revegetation test plot results show such species to be of superior value for reclamation purposes. Requests to substitute such species shall be made in writing to the administrator. The administrator shall inspect such test plots before approval or disapproval of the request.

f. The administrator shall not release the entire bond of any operator until such time as revegetation is complete, if revegetation is the method of reclamation as specified in the operator's approved reclamation plan. Revegetation shall be deemed to be complete when (1) the vegetative cover of the affected land is shown to be capable of renewing itself under natural conditions prevailing at the site, and is at least equal to the cover on the area before mining, (2) the productivity is at least equal to the productivity on the area before mining, (3) the species diversity and composition are suitable for that land use goal, and (4) the requirements in (1), (2) and (3) are met for two consecutive years. The administrator shall determine whether equal cover or productivity has been established. Reference areas that will not be affected by mining activities shall be established in each vegetation type or range site over ten (10) acres that is represented on the area that will be affected. These shall be sampled for vegetative cover, productivity, and species diversity in the same season that the area to be affected is sampled for baseline data. They shall again be sampled when determining if revegetation has been accomplished according to the four provisions above. Adjustments will then be made for any difference in results between the different sample years. Revegetation should be capable of withstanding grazing pressure at least comparable to that which the land could have sustained prior to mining, unless Federal, State or local regulations prohibit grazing on such lands.

If reforestation for commercial harvest is the method of revegetation used, reforestation shall be deemed to be complete when ninety (90) percent of the population density goal of the reclamation plan has been achieved, the plants have shown themselves capable of continued growth of a period of five (5) years following planting, and the understory vegetation is adequate to control erosion and is appropriate for the land use goal. Quality and quantity of vegetation cover, productivity, and species diversity shall be determined in accordance with scientifically acceptable sampling procedures approved by the administrator.

When the approved reclamation plan is to return to cropland, reclamation shall be deemed to be complete when production is equivalent, for at least two consecutive crop years, to the production on an approved reference area in the vicinity. In addition, the premining production data on the reclaimed site shall be considered in judging completeness of reclamation whenever said data are available.

For surface coal mining operations, the bond for revegetation may be retained for ten (10) or more years after the last seeding; or in the case of cropland, after the first seeding.

g. Any plans for irrigation must meet state laws for this use and be explained in the reclamation plan.

h. The operator must protect young vegetative growth from being destroyed by livestock by fencing or other approved techniques for a period of at least two (2) years, or until the vegetation is capable of renewing itself with properly managed grazing and without supplemental irrigation or fertilization. The Administrator, permittee and the landowner or land managing agency shall determine when the revegetated area is ready for livestock grazing.

i. In those areas where there were no or very few noxious weeds prior to being affected by mining the operator must control and prevent the introduction of noxious weeds into the revegetated areas for a period of at least five (5) years after the initial seeding.

CHAPTER III

WATER DIVERSION, USES, IMPOUNDMENTS

Section 1. Diversion of unchannelized surface waters

a. Surface water shall be diverted around the operation for the following purposes:

(1) To control water pollution.
(2) To control unnecessary erosion.
(3) To protect the on-going operation.
(4) To protect the water rights of down-stream users.

b. Temporary diversion structures are those used during mining and reclamation, and when no longer needed, they shall be removed and the area reclaimed.

(1) In soils or other unconsolidated material, the sides of diversion ditches shall be no steeper than one and one-half to one (1 1/2:1).

(2) In rock, the sides of diversion ditches shall not overhang.

(3) In soils or unconsolidated materials, the sides and in ditches carrying intermittent discharges, the bottom shall be seeded with approved grasses so as to take advantage of the next growing season.

(4) Rock riprap, concrete, soil cement or other methods shall be used where necessary to prevent unnecessary erosion.

(5) Culverts or bridges shall be installed where necessary to allow access by the surface owner for fire control and other purposes.

(6) Diversion ditches shall pass the peak runoff from a 1-year precipitation event, or larger, as specified by the Administrator.

c. In no case shall diversion ditches discharge upon topsoil storage areas, spoil or other unconsolidated material such as newly reclaimed areas.

d. A description of surface water diversion systems must be included in the mining plan and reclamation of these systems must be described in the reclamation plan.

e. Permanent diversion structures shall pass the peak runoff from a 100-year precipitation event, or larger, as specified by the Administrator.

Section 2. Diversion of streams

a. In no case shall spoil, topsoil, or other unconsolidated material be pushed into, or placed below the flood level of a perennial or intermittent stream except during the approved construction of the diversion of said stream.

b. Diversion of a perennial stream classified as navigable shall first be approved by the Wyoming State Engineer.

c. The Wyoming Game and Fish Department shall be consulted prior to the approval of a diversion of a perennial or intermittent stream.

d. The banks of a diverted perennial or intermittent stream shall be protected by vegetation by planting approved species to take advantage of the next growing season.

e. The banks and channel of a diverted perennial or intermittent stream shall be protected where necessary by rock, riprap or similar measures to minimize erosion and degradation of water quality. The average or lesser gradient of the existing channel shall be maintained for the permanent diversion.

f. Permanent diversion of a perennial stream must be fully described in the mining or reclamation plan.

g. Mining on the flood plain of a perennial or intermittent stream shall not be permitted if it would cause the uncontrolled diversion of the stream during periods of high water.

h. Waters flowing through or by the mining operation shall meet the standards set by the U.S. Environmental Protection Agency and the Wyoming Water Quality Division in regard to the effect of the operation upon such waters.

i. For coal mining operations, all land within 100 feet of a perennial or intermittent stream shall not be disturbed unless specifically authorized by the administrator. This land shall be clearly marked by durable and easily recognizable markers.

j. Channel and flood plain shall be designed to contain the 10-year precipitation event, if temporary, or the

100-year precipitation event, if permanent, or a greater event as specified by the administrator. Cross sections of the existing stream above, below and within the disturbed area may be used to determine the flow capacities, channel configuration and shape.

Section 3. Surface waters

a. The operator shall list and describe the name, location, size, and approximate intermittent flow intervals for the present surface waters in and adjacent to the proposed permit area. The list shall include, but not be limited to, rivers, creeks, lakes, reservoirs, springs and marshes.

b. Monitoring surface water conditions may be required during the course of the proposed operation based on the existing water conditions and the nature of the proposed operation.

Section 4. Subsurface waters

a. The operator shall submit an estimate of the depth and quantity of any subsurface waters existing in the proposed permit area. The operator may be required to conduct test drilling and monitoring in order to determine the exact depth, quantity and quality of groundwater in geological formations affected by the mining operations. Such drilling will require permits from the State Engineer's Office.

b. For coal mining operations, infiltration rates, subsurface flow and storage characteristics, and the quality of groundwater shall be monitored to determine the effects of mining and reclamation operations on the recharge capacity of reclaimed lands and on the quantity and quality of water in groundwater systems at the mine area and in associated offsite areas. When operations are conducted in such a manner that may affect the groundwater system, groundwater levels and groundwater quality shall be periodically monitored using wells that can adequately reflect changes in groundwater quantity and quality resulting from such operations. The administrator may require of the permittee additional hydrologic tests and monitoring wells.

Section 5. Water rights

a. The operator shall list all known adjudicated and appropriated water rights on the proposed permit area and adjacent lands.

b. The operator shall submit a list of all existing water wells on the proposed permit area and adjacent lands, including all wells filed with the State Engineer's Office, three (3) miles or less from the proposed permit area. A survey of the pre-mining water levels in the above wells may be required.

c. The operator shall submit a description of the immediate drainage area which includes the proposed permit area including the names of the creeks, streams, and rivers which drain the proposed permit area and adjacent lands including uses for domestic, municipal, industrial, agricultural, and wildlife purposes.

(1) Agricultural uses shall be identified.

(2) Wildlife uses shall be described as watering or habitat.

d. The operator shall, as required by state law replace the water supply of an owner of interest in real property who obtains all or part of his supply of water for domestic, agricultural, industrial, or other legitimate use from an underground or surface source where such supply has been affected by contamination, diminution, or interruption proximately resulting from coal mine operation by the operator.

Section 6. Water impoundments

a. Water impoundments may be considered as final reclamation when it can be shown that their construction is an approved use of the land after reclamation and the proposed impoundments are part of the approved plan in accordance with the provisions of the statutes and these regulations.

b. In order for such impoundments to be considered for approval, the operator must submit the following in support of the proposal:

(1) Written consent from the surface landowner if different than the mineral owner.

(2) A description of the proposed use of the impoundment.

(3) A statement of the source, quality and quantity of water available for impoundment. It must be demonstrated that these characteristics will be consistent with the proposed use.

(4) A statement regarding the suitability for recreational, irrigation, livestock or wildlife watering. Such waters must be suitable for such use as determined by applicable State and Federal standards. The operator may be required to monitor surface and groundwaters in order to determine that upon completion of the operation, the water quality and quantity will be consistent with the proposed use.

c. The operator must submit an alternative plan to be followed in the event monitoring indicates there is insufficient water of suitable quality to accomplish the proposed water impoundment plan.

d. All proposed water impoundments and dams to be constructed for reclamation purposes must be approved by the State Engineer's Office.

e. In addition to the above conditions, water impoundment construction will be subject to the following requirements:

(1) Dams must contain an overflow notch and spillway so as to prevent failure by overfilling and washing. Overflow notches and spillways must be riprapped with rock or concrete to prevent erosion.

(2) The slopes around all water impoundments must be gentle enough so as not to present a safety hazard to humans or livestock and so as to accommodate revegetation. Variations from this procedure may be approved by the administrator based on the conditions present at the individual locality.

(3) Mineral seams and other sources of possible water contamination within the impoundment area must be covered with overburden or stabilized in such a manner to prevent contamination of the impounded water.

(4) Bentonite or other mire producing material within the impoundment basin shall be removed or covered with materials which will prevent hazards to man or beast.

Section 7. Tailings impoundments

a. Impoundments to contain mill tailings or slurry tailings shall be constructed in accordance with established engineering principles and shall be approved by the Wyoming State Engineer's Office. A copy of the State Engineer's approval shall be attached to the application.

b. Uranium mill tailings impoundments shall be subject to all applicable State and Federal requirements.

c. Reclamation of tailings impoundments shall be accomplished by removal and storage of all topsoil present within the tailings basin. After termination of operations, the topsoil shall be replaced and revegetated in accordance with these rules and regulations.

(1) If other methods of reclamation and stabilization against wind and water erosion are found to be necessary because of natural conditions, this must be stated and described subject to the administrator's approval.

Section 8. Water quality standards, effluent limitations, and sedimentation control for coal mining operations

a. All surface drainage from disturbed areas (excluding sedimentation ponds, diversion ditches, or road disturbances) shall pass through a sedimentation pond(s) before leaving the permit area. Sedimentation ponds shall be constructed prior to mining activity disturbance and shall be retained until the area has been successfully reclaimed, or until erosion movement on such disturbed areas does not exceed "t" values which would be allowed on similar soils and slopes under natural conditions. Discharge from the disturbed area for all events less than the 10-year, 24 hour storm shall meet federal and state effluent standards.

Exemptions may be granted only when the disturbed drainage area within the total affected land is small and the permittee demonstrates that sediment ponds are not necessary. The permittee shall treat any water discharged from the affected land that does not meet the effluent standards. A neutralization process shall be required of the permittee if the pH of the discharge water is less than 6. If the mine normally produces less than 500 tons of coal per day, and small and infrequent treatments are required, a manual system may be used.

b. The requirement for downstream erosion control practices shall reflect the degree to which successful techniques have been applied at the sources of sediment. Sediment control measures consist of utilizing proper mining, reclamation methods, and sediment control practices (singly or in combination) including but not limited to:

(1) Disturbing the smallest practical area at any one time during the mining operation through progressive backfilling, grading and timely revegetation;

(2) Shaping the backfill material to promote a reduction of the rate and volume of runoff;

(3) Retention of sediment within the pit and affected land;

(4) Diversion of overland and channelized flow from undisturbed areas around or in protected crossings through the affected lands;

(5) Utilization of straw dikes, riprap, check dams, mulches, vegetative sediment filters, dugout ponds, and other measures that reduce overland flow velocity, reduce runoff volume or entrap sediment;

(6) Sedimentation ponds.

c. Sedimentation ponds should be located as near as possible to the affected lands and out of major stream courses and shall meet the following criteria:

(1) Sedimentation ponds must provide 24-hour theoretical detention time from a 10-year, 24-hour precipitation event. Runoff diverted away from the disturbed drainage areas need not be considered in sedimentation pond design. The characteristics of the mine site, reclamation procedures, and on-site control practices shall be considered when determining the runoff volume.

(2) Upon approval of the administrator, theoretical detention time may be reduced to not less than 10 hours as demonstrated by the permittee, due to any improvement in sedimentation removal efficiency as a result of pond design or when the permittee has demonstrated that the size distribution or the specific gravity of the suspended matter or the utilization of chemical treatment or flocculation are such that the effluent limitations can be met. The detention time shall be stipulated.

d. An additional sediment storage volume must be provided which is equal to a minimum of 3 years of accumulated sediment from the affected lands to the pond. The volume of sediment delivered to the pond may be determined using the Universal Soil Loss Equation, gully erosion rates, and sediment delivery ratio converted to volume by sediment density, or other empirical methods acceptable to the administrator based upon actual reservoir sedimentation surveys. Upon approval of the administrator the sediment storage volume may be reduced in an amount, as demonstrated by the permittee, equal to the sediment removed by other appropriate sediment control measures or by lesser sediment yields as evidenced by empirical data for runoff characteristics.

e. Ponds may be of the permanent pool or self-dewatering type. Dewatering-type ponds shall use siphon or other dewatering methods approved by the administrator.

f. Spillway systems shall be properly located to maximize the distances from the point of inflow into the pond to maximize detention times. Spillway systems shall be provided to safely discharge the peak runoff from a precipitation event with a 25-year recurrence interval, or larger event as specified by the administrator.

g. Sediment shall be removed from sedimentation ponds to assure maximum sediment removal efficiency and attainment and maintenance of effluent limitations.

h. If a sedimentation pond has an embankment that is more than 20 feet in height, as measured from the upstream toe of the embankment to the crest of the emergency spillway, or has a storage volume of 20 acre-feet or more, the following additional requirements shall be met:

(1) An appropriate combination of principal and emergency spillways shall be provided to safely discharge the runoff resulting from a 100-year, 6-hour precipitation event, or larger event as specified by the administrator;

(2) Ponds shall be designed and constructed with an acceptable static safety factor at least 1.5 of maximum design flood elevation of the pool to ensure embankment slope stability;

(3) The minimum top width of the embankment shall not be less than the quotient of (H+35)/5 where H is the height of the embankment in feet as measured from the upstream toe to the top of the embankment;

(4) Ponds shall have appropriate barriers to control seepage along conduits that extend through the embankment.

i. All ponds shall be designed and inspected under the supervision of, and certified after construction by, a registered professional engineer.

j. All ponds shall be examined for structural weakness, erosion, and other hazardous conditions.

Section 9. Water monitoring for coal mining operations

Sufficient data to describe the likely variations of water flow, pH, total iron, total manganese, total suspended solids, and any other parameter requested by the administrator shall be monitored before and during mining operations and during and after reclamation as required by the administrator. The permittee is responsible for properly installing, operating, maintaining, and removing all necessary monitoring equipment.

Section 10. Alluvial valley floors for surface coal mining operations

a. Coal mining operations conducted in or adjacent to alluvial valley floors shall be planned and conducted so as to preserve the essential hydrologic functions of these alluvial valley floors throughout the mining and reclamation process. These functions shall be preserved by maintaining or re-establishing those hydrologic and biologic characteristics of the alluvial valley floor that are necessary to support the function. The permittee shall provide information to the administrator as required in subsection c. of this section to allow identification of essential hydrologic functions and demonstrate that the functions will be preserved. The characteristics of an alluvial valley floor to be considered include, but are not limited to:

(1) Longitudinal profile (gradient), cross-sectional shape, and other channel characteristics of streams that have formed within the alluvial valley floor and that provide for maintenance for the prevailing conditions of surface flow;

(2) Aquifers (including capillary zones and perched water zones) and confining beds within the mined area which provide for storage, transmission, and regulation of natural groundwater and surface water that supply the alluvial valley floors;

(3) Quantity and quality of surface and groundwater beneath alluvial valley floors;

(4) Depth to and seasonal fluctuations of groundwater beneath alluvial valley floors;

(5) Configuration and stability of the land surface in the flood plain and adjacent low terraces in alluvial valley floors as they allow or facilitate irrigation with flood waters or subirrigation and maintain erosional equilibrium;

(6) Moisture-holding capacity of soils (or plant growth medium) within the alluvial valley floors, and physical and chemical characteristics of the subsoil which provide for sustained vegetation growth and cover through dry months.

b. Coal mining operations shall not interrupt, discontinue, or preclude farming on alluvial valley floors and shall not materially damage the quantity or quality of surface or groundwater that supplies these valley floors unless the premining land use is undeveloped rangeland which is not significant to farming on the alluvial valley floor or unless the area of affected alluvial valley floor is small and provides negligible support for the production from one or more farms. This subsection b. does not apply to those coal mining operations that:

(1) Were in production in the year preceding August 3, 1977, were located in or adjacent to an alluvial valley floor, and produced coal in commercial quantities during the year preceding August 3, 1977; or,

(2) Had specific permit approval by the administrator before August 3, 1977 to conduct surface coal mining operations for an area within an alluvial valley floor.

c. (1) Before surface mining and reclamation operations authorized under subsection b. of this section may be issued a new, revised or amended permit, the permittee shall submit, for regulatory authority approval, detailed surveys and baseline data to establish standards against which the requirements of subsection a. of this section may be measured and from which the degree of material damage to the quantity and quality of surface and groundwater that supply the alluvial valley floor may be addressed. The surveys shall include:

a) A map showing the location and configuration of the alluvial valley floors;

b) Baseline data covering a full water year for each of the hydrologic functions identified in subsection a. of this section.

c) Plans showing how the operation will avoid, during mining and reclamation, interruption, discontinuance, or preclusion of farming on the alluvial valley floors and will not materially damage the quantity or quality of water in surface and groundwater systems that supply such valley floors;

d) Historic land use data for the proposed permit area and for farms to be affected; and

e) Such other data as the administrator may require.

(2) Mining operations which qualify for the exemptions in subsection b. of this section are not required to submit the plans prescribed in (1) c. of this subsection.

d. If coal deposits are precluded from being mined by this section, the administrator shall certify to the Secretary of the Interior that the coal owner or lessee may be eligible for participation in a coal exchange program pursuant to Section 510(b) (5) of Public Law 95-87.

Section 11. Discharge structures for coal mining operations

Discharge from sedimentation ponds and diversions shall be controlled, where necessary, using energy dissipators, surge ponds, or other devices to reduce erosion and prevent deepening or enlargement of stream channels and to minimize disturbances to the hydrologic balance.

CHAPTER IV

RECLAMATION SCHEDULES

Section 1. Time schedule - The approved reclamation plan must be coordinated with the operator's mining plan in such a manner so as to facilitate reclamation at the earliest possible time consistent with the orderly development of the mining property.

a. Reclamation must begin as soon as possible after mining commences and must continue concurrently until such time that the mining operation is terminated and all of the affected land is reclaimed. If conditions are such that final reclamation procedures cannot begin until the mining operation is completed, this must be explained in the reclamation plan. Regardless of the type of operation, reclamation must begin within 180 days after termination of mineral production and must be completed within the time frame of the approved reclamation schedule. A detailed time schedule for the mining and reclamation progression must be included in the reclamation plan. This time schedule shall:

(1) Apply to reclamation of all lands to be affected in the permit area.

(2) Designate times for backfilling, grading, contouring, and reseeding.

(3) Be coordinated with a map indicating the areas of progressive mining and reclamation.

(4) Establish reclamation concurrently with mining operations, whenever possible.

Section 2. Delays - If reclamation cannot be completed within two (2) years after mining has ceased in a particular area, the operator must justify the reasons for he delay. If any operator desires to leave an operation partially unreclaimed for a period of time on the basis that economic conditions may make it profitable to continue mining in the near future, this must be explained in a written request to the Land Quality Division. This request must be accompanied by an economic report describing the extent of remaining reserves along with a description of all interim procedures and precautions that will be taken to stabilize all affected land, prevent any surface and subsurface water pollution, avoid public nuisance and provide safety measures to protect human and animal life. All requests must be accompanied by written consent from the surface land owners to the proposed

plan. All bonding and monitoring requirements shall be maintained during such an interim period.

CHAPTER V

EXPLORATION

Section 1. Requirements - No person shall engage in exploration by dozing without a license to explore by dozing as specified in Section 35-11-414, Wyoming Statutes, as amended.

Any person desiring to engage in mineral exploration by dozing shall make application to the administrator for a special license. Such application shall be made upon the form furnished by the administrator for such purpose. Application for a license to explore by dozing shall be made in duplicate and shall contain the following information:

a. Name and address of the person making the application.

b. Names and addresses of the supervisory personnel employed by the applicant who are responsible for exploratory operations in the State of Wyoming.

c. A map showing access roads to be constructed, areas where exploration is to be carried out, locations of public roads providing access to the area, dwellings, surface drainage, utilities, lakes, streams, creeks, and springs. This map shall be prepared on a topographic base map and shall be drawn on a scale of not less than one inch to four hundred feet (1" = 400') for all areas within one-half mile of any road which is to be constructed or exploratory pit or drill pad which is to be dug or constructed.

d. A U.S.G.S. topographic map, if one has been issued, showing the general area in which exploration is to be conducted. The area upon such maps which is shown in more detail under the provisions of sub-paragraph c. herein above shall be distinctly outlined and lightly shaded with a transparent color. In lieu of a topographic map, an aerial photo of suitable scale may be substituted for the map base.

e. A statement as to the estimated number of acres including roads, exploration pits, drill pads, and the area to be covered by displaced material, which will be affected within the period covered by the license.

f. The location of the lands by legal subdivision, section, quarter section (when available), township, and range.

g. A general description of the land included within the area covered by the license which shall include as nearly as possible its vegetative cover, the annual rainfall, general directions and average velocities of winds, indigenous wildlife, past and present uses, present surface waters, water rights and their immediate drainage areas and uses, nature and depth of the overburden, topsoil, mineral seams or other deposits and any subsurface waters known to exist above the deepest projected depth of the exploration operation.

h. Names and addresses of the owners of the surface of all land to be affected.

i. Names and addresses of the owners of the mineral rights to all land to be affected.

j. A reclamation plan which shall include the following:

(1) The proposed method of separating topsoil, subsoil and overburden, protecting them and conserving them from wind and water erosion before reclamation begins by planting a quick growing cover or other acceptable methods and the proposed method of preserving topsoil free of acid, toxic, or vegetation-inhibiting materials, as well as the manner in which topsoil shall be replace. If topsoil is virtually non-existent or is not capable of sustaining vegetation, then the method of removing, segregating, and preserving in a like manner subsoil which is better capable to support vegetation. Overburden piles are to be kept separate and apart from topsoil. Topsoil piles are to be clearly marked as to avoid confusion. If conditions do not permit the separation, conservation, and replacement of topsoil or subsoil, a full explanation of such conditions shall be given and alternate procedures proposed for approval.

(2) A plan for insuring that all acid forming or toxic materials, or materials constituting a fire, health or safety hazard uncovered during or created by the exploration process are promptly treated or disposed of during the exploration process in a manner designed to prevent pollution of surface or subsurface water or threats to human or animal health and safety. Such method may include but not be limited to covering, burying, temporarily impounding or otherwise containing or disposing of the acid, toxic, radioactive or otherwise dangerous material.

(3) Type of vegetation and manner of proposed revegetation or other surface treatment of affected area.

(4) A detailed description of the proposed access roads including engineering design and structures for prevention of erosion and pollution of streams and water courses.

(5) The procedures proposed to avoid constituting a public nuisance, endangering the public safety, human or animal life property, wildlife and plant life in or adjacent to the license area including a program fencing all roadways, pits and refuse or waste areas to protect the surface owner's on-going operations.

k. A description of backfilling, grading, and contouring procedures so as to blend with the topography of the surrounding terrain and, where possible, return it to its approximate original contour.

l. An estimate, prepared in accordance with established engineering principles, of the cost of hiring an independent contractor to accomplish the reclamation of all land in the license area which will be affected by the exploration for which license is sought. Such estimate shall also give a breakdown of costs including the cost per acre of backfilling, replacement of topsoil, and the cost of seed or seedlings, and the planting thereof.

m. Such other information as the administrator deems necessary to enable him to insure compliance with the Wyoming Environmental Quality Act.

Section 2. <u>License issuance and renewal</u>

a. Within thirty (30) days following receipt of a complete application for a license to explore, the administrator shall notify the applicant of the amount of bond to be required for the applicant. Such bond shall be in an amount sufficient to pay all costs which would be incurred by the State in the event it is necessary for the State to forfeit such bond and accomplish reclamation of the affected area including access roads, drill pads, and exploration pits.

(1) Upon receipt of a satisfactory bond in the amount required by the administrator, the administrator shall approve the application if it is otherwise in order and shall return a duplicate to the applicant to serve as his license to explore by dozing. No holder of a license to explore shall produce and save or sell any minerals from within the license area without first obtaining a permit and license to mine. The only material which may be removed from the permit area shall be that necessary for assay and testing purposes.

(2) It shall be the operator's responsibility to inform the administrator whenever an increase in the bond is necessary should the amount of affected land be greater than that estimated in the license application. The operator shall take immediate steps to obtain an increase in the amount of the bond for such contingencies.

b. The administrator may deny the issuance of a license to explore by dozing if he finds the following:

(1) If the application is in violation of the intent of the Wyoming Environmental Quality Act, which is to reclaim the land to a use equal to or higher than the highest previous use.

(2) If the application is incomplete.

(3) If the bond is insufficient to reclaim the area listed within the license as to be affected.

(4) If the operation will irreparably harm lands which lie within an area designated by the Council as of unique and irreplaceable, historical, archaeological, scenic or natural value.

(5) If information submitted by the operator is found to be intentionally misrepresentative.

c. The license to explore may be renewed annually. Renewal reports shall be filed within 30 days before the anniversary date of the license on forms provided by the Land Quality Division and shall include:

(1) Name of licensee and license number.

(2) Location of area by section, quarter section (when available), township and range.

(3) Number of acres disturbed during the last year.

(4) Estimated number of acres to be disturbed in the next twelve (12) months.

(5) Updated maps.

(6) Current status of reclamation performed.

CHAPTER VI

MINING PLAN

Section 1. Applications - All mining permit applications shall be furnished on forms supplied by the administrator and must be accompanied by a detailed mining plan which is coordinated with the proposed reclamation plan and the reclamation time schedule. The plan must be approved by the administrator before a permit can be issued and any activity can begin in conjunction with the proposed operation. The administrator shall approve any such plan if it is found that such plan contains all the information required by the law and that the proposals for mining will, when put into effect, accomplish the objective in such a way as to facilitate reclamation at the earliest possible time and create a minimum of environmental disturbances. If a plan is rejected by the administrator, the Land Quality Division will provide reasons for rejection and provide suggestions for making the plan acceptable.

Section 2. Plan requirements - The mining plan must include the following information and any other information as required by the administrator:

a. A detailed description of the lands to be affected within the permit area, how these lands will be affected, for what purpose these areas will be used during the course of the mining operation and a time schedule for affecting these lands.

b. For each commodity mined in the permit area, the number of acres that will be affected annually.

c. A description of the mining techniques to be used during the operation (underground-block-caving, underground-room and pillar, open pit, strip mining, dredging, etc.), and a time schedule stating how the mining will proceed with time for each commodity mined in the permit area.

d. An explanation of any plans for temporarily diverting streams or drainage in accordance with requirements listed in Chapter III, Section 2, of these regulations.

e. An explanation of plans for reclamation of haul or access roads or railroad spurs following the guidelines given in Chapter VIII, Section 1, of these regulations.

f. Plans for relocating any existing ponds or impoundments.

g. A design for constructing any impoundments or tailings reservoirs in accordance with requirements listed in Chapter III, Sections 6 and 7, of these regulations.

h. Plans for spoil or development waste rock piles to include locations, height of piles, and proposed slopes of piles in accordance with requirements listed in Chapter II, Section 4 of these Regulations.

Section 3. Physical land descriptions

a. Vegetative cover

(1) Grasses - the description shall include the common and/or scientific names of the predominating species of grasses and their estimated abundance per square yard on a typical area or areas, if more than one vegetative zone is present, within the proposed permit area.

(2) Trees, shrubs, and forbs - the description shall include the common and/or scientific names of the predominate species of trees, shrubs and forbs and their estimated abundance in a typical area within the proposed permit area. If trees are present within the proposed permit area, then the description shall include an estimate of the range of their heights and diameters.

(3) Noxious weeds - if any weeds or other plants listed by the local Weed and Pest Control District as harmful are present within the proposed permit area, the description shall include a list of their names, either common or scientific, and their abundance.

(4) Annual precipitation - the operator shall submit an estimate total annual precipitation for the proposed permit area. Data from the nearest official weather reporting station may be used. Operations more than fifty miles from an official weather station that are permanently staffed may be required to keep precipitation records.

(5) Average wind direction and velocity - the operator shall submit the average wind direction and velocity recorded at the nearest official weather station or as measured at the site.

Section 4. Indigenous wildlife

a. The operator shall submit a list of the indigenous vertebrate wildlife species by common and scientific names observed within one (1) mile of the proposed permit area.

b. Special attention shall be paid to the possible presence of wildlife on or adjacent to the proposed permit area which are listed on the "Endangered Species List", of the Wyoming Game and Fish Department.

c. If significant habitat or migration route disruption is possible or likely, the Wyoming Game and Fish Department shall be contacted in order to determine the types and numbers of wildlife likely to be disturbed or displaced.

Section 5. Overburden, topsoil, subsoil, mineral seams or other deposits and prime farmland

a. Overburden - The operator shall submit a detailed description including the thickness, geological nature (rock type, orientation, etc.), the presence of toxic, acid forming, or vegetative retarding substances, or any other factor that will influence the mining or reclamation activities.

b. Topsoil - the operator shall submit a description of the thickness and nature of the topsoil, if any. If the topsoil varies in thickness or character over the proposed permit area, then this shall be described. A detailed soils survey and soil analyses may be required.

c. Subsoil - the nature and thickness of the subsoil, if any, shall be described as well as its distribution over the permit area. Detailed analyses of the subsoil may be required, if there is reason to suspect it may be of better quality for revegetation than the topsoil, or could be used to supplement topsoil in reclamation efforts. If the subsoil is suspected of containing substances that might cause pollution or hinder reclamation, analyses will provide a basis for determining how to handle this material during reclamation.

d. Mineral seams or other deposits - the operator shall submit a detailed description of the mineral seam in the proposed permit area, including, but not limited to, their depth, thickness, orientation (strike and dip), and rock or mineral type. Maps or geologic cross-sections may be used to illustrate the description of the mineral seams.

e. Prime farmland - For surface coal mining operations where prime farmland is suspected to occur within the permit area a detailed soil survey shall be conducted on suspect areas. The operator shall identify land in accordance with the soils criteria of the Secretary of Agriculture which generally state that prime farmland soil must have an adequate and dependable water supply from precipitation or

irrigation, a favorable temperature and growing season, acceptable acidity or alkalinity, acceptable salt and sodium content and few to no rocks. Lands which qualify under the appropriate soils criteria for prime farmland and have had a history of intensive agricultural use meeting the criteria in either (1) or (2) below shall be restored as prime farmland in accordance with Chapter II, Section 4.a.(8) of these regulations.

Historical agricultural use criteria for prime farmland:

(1) Nonirrigated prime farmland soil where cultivated crops or small grains have been harvested for 5 out of any 10 year period.

(2) Prime farmland soil which has been irrigated and where irrigation water availability and quality is sufficient to sustain production of cultivated crops or small grain for 8 out of 10 years and when a cultivated crop or small grain has been harvested for any one (1) year.

If the administrator, in consultation with the Local Conservation District, determines that the acreage of the prime farmland meeting the above criteria is so small that it would not be economical to maintain such land as cropland after restoration, it need not be treated as prime farmland. Nothing in this subsection shall apply to any permit issued prior to August 3, 1977, or to any revisions of any existing surface coal mining operation for which a permit was issued prior to August 3, 1977.

CHAPTER VII

SMALL MINING OPERATIONS

Section 1. Mining permit requirements

a. Prior to the commencement of a small surface mining operation involving not more than ten thousand (10,000) yards of overburden and ten (10) acres of affected land in any one (1) year, an application shall be submitted to the administrator in duplicate on forms supplied by the division. Each application shall contain:

(1) All information required in W.S. 35-11-406(a) except:

(a) W.S. 35-11-406(a)(vi)(A) is modified to require the location of the proposed permit area by legal subdivision, section, township and range. If there is no other survey, give the location by protracted survey and map, metes and bounds, claim number and mining district.

(b) W.S. 35-11-406(a)(vi)(D) is suspended.

(c) W.S. 35-11-406(a)(vii) is modified to require only:

(i) A map of vegetation types and a range site - range condition survey on the proposed permit area along with a list of species and a ranking of their relative abundance in each vegetation type. The applicant is encouraged to submit labeled photographs to demonstrate each vegetation type and to document areas of sparse vegetation. Locations photographed should be shown on the vegetation map.

(ii) A description of the present land use within the permit boundary including a map at the same scale as the postmining map showing the contours of the proposed permit area and the surrounding lands.

(iii) A description of any surface waters within the proposed permit area including estimated average flow rates, storage volume of any reservoirs and associated water rights within the permit area of any stream, reservoir, or lake. Depth to the groundwater shall be indicated.

(iv) A soil map which identifies the soil types, location, their suitability for reclamation and

depths and volume of suitable topsoil present on the proposed affected lands. Also, a description of the subsoil and/or overburden material existing between the topsoil and mineral seams.

(d) W.S. 35-11-406(a)(ix) is modified to require only:

(i) A map based upon public records showing the boundaries of the land to be affected.

(ii) The names of any surface waters within the proposed permit area.

(iii) Water wells on and within 1/2 mile of the permit area shall be located on a map where the maximum expected depth of disturbance is within 20 feet of or below the water table.

(iv) A map to show an outline of all areas previously disturbed by underground mining or which will be affected by future underground mining as a guide to potential subsidence problems.

(2) In addition to a description of the mining technique and method of operation to be used, each operator shall supply all information required in W.S. 35-11-406(b) except:

(a) W.S. 35-11-406(b)(ii) is modified to also include statements as to the maximum slope that will be created and a plan to reestablish the original surface drainage.

(b) W.S. 35-11-406(b)(iii) is modified to also include a description of the methods and schedule of seedbed preparation and seeding, the amounts of plants to be used, and protective measures against grazing animals.

(c) W.S. 35-11-406(b)(iv) is suspended.

(d) W.S. 35-11-406(b)(v) is modified to require only a map showing the location of all activities associated with the operation including roads, temporary drainage diversions, ponds, stockpiles for topsoil, overburden, ore product and waste, plant site and other processing facilities.

(e) W.S. 35-11-406(b)(vii) is modified to allow the administrator to waive this requirement if requested by the operator and the degree of surface disturbance is small.

(f) W.S. 35-11-406(b)(viii) is modified to require only a description of how topsoil will be salvaged, stockpiled, and replaced during reclamation.

(g) W.S. 35-11-406(b)(x) is suspended.

b. Notification and publication requirement - Upon written notification by the division that the application is complete, the following procedure shall be followed:

(1) W.S. 35-11-406(d) shall be met.

(2) All requirements of W.S. 35-11-406(f) shall be met except the applicant shall cause notice of the application to be published once a week for only two (2) consecutive weeks in a newspaper of general circulation in the location of the proposed operation.

c. All requirements of W.S. 35-11-406(g) shall be met.

Section 2. Conversion of small mine permit to standard mine

If an operator, holding a valid mining permit under W.S. 35-11-401(h) for a small mining operation, intends to expand his operation to remove more than 10,000 yards of overburden or affect more than ten (10) acres of land per year, the operator shall submit revised mining and reclamation plans, revised maps and an appropriate reclamation bond to the Land Quality Division and obtain approval for the expansion prior to the time when he intends to exceed the established limits. The provisions of Section 35-11-406(d),(f) and (g) will be required. Any public hearing shall apply only to the request of the operator to expand his operation, and the valid mining permit already held by the operator will not be affected.

CHAPTER VIII

OTHER CONSIDERATIONS

Section 1. Roads and spur railroad lines and other transport facilities

a. Enclosures within permit area - Access roads and railroad spurs shall be considered within the permit area and shall be covered by a reclamation bond. Spur lines shall be included within the permit area to the point where they join the main line or a spur serving another mine. Access roads shall be included within the permit area. Roads maintained by the County, State or Federal Government need not be included in the permit area. Existing private roads must be included in the permit area if substantial upgrading is required. Transport facilities shall be constructed, maintained and reclaimed to control diminution or degradation of water quality and quantity and to the extent possible prevent additional contributions of suspended solids to streamflow outside the permit area.

b. Upgrading - Existing private roads need not be included within the permit area with the following exception(s).

(1) When the existing road requires extensive regrading and resurfacing in order to render the road usable.

(2) Upgrading of the road requires cuts, fills, and borrow areas.

c. Legal ownership - If the operator includes roads or spur lines within the permit area but does not possess the mineral rights or the right-to-mine, for these lands, the lands shall then be listed in the application as a separate subsection in Appendix "C", the legal land description. The heading of the subsection shall make it clear that the right-to-mine is not claimed on the described lands. Surface owners shall be listed for all lands crossed by spur lines and roads.

d. Standards for roads.

(1) Roads shall not be constructed up a stream channel or so close that the material shall spill into the channel.

(2) Streams shall be crossed at or near right angles unless contouring down to the stream bed will result in less potential stream bank erosion. Structure of ford entrances and exits must be constructed to prevent water from flowing down the roadway. For coal mining operations stream fords are prohibited unless they are specifically approved by the administrator as temporary routes across dry streams that will not adversely affect sedimentation and that will not be used for coal haulage.

(3) A ditch must be provided on both sides of a through cut or a cutfill section, with ditch relief cross drains being spaced according to grade. Water must be intercepted before reaching a switchback or large fill area and diverted from the road. Water on a fill or switchback must be released below the fill or switchback, not over it. Waterbars shall be installed where needed.

(4) Culverts shall be installed at prominent drainageways, small creeks and springs. Where necessary, culverts must be protected from erosion by adequate rock, concrete or riprap. Culverts and drainage pipes shall be constructed to avoid plugging, collapsing, or erosion at inlets and outlets.

(5) Trees and vegetation may be cleared only for the essential width necessary to maintain slope stability and to serve traffic needs.

(6) Drainage facilities shall be installed as road construction progresses. For coal mining operations, drainage ditches shall be provided at the toe of all cut slopes formed by construction of roads. Trash racks and debris basins shall be installed in the drainage ditches wherever debris from the drainage area could impair the functions of drainage and sediment control structures, and ditch relief and cross drains shall be spaced according to grade.

(7) For coal mining operations, all roads, insofar as possible, shall be located on ridges or on the available flatter, and more stable slopes to minimize erosion. These roads shall be constructed in compliance with the following grade restrictions or other grades determined by the Administrator to be necessary to control erosion:

(a) The overall sustained grade shall not exceed 1V:10H (10percent);

(b) The maximum grade greater than 10 percent shall not exceed 1V:6.5H (15 percent) for more than 300 feet;

(c) There shall not be more than 300 feet of grade exceeding 10 percent within each 1,000 feet.

(8) For coal mining operations, for access and haul roads that are to be maintained for more than 1 year, water-control structures shall be designed with a discharge capacity capable of passing the peak runoff from a 10-year, 24-hour precipitation event, or greater as required by the Administrator.

(9) For coal mining operations, access and haul roads shall be surfaced with durable material. Toxic or acid-forming substances shall not be used. Vegetation may be cleared only for the essential width necessary for road and associated ditch construction and to serve traffic needs.

(10) Access and haul roads and drainage structures shall be routinely maintained.

e. Exemptions concerning roads.

(1) If approval is obtained from the surface landowner to leave a road unreclaimed, an operator may request in writing to the Land Quality Division that a road be permitted to remain unreclaimed. The operator must furnish proof of the surface landowner's approval. Final decision of road reclamation will be made by the Land Quality Division administrator. For coal mining operations, final decisions of the administrator on exemptions concerning roads shall be made in accordance with the requirements contained in Chapter II, Section 1.b. (1), (a) - (i) of these regulations.

(2) In the event that the surface landowner, a city or town, another agency of the State of Wyoming or an agency of the United States government has approved the proposed access roads and has requested they not be reclaimed, no bond shall be required of the applicant for the reclamation of such roads and reclamation of such roads shall not be required; provided, however, that the administrator receives a copy of the written request from the surface landowner, city or town, or agency of the State or Federal Government, for retention of such roads.

f. Subject to valid existing rights no surface coal mining operations except those which existed on August 3, 1977, shall be permitted within one hundred feet of the outside right-of-way line of any public road, except where mine access roads or haulage roads join such right-of-way lines and except that the administrator may permit such roads to

be relocated or the area affected to lie within one hundred feet of such road, if after public notice and opportunity for public hearing in the locality a written finding is made that the interest of the public and the land owners affected thereby will be protected.

Section 2. Filing and advertising - Filing of the reclamation plan with the County Clerk and publication of the notices of application in a local newspaper, as required by Section 35-11-406 (d), (f), and (g), shall commence within 15 days of receipt by the permit holder of confirmation that the Land Quality Division has reviewed the application and considers it to be complete. This confirmation is not approval of the application. Immediately after first publication all interested parties shall receive a copy of the notice as provided for in Section 35-11-406 (f). Compliance with Section 35-11-406 (d), (f), and (g) is required of small operators as defined in Chapter VII, Section 1, of these Regulations.

Section 3. Disposal of buildings and structures

a. All buildings and structures constructed for the purposes of the mining operation must be removed or dismantled unless it can be demonstrated to the administrator's satisfaction that the buildings or structures will be of beneficial use in accomplishing the proposed use of the land after reclamation.

b. If the operator does not wish to remove certain buildings or facilities he must obtain the written consent of the surface landowner to leave the buildings or facilities intact. The operator must make a request in writing, providing written proof of the above to the Land Quality Division, that the buildings or facilities be permitted to remain intact.

Section 4. Archaeological and paleontological material - The administrator may temporarily deny an application for a mining permit in any area where prior scientific investigations known to the administrator, affirm the existence of significant artifacts, fossil or other articles of archaeological or paleontological value. Upon recommendation by a qualified archaeologist or a qualified paleontologist, the administrator may require an evaluation of such area prior to the time that a permit or license is issued.

Section 5. Unanticipated conditions

a. An operator encountering unanticipated conditions shall notify the administrator as soon as possible and in no event more than five days after making the discovery.

b. An unanticipated condition is any condition encountered in a mining operation and not mentioned by the operator in his mining or reclamation plan which may seriously affect the procedures, timing, or outcome of mining or reclamation. Such unanticipated conditions include but are not limited to the following:

(1) The uncovering during mining operations of any acid forming, radioactive, inflammable, or toxic materials which must be burned, impounded, or otherwise disposed of in order to eliminate pollution or safety hazards.

(2) The discovery during mining operations of a significant flow of groundwater in any stratigraphic horizon.

(3) The occurrence of faults or unstable soil and overburden materials which may cause sliding or caving in a pit which could cause problems or delays with mining or reclamation.

(4) The occurrence of uncontrolled underground caving or subsidence which reaches the surface, causing problems with reclamation and safety hazards.

(5) A discovery of significant archaeological or paleontological importance.

c. In the case of the uncovering of hazardous materials, the operator shall take immediate steps to eliminate the pollution or safety hazard. Under all conditions the operator must take appropriate measures to correct, eliminate, or adapt to an unanticipated condition before mining resumes in the immediate vicinity of that condition.

Section 6. <u>County cooperative agreements</u>

a. Cooperative agreements between the individual counties and the Division may be entered into by the County Commissioners, the Director and the Administrator in order to facilitate the reclamation activities of those areas affected by the county.

(1) The County Commissioners of each county shall designate a person to coordinate the mining and reclamation activities of the individual county with the Division.

(2) The Division will assist each county in determination of the best possible methods of reclamation and prevention of pollution and erosion arising from their mining operations.

(3) The county shall make an annual report to the administrator detailing past year's activity of the county in mining and reclamation.

CHAPTER IX

EXPLOSIVES FOR SURFACE COAL MINING OPERATIONS

Section 1. General

a. The permittee shall comply with all applicable local, State and Federal laws and regulations and the requirements of this section in the storage, handling, preparation, and use of explosives.

b. Blasting operations that use more than the equivalent of 5 pounds of TNT shall be conducted according to a time schedule approved by the administrator.

c. All blasting operations shall be conducted by experienced, trained, and competent persons who understand the hazards involved. Persons working with explosive material shall:

(1) Have demonstrated a knowledge of, and a willingness to comply with, safety and security requirements;

(2) Be capable of using mature judgment in all situations;

(3) Be in good physical condition and not addicted to intoxicants, narcotics, or other similar types of drugs;

(4) Possess current knowledge of the local, State and Federal laws and regulations applicable to this work; and

(5) Have obtained a certificate of completion of training and qualification as required by State law.

d. Where blasting is necessary to conduct surface coal mining operations, signs reading "Blasting Area" shall be displayed conspicuously at the edge of blasting areas along access and haul roads within the permit area. Signs reading "Blasting Area" and explaining the blasting warning and all-clear signals shall be posted at all entrances to the permit area.

Section 2. Preblasting survey

a. On the request to the regulatory authority from a resident or owner of a manmade dwelling or structure that is located within one-half mile of any part of the permit area,

the administrator shall notify the applicant or permittee and the person making the request of the date and time when the preblasting survey will be made. Personnel approved by the administrator shall conduct the survey to determine the condition of the dwelling(s) and structure(s) and document any preblasting damage and other physical factors that could reasonably be affected by the blasting. Assessments of structures such as pipes, cables, transmission lines, and wells and other water systems shall be limited to surface condition and other readily available data. Special attention shall be given to the preblasting condition of wells and other water systems used for human, animal, or agricultural purposes and to the quantity and quality of the water.

b. A written report of the survey shall be prepared and signed by the applicant or permittee who conducted the survey and prepared the written report. The report shall include recommendations of any special conditions of proposed adjustments to the blasting procedures outlined in this section which should be incorporated into the blasting plan to prevent damage. Copies of the report shall be provided to the person requesting the survey and to the administrator.

Section 3. Public notice of blasting schedule

a. At least 10 days, but not more than 20 days before beginning a blasting program in which explosives that use more than the equivalent of 5 pounds of TNT are detonated, the permittee shall publish a blasting schedule in a newspaper of general circulation in the locality of the proposed site. Copies of the schedule shall be distributed by mail to local governments and public utilities and to each residence within one-half mile of the blasting sites described in the schedule. The permittee shall republish and redistribute the schedule by mail at least every 3 months. Blasting schedules shall not be so general as to cover all working hours but shall identify as accurately as possible the location of the blasting sites and the time periods when blasting will occur. The blasting schedule shall contain at a minimum:

(1) Identification of the specific areas in which blasting will take place. The specific blasting areas described shall not be larger than 300 acres with a generally contiguous border;

(2) Dates and times when explosives are to be detonated expressed in not more than 4-hour increments;

(3) Methods to be used to control access to the blasting area;

(4) Types of audible warnings and all-clear signals to be used before and after blasting; and

(5) A description of possible emergency situations (defined in Section 5. a. (2)), which may have been approved by the administrator, when it may be necessary to blast at times other than those described in the schedule.

Section 4. Public notice of changes to blasting schedules

Before blasting in areas not covered by a previous schedule or whenever the proposed frequency of individual detonations are materially changed, the permittee shall prepare a revised blasting schedule in accordance with the procedures in Section 3. If the change involves only a temporary adjustment of the frequency of blasts, the permittee may use alternate methods to notify the governmental bodies and individuals to whom the original schedule was sent.

Section 5. Blasting procedures

a. General

(1) All blasting shall be conducted only during the daytime hours, defined as sunrise until sunset. Based on public requests or other considerations, including the proximity to residential areas, the administrator may specify more restrictive time periods.

(2) Blasting may not be conducted at times different from those announced in the blasting schedule except in emergency situations where rain, lightning, other atmospheric conditions, or operator or public safety requires unscheduled detonation.

(3) Warning and all-clear signals of different character that are audible within a range of one-half mile from the point of the blast shall be given. All persons within the permit area shall be notified of the meanings of the signals through appropriate instructions and blasting signs.

(4) Access to the blasting area shall be regulated to protect the public and livestock from the effects of blasting. Access to the blasting area shall be controlled to prevent unauthorized entry at least 10 minutes before each blast and until the permittee's authorized representative has determined that no unusual circumstances such as imminent slides or undetonated charges exist and access to and travel in or through the area can safely resume.

(5) Areas in which charged holes are awaiting firing shall be guarded, barricaded and posted, or flagged against unauthorized entry.

(6) Airblast shall be controlled such that it does not exceed 128 decibel linear-peak at any manmade dwelling or structure located within one-half mile of the permit area.

(7) Except where lesser distances are approved by the administrator (based upon a preblasting survey or other appropriate investigations), blasting shall not be conducted within:

(a) 1,000 feet of any building used as a dwelling, school, church, hospital, or nursing facility;

(b) 500 feet of facilities including, but not limited to, disposal wells, petroleum or gas-storage facilities, municipal water-storage facilities, fluid-transmission pipelines, gas or oil-collection lines, or water and sewage lines; and

(c) 500 feet of an underground mine not totally abandoned except with the concurrence of the administrator.

b. Blasting standards

(1) Blasting shall be conducted to prevent injury to persons, damage to public or private property outside the permit area, adverse impacts on any underground mine, and change in the course, channel, or availability of ground or surface waters outside the permit area.

(2) In all blasting operations, except as otherwise stated, the maximum peak particle velocity of the ground motion in any direction shall not exceed 1 inch per second at the immediate location of any dwelling, public building, school, church or commercial or institutional building. The administrator may reduce the maximum peak particle velocity allowed if he determines that a lower standard is required because of density of population or land use, age or type of structure, geology or hydrology of the area, frequency of blasts or other factors.

(3) The maximum peak particle velocity of ground motion does not apply to property inside the permit area that is owned or leased by the permittee.

(4) An equation for determining the maximum weight of explosives that can be detonated within any 8 millisecond period is given a paragraph (5). If the blasting is conducted in accordance with this equation, the administrator will consider the vibrations to be within the 1 inch per second limit.

(5) The maximum weight of explosives to be detonated within any 8 millisecond period shall be determined by the formula

$$W = \left[\frac{D}{60}\right]^2$$

where W = the maximum weight of explosives, in pounds, that can be detonated in any eight (8) millisecond period, and D = the distance, in feet, to the nearest dwelling, school, church, or commercial or institutional building.

For distances between 350 and 5,000 feet, solution of the equation results in the following maximum weight:

Distance in feet (D)	Maximum weight in pounds (W)
350	34
400	44
500	69
600	100
700	136
800	178
900	225
1,000	278
1,100	336
1,200	400
1,300	469
1,400	544
1,500	625
1,600	711
1,700	803
1,800	900
1,900	1,002
2,000	1,111
2,500	1,736
3,000	2,500
3,500	3,402
4,000	4,444
4,500	5,625
5,000	6,944

(6) If on a particular site the peak particle velocity continuously exceeds one-half inch per second after a period of 1 second following the maximum ground particle velocity, the administrator shall require the blasting procedures to be revised to limit the ground motion.

c. Seismograph measurements

(1) Where a seismograph is used to monitor the velocity of ground motion and the peak particle velocity limit of 1 inch per second is not exceeded, the equation in subsection b.(5) need not be used. However, if the equation is not being used, a seismograph record shall be obtained for every shot.

(2) The use of a modified equation to determine maximum weight of explosives for blasting operations at a particular site may be approved by the administrator on receipt of a petition accompanied by reports including seismograph records of test blasting on the site. However, in no case shall the administrator approve the use of a modified equation where the peak velocity limit of 1 inch per second required in subsection b.(2) of this section would be exceeded.

(3) The administrator may require a seismograph recording of any or all blasts.

d. Records of blasting operations

A record of each blast, including seismograph reports, shall be retained for at least three (3) years and shall be available for inspection by the administrator and the public on request. The record shall contain the following data:

(1) Name of permittee, operator, or other person conducting the blast;

(2) Location, date and time of blast;

(3) Name, signature, and license number of blaster-in-charge;

(4) Direction and distance, in feet, to nearest dwelling, school, church, or commercial or institutional building neither owned or leased by the permittee;

(5) Weather conditions;

(6) Type of material blasted;

(7) Number of holes, burden and spacing;

(8) Diameter and depth of holes;

(9) Types of explosives used;

(10) Total weight of explosives used;

(11) Maximum weight of explosives detonated within any 8 millisecond period;

(12) Maximum number of holes detonated within any 8 millisecond period;

(13) Methods of firing and type of circuit;

(14) Type and length of stemming;

(15) If mats or other protections were used;

(16) Type of delay detonator used, and delay periods used;

(17) Seismograph records, where required, including:

(a) Seismograph reading, including exact location of seismograph and its distance from the blast;

(b) Name of person taking the seismograph reading; and

(c) Name of person and firm analyzing the seismograph record.

CHAPTER X

LIMITED MINING OPERATIONS FOR TEN (10) ACRES OR LESS OF AFFECTED LAND

Section 1. Commencement

a. Prior to the commencement of surface mining operations for the removal of sand, gravel, scoria, limestone, dolomite, shale, ballast, or feldspar from an area of ten (10) acres or less of affected land, a notification shall be submitted by the operator to the administrator on forms supplied by the Division and shall contain the following:

(1) the name, address, and telephone number of the operator,

(2) the written consent for the operation from the surface owner and surface lessee, if any, of the land to be affected,

(3) the location of the area of the operation by legal subdivision, section, township, and range. If there is no other survey, the location by protracted survey, metes and bounds, or claims,

(4) the mineral to be mined,

(5) the proposed commencement and completion dates of the operation,

(6) a U.S.G.S. topographic map.

(a) Each notification (Form 10) must be accompanied by an original quadrangle map (photo copies or other similar copies are not acceptable unless prior approval is obtained from the Land Quality Division).

(b) The following information shall be shown on the quadrangle map:

(i) A legal description of the ten (10) acres or less of land to be affected.

(ii) If any previous mining has taken place, or is taking place, within the ten (10) acres or less to be affected, show the location and identity of this mining as an existing mining operation.

(iii) Show any existing or proposed access or haul roads into, or away from the proposed mining operation. These roads shall be included as part of the ten (10) acre operation unless they are maintained by the county, state, or federal government.

(7) The operator shall provide a description of the proposed mining operation. This description shall include:

(a) Number of acres to be affected.

(b) Maximum depth to which mining will occur.

(c) Depth to groundwater where known.

(d) Brief description of the mining operation(s) and methods.

(e) The premining and proposed post-mining land use.

(8) A sworn statement that all information contained in the notification is true and correct to the best knowledge of the operator.

Section 2. Bond

a. The operator shall file a bond pursuant to W.S. 35-11-401(d)(vii)(1977).

Section 3. Annual Reports

a. The operator shall file annual reports pursuant to W.S. 35-11-401(j)(1977).

Section 4. Reclamation

a. After the mining operations have ceased or within thirty (30) days after the abandonment of the mining operation, the operator shall notify the administrator of such fact and commence reclamation and restoration. Provided however, that immediate reclamation will not be required if the landowner advises the Department in writing of his intent to further utilize the product of the mine, and if he assumes the obligation of reclamation and furnishes an appropriate bond to the administrator.

(1) The operation will be considered to be abandoned if any of the following occur:

(a) The individual, partnership, or corporation conducting the operation goes out of business.

(b) No further mining or reclamation work has been done from one annual report to the next.

(c) The mineral being mined has been exhausted.

(d) The period of time for which the surface owner (or lessee) gave permission has expired and a written extension has not been obtained.

b. The reclamation of the affected lands shall be in accordance with the following:

(1) Reclamation shall be consistent with the proposed postmining land use.

(2) All topsoil material from affected lands shall be saved and stockpiled in such a manner to minimize wind and water erosion. Such stockpiles shall be clearly identified by a sign. On commencement of reclamation the topsoil shall be redistributed evenly over the affected area.

(3) The affected land shall be reclaimed using sound agricultural practices. Surface preparation of affected areas to be seeded, seed types, amounts, method of seeding and time shall be subjected to approval by the Division prior to seeding.

(4) Mulching and/or fertilizing may be required at the administrator's discretion to insure revegetation.

(5) In no case shall any materials be pushed or dumped over escarpments.

(6) Petroleum wastes and other toxic materials shall be disposed of by methods which insure that topsoil, vegetation, surface water and groundwater are not contaminated.

(7) Final slopes shall be gentle enough to allow for contour seeding and all final forms shall be approved by the Division. Provided however, that the final slope shall not be greater than a ratio of 3 to 1 (3:1).

Section 5. Release of Bonds and Forfeiture of Bonds

a. Bond release. Forfeiture and cancellation shall be handled as provided in W.S. 35-11-417 through 35-11-424.

Section 6. Limitation of Operations

a. The operator will not be allowed to:

(1) Conduct more than one (1) operation under W.S. 35-11-401(d)(vi) within adjacent areas when the operations are to mine the same minerals, or

(2) Conduct nearby operations of ten (10) acres or less so as to circumvent the general requirements of the Environmental Quality Act.

CHAPTER XI

PERMIT REVISIONS

This chapter is reserved.

CHAPTER XII

RULES AND REGULATIONS FOR SELF-BONDING PROGRAM FOR SURFACE COAL MINING OPERATIONS

Section 1. Definitions

(1) "Self-Bond" means to assure, without the necessity of a corporate surety, that the operator shall faithfully perform all requirements of the act, all rules and regulations promulgated thereunder, and the provisions of the operator's permit and license to mine.

(2) "Corporate surety" means a corporation licensed to do business in the State whose business it is to assume the responsibility of a surety and thereby become primarily bound with the principal for the payment of a sum of money or for the performance of some duty or promise.

(3) "Common-size comparative balance sheet" means item amounts from a number of the operator's successive yearly balance sheets arranged side by side in a single statement followed by common-size percentages whereby: (1) the asset total is assigned a value of 100%; (2) the total of liabilities and owner equity is also assigned a value of 100%; and then (3) each individual asset, liability, and owner equity item is shown as a fraction of one of the 100% totals.

(4) "Common size comparative income statement" means an operator's income statement amounts for a number of successive yearly periods arranged side by side in a single statement followed by common-size percentages whereby net sales are assigned a 100% value, and then each statement item is shown as a percentage of net sales.

(5) "Retained earnings" means stockholder's equity that has arisen from retained assets from earnings in the business. This shall include only earnings from normal operations and not gains from such transactions as the sale of plant assets or investments.

(6) "Working capital" means the excess of the operator's current assets over its current liabilities.

(7) "Current assets" means cash and assets that are reasonably expected to be realized in cash or sold or consumed within one year.

(8) "Current liabilities" means debts or other obligations that must be paid or liqidated within a short period of time, usually a year. This shall also include dividends payable on preferred stock within one year.

(9) "Current ratio" means the relation of current assets to current liabilities.

(10) "Acid-test ratio" means the relation of quick assets to current liabilities.

(11) "Quick assets" means current assets that can be quickly turned into cash.

(12) "Cash" means (a) all "cash" items except cash (1) restricted by an agreement, or (2) described as earmarked for a particular purpose; and (b) short-term investments such as stocks, bonds, notes, and certificates of deposit, where the intent and ability to sell them in the near future is established by the operator.

(13) "Liquidity ratio" means the relation of cash to current liabilities.

(14) "Asset ratio" means the relation of total assets to total liabilities.

(15) "Return on Investment" means the relation of net profit for the last yearly period to ending net worth.

(16) "Net worth" means preferred and common stock, all surplus accounts, and retained earnings.

(17) "Net profit" means the "bottom line" of the income statement after taxes, including taxes based on income, adjustments, all extra-ordinary income and expense, but before preferred and common stock dividends.

(18) "Capital assets" means those assets such as land, buildings and equipment held for use in the production or sale of other assets or services.

(19) "Collateral" shall mean what it means in W.S. 34-21-905(a)(iii)(1977): the property subject to a security interest and includes accounts, contract rights and chattel paper which have been sold.

(20) "Security agreement" shall mean what it means in W.S. 34-21-905(a)(viii)(1977): an agreement which creates or provides for a security interest.

Section 2. Initial application to self bond

a. Initial application to self bond shall be made at the time the operator makes written application to the administrator for a license to mine. The application shall be on forms furnished by the administrator and shall contain:

(1) Identification of operator by:

(a) for corporations, name, address, telephone number, state of incorporation, principal place of business and name, title and authority of person signing application, and statement of authority to do business in the state of Wyoming, or

(b) For all other forms of business enterprises, name, address and telephone number and statement of how the enterprise is organized, law of the state under which it is formed, place of business, and relationship and authority of the person signing the application.

(2) Identification of the record mineral owner of the land to be mined, if other than the operator, by name, address and telephone number.

(3) Amount of bond required, to be determined in accordance with W.S. 35-11-417(c)(i)(1977).

(4) Nature of the activity or obligation to be covered by the bond:

(a) type of operation,

(b) anticipated dates performance to be commenced and be completed.

(5) Operator's prior experience in performing such obligations. This information shall be in sufficient detail so as to not only demonstrate good faith performance of past mining and reclamation operations, but actual compliance with the standards required

(6) History of other bonds for mining operations in any state procured by operator, including:

(a) names of sureties, if any, for outstanding bonds,

(b) amounts of outstanding bonds,

(c) denial of any bonds,

(d) claims against any bonds.

(7) Brief chronological history of those operations which would illustrate:

(a) a continuous operation and

(b) operations, if any, conducted within the State and

(c) other significant operations outside the State.

(8) A statement, in detail, so as to show a history of financial solvency. For an initial bond, each operator must provide:

(a) audited financial statements prepared and certified by an independent Certified Public Accountant who, by reason of education, experience or special training, and disinterest, is competent to analyze and interpret the operator's financial solvency. All statements shall be prepared following generally accepted principles of accounting, and shall include:

(i) a common-size comparative balance sheet which shows assets, liabilities and owner equity for ten years. The administrator shall have the option to vary this length of time to any period which, in his belief, is necessary to show a history of financial solvency and continuous operation. The common-size comparative balance sheet must be detailed with regard to owner's equity, especially retained earnings, so as to set forth a series of retained earnings statements showing the changes that have occurred in retained earnings during the required period of time,

(ii) a common-size comparative income statement which shows all revenues and expenses for ten years. The administrator shall have the option to vary this length of time to any period which, in his belief is necessary to show a history of financial solvency and continuous operation,

(iii) a statement of the operator's working capital and an analysis of the composition of current assets, which shall include:

(A) a schedule showing the percentage of each classification of current assets to total current assets,

(B) the current ratio,

(C) the acid-test ratio,

(D) the liquidity ratio,

(iv) the asset ratio,

(v) the return on investment,

(vi) all ratios required in the above must be calculated for every year contained within the common-size comparative balance sheet and income statement,

(vii) in addition to the above, all ratios must be calculated with the bond amount added to the operator's current or total liabilities,

(viii) a ratio of the operator's capital assets subject to a mortgage or security interest to those liabilities to which the assets are subject. If the offer of real property or collateral for the bond (see 10 below) will alter this ratio, this must be illustrated.

(b) A satisfactory basis to compare all ratios submitted pursuant to (a) above.

(c) The administrator shall have the right to challenge, prohibit or prescribe the inclusion of any specific item or the value thereof within any of the above statements or ratios. If the value is challenged, the administrator shall appoint an appraiser or appraisers to value the item. Any such appraisal shall be expeditiously made, and a copy thereof furnished to the administrator and the operator. The reasonable expense of the appraisal(s) shall be borne by the operator. The findings of the appraisal shall be final and binding.

(d) A final determination by the independent Certified Public Accountant regarding the operator's ability to satisfactorily meet all obligations and costs under the proposed reclamation plan.

(e) If the administrator deems necessary, evidence of financial responsibility, through letters of credit, etc.

(9) Evidence of any involuntary liens filed on the assets of the operator, cases pending or judgments rendered within the last five years against the operator but not satisfied.

(10) If the operator desires, an offer of real property or collateral. The administrator may, however, require the bond amount to be secured through real property or collateral.

(a) Any such offer shall contain:

(i) description of the property satisfactory for deposit (in accordance with (b) below) to further assure that the operator shall faithfully perform all requirements of the act. The administrator shall have full discretion in accepting any such offer.

(ii) the value of the property. The property shall be valued at fair market value as determined by an appraisal conducted by an appraiser or appraisers appointed by the administrator. The appraisal shall be expeditiously made, and a copy thereof furnished to the administrator and the operator. The reasonable expense of the appraisal shall be borne by the operator.

(b) The description of the property to be deposited shall include, at the administrator's discretion, one or more of the following:

(i) The operator's possession of and title to unencumbered real property within the state. Such shall only be evidenced by:

(A) if the interest arises under a federal or state lease, a status report prepared by an attorney, satisfactory to the administrator as disinterested and competent to so evaluate the asset and an affidavit from the owner in fee establishing that the leasehold could be transferred upon default.

(B) if title is in fee, a title certificate or similar evidence of title and encumbrances prepared by an abstract office authorized to transact business within the State and satisfactory to the administrator.

(C) The deposit shall not include any lands in the process of being mined, reclaimed, or the subject of this application. The operator may offer any lands the bonds for which have been released. In addition, any land used as security shall not be mined while it is security.

(ii) The operator's possession of and title to personal property within the State. Evidence of such ownership shall be submitted in that form satisfactory to the administrator to establish unquestioned title to the property in the operator. The personal property offered shall not include:

(A) property which is already collateral, or

(B) goods which the operator sells in the ordinary course of his business, or

(C) fixtures, or

(D) securities which are not U.S. government securities or those state government securities not acceptable to the administrator, or

(E) certificates of deposit which are not federally insured or where the depository is unacceptable to the administrator.

(c) The administrator may require possession by the department of the personal property, or a mortgage or security agreement executed by the operator in favor of the department of environmental quality. The requirement shall be that which is sufficient to vest such interest in the property in the department to secure the right and power to sell or otherwise dispose of the property by public or private proceedings so as to insure reclamation of the affected lands in accordance with the act.

(i) Any mortgage shall be executed and duly recorded as required by law so as to be first in time and constitute notice to any prospective subsequent purchaser of the same real property or any portion thereof.

(ii) Any security interest created by a security agreement shall be perfected by filing a financing statement or taking possession of the collateral in accordance with W.S. 34-21-950 through 34-21-955 (1977). The department shall have all rights and duties set forth in W.S. 34-21-926 (1977) when the collateral is in its possession as a secured party, as defined in W.S. 34-21-905 (a)(ix). Any money received from the collateral during this period of time shall be remitted to the operator. When the collateral is left in the possession of the operator, the security agreement shall require that, upon default, the operator shall assemble the collateral and make it available to the department at a place to be designated by the department which is reasonably convenient to both parties.

(d) The operator shall be in default at the time when the council orders the bond forfeited in accordance with W.S. 35-11-421 (1977).

(i) When the administrator has required a mortgage, foreclosure procedure shall be in accordance with W.S. 34-4-101 through 34-4-113 (1977).

(ii) When the administrator has required a security agreement the department shall, if necessary and reasonable, take possession of the collateral. Notification of disposition shall be made in accordance with W.S. 34-21-963. At any time before disposition, the operator, unless otherwise agreed, may redeem the collateral by tendering fulfillment of all obligations secured by the collateral as well as the expenses reasonably incurred by the department in preparing the collateral for disposition. Unless otherwise agreed or determined by a judicial proceeding, the department shall sell the collateral either in the usual manner in any recognized market therefor, or at the price current in such market at the time of the sale, or otherwise in conformity with reasonable commercial practices among dealers in the type of property sold. The proceeds of disposition shall be applied in the order set out in W.S. 34-21-963 (1977).

(e) The operator may, with written consent from the administrator, substitute for any of the real property or collateral held hereunder other property upon submittal of all information required under this subsection and execution of a mortgage or security agreement in the manner described under this subsection so as to secure all obligations under all periods of time as they relate to mining operations.

(f) Return of property shall occur at such time when the bond is released pursuant to W.S. 35-11-417(e) and 35-11-423 (1977) or when substitution is made in compliance with (e) above. Return shall be of that form sufficient for the department to release that portion of the security interest or mortgage commensurate with the amount of the bond released or substitution made less any disposed of in accordance with the mortgage or security agreement.

(11) If the operator has executed an agreement as endorser, guarantor, or surety for others the operator shall submit a detailed statement giving names of the principals, obligations covered by bonds, date performance to be commenced and be completed and any penalty for non-completion of performance.

(12) A statement identifying by name, address and telephone number:

(a) a registered office which may be but need not be, the same as the operator's place of business,

(b) a registered agency, which agent may be either an individual resident in this state, whose business office is identical with such registerd office, or a domestic corporation, or a foreign corporation authorized to transact business in this state, having a business office identical with such registered office. The registered agent so appointed by the operator shall be an agent to such operator upon whom any process, notice or demand required or permitted by law to be served upon the operator may be served.

(c) If the operator fails to appoint or maintain a registered agent in this state, or whenever any such registered agency cannot be reasonably found at the registered office, then the director shall be an agent for such operator upon whom any process, notice or demand may be served. In the event of any such process, the director shall immediately cause one copy of such process, notice or demand to be forwarded, by registerd mail, to the operator at his principle place of business. The Director shall keep a record of all processes, notices, or demands served upon him under this paragraph, and shall record therein the time of such service and his action with reference thereto.

(d) Should the operator change the registered office or registered agent, or both, a statement indicating such change shall be filed immediately with the land quality division.

(e) Nothing herein contained shall limit or affect the right to serve any process, notice or demand required or permitted by law to be served upon an operator in any other manner now or hereafter permitted by law.

(13) An agreement to pay all litigation costs incurred by the State in any successful effort to enforce this program against the operator with respect to the operation or activity to be bonded. This shall also include all costs reasonably connected to the litigation costs, and all administrative costs reasonably incurred in the course of enforcing or in preparation to enforce these rules and regulations against the operator with respect to the operation or activity to be bonded.

(14) When the operator intends to use a third party indemnitor, an offer of such third party indemnitor which will execute an agreement to indemnify the department against any and all demands, liabilities, charges, and expenses of whatsoever kind or nature, which the department may at any time sustain or incur by reason of or in consequence of having accepted the bond of the operator itself without separate surety. The third party indemnitor shall supply to the administrator all information required of the operator under this program less that information applicable only to the proposed mining operation. The administrator shall have full discretion in accepting any such offer.

Section 3. Application for renewal bonds

a. Application for renewal bonds under the self bonding program shall be made at the time the operator files an annual report with the administrator. The application shall be on forms furnished by the administrator and shall contain:

(1) Any changes in the identity of the operator, location of the operator, identity of the record mineral owner or nature of the activity to be covered by the bond,

(2) Amount of bond required, which shall be determined in accordance with W.S. 35-11-417(c)(ii),

(3) Statement of financial solvency prepared and certified by an independent Certified Public Accountant to include:

(a) a comparative balance sheet consisting of the item amounts from the previous two yearly balance sheets arranged side by side so that changes in item amounts may be seen. The sheet must show changes in both dollar amounts and percentages, and must be in detail as to the retained earnings item,

(b) a comparative income statement consisting of the amounts for the two previous years placed side by side, with dollar and percentage changes in additional columns,

(c) all information required in section 2 a.(8)(a)(iii) to 2 a.(9).

(4) Evidence of any involuntary liens filed on the assets of the operator, cases pending or judgments rendered within the last year against the operator but not satisfied.

(5) If the administrator has required a mortgage or security agreement, all evidence of value, title and possession of the property shall be submitted in accordance with section 2 a.(10):

(a) The property required may be increased or reduced at this time or the time of an approved revision, as determined by the Administrator, for reasons of:

(i) subsequent legal clouds on the property,

(ii) the market value of the property falling below the required amount,

(iii) unusual or abrupt changes in the operator's financial solvency,

(iv) any such other occurences that the administrator determines that the best interests of the State would be served by such increases or reductions.

(b) In addition, if the administrator deems it necessary to value any asset, he may appoint the appraiser or appraisers. Any such appraisal shall be expeditiously made, and a copy thereof furnished to the administrator and the operator. The reasonable expense of the appraisal shall be borne by the operator. The findings of the appraisal shall be final and binding.

b. If and when the administrator in good faith has adequate reason to suspect the operator's financial condition, continuous operation, the nature of its operations and compliance with the requirements of the act and all rules and regulations promulgated thereunder, the administrator may examine the affairs, transactions, accounts, records and assets of the operator as they relate to the ability to self-bond. The reasonable and proper expense of examination shall be borne by the operator. Such operator shall promptly pay the examination expense upon presentation by the administrator of a reasonably detailed written account thereof.

c. If the administrator has required a third party indemnitor agreement, the third party indemnitor shall also supply all information required under subsection a. of this Section, substituting therein "third party indemnitor" for "operator".

Section 4. <u>Approval or denial of operator's self bond application</u>

a. The administrator, within sixty (60) days of operator's submission of all materials necessary to base a decision on the application shall:

(1) Approve or reject such application and declare in writing his reasons for such action to the operator or his registered agent.

(2) If a rejection is based on inadequate information or failure of the operator to supply all necessary material, the administrator shall allow the operator thirty (30) days to remedy the deficiencies. Such corrections must be made to the satisfaction of the administrator. The administrator shall have an additional sixty (60) days to approve or reject the corrected application.

b. At the discretion of the advisory board, the approval of the application to self-bond may be conditioned on the requirement that the record mineral owner of the land to be mined join in the execution of the bond.

Section 5. Certification

a. All parties signing any application, bond, or agreement must have the right and power to do so, must certify as to that right and power and certify that the statements contained therein are true and correct to their best knowledge.

Section 6. Protection of surface owner

a. Nothing contained in these rules and regulations affects the statutory provision as to any bonds required for the protection of the surface owner. W.S. 35-11-416 (1977).

Section 7. Substitution of the operator's self-bond

a. The administrator may require the operator to substitute a good and sufficient corporate surety licensed to do business in the State within thirty (30) days of receiving written notice from the administrator that the self-bond of the operator fails to provide the protection consistent with the objectives and purposes of this Act. The operator may also request substitution. This request is contingent upon the operator meeting all the requirements of the bond provisions. W.S. 35-11-417 to 424 (1977) of the Act.

b. Upon failure of the operator to make substitution of a corporate surety, cash, governmental securities, or federally insured certificates of deposit, within a reasonable period of time, not to exceed thirty (30) days, the

administrator shall suspend or revoke the license of the operator to conduct operations upon the land described in the permit until such substitution is made.

c. All methods of substitution shall be made in accordance with the bonding provisions W.S. 35-11-417 to 35-11-424 (1977) of the Act. The administrator shall either:

(1) Require substitution of a good and sufficient corporate surety licensed to do business in the state that will stand as surety so as to cover all periods of time as they relate to the mining operations, or

(2) Retain from the operator sufficient assets within the department so as to cover that period of time of the mining operation which is not covered by the substituted surety. Those assets not retained shall be returned to the operator within sixty (60) days free from the Department's encumbrances, liens, mortgages or security interests.

Section 8. Requirements for forfeiture and release

All requirements as to bond forfeiture proceedings and the release of bonds shall be consistent with W.S. 35-11-417(e) and W.S. 35-11-421 thru 35-11-424 of the Act, excepting the requirements as to notification to the surety.

Section 9. Powers

This chapter in no way limits the director's or administrator's powers as described by the Act.

Section 10. Administrative Procedure Act

Any person aggrieved or adversely affected in fact by any agency action or inaction is entitled to judicial review in accordance with the Wyoming Administrative Procedure Act. (W.S. 9-4-101 through 9-4-115).

Section 11. Existing Operations

a. An operator conducting an existing, ongoing operation may submit to the administrator an application to self-bond. The application shall contain all information required in Section 2 of this Chapter except:

(1) Section 2 a. (3) shall read: "Amount of bond required, to be determined in accordance with W.S. 35-11-417 (c)(ii)(1977).

(2) Section 2 a. (4) shall be omitted.

b. If the administrator determines that the operator qualifies for self-bonding, then the operator shall execute all required agreements or instruments and sign a new bond payable to the State of Wyoming which covers all periods of time as they relate to the mining operation. At this time, the prior bond shall be released. This release shall not be governed by any requirements as to the release of bonds which occur upon completion in whole or in part of the reclamation program.

Section 12. Confidentiality

Such information submitted to the Department pursuant to this chapter which the operator determines is a trade secret shall be held confidential by the Department.

CHAPTER XIII

RELEASE OF BONDS OR DEPOSITS FOR
SURFACE COAL MINING OPERATIONS

Section 1. Definitions

(1) "Performance bond" means the surety instrument by which the permit applicant assures faithful performance of all requirement of the Act, all rules and regulations promulgated thereunder, and the provisions of the permit and license to mine.

(2) "Deposit" means federally insured certificates of deposit, cash or government securities which the operator has deposited with the Department of Environmental Quality in lieu of a bond.

Section 2. Request for Release

a. The operator may file a request with the Land Quality Division of the Department of Environmental Quality for the release of all or part of a performance bond, self-bond or deposit. The request shall contain copies of letters stating the operator's intent to seek release from the bond or deposit and the information required in Section 2, subsection (b)(1) - (8), which the operator has sent to:

(1) all owners of record of the surface and mineral rights of the land within the permit area.

(2) all owners of record of the surface rights of the immediately adjacent land.

(3) other persons within 1/2 mile of the permit area having a valid legal estate of record.

(4) the county or counties in which the operation is located and any incorporated municipality within five (5) miles of the permit area.

(5) the Department of Economic Planning and Development (DEPAD) and other area-wide planning entities within the state.

(6) sewage and water treatment authorities or water companies in the locality in which the surface coal mining and reclamation activities took place.

b. The operator shall cause notice of the request for bond or deposit release to be published in a newspaper of general circulation in the locality of the surface coal mining operation at least once per week for four (4) consecutive weeks commencing within fifteen (15) days after filing of the completed request. The notice shall contain information regarding:

(1) the name of the operator.

(2) the precise location of the land affected by legal subdivision, section, township, range, county and municipal corporation if any.

(3) the number of acres affected.

(4) the method of operation, (e.g. strip, open pit, contour ..).

(5) the permit number and the date approved.

(6) the total amount of the bond or deposit in effect and the amount for which release is sought.

(7) the type and appropriate dates of reclamation work performed and a description of the results achieved as they relate to the operator's approved reclamation plan.

(8) the location and final date for filing objections to the bond or deposit release request.

Section 3. Administrative Hearing

a. Any affected person has the right to file written objections to the request for bond or deposit release with the administrator within thirty (30) days after the last publication of the above notice. Affected persons are:

(1) Any person with a valid legal interest that might be affected by bond release; and

(2) The responsible officer or head of any Federal, State or local government agency which:

(a) has jurisdiction by law or special expertise with respect to any environmental, social or economic impact involved; or

(b) is authorized to develop and enforce environmental standards with respect to surface coal mining.

b. If written objections are filed, and public hearing requested, the council shall hold a public hearing within thirty (30) days after the final date for filing objections unless a different period is stipulated to by all parties. The council shall inform the operator, the county or counties in which the operation is located and any incorporated municipality within five (5) miles of the permit area, and all other interested parties of the public hearing. The council shall also publish notice of the time, date and location of the hearing in a newspaper of general circulation in the locality of the surface coal mining operation at least twice a week for two (2) consecutive weeks immediately prior to the hearing. The hearing shall be conducted as a contested case in accordance with the Wyoming Administrative Procedure Act, and right of judicial review will be afforded as provided in said Act.

Section 4. Inspection of the Permit Area

Upon receipt of the notification and request, the administrator shall, within sixty (60) days, conduct an inspection and evaluation of the mining and reclamation work involved, weather conditions permitting. Such evaluation shall consider whether the operator has complied with his approved mining and reclamation plan which shall include, among other things:

(1) proper revegetation of the reclaimed areas so as to provide a vegetative cover consistent with the surrounding terrain and in accordance with the operator's approved reclamation plan.

(2) proper surface gradient according to the approved plan.

(3) degree of difficulty to complete any remaining reclamation.

(4) whether pollution of surface and subsurface waters is occurring through erosion, siltation, or failure to control or dispose of all materials constituting a fire, health or safety hazard.

(5) probability of continuance of future occurence of such pollution.

(6) the estimated cost of abating such pollution.

(7) the failure or appeared failure, of the operator's reclamation plan.

Section 5. Notification

a. If the director finds the reclamation meets the requirements of this Act (W.S. 35-11-101 to 35-11-1104), he shall notify the operator in writing of his decision to release all or part of the performance bond, self-bond, or deposit within sixty days from the filing of the request and order the state treasurer to release that portion of the final bond or deposit, if no public hearing is held pursuant to Section 3. If there has been a public hearing, the notification to the operator shall be within thirty days thereafter.

b. If the director disapproves of the application for release of bond or deposit, or a portion thereof, the director shall notify the operator in writing stating the reasons for disapproval and recommend corrective actions necessary to secure said release, allowing opportunity for public hearing.

Section 6. Schedule for Release of Bond or Deposit

a. The administrator, upon consultation with the advisory board, may recommend to the director the release of the bond or deposit according to the following schedule:

(1) When the operator completes the backfilling, regrading, topsoil replacement, recontouring and drainage control of a bonded area in accordance with his approved reclamation plan, the release of 50% of the bond or deposit for the applicable permit area.

(2) After revegetation has been established on the regraded mined land in accordance with the approved reclamation plan, the amount of bond or deposit to be released shall be determined by:

(a) the amount the director determines must be retained for the permit area which would be sufficient for a third party to cover the cost of reestablishing vegetation so as to comply with the Act and all rules and regulations promulgated thereunder. The director may release up to 75% of the total bond or deposit required for the affected land. The remaining portion of the bond or deposit shall not be less than ten thousand dollars ($10,000), and shall be held for a period of at least 5 years as provided in W.S. 35-11-417 of the Act, or for so long thereafter as necessary to assure proper vegetation of the reclaimed areas in accordance with Chapter II, Section 5 f., Land Quality Rules and Regulations.

(b) No part of the remaining bond or deposit shall be released under this section:

(i) so long as the lands to which the release would be applicable are contributing suspended solids to streamflow or runoff outside the permit area in excess of that stipulated under the operator's reclamation plan;

(ii) until soil productivity for prime farmlands has returned to equivalent levels of yield as non-mined land of the same soil type in the surrounding area under equivalent management practices in accordance with the reference area requirements of the revegetation rules and regulations.

b. The administrator shall notify the town or city nearest to and the county in which the surface coal mining operation is located by certified mail at least 30 days prior to the release of all or a portion of the bond or deposit.

c. No bond or deposit shall be fully released until all reclamation requirements of the permit, license and the Act are fully met.

Section 7. Renewal.Bonds

a. This chapter in no way governs any determination as to renewal bonds where the amount of the bond or deposit required and the terms of each acceptance of the operator's bond shall be adjusted after receipt of the annual report, inspection report and other required materials, as affected land acreages are increased or reduced during the renewal period or where the cost of future reclamation changes.