

Minnesota Attorney General: Administrative Rules Proceedings

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Version 3
August 20, 2018

Our File No. 1262 CS.0009.9018

RULE REVIEW CHECKLIST

DATE RULE RECEIVED 4-3-86
DATE FOR REVIEW 4-11-86
DATE DUE 4-17-86

Adopted w/a hearing _____
Adopted w/o hearing ✓
Temporary rule _____

Approved 4-17-86 mjc Disapproved _____ Returned to Agency _____

Resubmitted _____ Due _____
Approved _____ Disapproved _____ Returned to Agency _____

Date filed w/Secretary of State 4-17-86 Revisor approved 4.4.86
disapproved _____

✓ Rule as Adopted

✓ Rule as Proposed

✓ Order Adopting 2.20.86. Date combined w/ F of F

✓ Notice of Intent to Solicit Outside Opinion SR. 11.11.85

✓ Order for rulemaking
N/A date of Hearing

✓ Certificate of Board's Authorizing Resolution

✓ Notice of rulemaking
? Sufficiency no small biz statement

✓ Affidavit of Mailing Notice or rulemaking
12.12.85 At least 30 days prior to ~~hearing~~/adoption } combined

✓ Mailing list Certificate

✓ Publication in State Register
12.16.85 At least 30/~~20~~ days prior to ~~hearing~~/adoption

N/A Hearing Examiner's Report

✓ Chief Hearing Examiner's Report(s)
_____ Approving H.E.'s Report
_____ Approving agency action

✓ Agency's Findings of Fact combined w/ Order Adopting

N/A LCRAR Report or agency Affidavit

✓ Certificate of Board's Resolution Adopting Rules

N/A Order Approving Incorporation by Reference

? Statement of Need and Reasonableness no small biz statement.

N/A Petition for Adoption of a Rule

✓ Record (includes transcript or tape, exhibits, comments received by agency, requests for a hearing, and other relevant materials)

✓ Certificate of Compliance w/Rulemaking Procedures

N/A Affidavit of Mailing Notice of Submission to Attorney General

✓ Notice of Submission to the Attorney General

✓ Memos: EQB to DOF, DOF to EQB re fee structure

SF-00006-03

STATE MINNESOTA

DEPARTMENT ATTORNEY GENERAL

Office Memorandum

TO: JOHN C. DITMORE, Chair
Environmental Quality Board

ATTN: CHRISTINE B. ELLER
Special Assistant Attorney General

DATE: 4/17/86

FROM: MARTHA J. CASSERLY MJC
Special Assistant Attorney General

PHONE: 296-4692

SUBJECT: In the Matter of the Proposed Adoption of the Rule of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste

The above-referenced rule has been approved as to its legality by the Attorney General on April 17, 1986.

Enclosed is the agency's copy of the approved rule. This office has already filed two copies of the approved rule with the Secretary of State, who will forward one copy to the Revisor of Statutes. The fourth copy is being retained by this division of the Attorney General's Office for its records.

Also enclosed are any petitions, requests, submission or comments received by the agency and any extra copies of documents which the agency submitted to the Attorney General.

In order for a permanent rule without a hearing to become effective, your agency must publish a notice of adoption in the State Register in accordance with Minn. Stat. § 14.27. An emergency rule becomes effective five working days after approval by the Attorney General; however, the agency must publish a notice in the State Register in accordance with Minn. Stat. § 14.34.

If you have any questions in this regard, please contact me.

MJC:pmf

Enclosures

cc: Maryanne Hruby
Executive Director
Legislative Commission to Review
Administrative Rules

Duane Harves
Chief Administrative Law Judge
Office of Administrative Hearings

RR1262

AG copy.

Minnesota Environmental Quality Board

Adopted Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Rules as Adopted

4410.7900 DEFINITIONS.

Subpart 1. **Scope.** The definitions in Minnesota Statutes, section 116C.71 apply to parts 4410.7900 to 4410.7934, and for the purposes of those parts, the following terms have the meanings given them.

Subp. 2. **Affected landowner.** "Affected landowner" means a person who owns or leases property within the right-of-way of the investigative activities.

Subp. 3. **Agent.** "Agent" means a responsible person who will act as a contact person on behalf of the applicant or permittee.

Subp. 4. **Applicant.** "Applicant" means any person who applies to the board for a drilling permit.

Subp. 5. **Data.** "Data" means any factual measurements, statistics, or information obtained from the investigative activities.

Subp. 6. **Drilling permit.** "Drilling permit" means the written document issued by the board authorizing and outlining the rights and responsibilities of the permittee.

Subp. 7. **Investigative activities.** "Investigative activities" means the actions, whether in the laboratory or in the field, including visual inspection, mapping, surveying, photography, drilling, surface excavations, in situ testing, and all other research undertaken to establish the geologic and hydrologic condition and ranges of the parameters relevant to drilling in a potentially impacted area.

Subp. 8. **Permanent abandonment.** "Permanent abandonment" means the act of permanently sealing a drill hole for the purpose of permanently discontinuing the active and operational

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use of the drill hole.

Subp. 9. **Permittee.** "Permittee" means any person to whom a drilling permit is issued.

Subp. 10. **Right-of-way.** "Right-of-way" means the interest in real property used or proposed to be used around each drill hole and/or to obtain access to and from that drill hole.

Subp. 11. **Shelterbelt.** "Shelterbelt" means the barrier zone of grasses, shrubs, and trees, or any combination of them, planted to protect crops, soil, and other sensitive areas against erosion.

? FF1 indicates language change but not this one.

Subp. 12. **Split.** "Split" means a division of a core sample parallel to the axis of the core sample.

Subp. 13. **Surface water.** "Surface water" means water systems on the surface of the earth, including permanent lakes, streams and wetlands, intermittent streams, periodic wetlands and their respective watercourse beds, and wetland basins.

not in FF

FF2 more or less the same language indicated

Subp. 14. **Temporary abandonment.** "Temporary abandonment" means the act of sealing, capping, or protecting a drill hole for the purpose of temporarily discontinuing use of the drill hole for a period of not more than five years.

4410.7902 PREAPPLICATION RESPONSIBILITIES OF APPLICANT.

A. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, paragraph (c), the applicant shall provide a notice of intent in writing to the chair at least ten days prior to initiating any contact with any landowner/tenant regarding negotiation of easement rights or other property interests that relate to predrilling right-of-way investigative activities. The notice of intent shall contain the legal description of the right-of-way, the property interest in that right-of-way, and the procedure by which the property interest is to be acquired.

B. The applicant shall provide the chair with copies of any permit, lease, permission, and/or easement agreements, within ten days of reaching the agreement, negotiated with landowners and/or tenants during the entire period a potentially impacted area is under consideration for investigative

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activities related to drilling. These agreements shall provide unrestricted access to the right-of-way as set forth in Minnesota Statutes, section 116C.724, subdivision 2, clause (4), and parts 4410.7900 to 4410.7934.

4410.7904 LICENSING OF EXPLORERS.

An applicant shall comply with Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900, relating to the regulation of exploratory boring.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT.

Subpart 1. **Drilling permit required.** A drilling permit shall be obtained from the board for each potentially impacted area prior to commencing any drilling to obtain geologic and hydrologic information, other than the drilling of geophysical shot holes, relating to the disposal of high level radioactive waste.

Subp. 2. **Content of an application for drilling permit.** An application for a drilling permit shall be filed by the applicant with the board and shall include:

A. the name of the applicant seeking a drilling permit;

B. the name and address of an agent for the applicant;

C. the applicant's explorer's license, issued under Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900;

D. a description of the proposed drilling operation including the number, type, size, and depth of drill holes;

E. United States Geological Survey topographical maps to the scale 1:24,000 or smaller on which are drawn to scale the exact locations of the right-of-way and the proposed drill holes;

F. a development plan showing the right-of-ways and the geographical and cultural features existing on each side of the right-of-ways in an area not less than 200 feet in width on each side of the right-of-way. The scale of the plan shall not be greater than 200 feet per inch. The development plan shall show, to the scale of the plan, dimensions, elevations, contours

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(using contour intervals of five feet or less), drill hole locations, field construction of drilling equipment, and present and planned pertinent features, including but not limited to roads, buildings, encampments, shelterbelts, fencing, surface water and its diversion or drainage, and present land use. The plan shall show the stages of development from right-of-way preparation through all phases of construction and maintenance.

G. a time schedule for acquisition and construction of each right-of-way starting with the ~~beginning of any investigative activities~~ initial visual inspection of the right-of-way. The time schedule shall include the proposed commencement and finishing dates of each stage of investigative activities, and shall also include the proposed date of right-of-way clearance, temporary and permanent abandonment, right-of-way restoration activities, and the method and schedule of drill hole monitoring;

H. a listing of the federal, state, and local permits that may be required for the proposed drilling and the accompanying right-of-way clearance;

I. a description of the environmental setting and the potential environmental impacts of right-of-way clearance and drilling on the following:

(1) groundwater-bearing formations, whether in bedrock, glacial, or postglacial sediments;

(2) surface water;

(3) agricultural lands;

(4) man-made structures;

(5) transportation routes;

(6) residences;

(7) water wells;

(8) rare or endangered species; and

(9) wildlife habitat, native grassland, and other natural areas;

J. existing or potential point and nonpoint sources of pollution on or near the right-of-way that could contaminate ~~surficial~~ surface water ~~bodies~~ or water-bearing formations

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underground because of the investigative activities.

Subp. 3. **Acceptance of drilling permit application.** Within 30 days of receipt of a permit application, the chair shall review it for completeness pursuant to subpart 2 and accept or reject the application. If the chair rejects the application, he shall upon rejection inform the applicant which deficiencies, if corrected, will allow the application to be accepted. Upon resubmission, the chair shall have 30 days to review the amended application and accept or reject it. After acceptance of an application, the applicant shall provide any additional relevant information that the chair or the board determines necessary for board approval of the application. The applicant shall supply extra copies of the application to the members of the board, to the technical representatives to the board designated by an agency member of the board, and five copies to the board's staff.

? vague

? how many ?

FF 3

Subp. 4. **Copy of application to historical society and county auditor.** When an applicant files a permit application with the board, the applicant shall simultaneously send a copy of the application to the Minnesota historical society, and to the office of the county auditor in each county or any portion of a county within the potentially impacted area. The county auditor shall retain and file the application in a manner making it accessible to the public.

FF 4

4410.7908 INFORMATION MEETINGS.

Subpart 1. **Information meetings required.** The applicant or permittee, as appropriate, shall hold public information meetings as required by Minnesota Statutes, section 116C.724, subdivision 3, paragraph (b).

(1) The applicant shall hold one public meeting in the potentially impacted area after the permit application has been filed with the board and before the hearing required by part ~~4410.7950~~ 4410.7910. At the meeting the applicant shall explain the scope of the planned investigative activities and the potential short- and long-term environmental, health, and

FF 5

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safety impacts, if any, of the investigative activities.

(2) The permittee shall hold at least one public meeting every three months in the potentially impacted area during the investigation in order to answer questions, concerns, and complaints, and to provide the public with all current raw and interpreted data on the progress of the investigation.

Subp. 2. **Agenda.** The applicant or permittee, as appropriate, shall provide the agenda, and responses to concerns and issues raised at the public information meeting, in writing to the chair within 20 days of the meeting.

Subp. 3. **Evidence.** Any person may appear at the public information meetings and present written and/or oral testimony and exhibits relevant to the investigative activities.

Subp. 4. **Schedule and location.** The public information meetings shall be scheduled on weekday evenings that do not fall on a public holiday and shall begin no earlier than 7:00 p.m. The public information meetings shall be held in a facility centrally located within the potentially impacted area and sufficient in size to accommodate the reasonably projected attendance. If no adequate facility exists within the potentially impacted area, the meetings shall be held in an adequate facility near the potentially impacted area.

Subp. 5. **Notice.** Notice of each public information meeting held pursuant to subpart 1 shall be given by the applicant or permittee, as appropriate, by paid advertisement in a qualified newspaper, as defined in Minnesota Statutes, section 331A.01, subdivision 8, in general circulation in the potentially impacted area. The notice shall be published at least ten days and not more than 30 days prior to the meeting. The applicant or permittee shall notify the chair and the county auditor of each county or portion of each county within the potentially impacted area in writing at least ten days in advance of the meeting. The notice shall include the following information:

A. the date, time, and place of the meeting;

B. the agenda;

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C. the identity of the applicant or permittee and the name of the agent and the address and phone number where that person can be reached; and

D. the locations where the most recent permit application or the drilling permit is available to the public.

4410.7910 HEARING PROVISIONS.

A contested case hearing under Minnesota Statutes, chapter 14 and parts 1400.5100 to 1400.8300 shall be held by the board for the purposes of collecting and verifying data, and establishing a complete and accurate record upon which to base a decision to grant or deny a drilling permit. The hearing shall be held after the chair accepts the application for completeness and before the board acts to approve or reject the application. The hearing shall be conducted by an administrative law judge from the State Office of Administrative Hearings. The board shall give notice of the hearing pursuant to part 1400.5600 and the notice shall include all information required by part 1400.5600, subpart 2.

4410.7912 BOARD CONSIDERATION.

Subpart 1. **Consideration and approval of the drilling permit application.** After acceptance of the application by the chair, and consideration of the findings, conclusion, and recommendation of the administrative law judge, the board shall either approve or reject the application. The board shall approve the application for a permit provided:

A. that the application is complete;

B. that the applicant has complied with all the requirements of Minnesota Statutes, section 116C.724, and parts 4410.7900 to 4410.7934; and

C. that the investigative activities will not materially and adversely affect the environment, unless there is no feasible and prudent alternative and the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land,

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and other natural resources from pollution, impairment, or destruction.

If the board approves the application, the board shall within 90 days issue a permit to commence drilling in accordance with the time schedule and plans set forth in the application. The drilling permit shall contain the terms and conditions to assure compliance with Minnesota Statutes, section 116C.724, parts 4410.7900 to 4410.7934, and all applicable federal, state, and local ordinances. Upon receipt of the drilling permit, the permittee may begin the approved investigative activities relevant to drilling.

Subp. 2. **Copy of permit to county auditor.** The permittee shall, within three days of receipt of the permit from the board, send a copy of the drilling permit to the office of the county auditor in each county or portion of a county within the potentially impacted area. The county auditor shall retain and file the permit in a manner making it accessible to the public.

Subp. 3. **Report of complaints.** The permittee must promptly report to the chair any complaint received about investigative activities, right-of-way preparation, maintenance, restoration, and temporary and permanent abandonment.

Subp. 4. **Rejection of drilling permit application.** The board shall reject the application if it determines that the application has not met any of the conditions of subpart 1, items A to C. If the board rejects the application, it shall upon rejection inform the applicant which deficiencies if corrected will allow the application to be approved. If the deficiencies are corrected and the amended application is submitted to the board at least 30 days in advance of the board's next regularly scheduled meeting, the board shall consider the amended application at the next regularly scheduled meeting.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE.

A. The permittee shall ensure that it clears the right-of-way only to the extent necessary to assure safe

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drilling operations and to provide suitable access for construction and operation.

B. Equipment used in right-of-way preparation and maintenance shall comply with the noise control rules of the Pollution Control Agency published in chapter 7010.

C. Where the right-of-way as planned contacts surface water ~~bodies~~ and roads, clearing by the permittee shall be done so that a screen of the maximum possible width of any existing natural vegetation is left along the right-of-way adjacent to the surface water ~~body~~ or road. If the natural vegetation that existed prior to clearing cannot be left as a screen and suitable natural regeneration is not likely to occur within one full growing season following right-of-way restoration, native types of shrubs and trees shall be planted by the permittee to provide an adequate screen. Where the right-of-way as planned contacts surface water ~~bodies~~ of any size and type, the permittee shall act in accordance with federal law, including Executive Order 11990, that protects wetlands of all sizes and types, in accordance with Minnesota Statutes, chapters 104 and 105, which cover shoreland management, floodplain management, wild and scenic rivers, and permits required for protected waters, and in accordance with any other federal, state, and local laws, regulations, and ordinances. The amount and species of vegetation that will be planted to replace the vegetation removed from any Minnesota highway right-of-way shall be specified by the Minnesota Department of Transportation or appropriate county or local authority.

D. Investigative activities by the permittee in the vicinity of streams shall comply with Minnesota Statutes, chapter 105, permit requirements of the Department of Natural Resources so as to minimize damage to the natural condition of the area.

E. Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and ~~seeded~~ revegetated by the permittee using native plant species indigenous to the area.

FF2 FF6 FF6

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F. Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be ~~reseeded~~ revegetated by the permittee using native plant species indigenous to the area within one full growing season after temporary abandonment. FF6

G. Where significant grading or excavation or both is required, precautions shall be taken by the permittee to protect and segregate top soil.

H. Compaction of cropland by the permittee shall be kept to a minimum and confined to as small an area as practicable.

I. Precautions to protect livestock and crops shall be taken by the permittee. ? vague

J. All appropriate precautions to protect against pollution of the environment shall be taken by the permittee. ? vague

K. The permittee ~~will~~ shall repair or replace all drainage tiles broken or damaged during right-of-way preparation or investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate, on whose property the tiles are located. FF8

L. The permittee is responsible for the repair of private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way and for the reimbursement to the landowner or tenant, as appropriate, for crop loss resulting from access to right-of-way damaged during preparation or drilling operations.

M. The permittee shall replace or repair all fences and gates removed or damaged during right-of-way preparation and investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate.

N. Shelterbelts and trees shall be protected by the permittee whenever possible. If shelterbelts and trees must be cut, native shrubs and trees shall be planted to provide protection in accordance with the request of the landowner or tenant, as appropriate, unless otherwise negotiated with the landowner or tenant, as appropriate.

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O. The permittee shall restore cropland to substantially its original condition, unless otherwise negotiated with the landowner or tenant, as appropriate. Restoration shall include grading, topsoil replacement, subsoiling and disking, or other methods as negotiated with the landowner or tenant, as appropriate.

P. The permittee shall return pasture to its former level of productivity, unless otherwise negotiated with the landowner or tenant, as appropriate. Pasture restoration shall include planting native or tame grasses or other restoration methods as negotiated with the landowner or tenant, as appropriate.

Q. The permittee shall, unless negotiated with the landowner or tenant, as appropriate, restore other areas to substantially their original condition. FF 10

4410.7916 EMERGENCY NOTIFICATION.

The applicant or permittee, as appropriate, shall promptly notify the chair, the commissioner of health, the commissioner of natural resources, the pollution control agency, and the county health officer of each county or portion of a county in which investigative activities are conducted of any occurrence during investigative activities and related actions that has a potential for significant adverse health or environmental effects and shall take action as quickly as may be reasonably possible to minimize adverse effects.

4410.7918 LOCATION OF DRILL HOLES.

A permittee shall comply to the extent practicable with the following standards with respect to location of a drill hole.

A. A drill hole shall be located:

(1) when possible on a right-of-way that has good surface drainage, at a higher elevation than, and at a sufficient distance from cesspools, buried sewers, septic tanks, privies, barnyards, and feedlots or other possible sources of contamination, as provided in the Minnesota Water Well Construction Code, chapter 4725;

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(2) so that the drill hole and its surrounding area can be kept in a sanitary condition;

(3) to exclude all sources of pollution that are known to the permittee, or reasonably should have been known to the permittee, from entering the drill hole; and

(4) 50 feet from any building and at least 1,000 feet from any occupied residence or occupied animal barn, or as negotiated with the landowner or tenant, as appropriate.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

A permittee shall comply with the following standards with respect to construction of a drill hole.

A. Drill holes shall be constructed in such a fashion as to facilitate testing and prevent any contamination of aquifers.

B. Drill holes not permanently abandoned within 30 days of completion must be constructed to ~~the standards of the Minnesota Water Well Construction Code, chapter 4725~~ meet the requirements of part 4727.1100 regarding temporary abandonment of exploratory borings, and the requirements of any federal statutes and regulations applicable to deep wells.

not exactly same language FF11 -

4410.7922 USE OF DRILL HOLE FOR DISPOSAL PROHIBITED.

A drill hole shall not be used by the permittee for disposal of surface water, near surface water or groundwater or any other liquid, gas, chemical, or solid waste including drilling fluids.

4410.7924 CLEANUP PROCEDURES.

A permittee shall comply with the following clean-up procedures.

A. Cleanup of personal litter, including cans, bottles, and paper, deposited by drilling operation or right-of-way preparation crews on and off the right-of-way shall be on a daily and continuous basis.

B. Interim cleanup and proper disposal of all waste and scrap materials on and off the right-of-way work areas shall

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be carried out after each phase of the drilling operation.

C. After all the work has been performed, the land shall be restored to approximate original contour within a reasonable period of time, unless negotiated with the landowner or tenant, as appropriate.

D. All waste and scrap shall be removed or properly disposed of in accordance with the solid and liquid waste regulations of chapters 7035 and 7001.

4410.7926 ABANDONMENT OF EXPLORATORY BORINGS.

Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clause (1), any abandonment, whether temporary or permanent, shall comply with the state drilling and drill hole abandonment and restoration rules governing exploratory boring under Minnesota Statutes, chapter 156A, and parts 4727.1000 to 4727.1300.

4410.7928 SUBMISSION OF SPLITS AND DATA.

Subpart 1. **Request for samples or data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clauses (5) and (6), the permittee shall submit splits or portions of a core sample to the commissioner of natural resources at the commissioner's request or to the director of the Minnesota geological survey at the director's request. If the permittee needs a sample in its entirety, the commissioner or director may accept certified and uninterpreted data of the sample in lieu of an actual portion if that data provides all the information necessary to obtain complete and accurate conclusions. Splits or certified data shall be presented to the commissioner or director within 30 days after the request is made and all samples submitted shall become the property of the state.

Subp. 2. **Required data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, the permittee or any person conducting geologic, hydrologic, or geophysical testing or any other studies relating to disposal is required to provide unrestricted access to ~~both~~ all raw and interpreted data to the chair and director of the Minnesota geological survey or their

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designated representatives within 30 days. The raw and interpreted data includes:

A. core samples and splits;

B. distribution of engineering and geophysical parameters including rippability of rock and surficial materials, degree of bedrock or surficial weathering including depth of exfoliation present, resistivity, seismic properties, elastic properties, and coefficients of thermal expansion and thermal conductivity;

C. stratigraphic sections and geologic cross sections of the affected areas including structural, mineralogical, and petrological descriptions at a scale sufficient to delineate relevant stratigraphic changes, discontinuities, or sections of hydrologic or structural interest;

D. location, depth, thickness, and mineral composition of all bedrock aquifers and other water-bearing formations;

E. location, depth, thickness, geologic classification, and material classification of all Quaternary hydrogeologic units encountered;

F. distribution of hydrologic parameters including vertical and horizontal hydraulic conductivity, sustained yield ratings, transmissivity, effective porosity, dispersivity, interstitial velocity, sorbtion coefficients, ion exchange capacity, and elevation of the potentiometric surface for all confined units and water level elevation for unconfined units for the area of potential environmental impact;

G. the groundwater recharge and discharge areas and a description of the flow system including local, intermediate, and regional flow;

H. structural discontinuities and their relationship to groundwater flow, including the presence of and effects on the flow system due to faults, fractures, joints, fissures, and microfissures. Related secondary permeability, rock pore pressure factors, and the extent and type of fracture filling material;

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I. groundwater samples with hydrogeochemical analyses of the area and location, including probable ranges of the chemical composition for major and trace ions and organics with location and depth and Eh-pH;

J. postdrilling test results, including in-situ stresses, in-situ heat, and tracer tests;

K. levels of preexisting radiation from natural elements and man-made structures;

L. tests for solubility of radionuclides and radioactive chemicals, including but not limited to Cesium, Strontium, Carbon-14, Iodine 129, Plutonium, Technetium, Americium, Neptenium, Radon, and Radium;

M. survey charts, maps, graphs, photographs, and interpretative and predecisional reports; and

N. any and all other raw and interpreted data obtained through the studies related to the disposal of high-level radioactive waste.

4410.7930 PERMIT AMENDMENTS.

Subpart 1. **Amendments proposed by permittee.** Proposed amendments to the conditions set forth in the drilling permit regarding size, type, depth, number, and location of drill holes or the location of right-of-ways shall be sent in writing to the chair of the board. Revised maps, development plans, and descriptions of the environmental setting in accordance with part 4410.7906, subpart 1, shall accompany a detailed statement explaining the necessity and reasonableness of the amendments, all of which shall be sent by the permittee to be received by the chair at least ten working days before the day the proposed amendments are intended to become effective.

A. Within the ten working days the chair shall decide whether the proposed amendments require board approval and notify the permittee as to the status of the proposed permit amendments.

B. If, in the opinion of the chair, the proposed amendments would not significantly change the terms and

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conditions set forth in the drilling permit, or materially and adversely affect the environment, the amendments may be approved by the chair.

C. If, in the opinion of the chair, the proposed amendments would cause significant changes in the terms and conditions of the permit, or materially and adversely affect the environment, the chair shall submit the proposed amendments to the board at its next scheduled meeting following the chair's determination, providing his determination is made 20 days in advance of the next scheduled board meeting. The board shall approve the proposed amendments if the application as amended complies with all the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. The board shall reject the proposed amendments if it determines that the application as amended would not comply with the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. Proposed amendments submitted to the board shall not be implemented until the board approves them.

Subp. 2. **Amendments proposed by board.** The board shall, acting on its own initiative, amend the permit to prevent any material and adverse effect to the environment and to prevent any violation of parts 4410.7900 to 4410.7934 or the terms of the permit. The board shall give at least ten working days written notice to the permittee of board action to amend the permit. The permittee may appear before the board and offer evidence relevant to the proposed amendment.

4410.7932 PERMIT REVOCATION.

Subpart 1. **Initiation of revocation.** The board may initiate action to revoke a drilling permit upon a prima facie showing by affidavit and documentation that a violation may have occurred or is likely to occur of the terms and conditions of the permit or parts 4410.7900 to 4410.7934 and Minnesota Statutes, section 116C.724, subdivision 2.

change not addressed in FF

Subp. 2. **Hearing.** If the board determines that a hearing is necessary before revocation of a drilling permit, it shall

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order a contested case hearing. The findings, conclusions, and recommendations of the administrative law judge shall contain the opinion of the judge whether a violation has occurred or is likely to occur and whether corrective measures, permit revocation, or both, are necessary.

Subp. 3. **Considerations for board action.** Based upon the record and the findings, conclusions, and recommendations of the administrative law judge, if a contested case hearing was held, the board shall consider the following matters at its meeting:

A. whether a violation of any of the conditions in Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the drilling permit has occurred or is likely to occur;

B. whether the violation has resulted or will result in any significant adverse environmental effects; and

C. whether the results of the violation can be corrected or ameliorated.

Subp. 4. **Board action.** If the board finds that a violation of Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the terms and conditions of the drilling permit has occurred or is likely to occur, or that a material and adverse effect upon the environment has occurred or is likely to occur, the board shall require corrective measures, or amend or revoke the permit, unless the permittee has undertaken effective corrective or ameliorative measures to correct the violations.

Subp. 5. **Action by the chair.** The chair shall have the power to revoke a permit if all of the following conditions are present:

A. the three days needed to call an emergency board meeting would be too late to prevent a further violation; and

B. the violation is an imminent threat to the public health or safety or a serious or irreversible threat to natural resources.

If a permit is revoked by the chair, the board shall at its next meeting review the decision of the chair and vote to uphold

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or reverse the permit revocation or vote to hold a contested case hearing on the issue of revocation.

Subp. 6. **Effect of revocation.** If a permit is revoked, the permittee shall halt all drilling and investigative activities immediately. The permit may be reinstated by the board only after the violations are corrected. If the violations are corrected and the corrective action and results are submitted to the board at least 30 days in advance of the board's next scheduled meeting, the board shall consider reinstating the permit at that meeting. If it finds the violations are not corrected, the board shall inform the permittee which deficiencies, if corrected, will allow the permit to be reinstated.

4410.7934 APPLICATION AND MONITORING ~~FEES~~ ASSESSMENTS.

Subpart 1. **~~Application fees~~** Initial assessment. Every applicant for a drilling permit shall pay to the board ~~a base fee~~ an initial assessment of $20,000 to be paid as follows:

A. 50 percent accompanying the application; and

B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

Subp. 2. Purpose of assessments and additional costs. ~~If the actual cost of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation, exceeds the above fee, the board shall assess the permittee any additional fees necessary to cover the actual costs. All money received pursuant to this subpart shall be deposited in the general fund.~~

~~The board shall assess to the permittee all costs incurred in monitoring the investigative activities. The permittee shall be assessed~~ The purpose of the assessments is to cover the actual costs of processing an application or amendments, holding hearings, whether required by law or initiated by the board, or the costs incurred through permit revocation and monitoring the investigative activities, including staff and consultant expenses including housing, travel, office space within the

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potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities. If the actual costs exceed the initial assessment the board shall assess the permittee any additional assessments necessary to cover the actual costs. FF12

Subp. 3. **Method of assessment.** The costs assessed under subpart 2 shall be assessed quarterly, at least 30 days before the start of each calendar quarter, by the board against the permittee. The money paid pursuant to the assessment shall be paid to the board within 30 days after receipt of the assessment, which assessment shall constitute notice of the assessment and demand for payment thereof. The total amount which may be assessed to the permittee under authority of this part shall not exceed the sum of the costs incurred through the monitoring, processing, and related activities. Money received by the board pursuant to any assessment shall be paid to the ~~general~~ special revenue fund. FF12

? not clear if BD has authority to designat special fund. — see SONR, taken care of in Laws 85, Sp. 13, § 245

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STATE OF MINNESOTA
DEPARTMENT OF STATE
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Joan Anderson Growe
Secretary of State
12:44 PM

APPROVED AS TO FORM AND LEGALITY
April 17 1986
HUBERT H. HUMPHREY, III
ATTORNEY GENERAL
BY MJ Cassedy
SPECIAL ASSISTANT ATTORNEY GENERAL

Minnesota Environmental Quality Board

Proposed Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Rules as Proposed (all new material)

4410.7900 DEFINITIONS.

Subpart 1. **Scope.** The definitions in Minnesota Statutes, section 116C.71 apply to parts 4410.7900 to 4410.7934, and for the purposes of those parts, the following terms have the meanings given them.

Subp. 2. **Affected landowner.** "Affected landowner" means a person who owns or leases property within the right-of-way of the investigative activities.

Subp. 3. **Agent.** "Agent" means a responsible person who will act as a contact person on behalf of the applicant or permittee.

Subp. 4. **Applicant.** "Applicant" means any person who applies to the board for a drilling permit.

Subp. 5. **Data.** "Data" means any factual measurements, statistics, or information obtained from the investigative activities.

Subp. 6. **Drilling permit.** "Drilling permit" means the written document issued by the board authorizing and outlining the rights and responsibilities of the permittee.

Subp. 7. **Investigative activities.** "Investigative activities" means the actions, whether in the laboratory or in the field, including visual inspection, mapping, surveying, photography, drilling, surface excavations, in situ testing, and all other research undertaken to establish the geologic and hydrologic condition and ranges of the parameters relevant to drilling in a potentially impacted area.

Subp. 8. **Permanent abandonment.** "Permanent abandonment" means the act of permanently sealing a drill hole for the purpose of permanently discontinuing the active and operational use of the drill hole.

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Subp. 9. **Permittee.** "Permittee" means any person to whom a drilling permit is issued.

Subp. 10. **Right-of-way.** "Right-of-way" means the interest in real property used or proposed to be used around each drill hole and/or to obtain access to and from that drill hole.

Subp. 11. **Shelterbelt.** "Shelterbelt" means the barrier zone of grasses, shrubs, and trees planted to protect crops, soil, and other sensitive areas against erosion.

Subp. 12. **Split.** "Split" means a division of a core sample parallel to the axis of the core sample.

Subp. 13. **Temporary abandonment.** "Temporary abandonment" means the act of sealing, capping, or protecting a drill hole for the purpose of temporarily discontinuing use of the drill hole for a period of not more than five years.

4410.7902 PREAPPLICATION RESPONSIBILITIES OF APPLICANT.

A. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, paragraph (c), the applicant shall provide a notice of intent in writing to the chair at least ten days prior to initiating any contact with any landowner/tenant regarding negotiation of easement rights or other property interests that relate to predrilling right-of-way investigative activities. The notice of intent shall contain the legal description of the right-of-way, the property interest in that right-of-way, and the procedure by which the property interest is to be acquired.

B. The applicant shall provide the chair with copies of any permit, lease, permission, and/or easement agreements, within ten days of reaching the agreement, negotiated with landowners and/or tenants during the entire period a potentially impacted area is under consideration for investigative activities related to drilling. These agreements shall provide unrestricted access to the right-of-way as set forth in Minnesota Statutes, section 116C.724, subdivision 2, clause (4), and parts 4410.7900 to 4410.7934.

4410.7904 LICENSING OF EXPLORERS.

An applicant shall comply with Minnesota Statutes, section

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156A.071, subdivision 2, and parts 4727.0400 to 4727.0900, relating to the regulation of exploratory boring.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT.

Subpart 1. **Drilling permit required.** A drilling permit shall be obtained from the board for each potentially impacted area prior to commencing any drilling to obtain geologic and hydrologic information, other than the drilling of geophysical shot holes, relating to the disposal of high level radioactive waste.

Subp. 2. **Content of an application for drilling permit.** An application for a drilling permit shall be filed by the applicant with the board and shall include:

A. the name of the applicant seeking a drilling permit;

B. the name and address of an agent for the applicant;

C. the applicant's explorer's license, issued under Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900;

D. a description of the proposed drilling operation including the number, type, size, and depth of drill holes;

E. United States Geological Survey topographical maps to the scale 1:24,000 or smaller on which are drawn to scale the exact locations of the right-of-way and the proposed drill holes;

F. a development plan showing the right-of-ways and the geographical and cultural features existing on each side of the right-of-ways in an area not less than 200 feet in width on each side of the right-of-way. The scale of the plan shall not be greater than 200 feet per inch. The development plan shall show, to the scale of the plan, dimensions, elevations, contours (using contour intervals of five feet or less), drill hole locations, field construction of drilling equipment, and present and planned pertinent features, including but not limited to roads, buildings, encampments, shelterbelts, fencing, surface water and its diversion or drainage, and present land use. The plan shall show the stages of development from right-of-way preparation through all phases of construction and maintenance.

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G. a time schedule for acquisition and construction of each right-of-way starting with the beginning of any investigative activities. The time schedule shall include the proposed commencement and finishing dates of each stage of investigative activities, and shall also include the proposed date of right-of-way clearance, temporary and permanent abandonment, right-of-way restoration activities, and the method and schedule of drill hole monitoring;

H. a listing of the federal, state, and local permits that may be required for the proposed drilling and the accompanying right-of-way clearance;

I. a description of the environmental setting and the potential environmental impacts of right-of-way clearance and drilling on the following:

(1) groundwater-bearing formations, whether in bedrock, glacial, or postglacial sediments;

(2) surface water;

(3) agricultural lands;

(4) man-made structures;

(5) transportation routes;

(6) residences;

(7) water wells;

(8) rare or endangered species; and

(9) wildlife habitat, native grassland, and other natural areas;

J. existing or potential point and nonpoint sources of pollution on or near the right-of-way that could contaminate surficial water bodies or water-bearing formations underground because of the investigative activities.

Subp. 3. **Acceptance of drilling permit application.** Within 30 days of receipt of a permit application, the chair shall review it for completeness pursuant to subpart 2 and accept or reject the application. If the chair rejects the application, he shall upon rejection inform the applicant which deficiencies, if corrected, will allow the application to be accepted. Upon resubmission, the chair shall have 30 days to

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review the amended application and accept or reject it. After acceptance of an application, the applicant shall provide any additional relevant information that the chair or the board determines necessary for board approval of the application.

Subp. 4. **Copy of application to county auditor.** When an applicant files a permit application with the board, the applicant shall simultaneously send a copy of the application to the office of the county auditor in each county or any portion of a county within the potentially impacted area. The county auditor shall retain and file the application in a manner making it accessible to the public.

4410.7908 INFORMATION MEETINGS.

Subpart 1. **Information meetings required.** The applicant or permittee, as appropriate, shall hold public information meetings as required by Minnesota Statutes, section 116C.724, subdivision 3, paragraph (b).

(1) The applicant shall hold one public meeting in the potentially impacted area after the permit application has been filed with the board and before the hearing required by part 4410.7950. At the meeting the applicant shall explain the scope of the planned investigative activities and the potential short- and long-term environmental, health, and safety impacts, if any, of the investigative activities.

(2) The permittee shall hold at least one public meeting every three months in the potentially impacted area during the investigation in order to answer questions, concerns, and complaints, and to provide the public with all current raw and interpreted data on the progress of the investigation.

Subp. 2. **Agenda.** The applicant or permittee, as appropriate, shall provide the agenda, and responses to concerns and issues raised at the public information meeting, in writing to the chair within 20 days of the meeting.

Subp. 3. **Evidence.** Any person may appear at the public information meetings and present written and/or oral testimony and exhibits relevant to the investigative activities.

Subp. 4. **Schedule and location.** The public information

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meetings shall be scheduled on weekday evenings that do not fall on a public holiday and shall begin no earlier than 7:00 p.m. The public information meetings shall be held in a facility centrally located within the potentially impacted area and sufficient in size to accommodate the reasonably projected attendance. If no adequate facility exists within the potentially impacted area, the meetings shall be held in an adequate facility near the potentially impacted area.

Subp. 5. **Notice.** Notice of each public information meeting held pursuant to subpart 1 shall be given by the applicant or permittee, as appropriate, by paid advertisement in a qualified newspaper, as defined in Minnesota Statutes, section 331A.01, subdivision 8, in general circulation in the potentially impacted area. The notice shall be published at least ten days and not more than 30 days prior to the meeting. The applicant or permittee shall notify the chair and the county auditor of each county or portion of each county within the potentially impacted area in writing at least ten days in advance of the meeting. The notice shall include the following information:

A. the date, time, and place of the meeting;

B. the agenda;

C. the identity of the applicant or permittee and the name of the agent and the address and phone number where that person can be reached; and

D. the locations where the most recent permit application or the drilling permit is available to the public.

4410.7910 HEARING PROVISIONS.

A contested case hearing under Minnesota Statutes, chapter 14 and parts 1400.5100 to 1400.8300 shall be held by the board for the purposes of collecting and verifying data, and establishing a complete and accurate record upon which to base a decision to grant or deny a drilling permit. The hearing shall be held after the chair accepts the application for completeness and before the board acts to approve or reject the application. The hearing shall be conducted by an administrative law judge

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from the State Office of Administrative Hearings. The board shall give notice of the hearing pursuant to part 1400.5600 and the notice shall include all information required by part 1400.5600, subpart 2.

4410.7912 BOARD CONSIDERATION.

Subpart 1. **Consideration and approval of the drilling permit application.** After acceptance of the application by the chair, and consideration of the findings, conclusion, and recommendation of the administrative law judge, the board shall either approve or reject the application. The board shall approve the application for a permit provided:

A. that the application is complete;

B. that the applicant has complied with all the requirements of Minnesota Statutes, section 116C.724, and parts 4410.7900 to 4410.7934; and

C. that the investigative activities will not materially and adversely affect the environment, unless there is no feasible and prudent alternative and the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land, and other natural resources from pollution, impairment, or destruction.

If the board approves the application, the board shall within 90 days issue a permit to commence drilling in accordance with the time schedule and plans set forth in the application. The drilling permit shall contain the terms and conditions to assure compliance with Minnesota Statutes, section 116C.724, parts 4410.7900 to 4410.7934, and all applicable federal, state, and local ordinances. Upon receipt of the drilling permit, the permittee may begin the approved investigative activities relevant to drilling.

Subp. 2. **Copy of permit to county auditor.** The permittee shall, within three days of receipt of the permit from the board, send a copy of the drilling permit to the office of the county auditor in each county or portion of a county within the

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potentially impacted area. The county auditor shall retain and file the permit in a manner making it accessible to the public.

Subp. 3. **Report of complaints.** The permittee must promptly report to the chair any complaint received about investigative activities, right-of-way preparation, maintenance, restoration, and temporary and permanent abandonment.

Subp. 4. **Rejection of drilling permit application.** The board shall reject the application if it determines that the application has not met any of the conditions of subpart 1, items A to C. If the board rejects the application, it shall upon rejection inform the applicant which deficiencies if corrected will allow the application to be approved. If the deficiencies are corrected and the amended application is submitted to the board at least 30 days in advance of the board's next regularly scheduled meeting, the board shall consider the amended application at the next regularly scheduled meeting.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE.

A. The permittee shall ensure that it clears the right-of-way only to the extent necessary to assure safe drilling operations and to provide suitable access for construction and operation.

B. Equipment used in right-of-way preparation and maintenance shall comply with the noise control rules of the Pollution Control Agency published in chapter 7010.

C. Where the right-of-way as planned contacts water bodies and roads, clearing by the permittee shall be done so that a screen of any existing natural vegetation is left along the right-of-way adjacent to the water body or road. If the natural vegetation that existed prior to clearing cannot be left as a screen and suitable natural regeneration is not likely to occur within one full growing season following right-of-way restoration, native types of shrubs and trees shall be planted by the permittee to provide an adequate screen. Where the right-of-way as planned contacts water bodies of any size and type, the permittee shall act in accordance with federal law.

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including Executive Order 11990, that protects wetlands of all sizes and types, in accordance with Minnesota Statutes, chapters 104 and 105, which cover shoreland management, floodplain management, wild and scenic rivers, and permits required for protected waters, and in accordance with any other federal, state, and local laws, regulations, and ordinances. The amount and species of vegetation that will be planted to replace the vegetation removed from any Minnesota highway right-of-way shall be specified by the Minnesota Department of Transportation or appropriate county or local authority.

D. Investigative activities by the permittee in the vicinity of streams shall comply with Minnesota Statutes, chapter 105, permit requirements of the Department of Natural Resources so as to minimize damage to the natural condition of the area.

E. Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and seeded by the permittee.

F. Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be reseeded by the permittee within one full growing season after temporary abandonment.

G. Where significant grading or excavation or both is required, precautions shall be taken by the permittee to protect and segregate top soil.

H. Compaction of cropland by the permittee shall be kept to a minimum and confined to as small an area as practicable.

I. Precautions to protect livestock and crops shall be taken by the permittee.

J. All appropriate precautions to protect against pollution of the environment shall be taken by the permittee.

K. The permittee will repair or replace all drainage tiles broken or damaged during right-of-way preparation or investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate, on whose property the tiles

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are located.

L. The permittee is responsible for the repair of private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way and for the reimbursement to the landowner or tenant, as appropriate, for crop loss resulting from access to right-of-way damaged during preparation or drilling operations.

M. The permittee shall replace or repair all fences and gates removed or damaged during right-of-way preparation and investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate.

N. Shelterbelts and trees shall be protected by the permittee whenever possible. If shelterbelts and trees must be cut, native shrubs and trees shall be planted to provide protection in accordance with the request of the landowner or tenant, as appropriate, unless otherwise negotiated with the landowner or tenant, as appropriate.

O. The permittee shall restore cropland to substantially its original condition, unless otherwise negotiated with the landowner or tenant, as appropriate. Restoration shall include grading, topsoil replacement, subsoiling and disking, or other methods as negotiated with the landowner or tenant, as appropriate.

P. The permittee shall return pasture to its former level of productivity, unless otherwise negotiated with the landowner or tenant, as appropriate. Pasture restoration shall include planting native or tame grasses or other restoration methods as negotiated with the landowner or tenant, as appropriate.

Q. The permittee shall restore other areas to substantially their original condition.

4410.7916 EMERGENCY NOTIFICATION.

The applicant or permittee, as appropriate, shall promptly notify the chair, the commissioner of health, the commissioner of natural resources, the pollution control agency, and the county health officer of each county or portion of a county in

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which investigative activities are conducted of any occurrence during investigative activities and related actions that has a potential for significant adverse health or environmental effects and shall take action as quickly as may be reasonably possible to minimize adverse effects.

4410.7918 LOCATION OF DRILL HOLES.

A permittee shall comply to the extent practicable with the following standards with respect to location of a drill hole.

A. A drill hole shall be located:

(1) when possible on a right-of-way that has good surface drainage, at a higher elevation than, and at a sufficient distance from cesspools, buried sewers, septic tanks, privies, barnyards, and feedlots or other possible sources of contamination, as provided in the Minnesota Water Well Construction Code, chapter 4725;

(2) so that the drill hole and its surrounding area can be kept in a sanitary condition;

(3) to exclude all sources of pollution that are known to the permittee, or reasonably should have been known to the permittee, from entering the drill hole; and

(4) 50 feet from any building and at least 1,000 feet from any occupied residence or occupied animal barn, or as negotiated with the landowner or tenant, as appropriate.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

A permittee shall comply with the following standards with respect to construction of a drill hole.

A. Drill holes shall be constructed in such a fashion as to facilitate testing and prevent any contamination of aquifers.

B. Drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725, and any federal statutes and regulations applicable to deep wells.

4410.7922 USE OF DRILL HOLE FOR DISPOSAL PROHIBITED.

A drill hole shall not be used by the permittee for

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disposal of surface water, near surface water or groundwater or any other liquid, gas, chemical, or solid waste including drilling fluids.

4410.7924 CLEANUP PROCEDURES.

A permittee shall comply with the following clean-up procedures.

A. Cleanup of personal litter, including cans, bottles, and paper, deposited by drilling operation or right-of-way preparation crews on and off the right-of-way shall be on a daily and continuous basis.

B. Interim cleanup and proper disposal of all waste and scrap materials on and off the right-of-way work areas shall be carried out after each phase of the drilling operation.

C. After all the work has been performed, the land shall be restored to approximate original contour within a reasonable period of time, unless negotiated with the landowner or tenant, as appropriate.

D. All waste and scrap shall be removed or properly disposed of in accordance with the solid and liquid waste regulations of chapters 7035 and 7001.

4410.7926 ABANDONMENT OF EXPLORATORY BORINGS.

Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clause (1), any abandonment, whether temporary or permanent, shall comply with the state drilling and drill hole abandonment and restoration rules governing exploratory boring under Minnesota Statutes, chapter 156A, and parts 4727.1000 to 4727.1300.

4410.7928 SUBMISSION OF SPLITS AND DATA.

Subpart 1. **Request for samples or data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clauses (5) and (6), the permittee shall submit splits or portions of a core sample to the commissioner of natural resources at the commissioner's request or to the director of the Minnesota geological survey at the director's request. If the permittee needs a sample in its entirety, the commissioner or director may

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accept certified and uninterpreted data of the sample in lieu of an actual portion if that data provides all the information necessary to obtain complete and accurate conclusions. Splits or certified data shall be presented to the commissioner or director within 30 days after the request is made and all samples submitted shall become the property of the state.

Subp. 2. **Required data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, the permittee or any person conducting geologic, hydrologic, or geophysical testing or any other studies relating to disposal is required to provide unrestricted access to both all raw and interpreted data to the chair and director of the Minnesota geological survey or their designated representatives within 30 days. The raw and interpreted data includes:

A. core samples and splits;

B. distribution of engineering and geophysical parameters including rippability of rock and surficial materials, degree of bedrock or surficial weathering including depth of exfoliation present, resistivity, seismic properties, elastic properties, and coefficients of thermal expansion and thermal conductivity;

C. stratigraphic sections and geologic cross sections of the affected areas including structural, mineralogical, and petrological descriptions at a scale sufficient to delineate relevant stratigraphic changes, discontinuities, or sections of hydrologic or structural interest;

D. location, depth, thickness, and mineral composition of all bedrock aquifers and other water-bearing formations;

E. location, depth, thickness, geologic classification, and material classification of all Quaternary hydrogeologic units encountered;

F. distribution of hydrologic parameters including vertical and horizontal hydraulic conductivity, sustained yield ratings, transmissivity, effective porosity, dispersivity, interstitial velocity, sorbtion coefficients, ion exchange

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capacity, and elevation of the potentiometric surface for all confined units and water level elevation for unconfined units for the area of potential environmental impact;

G. the groundwater recharge and discharge areas and a description of the flow system including local, intermediate, and regional flow;

H. structural discontinuities and their relationship to groundwater flow, including the presence of and effects on the flow system due to faults, fractures, joints, fissures, and microfissures. Related secondary permeability, rock pore pressure factors, and the extent and type of fracture filling material;

I. groundwater samples with hydrogeochemical analyses of the area and location, including probable ranges of the chemical composition for major and trace ions and organics with location and depth and Eh-pH;

J. postdrilling test results, including in-situ stresses, in-situ heat, and tracer tests;

K. levels of preexisting radiation from natural elements and man-made structures;

L. tests for solubility of radionuclides and radioactive chemicals, including but not limited to Cesium, Strontium, Carbon-14, Iodine 129, Plutonium, Technetium, Americium, Neptenium, Radon, and Radium;

M. survey charts, maps, graphs, photographs, and interpretative and predecisional reports; and

N. any and all other raw and interpreted data obtained through the studies related to the disposal of high-level radioactive waste.

4410.7930 PERMIT AMENDMENTS.

Subpart 1. **Amendments proposed by permittee.** Proposed amendments to the conditions set forth in the drilling permit regarding size, type, depth, number, and location of drill holes or the location of right-of-ways shall be sent in writing to the chair of the board. Revised maps, development plans, and descriptions of the environmental setting in accordance with

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part 4410.7906, subpart 1, shall accompany a detailed statement explaining the necessity and reasonableness of the amendments, all of which shall be sent by the permittee to be received by the chair at least ten working days before the day the proposed amendments are intended to become effective.

A. Within the ten working days the chair shall decide whether the proposed amendments require board approval and notify the permittee as to the status of the proposed permit amendments.

B. If, in the opinion of the chair, the proposed amendments would not significantly change the terms and conditions set forth in the drilling permit, or materially and adversely affect the environment, the amendments may be approved by the chair.

C. If, in the opinion of the chair, the proposed amendments would cause significant changes in the terms and conditions of the permit, or materially and adversely affect the environment, the chair shall submit the proposed amendments to the board at its next scheduled meeting following the chair's determination, providing his determination is made 20 days in advance of the next scheduled board meeting. The board shall approve the proposed amendments if the application as amended complies with all the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. The board shall reject the proposed amendments if it determines that the application as amended would not comply with the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. Proposed amendments submitted to the board shall not be implemented until the board approves them.

Subp. 2. **Amendments proposed by board.** The board shall, acting on its own initiative, amend the permit to prevent any material and adverse effect to the environment and to prevent any violation of parts 4410.7900 to 4410.7934 or the terms of the permit. The board shall give at least ten working days written notice to the permittee of board action to amend the permit. The permittee may appear before the board and offer

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evidence relevant to the proposed amendment.

4410.7932 PERMIT REVOCATION.

Subpart 1. **Initiation of revocation.** The board may initiate action to revoke a drilling permit upon a prima facie showing by affidavit and documentation that a violation may have occurred or is likely to occur of the terms and conditions of the permit or parts 4410.7900 to 4410.7934.

Subp. 2. **Hearing.** If the board determines that a hearing is necessary before revocation of a drilling permit, it shall order a contested case hearing. The findings, conclusions, and recommendations of the administrative law judge shall contain the opinion of the judge whether a violation has occurred or is likely to occur and whether corrective measures, permit revocation, or both, are necessary.

Subp. 3. **Considerations for board action.** Based upon the record and the findings, conclusions, and recommendations of the administrative law judge, if a contested case hearing was held, the board shall consider the following matters at its meeting:

A. whether a violation of any of the conditions in Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the drilling permit has occurred or is likely to occur;

B. whether the violation has resulted or will result in any significant adverse environmental effects; and

C. whether the results of the violation can be corrected or ameliorated.

Subp. 4. **Board action.** If the board finds that a violation of Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the terms and conditions of the drilling permit has occurred or is likely to occur, or that a material and adverse effect upon the environment has occurred or is likely to occur, the board shall require corrective measures, or amend or revoke the permit, unless the permittee has undertaken effective corrective or ameliorative measures to correct the violations.

Subp. 5. **Action by the chair.** The chair shall have the

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power to revoke a permit if all of the following conditions are present:

A. the three days needed to call an emergency board meeting would be too late to prevent a further violation; and

B. the violation is an imminent threat to the public health or safety or a serious or irreversible threat to natural resources.

If a permit is revoked by the chair, the board shall at its next meeting review the decision of the chair and vote to uphold or reverse the permit revocation or vote to hold a contested case hearing on the issue of revocation.

Subp. 6. **Effect of revocation.** If a permit is revoked, the permittee shall halt all drilling and investigative activities immediately. The permit may be reinstated by the board only after the violations are corrected. If the violations are corrected and the corrective action and results are submitted to the board at least 30 days in advance of the board's next scheduled meeting, the board shall consider reinstating the permit at that meeting. If it finds the violations are not corrected, the board shall inform the permittee which deficiencies, if corrected, will allow the permit to be reinstated.

4410.7934 APPLICATION AND MONITORING FEES.

Subpart 1. **Application fees.** Every applicant for a drilling permit shall pay to the board a base fee of $20,000 to be paid as follows:

A. 50 percent accompanying the application; and

B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

Subp. 2. **Additional costs.** If the actual cost of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation, exceeds the above fee, the board shall assess the permittee any additional fees necessary to cover the actual costs. All money received pursuant to this subpart shall be deposited in the general fund.

APPROVED BY THE REVISOR OF STATUTES OFFICE BY:

The board shall assess to the permittee all costs incurred in monitoring the investigative activities. The permittee shall be assessed staff and consultant expenses including housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities.

Subp. 3. **Method of assessment.** The costs assessed under subpart 2 shall be assessed quarterly, at least 30 days before the start of each calendar quarter, by the board against the permittee. The money paid pursuant to the assessment shall be paid to the board within 30 days after receipt of the assessment, which assessment shall constitute notice of the assessment and demand for payment thereof. The total amount which may be assessed to the permittee under authority of this part shall not exceed the sum of the costs incurred through the monitoring, processing, and related activities. Money received by the board pursuant to any assessment shall be paid to the general fund.

APPROVED IN THE REVISOR OF STATUTES OFFICE BY:

OFFICE OF THE REVISOR OF STATUTES

Proposed Rule

RD850

Agency: Minnesota Environmental Quality Board

Division:

Agency Contact: John Morley

Minnesota Rules: Parts 4410.7900 to 4410.7934

Title: Proposed Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Type of Rules: Permanent

Incorporations by Reference: None

Steven C. Cross
Revisor of Statutes

David S. Niss
Assistant Revisor
Phone: 297-2948

Date: November 22, 1985

Minnesota Environmental Quality Board

Proposed Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Pat Leonard - MPCA 623-5297 MPH

Rules as Proposed (all new material)

4410.7900 DEFINITIONS.

Subpart 1. **Scope.** The definitions in Minnesota Statutes, section 116C.71 apply to parts MN. Rules - 4410.7900 to 4410.7934, and for the purposes of those parts, the following terms have the meanings given them.

Subp. 2. **Affected landowner.** ~~"Affected landowner"~~ means a person whose property is within the right-of-way of the investigative activities.

Subp. 3. **Agent.** ~~"Agent"~~ means a responsible person who will act as a contact person on behalf of the applicant or permittee.

Subp. 4. **Applicant.** ~~"Applicant"~~ means any person who applies to the board for a drilling permit.

Subp. 5. **Data.** ~~"Data"~~ means any factual measurements, statistics, or information obtained from the investigative activities.

Subp. 6. **Drilling permit.** "Drilling permit" means the written document issued by the board authorizing and outlining the rights and responsibilities of the permittee.

Subp. 7. **Investigative activities.** "Investigative activities" means the actions, whether in the laboratory or in the field, including visual inspection, mapping, surveying, photography, drilling, surface excavations, in situ testing, and all other research undertaken to establish the geologic and hydrologic condition and ranges of the parameters relevant to drilling in a potentially impacted area.

Subp. 8. **Permanent abandonment.** "Permanent abandonment" means the act of permanently sealing, capping, or protecting a drill hole for the purpose of permanently discontinuing the active and operational use of the drill hole.

Subp. 9. **Permittee.** "Permittee" means any person to whom a drilling permit is issued.

Subp. 10. **Right-of-way.** "Right-of-way" means the interest in real property used or proposed to be used around each drill hole and/or to obtain access to and from that drill hole.

Subp. 11. **Shelterbelt.** "Shelterbelt" means the barrier zone of grasses, shrubs, and trees planted to protect crops, soil, and other sensitive areas against wind erosion.

Subp. 12. **Split.** "Split" means a division of a core sample parallel to the length of the core sample.

Subp. 13. **Temporary abandonment.** "Temporary abandonment" means the act of sealing, capping, or protecting a drill hole for the purpose of temporarily discontinuing use of the drill hole for a period of not more than five years.

4410.7902 PREAPPLICATION RESPONSIBILITIES OF APPLICANT.

A. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, paragraph (c), the applicant shall provide a notice of intent in writing to the chair at least ten days prior to initiating any contact with any landowner/tenant regarding negotiation of easement rights or other property interests that relate to predrilling right-of-way investigative activities. The notice of intent shall contain the legal description of the right-of-way, the property interest in that right-of-way, and the procedure by which the property interest is to be acquired.

B. The applicant shall provide the chair with copies of any lease, permission, and/or easement agreements, within ten days of reaching the agreement, negotiated with landowners and/or tenants during the entire period a potentially impacted area is under consideration for investigative activities related to drilling. These agreements shall provide unrestricted access to the right-of-way as set forth in Minnesota Statutes, section 116C.724, subdivision 2, clause (4), and parts 4410.7900 to 4410.7934.

4410.7904 LICENSING OF EXPLORERS.

An applicant shall comply with with Minnesota Statutes,

section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900, relating to the regulation of exploratory boring.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT.

A drilling permit shall be obtained from the board for each potentially impacted area prior to commencing any drilling to obtain geologic and hydrologic information relating to the disposal of high level radioactive waste.

Subpart 1. Content of an application for drilling permit. An application for a drilling permit shall be filed by the applicant with the board and shall include:

A. the name of the applicant seeking a drilling permit;

B. the name and address of an agent for the applicant;

C. the applicant's explorer's license, issued under Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900;

D. a copy of the applicant's registration required by Minnesota Statutes, section 156A.071, subdivision 3;

E. the size, type, and method of the proposed drilling operation including number of drill holes, projected depth, ~~drilling method~~, construction of ~~the~~ drilling machine, ~~and the method and schedule of monitoring the drilling~~;

F. United States Geological Survey topographical maps to the scale 1:24,000 or smaller on which are drawn to scale the exact locations of the right-of-way and the proposed drill holes;

G. a development plan of showing the right-of-way and the geographical features existing on each side of the right-of-way in an area not less than 200 feet in width on each side of the right-of-way. The scale of the plan shall not be greater than 200 feet per inch. The development plan shall show, to the scale of the plan if possible, dimensions, elevations, contours (using contour intervals of five feet or less), drill hole locations, and present and planned pertinent features, including but not limited to roads, buildings, shelterbelts, fencing, surface water and its diversion or drainage, and present land use. The plan shall show the stages

of development from right-of-way preparation through all phases of construction.

H. a time schedule for acquisition and construction of each right-of-way starting with the beginning of any investigative activities. The time schedule shall include the proposed commencement and finishing dates of each stage of investigative activities, and shall also include the proposed date of right-of-way clearance, temporary and permanent abandonment of boreholes and right-of-way restoration activities;

I. a description of the right-of-way preparation and maintenance procedures anticipated for the proposed drilling operation;

J. a listing of the federal, state, and local permits that may be required for the proposed drilling and the accompanying right-of-way clearance;

K. a description of the environmental setting and the potential environmental impacts of right-of-way clearance and drilling on the following:

(1) groundwater-bearing formations, whether in bedrock, glacial, or postglacial sediments;

(2) surface water bodies;

(3) agricultural lands;

(4) man-made structures;

(5) transportation routes;

(6) residences; and

(7) water wells; and

L. existing and potential point and nonpoint sources of pollution on or near the right-of-way that could contaminate surficial water bodies or water-bearing formations underground because of the investigative activities.

Subp. 2. **Acceptance of drilling permit application.** Within 30 days of receipt of a permit application, the chair shall review it for completeness pursuant to subpart 1 and accept or reject the application. If the chair rejects the application, he shall upon rejection inform the applicant which deficiencies, if corrected, will allow the application to be

accepted. Upon resubmission, the chair shall have 30 days to review the amended application and accept or reject it. After acceptance of an application, the applicant shall provide any additional relevant information that the chair or the board determines necessary for board approval of the application.

Subp. 3. **Copy of application to county auditor.** When an applicant files a permit application with the board, the applicant shall simultaneously send a copy of the application to the office of the county auditor in each county or any portion of a county within the potentially impacted area. The county auditor shall retain and file the application in a manner making it accessible to the public.

4410.7908 INFORMATION MEETINGS.

Subpart 1. **Information meetings required.** The applicant or permittee, as appropriate, shall hold public information meetings as required by Minnesota Statutes, section 116C.724, subdivision 3, paragraph (b).

(1) The applicant shall hold one public meeting in the potentially impacted area after the permit application has been filed with the board and before the hearing required by part 4410.7950. At the meeting the applicant shall explain the scope of the planned investigative activities and the potential short- and long-term environmental, health, and safety impacts, if any, of the investigative activities.

(2) The permittee shall hold at least one public meeting every three months in the potentially impacted area during the investigation in order to answer questions, concerns, and complaints, and to provide the public with all current raw and interpreted data on the progress of the investigation.

Subp. 2. **Agenda.** The applicant or permittee, as appropriate, shall provide the agenda, and responses to concerns and issues raised at the public information meeting, in writing to the chair within 20 days of the meeting.

Subp. 3. **Evidence.** Any person may appear at the public information meetings and present testimony and exhibits relevant to the investigative activities.

Subp. 4. Schedule and location. The public information meetings shall be scheduled on weekday evenings that do not fall on a public holiday and shall begin no earlier than 7:00 p.m. The public information meetings shall be held in a facility centrally located within the potentially impacted area and sufficient in size to accommodate the reasonably projected attendance.

Subp. 5. Notice. Notice of each public information meeting held pursuant to subpart 1 shall be given by the applicant or permittee, as appropriate, by paid advertisement in a qualified newspaper, as defined in Minnesota Statutes, section 331A.01, subdivision 8, in general circulation in the potentially impacted area. The notice shall be published at least ten days and not more than 30 days prior to the meeting. The applicant or permittee shall notify the chair and the county auditor of each county or portion of each county within the potentially impacted area in writing at least ten days in advance of the meeting. The notice shall include the following information:

A. the date, time, and place of the meeting;

B. the agenda;

C. the identity of the applicant or permittee and the name of the agent and the address and phone number where that person can be reached; and

D. the locations where, after a drilling application has been submitted to the board or a permit has been issued, the most recent permit application or the drilling permit is available to the public.

4410.7910 HEARING PROVISIONS.

A contested case hearing under Minnesota Statutes, chapter 14 and parts 1400.5100 to 1400.8300 shall be held by the board for the purposes of collecting and verifying data, and establishing a complete and accurate record upon which to base a decision to grant or deny a drilling permit. The hearing shall be held after the chair accepts the application for completeness and before the board acts to approve or reject the application.

The hearing shall be conducted by an administrative law judge from the State Office of Administrative Hearings. The board shall give notice of the hearing pursuant to part 1400.5600 and the notice shall include all information required by part 1400.5600, subpart 2.

4410.7912 BOARD CONSIDERATION.

Subpart 1. **Consideration and approval of the drilling permit application.** After acceptance of the application by the chair of the board, and consideration of the findings, conclusion, and recommendation of the administrative law judge, the board shall either approve or reject the application. The board shall approve the application for a permit provided the application is complete and the applicant has complied with all the requirements of Minnesota Statutes, section 116C.724, and parts 4410.7900 to 4410.7934. If the board approves the application, the board shall within 90 days issue a permit to commence drilling in accordance with the time schedule and plans set forth in the application. The drilling permit shall contain the terms and conditions to assure compliance with Minnesota Statutes, section 116C.724, parts 4410.7900 to 4410.7934, and all applicable federal, state, and local ordinances. Upon receipt of the drilling permit, the permittee may begin the approved investigative activities relevant to drilling, provided the permittee has the necessary right-of-way agreements.

Subp. 2. **Copy of permit to county auditor.** The permittee shall, within three days of receipt of the permit from the board, send a copy of the drilling permit to the office of the county auditor in each county or portion of a county within the potentially impacted area. The county auditor shall retain and file the permit in a manner making it accessible to the public.

Subp. 3. **Report of complaints.** The permittee must promptly report to the chair any complaint received about investigative activities, right-of-way preparation, maintenance, restoration, and temporary and permanent abandonment.

Subp. 4. **Rejection of drilling permit application.** The board shall reject the application if it determines:

A. that the application is not complete;

B. that the applicant has not complied with all the requirements of Minnesota Statutes, section 116C.724, and parts 4410.7900 to 4410.7934; or

C. that the investigative activities will materially and adversely affect the environment, unless there is no feasible and prudent alternative and the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land, and other natural resources from pollution, impairment, or destruction. If the board rejects the application, it shall upon rejection inform the applicant which deficiencies if corrected will allow the application to be approved. If the deficiencies are corrected and the amended application is submitted to the board at least 30 days in advance of the board's next regularly scheduled meeting, the board shall consider the amended application at the next regularly scheduled meeting.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE.

A. The permittee shall ensure that it clears the right-of-way only to the extent necessary to assure safe drilling operations and to provide suitable access for construction and operation.

B. Equipment used in right-of-way preparation and maintenance shall comply with the noise control rules of the Pollution Control Agency published in chapter 7010.

C. Where the right-of-way as planned contacts water bodies and roads, clearing by the permittee shall be done so that a screen of any existing natural vegetation is left along the right-of-way adjacent to the water body or road. If the natural vegetation that existed prior to clearing cannot be left as a screen and suitable natural regeneration is not likely to occur within one full growing season following right-of-way restoration, native types of shrubs and trees shall be planted by the permittee to provide an adequate screen. Where the

right-of-way as planned contacts water bodies of any size and type, the permittee shall act in accordance with federal law, including Executive Order 11990, that protects wetlands of all sizes and types, in accordance with Minnesota Statutes, chapters 104 and 105, which cover shoreland management, floodplain management, wild and scenic rivers, and permits required for protected waters, and in accordance with any other federal, state, and local laws, regulations, and ordinances. The number and species of trees and shrubs that will be planted to replace those removed from any Minnesota state highway right-of-way shall be specified by the Minnesota Department of Transportation, as necessary to provide an adequate screen.

D. Investigative activities by the permittee in the vicinity of streams shall comply with Minnesota Statutes, chapter 105, permit requirements of the Department of Natural Resources so as to minimize damage to the natural condition of the area.

E. Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and seeded by the permittee.

F. Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be reseeded by the permittee within one full growing season after temporary abandonment.

G. Where significant grading or excavation or both is required, precautions shall be taken by the permittee to protect and segregate top soil.

H. Compaction of cropland by the permittee shall be kept to a minimum and confined to as small an area as practicable.

I. Precautions to protect livestock and crops shall be taken by the permittee.

J. All appropriate precautions to protect against pollution of the environment shall be taken by the permittee.

K. The permittee will repair or replace all drainage tiles broken or damaged during right-of-way preparation or

investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate, on whose property the tiles are located.

L. The permittee is responsible for the repair of private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way and for the reimbursement to the landowner or tenant, as appropriate, for crop loss resulting from access to right-of-way damaged during preparation or drilling operations.

M. The permittee shall replace or repair all fences and gates removed or damaged during right-of-way preparation and investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate.

N. Shelterbelts shall be protected by the permittee whenever possible. If shelterbelts must be cut, native shrubs and trees shall be planted to provide protection in accordance with the request of the landowner or tenant unless otherwise negotiated with the landowner.

O. The permittee shall restore cropland to substantially its original condition, unless otherwise negotiated with the landowner or tenant. Restoration shall include grading, topsoil replacement, subsoiling and disking, or other methods as negotiated with the landowner or tenant.

P. The permittee shall return pasture to its former level of productivity, unless otherwise negotiated with the landowner or tenant. Pasture restoration shall include planting native or tame grasses or other restoration methods as negotiated with the landowner or tenant.

Q. The permittee shall restore other areas to substantially their original condition.

4410.7916 EMERGENCY NOTIFICATION.

The applicant or permittee, as appropriate, shall promptly notify the chair, the commissioner of health, the commissioner of natural resources, the pollution control agency, and the county health officer of each county or portion of a county in which investigative activities are conducted of any occurrence

during investigative activities and related actions that has a potential for significant adverse health or environmental effects and shall take action as quickly as may be reasonably possible to minimize adverse effects.

4410.7918 LOCATION OF DRILL HOLES.

A permittee shall comply with the following standards with respect to location of a drill hole.

A. A drill hole shall be located:

(1) only on a right-of-way that has good surface drainage, at a higher elevation than, and at a sufficient distance from cesspools, buried sewers, septic tanks, privies, barnyards, and feedlots or other possible sources of contamination, as provided in the Minnesota Water Well Construction Code, chapter 4725;

(2) so that the drill hole and its surrounding area can be kept in a sanitary condition; and

(3) to exclude all sources of pollution that are known to the permittee, or reasonably should have been known to the permittee, from entering the drill hole.

B. A drill hole shall be located by the permittee the following distances from pollution or contamination sources and structures that are known to the permittee or reasonably should have been known to the permittee:

(1) 150 feet from a preparation or storage area for spray materials, commercial fertilizers, or chemicals that may result in pollution of the soil or groundwater;

(2) 100 feet from a below-grade manure storage area;

(3) 75 feet from a cesspool or leaching pit;

(4) 50 feet from a buried sewer, septic tank, subsurface disposal field, grave, animal or poultry yard or building, privy, or other contaminants that may drain into the soil;

(5) 50 feet from any building and at least 1,000 feet from any occupied residence; or

(6) 50 feet from a gas line, overhead electrical

distribution line, or an underground electrical distribution line.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

A permittee shall comply with the following standards with respect to construction of a drill hole.

A. All drill holes shall be watertight to such depth as may be necessary to exclude pollution and to seal off formations that are or may be contaminated or undesirable.

B. A drill hole constructed in unconsolidated glacial drift or other vulnerable formations shall be cased with material of sufficient strength and impermeability to withstand pressures of the formation.

C. Drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725.

4410.7922 USE OF DRILL HOLE FOR DISPOSAL.

A drill hole shall not be used by the permittee for disposal of surface water, near surface water or groundwater or any other liquid, gas, chemical, or solid waste including drilling fluids.

4410.7924 CLEAN-UP PROCEDURES.

A permittee shall comply with the following clean-up procedures.

A. Cleanup of personal litter, including cans, bottles, and paper, deposited by drilling operation or right-of-way preparation crews on and off the right-of-way shall be on a daily and continuous basis.

B. Interim cleanup and proper disposal of all waste and scrap materials on and off the right-of-way work areas shall be carried out after each phase of the drilling operation.

C. After all the work has been performed, the land shall be restored to substantially its original surface condition within a reasonable period of time.

D. All waste and scrap shall be removed or properly disposed of in accordance with the solid waste regulations of

chapter 7035.

4410.7926 ABANDONMENT OF EXPLORATORY BORINGS.

Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clause (1), any abandonment, whether temporary or permanent, shall comply with the state drilling and drill hole abandonment and restoration rules governing exploratory boring under Minnesota Statutes, chapter 156A, and parts 4727.1000 to 4727.1300.

Ask Barb - are you saying that if Minn. grants a permit, the permittee must agree to hand over information? Cf. this to other exploratory permits - also can't this be in EIS; how do you tie them together??

4410.7928 SUBMISSION OF SPLITS AND DATA.

Subpart 1. Request for samples or data. Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clauses (5) and (6), the permittee shall submit splits or portions of a core sample to the commissioner of natural resources at the commissioner's request or to the director of the Minnesota geological survey at the director's request. If the permittee needs a sample in its entirety, the commissioner or director may accept certified and uninterpreted data of the sample in lieu of an actual portion if that data provides all the information necessary to obtain complete and accurate conclusions. Splits or certified data shall be presented to the commissioner or director within a reasonable time after the request is made and all samples submitted shall become the property of the state.

I think the cases may be different so distinct from groundwater - how they are tied together is clear.

See Barb - This needs work

Subp. 2. Required data. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, the permittee or any person conducting geologic, hydrologic, or geophysical testing or any other studies relating to disposal is required to provide unrestricted access to both all raw and interpreted data to the chair and director of the Minnesota geological survey or their designated representatives within a reasonable amount of time. The raw and interpreted data includes:

separate geologic + hydro-geologic data

A. core samples and splits;

B. location, depth, ~~size, sustained yield ratings,~~ thickness and mineral composition of all bedrock aquifers and other water-bearing formation;

C. location, depth, ~~size, sustained yield ratings,~~ thickness

can combine B & C

geology

geologic classification, and material classification of all Quaternary hydrogeologic units encountered;

D. distribution of hydrologic parameters ~~such as~~ vertical and horizontal hydraulic conductivity, ~~hydraulic head,~~ effective porosity, dispersivity, matrix diffusion, intersitial velocity, sorption coefficients, and potentiometric ~~levels at various depths and locations;~~

E. the groundwater recharge and discharge ~~locations,~~ mechanisms, and ~~amounts for the area and location;~~

F. structural discontinuities and their relationship to groundwater flow, including the presence and ~~assessment of~~ faults, fractures, joints, fissures, and microfissures and related permeability and rock pore pressure factors;

G. stratigraphic and lithologic discontinuities and their relationship to groundwater flow;

H. groundwater samples and hydrochemical analyses of the area and location, including probable ranges of the chemical composition with location and depth and Eh-pH;

I. stratigraphic sections and geologic cross sections of the affected areas including structural, mineralogical, and petrological descriptions;

J. distribution of geophysical parameters including ~~depth to bedrock~~, rippability of rock or surficial materials, ~~depth to water table~~, resistivity, strength, elastic properties, and coefficients of thermal expansion and thermal conductivity;

K. post-drilling tests, such as in situ stresses and in situ heat;

L. levels of preexisting radiation from natural elements and man-made structures;

M. tests for radionuclide solubility and radioactive chemicals, including radon and radium;

N. survey charts, maps, graphs, photographs, and interpretative and predecisional reports; and

O. any and all other raw and interpreted data obtained through the studies related to the disposal of high-level radioactive waste.

4410.7930 PERMIT AMENDMENTS.

Subpart 1. **Amendments proposed by permittee.** Proposed amendments to the conditions set forth in the drilling permit shall be sent in writing to the chair of the board at least 20 days in advance of the day any proposed changes are intended to become effective.

A. An explanation and approval of amendments, revised maps, development plans, and descriptions of the environmental setting in accordance with part 4410.7906, subpart 1, shall accompany a detailed statement explaining the necessity and reasonableness of the amendments, all of which shall be sent by the permittee to be received by the chair at least ten working days before the day the proposed amendments are intended to become effective. Within the ten working days the chair shall decide whether the proposed amendments require board approval and notify the permittee as to the status of the proposed permit amendments.

B. If, in the opinion of the chair, the proposed amendments would not significantly change the terms and conditions set forth in the drilling permit, or materially and adversely affect the environment, the amendments may be approved by the chair.

C. If, in the opinion of the chair, the proposed amendments would cause significant changes in the terms and conditions of the permit, or materially and adversely affect the environment, the chair shall submit the proposed amendments to the board at its next scheduled meeting following the chair's determination, providing his determination is made 20 days in advance of the next scheduled board meeting. The board shall approve the proposed amendments if the application as amended complies with all the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. The board shall reject the proposed amendments if it determines that the application as amended would not comply with the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. Proposed amendments submitted to the board shall not

be implemented until the board approves them.

Subp. 2. **Amendments proposed by board.** The board shall, acting on its own initiative, amend the permit to prevent any material and adverse effect to the environment and to prevent any violation of parts 4410.7900 to 4410.7934 or the terms of the permit. The board shall give at least ten working days written notice to the permittee of board action to amend the permit. The permittee may appear before the board and offer evidence relevant to the proposed amendment.

4410.7932 PERMIT REVOCATION.

Subpart 1. **Initiation of revocation.** The board may initiate action to revoke a drilling permit upon a prima facie showing by affidavit and documentation that a violation may have occurred or is likely to occur of the terms and conditions of the permit or parts 4410.7900 to 4410.7934.

Subp. 2. **Hearing.** If the board determines that a hearing is necessary before revocation of a drilling permit, it shall order a contested case hearing. The findings, conclusions, and recommendations of the administrative law judge shall contain the opinion of the judge whether a violation has occurred or is likely to occur and whether corrective measures, permit revocation, or both, are necessary.

Subp. 3. **Considerations for board action.** Based upon the record and the findings, conclusions, and recommendations of the administrative law judge, if a contested case hearing was held, the board shall consider the following matters at its meeting:

A. whether a violation of any of the conditions in Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the drilling permit has occurred or is likely to occur;

B. whether the violation has resulted or will result in any significant adverse environmental effects; and

C. whether the results of the violation can be corrected or ameliorated.

Subp. 4. **Board action.** If the board finds that a violation of Minnesota Statutes, section 116C.724, subdivision

2, parts 4410.7900 to 4410.7934, or the terms and conditions of the drilling permit has occurred or is likely to occur, or that a material and adverse effect upon the environment has occurred or is likely to occur, the board shall require corrective measures, or amend or revoke the permit, unless the permittee has undertaken effective corrective or ameliorative measures to correct the violations.

Subp. 5. **Action by the chair.** The chair shall have the power to revoke a permit if all of the following conditions are present:

A. the three days needed to call an emergency board meeting would be too late to prevent a further violation; and

B. the violation is an imminent threat to the public health or safety or a serious or irreversible threat to natural resources.

If a permit is revoked by the chair, the board shall at its next meeting review the decision of the chair and vote to uphold or reverse the permit revocation or vote to hold a contested case hearing on the issue of revocation.

Subp. 6. **Effect of revocation.** If a permit is revoked, the permittee shall halt all drilling and investigative activities immediately. The permit may be reinstated by the board only after the violations are corrected. If the violations are corrected and the corrective action and results are submitted to the board at least 30 days in advance of the board's next scheduled meeting, the board shall consider reinstating the permit at that meeting. If it finds the violations are not corrected, the board shall inform the permittee which deficiencies, if corrected, will allow the permit to be reinstated.

4410.7934 APPLICATION AND MONITORING FEES.

Subpart 1. **Application fees.** Every applicant for a drilling permit shall pay to the board a base fee of $20,000 to be paid as follows:

A. 50 percent accompanying the application; and

B. 50 percent to be paid five days before the hearing

held pursuant to part 4410.7910.

Subp. 2. **Additional costs.** If the actual cost of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation, exceeds the above fee, the board shall assess the permittee any additional fees necessary to cover the actual costs. All money received pursuant to this subpart shall be deposited in the general fund.

The board shall assess to the permittee all costs incurred in monitoring the investigative activities. The permittee shall be assessed staff and consultant expenses including housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities.

Subp. 3. **Method of assessment.** The costs assessed under subpart 2 shall be assessed quarterly, at least 30 days before the start of each calendar quarter, by the board against the permittee. The money paid pursuant to the assessment shall be paid to the board within 30 days after receipt of the assessment, which assessment shall constitute notice of the assessment and demand for payment thereof. The total amount which may be assessed to the permittee under authority of this part shall not exceed the sum of the costs incurred through the monitoring, processing, and related activities. Money received by the board pursuant to any assessment shall be paid to the general fund.

STATE OF MINNESOTA
ENVIRONMENTAL QUALITY BOARD

In the Matter of the Proposed Adoption of the Rule of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste

FINDINGS OF FACT, CONCLUSIONS AND ORDER ADOPTING RULE ADOPTED WITHOUT PUBLIC HEARING

Notice of the Board's proposed adoption of the above-entitled rule was published in the State Register on December 16, 1985 and was sent by United States mail to all persons on the list maintained by the board pursuant to Minnesota Statutes, sections 14.14, subdivision 1, paragraph (a) and 14.22 on December 12, 1985.

All persons were given the opportunity to submit comment on the rule for 30 days after notice of proposed rulemaking. Fewer than 25 written requests for hearing within the 30-day comment period were received.

Based on the comments and evidence in the record before the board, the board finds the following changes are necessary and reasonable and do not constitute a substantial change:

FINDINGS OF FACT

1. Paul Burns, Environmental Review Coordinator of the Minnesota Department of Agriculture submitted a comment letter attached hereto as exhibit A. He suggested changes in part 4410.7900 and part 4410.7914 N.

   4410.7900, Subp. 11
   The word "and" should be amended to "and/or" so that it reads "Shelterbelt means the barrier of grasses, shrubs, and/or trees planted to protect crops, soil, and other sensitive areas against erosion." This amendment, as proposed by the Department of Agriculture, does not "introduce significant new subject matter" and therefore does not constitute a substantial change under Minn. Stat. section 14.24.

2. Tom Balcom and Charlotte Cohn of the Department of Natural Resources (DNR) submitted a comment letter attached hereto as Exhibit B. They suggested changes which are addressed in a sequential order consistent with the rules.

   4410.7900 Subp.13
   The use of the terms "surface water" and "water bodies" is unclear in the rules. The Department of Natural Resource has commented that the terms "surface water" and "water bodies" do not explicitly include wetland and/or watercourse habitat that may not retain water throughout the entire year.

To clarify this, the term "surface water" should be defined in part 4410.7900 Subp. 13 as follows: "Surface water means water systems on the surface including permanent lakes, streams and wetlands, intermittent streams, periodic wetlands and their respective watercourse beds and wetland basins." In order to avoid confusion, the term "water bodies" should be replaced in the rules with the term "surface water" wherever it is used in the rules. This change serves strictly to clarify terms and does not constitute a significant change. Former subp. 13 has been appropriately renumerated.

4410.7906 Subp. 2.G. Content of an application for a drilling permit.

This provision addresses a time schedule for acquisition and construction of the rights-of-way starting with the beginning of any investigative activities. Investigative activities as defined in part 4410.7900, Subp. 7 include drilling and important drilling related activities. Some of the drilling related activities may commemce prior to submission of a permit application to the board and their commencement and finishing dates could be vital to the board's environmental assessment.

The Department of Natural Resources has pointed out that the rules do not clearly state that the time schedule should include past, present and proposed drilling related investigative activities. In order to clarify this provision, the first sentence should be changed to read as follows: "a time schedule for acquisition and construction of each right-of-way starting with the initial visual inspection of that right of way." This change serves to clarify and does not add significant new subject matter to the rules and is therefore not a substantial change.

3. John Hynes of the Board staff orally commented that additional copies of applications should be requested as they will contain documents such as maps which will be difficult to reproduce.

4410.7906 Subp. 3 Acceptance of a drilling permit application

The following sentence should be added: "The applicant shall supply extra copies of the application to the members of the board, technical representatives to the board designated by an agency member of the board and 5 copies for staff to the board." For proper review of the application, the board may need more than one copy. It should not be the responsibility of the board, however, to provide the reproduction services required to make copies. Additionally, the board does not have the capability to reproduce the large maps and development plans which will accompany the application.

This amendment does not introduce significant new subject matter and is therefore not considered a substantial change.

4. Russell Fridley, Minnesota Historical Society, submitted a comment attached as Exhibit C.

4410.7906 Subp. 4 Copy of application to county auditor.

At the request of the Minnesota Historical Society, the following provision should be added under part 4410.7906, Subp. 4. This

provision should read "Subp. 4. Copy of application to Minnesota historical society and county auditor. When an applicant files a permit application with the board, the applicant shall simultaneously send a copy of the application to the Minnesota historical society and to the office of the county auditor...."

This provision is necessary to allow the Minnesota Historical Society to ascertain potential impacts on historic or archaeological properties. It does not add significnat new subject matter to the rules and therefore does not constitute a substantial change.

5. An amendment is necessary to correct a typographical error.

4410.7908 Subpart 1. (1) Information meetings required.

A typographical error appears in part 4410.7908 Subp. 1 (1) [page 5, line 20], which incorrectly states that the contested case hearing provisions are found under part 4410.7950. The contested case hearing provisions are located under part 4410.7910.

6. The DNR comment letter attached as Exhibit B also suggests the following changes.

Part 4410.7914 C.

The Department of Natural Resources has suggested that the screen of natural vegetation adjacent to surface waters and roads should be the maximum width possible. Part 4410.7914 C. should read "Where the right-of-way as planned contacts surface water and roads, clearing by the permittee shall be done so that a screen of the maximum possible width of any existing natural vegetation is left along the right-of-way adjacent to the surface water or road." This addition does not introduce significant new subject matter and therefore does not result in a substantial change.

Part 4410.7914 E.

To assure appropriate soil stabilization and reclamation of disturbed stream banks, this provision should be changed to the following: "Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and revegetated by the permittee using native plant species indigenous to the area." The introduction of the phrase "native plant species indigenous to the area" is intended to clarify the type of vegetation acceptable to the board and does not constitute in a substantial change.

Part 4410.7914 F.

In order to clarify the importance of the type of reseeding used, this provision should be changed to "Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be revegetated by the permittee using native plant species indigenous to the area within one full growing season after temporary abandonment." Again, the clarification regarding plant type is not a substantial change.

8.

Part 4410.7914 K.

To be consistent with the other provisions, the word "will" should be replaced with the word "shall." The provision should read: "The permittee shall repair or replace all drainage tiles...."

9. The Minnesota Department of Agriculture requested a change in Exhibit A to assure that federally or state funded shelterbelts or trees are protected.

Part 4410.7914 N.

The Board finds it does not have the authority to make such a change as it lacks authority to specify the source of funding for shelterbelt replacement. In addition, as the permittee is likely to be federally funded by the U.S. Department of Energy, such a restriction is inappropriate.

10.

Part 4410.7914 Q.

To be consistent with other provisions, the phrase "unless negotiated with landowner or tenant, as appropriate" has been added to the end of part 4410.7914 Q.

11. The DNR suggested the following changes in Exhibit B

4410.7920 B.

This provision requires that drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725. The Water Well Construction Code includes provisions irrelevant to the exploratory boring process. The rules relating to temporary abandonment of exploratory borings are more appropriate to the drilling contemplated by the rules since they deal with construction so as to isolate all water-bearing units. The language should be changed to "Drill holes not permanently abandoned within 30 days of completion shall be constructed such that they meet the requirements of Minn. Rules part 4727.1100 regarding temporary abandonment of exploratory borings, and any federal statutes and regulations applicable to deep wells." This change to a more appropriate rule citation does not introduce significant new subject matter and is therefore not a significcant change.

12. To clarify the language in the rule and to make it clear that the assessment is based upon actual and direct costs of a service under Minn. Stat., section 16A.128.

Part 4410.7934

Minnesota Statutes section 116C.724 subd. 2 (3) states "payment by the permittee of a fee covering the costs of processing and monitoring drilling activities." The term "fee" as used here implies a one-time payment and does not project the long-term and cost recovery nature of the drilling rules. Upon the advice of the Department of Finance, the term "fee," should be substituted with the term "cost recovery assessment." This term better reflects the purpose of the payments as stated above in statute and does not add new subject matter to the rules.

4410.7934 Subp. 1

The term application fee should be replaced with "initial assessment" which foreshadows the future assessments and directly ties the cost recovery of processing the application to the cost recovery of monitoring the investigative activities. The initial assessment will remain at $20,000.00, the estimated cost of processing the application, and subsequent assessments will still be billed on a quarterly basis.

Part 4410.7934 Subpart 1 now reads as follows:

> Subpart 1. Initial assessment. Every applicant for a drilling permit shall pay to the board an initial assessment of $20,000.00 to be paid as follows:
> A. 50 percent accompanying the application; and
> B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

4410.7934 Subp. 2

At the suggestion of the Department of Finance, the assessments for application processing and monitoring have been more closely tied together. This clarifies questions regarding the single fund for both application processing and monitoring. In addition, the assessments will be deposited into a special revenue fund instead of the general fund. Due to the exact cost recovery nature of the assessments, it is more appropriate to use a special revenue fund administered through the Department of Finance instead of the legislatively administered general fund.

Part 4410.7934 Subp. 2 now reads as follows:

> Subp. 2. Additional costs. The purpose of the assessments is to cover the actual costs of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation and costs incurred through monitoring the investigative activities including staff and consultant expenses, housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities. If the actual costs exceeds the initial assessment, the board shall assess the permittee any additional assessments necessary to cover the actual costs.

4410.7934 Subp.3

To reflect the change from the general fund to the special revenue fund, the last sentence should read "Money received by the board pursuant to any assessment shall be paid to the special revenue fund."

CONCLUSIONS

1. The Board gave proper notice of its intent to adopt the proposed rules.

2. The Board has fulfilled the procedural requirements of Minnesota Statutes, section 14, and all other procedural requirements of law or rule.

3. The Board has statutory authority to adopt the proposed rules, and the clarifications thereto, and has fulfilled all other substantive requirements of the law or rules within the meaning of the Administrative Procedures Act.

4. The Board has determined that the proposed changes to the rules as published do not constitute a substantial change since they do not introduce new subject matter.

5. The Board has determined the need for and reasonableness of these adopted rules and the clarifications thereto.

ORDER

NOW, THEREFORE, IT IS ORDERED that the rule identified as Rules Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste are adopted this 20th day of February, 1986 pursuant of authority vested in the Board by Minnesota Statutes, section 116C.724

State of Minnesota

John C. Ditmore
Chair
Environmental Quality Board

LAND OF QUALITY FOODS

90 W. PLATO BOULEVARD
SAINT PAUL, MN 55107
(612) 296-1488

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

January 3, 1986

EXHIBIT A

Mr. John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Bldg.
550 Cedar Street
St. Paul, MN 55101

Subject: Proposed Rules Concerning Exploratory Drilling for the Disposal of High Level Radioactive Waste

Dear Mr. Morley:

The Minnesota Department of Agriculture has reviewed the proposed rules relating to exploratory drilling for the disposal of high level radioactive waste. We offer the following suggested changes to the proposed rule for your consideration.

1. Section 4410.7900, Subp. 11, change the first "and" to "and/or", so that it now reads "'Shelterbelt' means the barrier of grasses, shrubs, and/or trees..."

2. Section 4410.7914N. Add the following: "If the shelterbelts or trees were funded with federal or state funds, they must be replaced, without federal or state funds, within one year of abandonment, to the specifications prescribed by the local soil and water conservation district."

Thank you for the opportunity to comment. Other provisions referring to agricultural land appear quite thorough. Please contact me with any questions.

Yours truly,

MINNESOTA DEPARTMENT OF AGRICULTURE

Paul D. Burns

Paul Burns
Environmental Review Coordinator

PB:dw

DEPARTMENT OF NATURAL RESOURCES
Office of Planning

STATE OF MINNESOTA
Office Memorandum

EXHIBIT B

TO: John Morley, EQB
High-Level Radioactive Waste Program

DATE: Jan. 14, 1986

FROM: Thomas W. Balcom T.B.
Environmental Review Coordinator

PHONE: 6-4796

SUBJECT: IN THE MATTER OF THE PROPOSED RULES RELATING TO EXPLORATORY DRILLING FOR THE DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE (MINN. RULES PARTS 4410.7900 TO 4410.7934) (11/22/85 DRAFT)

The Department of Natural Resources (DNR) has reviewed the above-referenced proposed rules and submits the following comments and recommendations for your consideration. The Department has previously reviewed and commented on the October 10, 1985 draft. The DNR is not indicating a need for a public hearing on these proposed rules. It is our position that our comments serve to clarify issues, can be incorporated, and do not constitute significant changes in the rules as proposed.

We note that as recommended by DNR, provisions requiring applicant registration with the DNR as exploratory borers have been deleted.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT

Subpart 2. Content of an application for drilling permit.

Part 4410.7906, Subp. 2.G. addresses a time schedule for acquisition and construction of rights-of-way starting with the beginning of any investigative activities. Investigative activities as defined in part 4410.7900, Subp. 7 broadly include laboratory and in field analysis, drilling, mapping, and photography, etc. In all instances, a great deal of "investigative activity" is performed prior to selecting an area for exploratory drilling. In view of this definition, the rules are unclear as to how this broad definition of investigative activities will be reconciled with respect to the requirement for the time schedule to accompany a drilling permit.

Subp. 2.I(2) requires the description of the environmental setting and the potential environmental impacts to include surface water. The term "surface water" (though not defined in these rules) is acceptable assuming it includes wetland and/or watercourse habitat that may not retain water throughout a given year. Impacts to wetland basins or watercourse beds that contain surface water during all or a portion of a year should be discussed (even though these areas may not contain water at the time of drilling). The term "water bodies" is used elsewhere in the rules but it is unclear whether water bodies is to be used interchangeably with surface water(s) or whether non-surface water systems are also intended by the term water bodies.

4410.7908 INFORMATION MEETINGS

According to Subp. 1(1), a public meeting is to be held in the potentially impacted area after the application has been filed and before the hearing required by part 4410.7950. However, the rules cover parts 4410.7900 to 4410.7934 and do not include part 4410.7950. The text needs to be appropriately revised or clarified.

PART 4410.7910 HEARING PROVISIONS
PART 4410.7912 BOARD CONSIDERATION

While it is clear that the EQB chair has 30 days to review the drilling permit application or resubmission, the rules do not appear to contain any deadlines for either the period of time within which the hearing must be held after EQB chair acceptance of the application, or the period within which the entire EQB must act once all the requirements of Subpart 1 have been completed. For example, it is unclear whether the board has to act to accept or reject within "X" days after receipt of the Administrative Law Judge's report. A clarification of intent is required on these issues.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE

The screen of natural vegetation (4410.7914 C.) left adjacent to surface waters should be the maximum width possible. Determination of this maximum width should be done on a case-by-case basis.

To assure appropriate stabilization and reclamation of disturbed stream banks, part 4410.7914 E. should be changed to "Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and revetated by the permittee using native plant species indigenous to the area."

In order to clarify the importance of the type of reseeding used, part 4410.7914 F. should be changed to "Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be revegetated by the permittee using native plant species indigenous to the area within one full growing season after temporary abandonment."

The restoration of "other areas" to substantially their original condition should be defined/described in greater detail. The current language seems vague and unclear when compared to other items (part 4410.7914 N, O, and P.). This is especially important with regard to natural area restoration.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

Minn. Rules part 4727.1100 (rules relating to explorers and exploratory borings) provide explicit requirements for the temporary abandonment of exploratory borings and these rules should probably be used instead of the more general provisions of the Minnesota Water Well Construction Code (4410.7920 B.).

The Water Well Construction Code includes sections relating to production of sand free water, yield testing, sampling, etc. which are not particularly relevant here. The rules relating to temporary abandonment of exploratory borings are more appropriate to the drilling contemplated by the rules since they deal with construction so as to exclude all water-bearing units. Therefore the proposed language could be changed to "Drill holes not permanently abandoned within 30 days of completion shall be constructed such that they meet the requirements of Minn. Rules part 4727.1100, and any federal statutes and regulations applicable to deep wells."

Please contact Charlotte Cohn (296-9229) if you have any questions concerning these comments.

TWB/CWC:jl

c: Dave Johnson
Gene Hollenstein
Sarah Tufford
Kathy Lewis
Gregg Larson - EQB

MINNESOTA HISTORICAL SOCIETY
FOUNDED IN 1849
690 Cedar Street, St. Paul, Minnesota 55101 • (612) 296-6126

January 13, 1986

EXHIBIT C

Mr. John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101

Dear Mr. Morley:

Re: Proposed Rules Relating to Exploratory Drilling
for the Disposal of High-Level Radioactive Waste
Statewide
MHS Referral File Number: Z-350

Thank you for providing us with a copy of the above referenced rules. I ask that you include a provision, perhaps under 4410.7906, Procedure for the Issuance of a Drilling Permit, Sub-part 2, that the applicant contact the Minnesota Historical Society to ascertain potential impacts on historic or archaeological properties. The contact at the the Minnesota Historical Society is:

Ted Lofstrom
Environmental Assessment Officer
Minnesota Historical Society
Fort Snelling History Center
St. Paul, Minnesota 55111
(612) 726-1171

Thank you for your continued close attention to historical and archaeological values.

Sincerely,

Dennis A Gimmestad

Russell W. Fridley
Director
Minnesota Historical Society

RWF:dmb

NOTICE OF INTENT TO SOLICIT OUTSIDE OPINIION

Environmental Quality Board

Notice of Intent to Solicit Outside Opinion Regarding
Proposed Rules Relating to Exploratory Drilling
for the Disposal of High Level Radioactive Waste

Notice is hereby given that the Environmental Quality Board is seeking information or opinions from sources outside the agency in preparing to promulgate new rules relating to exploratory drilling for the disposal of high level radioactive waste. The promulgation of these rules is authorized by Minnesota Statutes 116C.724, subd. 2 (1985 supp.) which requires the agency to specify by rule the conditions of obtaining and retaining a permit for exploratory drilling for the disposal of high level radioactive waste.

The Environmental Quality Board requests information and comments concerning the subject matter of these rules. Interested or affected persons or groups may submit statements of information or comment orally or in writing. Written statements should be addressed to:

John Morley
High Level Radioactive Waste Program
Environmental Quality Board
Room 100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

Oral statements will be received during regular business hours over the telephone at (612) 297-2373 and in person at the above address.

All statements of information and comment shall be accepted until November 30, 1985. Any written material received by the Environmental Quality Board shall become part of the record in the event that the rules are promulgated.

John C. Pitman

Chairman,
Environmental Quality Board

STATE REGISTER

STATE OF MINNESOTA



VOLUME 10, NUMBER 20

November 11, 1985

Pages 1109-1140

OFFICIAL NOTICES

Pursuant to the provisions of Minn. Stat. § 15.0412, subd. 6, an agency, in preparing proposed rules, may seek information or opinion from sources outside the agency. Notices of intent to solicit outside opinion must be published in the *State Register* and all interested persons afforded the opportunity to submit data or views on the subject, either orally or in writing.

The *State Register* also publishes other official notices of state agencies, notices of meetings, and matters of public interest.

Department of Corrections

Hearing Regarding Implementation of Victims of Crime Act

The Minnesota Department of Corrections will hold a public hearing on November 19, 1985, from 1:00 p.m. to 7:00 p.m., Room 120, State Capitol, St. Paul, regarding the implementation of the federal Victims of Crime Act (P.L. 98-473).

It is anticipated that Minnesota will receive approximately $190,000 for victim compensation programs and $640,000 for victim assistance programs during the first year. The Minnesota Department of Corrections will implement the Crime Victim Assistance Grant Program.

The legislation requires each state to certify that "priority" will be given to programs serving victims of sexaul assault, spousal abuse, and child abuse. The federal Office of Justice Programs has published guidelines for the implementation of the crime victim assistance program which include three options for states to assure these priorities are met. Each state must adopt one of the options which are summarized as follows:

Option 1: The state may allocate at least 10 percent of the total crime victim assistance funds granted to the state to each of the three priority categories.

Option 2: The state may develop criteria for allocating funds that assure that programs serving each priority category of victims receive a share of crime victim assistance funds.

Option 3: The state may require every program receiving crime victim assistance funds to include, as a principal mission or component of its program, services to at least one category of priority victims.

Testimony should be limited to 10 minutes and address the following questions:

1. Which option should Minnesota select to ensure that priority is given to programs that provide assistance to victims of sexual assault, spousal abuse and child abuse?
2. What other types of programs are needed for effective services to victims of crime?
3. What methods can be utilized to improve geographic distribution of services to victims of crime?

Written testimony may also be submitted to Tom Lawson, Minnesota Department of Corrections, 300 Bigelow Building, 450 North Syndicate Street, St. Paul, Minnesota 55104, no later than 12:00 noon on November 19, 1985.

Anyone wishing to schedule testimony or desiring more information should contact Shari Burt at (612) 642-0292.

Environmental Quality Board

Outside Opinion Sought Regarding Proposed Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Notice is hereby given that the Environmental Quality Board is seeking information or opinions from sources outside the agency in preparing to promulgate new rules relating to exploratory drilling for the disposal of high level radioactive waste. The promulgation of these rules is authorized by Minnesota Statutes 116C.724, subd. 2 (1985 supp.) which requires the agency to specify by rule the conditions of obtaining and retaining a permit for exploratory drilling for the disposal of high level radioactive waste.

The Environmental Quality Board requests information and comments concerning the subject matter of these rules. Interested or

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

affected persons or groups may submit statements of information or comment orally or in writing. Written statements should be addresed to :

John Morley
High Level Radioactive Waste Program
Environmental Quality Board
Room 100 Capitol Square Building
550 Cedar Street
St. Paul, MN 55101

Oral statements will be received during regular business hours over the telephone at (612) 297-2373 and in person at the above address.

All statements of information and comment shall be accepted until November 30, 1985. Any written material received by the Environmental Quality Board shall become part of the record in the event that the rules are promulgated.

John C. Ditmore, Chairman
Environmental Quality Board

Housing Finance Agency

Public Hearing on Bond Issue

The Minnesota Housing Finance Agency will hold a public hearing pursuant to Section 103(k) of the Internal Revenue Code of 1954, as amended, on November 25, 1985, at 9:00 o'clock a.m., 3rd Floor, 400 Sibley Street, Saint Paul, Minnesota, 55101, on a proposed issue of Housing Development Bonds in an aggregate principal amount not to exceed $33,137,000 for the purpose of financing the facilities described below as residential rental projects and for the purpose of funding bond reserve accounts. The general functional description of the type and use of each facility, the maximum aggregate face amount of bonds to be issued with respect to it, the initial owner, operator, or manager of the facility, and its prospective location are as follows:

Description	Maximum Bond Amount	Initial Owner, Operator or Manager	Location
New townhouse/ apartment buildings (approx. 60 units)	$ 3,102,000	A partnership, corporation or other entity, one or more of the members of which is Terry Hartman, Rickey Hartman, Forest Oak Builders, Creek Meadows Corp., or a related party.	114th Ave. & Robinson Dr. North: Coon Rapids MN.
New townhouse/ apartment building (approx. 10 units)	$ 379,000	A partnership, corporation or other entity, one or more of the members of which is Lorenzo A. Williams, Timothy Baylor, or a related party.	4238 Nicollet Ave. So.; Minneapolis, MN.
New apartment building (approx. 36 units)	$ 1,917,000	A partnership, corporation or other entity, one or more of the members of which is Richard Asp, John Winter, Asp Construction, or a related party.	Minnetonka Blvd. & Monterey Ave.; St. Louis Park, MN.
New apartment building (approx. 162 units)	$ 9,262,000	A partnership, corporation or other entity, one or more of the members of which is Stuart H. Nolan, Stuart Corporation, or a related party.	Plymouth Blvd. & 37th Ave. N.; Plymouth, MN.

Environmental Quality Board

In the Matter of the Proposed Adoption of Noncontroversial Rules of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste.

Order for Publication of Noncontroversial Rules

It is ordered this 27TH day of NOVEMBER, 1985 that the proposed noncontroversial rules in the above-entitled matter be published in the State Register.

State of Minnesota

John C. Ditmore

John C. Ditmore
Chairman
Environmental Quality Board

CERTIFICATE OF BOARD'S
AUTHORIZING RESOLUTION

I, John C. Ditmore, do hereby certificate that I am a member and the Chairperson of the Environmental Quality Board, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete and correct copy of a resolution adopted at a meeting of the EQB duly and properly called and held on the 21st day of November, 1985, that a quorum was present at said meeting, that a majority of those present voted for the resolution and that said resolution is set forth in the minutes of said meeting and has not been rescinded or modified.

> "NOW, THEREFORE BE IT RESOLVED that John C. Ditmore, Chair of the Environmental Quality Board, be and he hereby is granted the authority and directed to sign an Order of the Board directing that Notice be given of the Board's intent to adopt without a public hearing rules governing the conditions of obtaining and retaining a permit for any geologic and hydrologic drilling related to high-level radioactive waste disposal, to sign the Notice thereof, and to perform any and all acts incidental thereto. In the event a public hearing becomes necessary, John C. Ditmore hereby is granted the authority and directed to call a hearing for the purpose of promulgating said rules as well as perform any and all acts incidental thereto, including but without limited to signing an Order for Hearing and Notice of Hearing as well as acting as the Board's representative at all hearings."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 27TH day of NOVEMBER, 1985.

John C. Ditmore

John C. Ditmore, Chairman

Attest by one other Board member

Environmental Quality Board

In the Matter of the Proposed Adoption of Rules of the Environmental Quality Board relating to exploratory drilling for the disposal of high-level radioactive waste.

Notice of Proposed Adoption of Rules Without a Public Hearing

Notice is hereby given that the Environmental Quality Board proposes to adopt the above-entitled rules without a public hearing following the procedures set forth in Minnesota Statutes, sections 14.22 to 14.28. The specific statutory authority to adopt the rules is 116C.724, subd. 2 (1985 Supp.).

Persons interested in these rules shall have 30 days in which to submit comment in support of or in opposition to the proposed rules or any part or subpart of the rule and comment is encouraged. Each comment should identify the portion of the proposed rules addressed, the reason for the comment, and any change proposed.

Any person may make a written request for a public hearing on the rules within the 30-day comment period. If 25 or more persons submit written requests for a public hearing within the 30-day period, a public hearing will be held unless a sufficient number withdraw their request. Any person requesting a public hearing should state his or her name and address, is encouraged to identify the portion of the proposed rule addressed, the reason for the request, and any change

proposed. If a public hearing is required, the Board will proceed pursuant to Minnesota Statutes, sections 14.131 to 14.20.

Persons who wish to submit comments or a written request for a public hearing should submit such comments or requests to:

John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Building
St. Paul, MN 55101
(612) 297-2373

The proposed rules may be modified if the modifications are supported by data and views submitted to the Board and do not result in a substantial change in the proposed rule.

A copy of the proposed rules are attached to this notice.

A Statement of Need and Reasonableness that describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rules has been prepared and is available from John Morley upon request.

If no hearing is required, upon adoption of the rules without a public hearing, the rules and the required supporting documents will be delivered to the Attorney General for review as to legality and form to the extent the form relates to legality. Any person may request notification of the date of submission to the Attorney General. Persons who wish to be advised of the submission of the material to the Attorney General, or who wish to recieve a copy of the final rules as proposed for adoption, must submit the written statement of such request to John Morley.

State of Minnesota

November 27, 1985

Date

John C. Ditmore

Chairman

Environmental Quality Board

AFFIDAVIT OF MAILING THE NOTICE
OF PROPOSED ADOPTION OF A RULE
WITHOUT A PUBLIC HEARING

STATE OF MINNESOTA
COUNTY OF RAMSEY

In the Matter of the Proposed Adoption of Rules of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste.

Patricia R. Blom, being first duly sworn deposes and says:

I hereby certify that the list of persons, who have requested, pursuant to Minnesota Statutes, sections 14.14, subdivision 1, paragraph (a), and 14.22 or 14.30, that their names be placed on the Environmental Quality Board rulemaking mailing list is accurate and complete as of 2:00 p.M., this 12 day of December, 1985.

That on the 12th day of December, 1985, at the City of St. Paul, County of Ramsey, State of Minnesota, I mailed the attached Notice of Proposed Adoption of A Rule Without a Public Hearing by depositing in the State of Minnesota Central Mail System for United States mailing

at said City of St. Paul, a copy thereof with postage prepaid, to all persons on the aforementioned mailing list.

Evelyn Routier

EVELYN ROUTIER
Notary Public, Ramsey County, Minn.
My Commission Expires Nov. 3, 1988

Subscribed and sworn to before me
this 12 day of December, 1985.

CERTIFICATE OF MAILING LIST

STATE OF MINNESOTA

COUNTY OF RAMSEY

CERTIFICATE

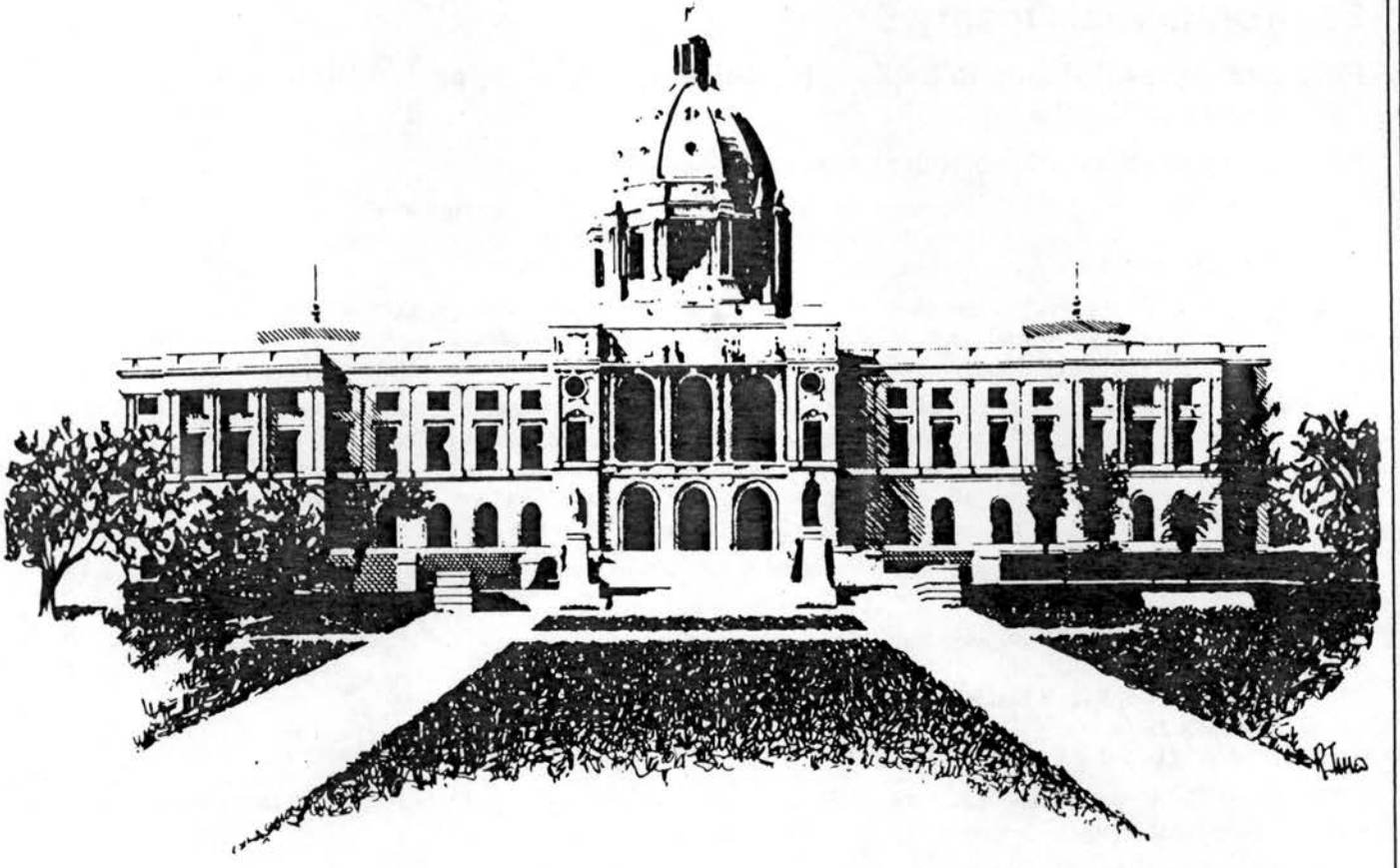
In the Matter of the Proposed Adoption of Rules of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste.

I hereby cerify that the list of persons, associations, and other interested groups who have requested, pursuant to Minnesota Statutes, section 14.14, subdivision 1, that their names be placed on file with and maintained by the Environmental Quality Board for the purpose of receiving notice of the proposed adoption of rules by this Board is accurate and complete as of 2:00 p.M., this 12th day of December 1985.

Patricia R. Blom

STATE REGISTER

STATE OF MINNESOTA



VOLUME 10, NUMBER 25

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Pages 1325-1396

Department of Energy and Economic Development Minnesota Energy and Economic Development Authority

Withdrawal of Previously Proposed Rules Relating to Qualified Economic Diversification Projects

Notice of Withdrawal of Rules

Notice is hereby given that the proposed rules relating to Qualified Economic Diversification Projects as published in the *State Register* on September 30, 1985, pages 721 to 724 (10 S.R. 721), are withdrawn.

New proposed rules regarding the same subject matter are being published in this issue.

Mark B. Dayton, Chairman
Minnesota Energy and Economic
Development Authority

Environmental Quality Board

Proposed Rules Relating to Exploratory Drilling for the Disposal of High Level Radioactive Waste

Notice of Proposed Adoption of Rules without a Public Hearing

Notice is hereby given that the Environmental Quality Board proposes to adopt the above-entitled rules without a public hearing following the procedures set forth in Minnesota Statutes, sections 14.22 to 14.28. The specific statutory authority to adopt the rules is 116C.724, subd. 2 (1985 Supp.).

Persons interested in these rules shall have 30 days in which to submit comment in support of or in opposition to the proposed rules or any part or subpart of the rule and comment is encouraged. Each comment should identify the portion of the proposed rules addressed, the reason for the comment, and any change proposed.

Any person may make a written request for a public hearing on the rules within the 30-day comment period. If 25 or more persons submit written requests for a public hearing within the 30-day period, a public hearing will be held unless a sufficient number withdraw their request. Any person requesting a public hearing should state his or her name and address, is encouraged to identify the portion of the proposed rule addressed, the reason for the request, and any change proposed. If a public hearing is required, the Board will proceed pursuant to Minnesota Statutes, sections 14.131 to 14.20.

Persons who wish to submit comments or a written request for a public hearing should submit such comments or requests to:

John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Building
St. Paul, MN 55101
(612) 297-2373

The proposed rules may be modified if the modifications are supported by data and views submitted to the Board and do not result in a substantial change in the proposed rule.

A copy of the proposed rules are attached to this notice.

A Statement of Need and Reasonableness that describes the need for and reasonableness of each provision of the proposed rules and identifies the data and information relied upon to support the proposed rules has been prepared and is available from John Morley upon request.

If no hearing is required, upon adoption of the rules without a public hearing, the rules and the required supporting documents

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will be delivered to the Attorney General for review as to legality and form to the extent the form relates to legality. Any person may request notification of the date of submission to the Attorney General. Persons who wish to be advised of the submission of the material to the Attorney General, or who wish to receive a copy of the final rules as proposed for adoption, must submit the written statement of such request to John Morley.

November 27, 1985

John C. Ditmore
Chairman
Environmental Quality Board

Rules as Proposed (all new material)

4410.7900 DEFINITIONS.

Subpart 1. **Scope.** The definitions in Minnesota Statutes, section 116C.71 apply to parts 4410.7900 to 4410.7934, and for the purposes of those parts, the following terms have the meanings given them.

Subp. 2. **Affected landowner.** "Affected landowner" means a person who owns or leases property within the right-of-way of the investigative activities.

Subp. 3. **Agent.** "Agent" means a responsible person who will act as a contact person on behalf of the applicant or permittee.

Subp. 4. **Applicant.** "Applicant" means any person who applies to the board for a drilling permit.

Subp. 5. **Data.** "Data" means any factual measurements, statistics, or information obtained from the investigative activities.

Subp. 6. **Drilling permit.** "Drilling permit" means the written document issued by the board authorizing and outlining the rights and responsibilities of the permittee.

Subp. 7. **Investigative activities.** "Investigative activities" means the actions, whether in the laboratory or in the field, including visual inspection, mapping, surveying, photography, drilling, surface excavations, in situ testing, and all other research undertaken to establish the geologic and hydrologic condition and ranges of the parameters relevant to drilling in a potentially impacted area.

Subp. 8. **Permanent abandonment.** "Permanent abandonment" means the act of permanently sealing a drill hole for the purpose of permanently discontinuing the active and operational use of the drill hole.

Subp. 9. **Permittee.** "Permittee" means any person to whom a drilling permit is issued.

Subp. 10. **Right-of-way.** "Right-of-way" means the interest in real property used or proposed to be used around each drill hole and/or to obtain access to and from that drill hole.

Subp. 11. **Shelterbelt.** "Shelterbelt" means the barrier zone of grasses, shrubs, and trees planted to protect crops, soil, and other sensitive areas against erosion.

Subp. 12. **Split.** "Split" means a division of a core sample parallel to the axis of the core sample.

Subp. 13. **Temporary abandonment.** "Temporary abandonment" means the act of sealing, capping, or protecting a drill hole for the purpose of temporarily discontinuing use of the drill hole for a period of not more than five years.

4410.7902 PREAPPLICATION RESPONSIBILITIES OF APPLICANT.

A. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, paragraph (c), the applicant shall provide a notice of intent in writing to the chair at least ten days prior to initiating any contact with any landowner/tenant regarding negotiation of easement rights or other property interests that relate to predrilling right-of-way investigative activities. The notice of intent shall contain the legal description of the right-of-way, the property interest in that right-of-way, and the procedure by which the property interest is to be acquired.

B. The applicant shall provide the chair with copies of any permit, lease, permission, and/or easement agreements, within ten days of reaching the agreement, negotiated with landowners and/or tenants during the entire period a potentially impacted area is under consideration for investigative activities related to drilling. These agreements shall provide unrestricted access to the right-of-way as set forth in Minnesota Statutes, section 116C.724, subdivision 2, clause (4), and parts 4410.7900 to 4410.7934.

4410.7904 LICENSING OF EXPLORERS.

An applicant shall comply with Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900, relating to the regulation of exploratory boring.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT.

Subpart 1. **Drilling permit required.** A drilling permit shall be obtained from the board for each potentially impacted area prior

to commencing any drilling to obtain geologic and hydrologic information, other than the drilling of geophysical shot holes, relating to the disposal of high level radioactive waste.

Subp. 2. **Content of an application for drilling permit.** An application for a drilling permit shall be filed by the applicant with the board and shall include:

A. the name of the applicant seeking a drilling permit;

B. the name and address of an agent for the applicant;

C. the applicant's explorer's license, issued under Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900;

D. a description of the proposed drilling operation including the number, type, size, and depth of drill holes;

E. United States Geological Survey topographical maps to the scale 1:24,000 or smaller on which are drawn to scale the exact locations of the right-of-way and the proposed drill holes;

F. a development plan showing the right-of-ways and the geographical and cultural features existing on each side of the right-of-ways in an area not less than 200 feet in width on each side of the right-of-way. The scale of the plan shall not be greater than 200 feet per inch. The development plan shall show, to the scale of the plan, dimensions, elevations, contours (using contour intervals of five feet or less), drill hole locations, field construction of drilling equipment, and present and planned pertinent features, including but not limited to roads, buildings, encampments, shelterbelts, fencing, surface water and its diversion or drainage, and present land use. The plan shall show the stages of development from right-of-way preparation through all phases of construction and maintenance.

G. a time schedule for acquisition and construction of each right-of-way starting with the beginning of any investigative activities. The time schedule shall include the proposed commencement and finishing dates of each stage of investigative activities, and shall also include the proposed date of right-of-way clearance, temporary and permanent abandonment, right-of-way restoration activities, and the method and schedule of drill hole monitoring;

H. a listing of the federal, state, and local permits that may be required for the proposed drilling and the accompanying right-of-way clearance;

I. a description of the environmental setting and the potential environmental impacts of right-of-way clearance and drilling on the following:

(1) groundwater-bearing formations, whether in bedrock, glacial, or postglacial sediments;

(2) surface water;

(3) agricultural lands;

(4) man-made structures;

(5) transportation routes;

(6) residences;

(7) water wells;

(8) rare or endangered species; and

(9) wildlife habitat, native grassland, and other natural areas;

J. existing or potential point and nonpoint sources of pollution on or near the right-of-way that could contaminate surficial water bodies or water-bearing formations underground because of the investigative activities.

Subp. 3. **Acceptance of drilling permit application.** Within 30 days of receipt of a permit application, the chair shall review it for completeness pursuant to subpart 2 and accept or reject the application. If the chair rejects the application, he shall upon rejection inform the applicant which deficiencies, if corrected, will allow the application to be accepted. Upon resubmission, the chair shall have 30 days to review the amended application and accept or reject it. After acceptance of an application, the applicant shall provide any additional relevant information that the chair or the board determines necessary for board approval of the application.

Subp. 4. **Copy of application to county auditor.** When an applicant files a permit application with the board, the applicant shall

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simultaneously send a copy of the application to the office of the county auditor in each county or any portion of a county within the potentially impacted area. The county auditor shall retain and file the application in a manner making it accessible to the public.

4410.7908 INFORMATION MEETINGS.

Subpart 1. **Information meetings required.** The applicant or permittee, as appropriate, shall hold public information meetings as required by Minnesota Statutes, section 116C.724, subdivision 3, paragraph (b).

(1) The applicant shall hold one public meeting in the potentially impacted area after the permit application has been filed with the board and before the hearing required by part 4410.7950. At the meeting the applicant shall explain the scope of the planned investigative activities and the potential short- and long-term environmental, health, and safety impacts, if any, of the investigative activities.

(2) The permittee shall hold at least one public meeting every three months in the potentially impacted area during the investigation in order to answer questions, concerns, and complaints, and to provide the public with all current raw and interpreted data on the progress of the investigation.

Subp. 2. **Agenda.** The applicant or permittee, as appropriate, shall provide the agenda, and responses to concerns and issues raised at the public information meeting, in writing to the chair within 20 days of the meeting.

Subp. 3. **Evidence.** Any person may appear at the public information meetings and present written and/or oral testimony and exhibits relevant to the investigative activities.

Subp. 4. **Schedule and location.** The public information meetings shall be scheduled on weekday evenings that do not fall on a public holiday and shall begin no earlier than 7:00 p.m. The public information meetings shall be held in a facility centrally located within the potentially impacted area and sufficient in size to accommodate the reasonably projected attendance. If no adequate facility exists within the potentially impacted area, the meetings shall be held in an adequate facility near the potentially impacted area.

Subp. 5. **Notice.** Notice of each public information meeting held pursuant to subpart 1 shall be given by the applicant or permittee, as appropriate, by paid advertisement in a qualified newspaper, as defined in Minnesota Statutes, section 331A.01, subdivision 8, in general circulation in the potentially impacted area. The notice shall be published at least ten days and not more than 30 days prior to the meeting. The applicant or permittee shall notify the chair and the county auditor of each county or portion of each county within the potentially impacted area in writing at least ten days in advance of the meeting. The notice shall include the following information:

A. the date, time, and place of the meeting;

B. the agenda;

C. the identity of the applicant or permittee and the name of the agent and the address and phone number where that person can be reached; and

D. the locations where the most recent permit application or the drilling permit is available to the public.

4410.7910 HEARING PROVISIONS.

A contested case hearing under Minnesota Statutes, chapter 14 and parts 1400.5100 to 1400.8300 shall be held by the board for the purposes of collecting and verifying data, and establishing a complete and accurate record upon which to base a decision to grant or deny a drilling permit. The hearing shall be held after the chair accepts the application for completeness and before the board acts to approve or reject the application. The hearing shall be conducted by an administrative law judge from the State Office of Administrative Hearings. The board shall give notice of the hearing pursuant to part 1400.5600 and the notice shall include all information required by part 1400.5600, subpart 2.

4410.7912 BOARD CONSIDERATION.

Subpart 1. **Consideration and approval of the drilling permit application.** After acceptance of the application by the chair, and consideration of the findings, conclusion, and recommendation of the administrative law judge, the board shall either approve or reject the application. The board shall approve the application for a permit provided:

A. that the application is complete;

B. that the applicant has complied with all the requirements of Minnesota Statutes, section 116C.724, and parts 4410.7900 to 4410.7934; and

C. that the investigative activities will not materially and adversely affect the environment, unless there is no feasible and prudent alternative and the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land, and other natural resources from pollution, impairment, or destruction.

If the board approves the application, the board shall within 90 days issue a permit to commence drilling in accordance with the time schedule and plans set forth in the application. The drilling permit shall contain the terms and conditions to assure compliance with Minnesota Statutes, section 116C.724, parts 4410.7900 to 4410.7934, and all applicable federal, state, and local ordinances. Upon receipt of the drilling permit, the permittee may begin the approved investigative activities relevant to drilling.

Subp. 2. **Copy of permit to county auditor.** The permittee shall, within three days of receipt of the permit from the board, send a copy of the drilling permit to the office of the county auditor in each county or portion of a county within the potentially impacted area. The county auditor shall retain and file the permit in a manner making it accessible to the public.

Subp. 3. **Report of complaints.** The permittee must promptly report to the chair any complaint received about investigative activities, right-of-way preparation, maintenance, restoration, and temporary and permanent abandonment.

Subp. 4. **Rejection of drilling permit application.** The board shall reject the application if it determines that the application has not met any of the conditions of subpart 1, items A to C. If the board rejects the application, it shall upon rejection inform the applicant which deficiencies if corrected will allow the application to be approved. If the deficiencies are corrected and the amended application is submitted to the board at least 30 days in advance of the board's next regularly scheduled meeting, the board shall consider the amended application at the next regularly scheduled meeting.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE.

A. The permittee shall ensure that it clears the right-of-way only to the extent necessary to assure safe drilling operations and to provide suitable access for construction and operation.

B. Equipment used in right-of-way preparation and maintenance shall comply with the noise control rules of the Pollution Control Agency published in chapter 7010.

C. Where the right-of-way as planned contacts water bodies and roads, clearing by the permittee shall be done so that a screen of any existing natural vegetation is left along the right-of-way adjacent to the water body or road. If the natural vegetation that existed prior to clearing cannot be left as a screen and suitable natural regeneration is not likely to occur within one full growing season following right-of-way restoration, native types of shrubs and trees shall be planted by the permittee to provide an adequate screen. Where the right-of-way as planned contacts water bodies of any size and type, the permittee shall act in accordance with federal law, including Executive Order 11990, that protects wetlands of all sizes and types, in accordance with Minnesota Statutes, chapters 104 and 105, which cover shoreland management, floodplain management, wild and scenic rivers, and permits required for protected waters, and in accordance with any other federal, state, and local laws, regulations, and ordinances. The amount and species of vegetation that will be planted to replace the vegetation removed from any Minnesota highway right-of-way shall be specified by the Minnesota Department of Transportation or appropriate county or local authority.

D. Investigative activities by the permittee in the vicinity of streams shall comply with Minnesota Statutes, chapter 105, permit requirements of the Department of Natural Resources so as to minimize damage to the natural condition of the area.

E. Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and seeded by the permittee.

F. Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be reseeded by the permittee within one full growing season after temporary abandonment.

G. Where significant grading or excavation or both is required, precautions shall be taken by the permittee to protect and segregate top soil.

H. Compaction of cropland by the permittee shall be kept to a minimum and confined to as small an area as practicable.

I. Precautions to protect livestock and crops shall be taken by the permittee.

J. All appropriate precautions to protect against pollution of the environment shall be taken by the permittee.

K. The permittee will repair or replace all drainage tiles broken or damaged during right-of-way preparation or investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate, on whose property the tiles are located.

L. The permittee is responsible for the repair of private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way and for the reimbursement to the landowner or tenant, as appropriate, for crop loss resulting from access to right-of-way damaged during preparation or drilling operations.

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M. The permittee shall replace or repair all fences and gates removed or damaged during right-of-way preparation and investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate.

N. Shelterbelts and trees shall be protected by the permittee whenever possible. If shelterbelts and trees must be cut, native shrubs and trees shall be planted to provide protection in accordance with the request of the landowner or tenant, as appropriate, unless otherwise negotiated with the landowner or tenant, as appropriate.

O. The permittee shall restore cropland to substantially its original condition, unless otherwise negotiated with the landowner or tenant, as appropriate. Restoration shall include grading, topsoil replacement, subsoiling and disking, or other methods as negotiated with the landowner or tenant, as appropriate.

P. The permittee shall return pasture to its former level of productivity, unless otherwise negotiated with the landowner or tenant, as appropriate. Pasture restoration shall include planting native or tame grasses or other restoration methods as negotiated with the landowner or tenant, as appropriate.

Q. The permittee shall restore other areas to substantially their original condition.

4410.7916 EMERGENCY NOTIFICATION.

The applicant or permittee, as appropriate, shall promptly notify the chair, the commissioner of health, the commissioner of natural resources, the pollution control agency, and the county health officer of each county or portion of a county in which investigative activities are conducted of any occurrence during investigative activities and related actions that has a potential for significant adverse health or environmental effects and shall take action as quickly as may be reasonably possible to minimize adverse effects.

4410.7918 LOCATION OF DRILL HOLES.

A permittee shall comply to the extent practicable with the following standards with respect to location of a drill hole.

A. A drill hole shall be located:

(1) when possible on a right-of-way that has good surface drainage, at a higher elevation than, and at a sufficient distance from cesspools, buried sewers, septic tanks, privies, barnyards, and feedlots or other possible sources of contamination, as provided in the Minnesota Water Well Construction Code, chapter 4725;

(2) so that the drill hole and its surrounding area can be kept in a sanitary condition;

(3) to exclude all sources of pollution that are known to the permittee, or reasonably should have been known to the permittee, from entering the drill hole; and

(4) 50 feet from any building and at least 1,000 feet from any occupied residence or occupied animal barn, or as negotiated with the landowner or tenant, as appropriate.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

A permittee shall comply with the following standards with respect to construction of a drill hole.

A. Drill holes shall be constructed in such a fashion as to facilitate testing and prevent any contamination of aquifers.

B. Drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725 and any federal statutes and regulations applicable to deep wells.

4410.7922 USE OF DRILL HOLE FOR DISPOSAL PROHIBITED.

A drill hole shall not be used by the permittee for disposal of surface water, near surface water or groundwater or any other liquid, gas, chemical, or solid waste including drilling fluids.

4410.7924 CLEANUP PROCEDURES.

A permittee shall comply with the following clean-up procedures.

A. Cleanup of personal litter, including cans, bottles, and paper, deposited by drilling operation or right-of-way preparation crews on and off the right-of-way shall be on a daily and continuous basis.

B. Interim cleanup and proper disposal of all waste and scrap materials on and off the right-of-way work areas shall be carried out after each phase of the drilling operation.

C. After all the work has been performed, the land shall be restored to approximate original contour within a reasonable period of time, unless negotiated with the landowner or tenant, as appropriate.

D. All waste and scrap shall be removed or properly disposed of in accordance with the solid and liquid waste regulations of chapters 7035 and 7001.

4410.7926 ABANDONMENT OF EXPLORATORY BORINGS.

Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clause (1), any abandonment, whether temporary or permanent, shall comply with the state drilling and drill hole abandonment and restoration rules governing exploratory boring under Minnesota Statutes, chapter 156A, and parts 4727.1000 to 4727.1300.

4410.7928 SUBMISSION OF SPLITS AND DATA.

Subpart 1. **Request for samples or data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clauses (5) and (6), the permittee shall submit splits or portions of a core sample to the commissioner of natural resources at the commissioner's request or to the director of the Minnesota geological survey at the director's request. If the permittee needs a sample in its entirety, the commissioner or director may accept certified and uninterpreted data of the sample in lieu of an actual portion if that data provides all the information necessary to obtain complete and accurate conclusions. Splits or certified data shall be presented to the commissioner or director within 30 days after the request is made and all samples submitted shall become the property of the state.

Subp. 2. **Required data.** Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, the permittee or any person conducting geologic, hydrologic, or geophysical testing or any other studies relating to disposal is required to provide unrestricted access to both all raw and interpreted data to the chair and director of the Minnesota geological survey or their designated representatives within 30 days. The raw and interpreted data includes:

A. core samples and splits;

B. distribution of engineering and geophysical parameters including rippability of rock and surficial materials, degree of bedrock or surficial weathering including depth of exfoliation present, resistivity, seismic properties, elastic properties, and coefficients of thermal expansion and thermal conductivity;

C. stratigraphic sections and geologic cross sections of the affected areas including structural, mineralogical, and petrological descriptions at a scale sufficient to delineate relevant stratigraphic changes, discontinuities, or sections of hydrologic or structural interest;

D. location, depth, thickness, and mineral composition of all bedrock aquifers and other water-bearing formations;

E. location, depth, thickness, geologic classification, and material classification of all Quaternary hydrogeologic units encountered;

F. distribution of hydrologic parameters including vertical and horizontal hydraulic conductivity, sustained yield ratings, transmissivity, effective porosity, dispersivity, interstitial velocity, sorbtion coefficients, ion exchange capacity, and elevation of the potentiometric surface for all confined units and water level elevation for unconfined units for the area of potential environmental impact;

G. the groundwater recharge and discharge areas and a description of the flow system including local, intermediate, and regional flow;

H. structural discontinuities and their relationship to groundwater flow, including the presence of and effects on the flow system due to faults, fractures, joints, fissures, and microfissures. Related secondary permeability, rock pore pressure factors, and the extent and type of fracture filling material;

I. groundwater samples with hydrogeochemical analyses of the area and location, including probable ranges of the chemical composition for major and trace ions and organics with location and depth and Eh-pH;

J. postdrilling test results, including in-situ stresses, in-situ heat, and tracer tests;

K. levels of preexisting radiation from natural elements and man-made structures;

L. tests for solubility of radionuclides and radioactive chemicals, including but not limited to Cesium, Strontium, Carbon-14, Iodine 129, Plutonium, Technetium, Americium, Neptenium, Radon, and Radium;

M. survey charts, maps, graphs, photographs, and interpretative and predecisional reports; and

N. any and all other raw and interpreted data obtained through the studies related to the disposal of high-level radioactive waste.

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4410.7930 PERMIT AMENDMENTS.

Subpart 1. **Amendments proposed by permittee.** Proposed amendments to the conditions set forth in the drilling permit regarding size, type, depth, number, and location of drill holes or the location of right-of-ways shall be sent in writing to the chair of the board. Revised maps, development plans, and descriptions of the environmental setting in accordance with part 4410.7906, subpart 1, shall accompany a detailed statement explaining the necessity and reasonableness of the amendments, all of which shall be sent by the permittee to be received by the chair at least ten working days before the day the proposed amendments are intended to become effective.

A. Within the ten working days the chair shall decide whether the proposed amendments require board approval and notify the permittee as to the status of the proposed permit amendments.

B. If, in the opinion of the chair, the proposed amendments would not significantly change the terms and conditions set forth in the drilling permit, or materially and adversely affect the environment, the amendments may be approved by the chair.

C. If, in the opinion of the chair, the proposed amendments would cause significant changes in the terms and conditions of the permit, or materially and adversely affect the environment, the chair shall submit the proposed amendments to the board at its next scheduled meeting following the chair's determination, providing his determination is made 20 days in advance of the next scheduled board meeting. The board shall approve the proposed amendments if the application as amended complies with all the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. The board shall reject the proposed amendments if it determines that the application as amended would not comply with the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. Proposed amendments submitted to the board shall not be implemented until the board approves them.

Subp. 2. **Amendments proposed by board.** The board shall, acting on its own initiative, amend the permit to prevent any material and adverse effect to the environment and to prevent any violation of parts 4410.7900 to 4410.7934 or the terms of the permit. The board shall give at least ten working days written notice to the permittee of board action to amend the permit. The permittee may appear before the board and offer evidence relevant to the proposed amendment.

4410.7932 PERMIT REVOCATION.

Subpart 1. **Initiation of revocation.** The board may initiate action to revoke a drilling permit upon a prima facie showing by affidavit and documentation that a violation may have occurred or is likely to occur of the terms and conditions of the permit or parts 4410.7900 to 4410.7934.

Subp. 2. **Hearing.** If the board determines that a hearing is necessary before revocation of a drilling permit, it shall order a contested case hearing. The findings, conclusions, and recommendations of the administrative law judge shall contain the opinion of the judge whether a violation has occurred or is likely to occur and whether corrective measures, permit revocation, or both, are necessary.

Subp. 3. **Considerations for board action.** Based upon the record and the findings, conclusions, and recommendations of the administrative law judge, if a contested case hearing was held, the board shall consider the following matters at its meeting:

A. whether a violation of any of the conditions in Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the drilling permit has occurred or is likely to occur;

B. whether the violation has resulted or will result in any significant adverse environmental effects; and

C. whether the results of the violation can be corrected or ameliorated.

Subp. 4. **Board action.** If the board finds that a violation of Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the terms and conditions of the drilling permit has occurred or is likely to occur, or that a material and adverse effect upon the environment has occurred or is likely to occur, the board shall require corrective measures, or amend or revoke the permit, unless the permittee has undertaken effective corrective or ameliorative measures to correct the violations.

Subp. 5. **Action by the chair.** The chair shall have the power to revoke a permit if all of the following conditions are present:

A. the three days needed to call an emergency board meeting would be too late to prevent a further violation; and

B. the violation is an imminent threat to the public health or safety or a serious or irreversible threat to natural resources.

If a permit is revoked by the chair, the board shall at its next meeting review the decision of the chair and vote to uphold or reverse the permit revocation or vote to hold a contested case hearing on the issue of revocation.

Subp. 6. **Effect of revocation.** If a permit is revoked, the permittee shall halt all drilling and investigative activities immediately. The permit may be reinstated by the board only after the violations are corrected. If the violations are corrected and the corrective action and results are submitted to the board at least 30 days in advance of the board's next scheduled meeting, the board shall consider reinstating the permit at that meeting. If it finds the violations are not corrected, the board shall inform the permittee which deficiencies, if corrected, will allow the permit to be reinstated.

4410.7934 APPLICATION AND MONITORING FEES.

Subpart 1. **Application fees.** Every applicant for a drilling permit shall pay to the board a base fee of $20,000 to be paid as follows:

A. 50 percent accompanying the application; and

B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

Subp. 2. **Additional costs.** If the actual cost of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation, exceeds the above fee, the board shall assess the permittee any additional fees necessary to cover the actual costs. All money received pursuant to this subpart shall be deposited in the general fund.

The board shall assess to the permittee all costs incurred in monitoring the investigative activities. The permittee shall be assessed staff and consultant expenses including housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities.

Subp. 3. **Method of assessment.** The costs assessed under subpart 2 shall be assessed quarterly, at least 30 days before the start of each calendar quarter, by the board against the permittee. The money paid pursuant to the assessment shall be paid to the board within 30 days after receipt of the assessment, which assessment shall constitute notice of the assessment and demand for payment thereof. The total amount which may be assessed to the permittee under authority of this part shall not exceed the sum of the costs incurred through the monitoring, processing, and related activities. Money received by the board pursuant to any assessment shall be paid to the general fund.

Department of Human Services

Proposed Rules Relating to Referral of General Assistance Applicants and Recipients to Other Maintenance Benefit Programs

Notice of Hearing and Notice of Intent to Cancel Hearing if Fewer Than Twenty-Five Persons Request a Hearing in Response to Notice of Intent to Adopt Rules without a Hearing

NOTICE IS HEREBY GIVEN that a public hearing on the above-entitled matter will be held in the Veterans Service Building, 20 West 12th St., St. Paul, Minnesota 55155 in Room D, 5th floor on January 24, 1986 commencing at 9:00 a.m. and continuing until all interested or affected persons have an opportunity to participate. The proposed rules may be modified as a result of the hearing process. Therefore, if you are affected in any manner by the proposed rules, you are urged to participate in the rule hearing process.

PLEASE NOTE, HOWEVER, THAT THE HEARING WILL BE CANCELLED IF FEWER THAN TWENTY-FIVE PERSONS REQUEST A HEARING IN RESPONSE TO THE NOTICE OF INTENT TO ADOPT THESE SAME RULES WITHOUT A PUBLIC HEARING PUBLISHED IN THIS *STATE REGISTER* AND MAILED TO PERSONS REGISTERED WITH THE DEPARTMENT OF HUMAN SERVICES. To verify whether a hearing will be held, please call the Department of Human Services between January 16, 1986 and January 23, 1986 at (612) 297-1489.

Following the agency's presentation at the hearing, all interested or affected persons will have an opportunity to participate. Such persons may present their views either orally at the hearing or in writing at any time prior to the close of the hearing record. All evidence presented should be pertinent to the matter at hand. Written material not submitted at the time of the hearing which is to be included in the hearing record may be mailed to Peter Erickson, Administrative Law Judge, Office of Administrative Hearings, 400 Summit Bank Building, 310 South Fourth Avenue, Minneapolis, Minnesota 55415; telephone 612/341-7606, either before the hearing or within five working days after the public hearing ends.

The Administrative Law Judge, may at the hearing, order the record be kept open for a longer period not to exceed 20 calendar days. The comments received during the comment period shall be available for review at the Office of Administrative Hearings. Following the close of the comment period the agency and all interested persons have three business days to respond in writing to any new information submitted during the comment period. During the three-day period, the agency may indicate in writing whether there are amendments suggested by other persons which the agency is willing to adopt. No additional evidence may be submitted during the three-day period. The written responses shall be added to the rulemaking record.

Upon the close of the record, the Administrative Law Judge will write a report as provided for in Minnesota Statutes, section

KEY: PROPOSED RULES SECTION — Underlining indicates additions to existing rule language. ~~Strike outs~~ indicate deletions from existing rule language. If a proposed rule is totally new, it is designated "all new material." ADOPTED RULES SECTION — Underlining indicates additions to proposed rule language. ~~Strike outs~~ indicate deletions from proposed rule language.

STATE OF MINNESOTA
ENVIRONMENTAL QUALITY BOARD

In the Matter of the Proposed Adoption of the Rule of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste

FINDINGS OF FACT, CONCLUSIONS AND ORDER ADOPTING RULE ADOPTED WITHOUT PUBLIC HEARING

Notice of the Board's proposed adoption of the above-entitled rule was published in the State Register on December 16, 1985 and was sent by United States mail to all persons on the list maintained by the board pursuant to Minnesota Statutes, sections 14.14, subdivision 1, paragraph (a) and 14.22 on December 12, 1985.

All persons were given the opportunity to submit comment on the rule for 30 days after notice of proposed rulemaking. Fewer than 25 written requests for hearing within the 30-day comment period were received.

Based on the comments and evidence in the record before the board, the board finds the following changes are necessary and reasonable and do not constitute a substantial change:

FINDINGS OF FACT

1. Paul Burns, Environmental Review Coordinator of the Minnesota Department of Agriculture submitted a comment letter attached hereto as exhibit A. He suggested changes in part 4410.7900 and part 4410.7914 N.

   4410.7900, Subp. 11
   The word "and" should be amended to "and/or" so that it reads "Shelterbelt means the barrier of grasses, shrubs, and/or trees planted to protect crops, soil, and other sensitive areas against erosion." This amendment, as proposed by the Department of Agriculture, does not "introduce significant new subject matter" and therefore does not constitute a substantial change under Minn. Stat. section 14.24.

   p.2. change made but not as indicated here.

2. Tom Balcom and Charlotte Cohn of the Department of Natural Resources (DNR) submitted a comment letter attached hereto as Exhibit B. They suggested changes which are addressed in a sequential order consistent with the rules.

   4410.7900 Subp.13
   The use of the terms "surface water" and "water bodies" is unclear in the rules. The Department of Natural Resource has commented that the terms "surface water" and "water bodies" do not explicitly include wetland and/or watercourse habitat that may not retain water throughout the entire year.

To clarify this, the term "surface water" should be defined in part 4410.7900 Subp. 13 as follows: "Surface water means water systems on the surface including permanent lakes, streams and wetlands, intermittent streams, periodic wetlands and their respective watercourse beds and wetland basins." In order to avoid confusion, the term "water bodies" should be replaced in the rules with the term "surface water" wherever it is used in the rules. This change serves strictly to clarify terms and does not constitute a significant change. Former subp. 13 has been appropriately renumerated.

4410.7906 Subp. 2.G. Content of an application for a drilling permit.

This provision addresses a time schedule for acquisition and construction of the rights-of-way starting with the beginning of any investigative activities. Investigative activities as defined in part 4410.7900, Subp. 7 include drilling and important drilling related activities. Some of the drilling related activities may commemce prior to submission of a permit application to the board and their commencement and finishing dates could be vital to the board's environmental assessment.

The Department of Natural Resources has pointed out that the rules do not clearly state that the time schedule should include past, present and proposed drilling related investigative activities. In order to clarify this provision, the first sentence should be changed to read as follows: "a time schedule for acquisition and construction of each right-of-way starting with the initial visual inspection of that right of way." This change serves to clarify and does not add significant new subject matter to the rules and is therefore not a substantial change.

3. John Hynes of the Board staff orally commented that additional copies of applications should be requested as they will contain documents such as maps which will be difficult to reproduce.

4410.7906 Subp. 3 Acceptance of a drilling permit application

The following sentence should be added: "The applicant shall supply extra copies of the application to the members of the board, technical representatives to the board designated by an agency member of the board and 5 copies for staff to the board." For proper review of the application, the board may need more than one copy. It should not be the responsibility of the board, however, to provide the reproduction services required to make copies. Additionally, the board does not have the capability to reproduce the large maps and development plans which will accompany the application.

This amendment does not introduce significant new subject matter and is therefore not considered a substantial change.

4. Russell Fridley, Minnesota Historical Society, submitted a comment attached as Exhibit C.

4410.7906 Subp. 4 Copy of application to county auditor.

At the request of the Minnesota Historical Society, the following provision should be added under part 4410.7906, Subp. 4. This

provision should read "Subp. 4. Copy of application to Minnesota historical society and county auditor. When an applicant files a permit application with the board, the applicant shall simultaneously send a copy of the application to the Minnesota historical society and to the office of the county auditor...." p.5

This provision is necessary to allow the Minnesota Historical Society to ascertain potential impacts on historic or archaeological properties. It does not add significnat new subject matter to the rules and therefore does not constitute a substantial change.

5. An amendment is necessary to correct a typographical error.

4410.7908 Subpart 1. (1) Information meetings required.

A typographical error appears in part 4410.7908 Subp. 1 (1) [page 5, line 20], which incorrectly states that the contested case hearing provisions are found under part 4410.7950. The contested case hearing provisions are located under part 4410.7910. p.5

6. The DNR comment letter attached as Exhibit B also suggests the following changes.

Part 4410.7914 C.

The Department of Natural Resources has suggested that the screen of natural vegetation adjacent to surface waters and roads should be the maximum width possible. Part 4410.7914 C. should read "Where the right-of-way as planned contacts surface water and roads, clearing by the permittee shall be done so that a screen of the maximum possible width of any existing natural vegetation is left along the right-of-way adjacent to the surface water or road." This addition does not introduce significant new subject matter and therefore does not result in a substantial change. p.9

Part 4410.7914 E.

To assure appropriate soil stabilization and reclamation of disturbed stream banks, this provision should be changed to the following: "Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and revegetated by the permittee using native plant species indigenous to the area." The introduction of the phrase "native plant species indigenous to the area" is intended to clarify the type of vegetation acceptable to the board and does not constitute in a substantial change. p.9

Part 4410.7914 F.

In order to clarify the importance of the type of reseeding used, this provision should be changed to "Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be revegetated by the permittee using native plant species indigenous to the area within one full growing season after temporary abandonment." Again, the clarification regarding plant type is not a substantial change. p.10

8.

Part 4410.7914 K.

To be consistent with the other provisions, the word "will" should be replaced with the word "shall." The provision should read: "The permittee shall repair or replace all drainage tiles...." p.10

9. The Minnesota Department of Agriculture requested a change in Exhibit A to assure that federally or state funded shelterbelts or trees are protected.

Part 4410.7914 N.

The Board finds it does not have the authority to make such a change as it lacks authority to specify the source of funding for shelterbelt replacement. In addition, as the permittee is likely to be federally funded by the U.S. Department of Energy, such a restriction is inappropriate.

10.

Part 4410.7914 Q.

To be consistent with other provisions, the phrase "unless negotiated with landowner or tenant, as appropriate" has been added to the end of part 4410.7914 Q. p.11

11. The DNR suggested the following changes in Exhibit B

4410.7920 B.

This provision requires that drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725. The Water Well Construction Code includes provisions irrelevant to the exploratory boring process. The rules relating to temporary abandonment of exploratory borings are more appropriate to the drilling contemplated by the rules since they deal with construction so as to isolate all water-bearing units. The language should be changed to "Drill holes not permanently abandoned within 30 days of completion shall be constructed such that they meet the requirements of Minn. Rules part 4727.1100 regarding temporary abandonment of exploratory borings, and any federal statutes and regulations applicable to deep wells." This change to a more appropriate rule citation does not introduce significant new subject matter and is therefore not a significcant change. more or less this language added p. 12

12. To clarify the language in the rule and to make it clear that the assessment is based upon actual and direct costs of a service under Minn. Stat., section 16A.128.

Part 4410.7934

Minnesota Statutes section 116C.724 subd. 2 (3) states "payment by the permittee of a fee covering the costs of processing and monitoring drilling activities." The term "fee" as used here implies a one-time payment and does not project the long-term and cost recovery nature of the drilling rules. Upon the advice of the Department of Finance, the term "fee," should be substituted with the term "cost recovery assessment." This term better reflects the purpose of the payments as stated above in statute and does not add new subject matter to the rules.

4410.7934 Subp. 1

The term application fee should be replaced with "initial assessment" which foreshadows the future assessments and directly ties the cost recovery of processing the application to the cost recovery of monitoring the investigative activities. The initial assessment will remain at $20,000.00, the estimated cost of processing the application, and subsequent assessments will still be billed on a quarterly basis.

Part 4410.7934 Subpart 1 now reads as follows:

Subpart 1. Initial assessment. Every applicant for a drilling permit shall pay to the board an initial assessment of $20,000.00 to be paid as follows:

A. 50 percent accompanying the application; and
B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

✓ p. 18

4410.7934 Subp. 2

At the suggestion of the Department of Finance, the assessments for application processing and monitoring have been more closely tied together. This clarifies questions regarding the single fund for both application processing and monitoring. In addition, the assessments will be deposited into a special revenue fund instead of the general fund. Due to the exact cost recovery nature of the assessments, it is more appropriate to use a special revenue fund administered through the Department of Finance instead of the legislatively administered general fund.

Part 4410.7934 Subp. 2 now reads as follows:

Subp. 2. Additional costs. The purpose of the assessments is to cover the actual costs of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation ~~and costs incurred through~~ monitoring the investigative activities including staff and consultant expenses, housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities. If the actual costs exceeds the initial assessment, the board shall assess the permittee any additional assessments necessary to cover the actual costs.

more & less the same language p 18, 19

4410.7934 Subp.3
To reflect the change from the general fund to the special revenue fund, the last sentence should read "Money received by the board pursuant to any assessment shall be paid to the special revenue fund."

p.19

CONCLUSIONS

1. The Board gave proper notice of its intent to adopt the proposed rules.

2. The Board has fulfilled the procedural requirements of Minnesota Statutes, section 14, and all other procedural requirements of law or rule.

3. The Board has statutory authority to adopt the proposed rules, and the clarifications thereto, and has fulfilled all other substantive requirements of the law or rules within the meaning of the Administrative Procedures Act.

4. The Board has determined that the proposed changes to the rules as published do not constitute a substantial change since they do not introduce new subject matter.

5. The Board has determined the need for and reasonableness of these adopted rules and the clarifications thereto.

ORDER

NOW, THEREFORE, IT IS ORDERED that the rule identified as Rules Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste are adopted this 20th day of February, 1986 pursuant of authority vested in the Board by Minnesota Statutes, section 116C.724

State of Minnesota

John C. Ditmore

John C. Ditmore
Chair
Environmental Quality Board

LAND OF QUALITY FOODS

90 W. PLATO BOULEVARD
SAINT PAUL, MN 55107
(612) 296-1488

STATE OF MINNESOTA
DEPARTMENT OF AGRICULTURE

January 3, 1986

EXHIBIT A

Mr. John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Bldg.
550 Cedar Street
St. Paul, MN 55101

Subject: Proposed Rules Concerning Exploratory Drilling for the Disposal of High Level Radioactive Waste

Dear Mr. Morley:

The Minnesota Department of Agriculture has reviewed the proposed rules relating to exploratory drilling for the disposal of high level radioactive waste. We offer the following suggested changes to the proposed rule for your consideration.

1. Section 4410.7900, Subp. 11, change the first "and" to "and/or", so that it now reads "'Shelterbelt' means the barrier of grasses, shrubs, and/or trees..."

2. Section 4410.7914N. Add the following: "If the shelterbelts or trees were funded with federal or state funds, they must be replaced, without federal or state funds, within one year of abandonment, to the specifications prescribed by the local soil and water conservation district."

Thank you for the opportunity to comment. Other provisions referring to agricultural land appear quite thorough. Please contact me with any questions.

Yours truly,

MINNESOTA DEPARTMENT OF AGRICULTURE

Paul D. Burns

Paul Burns
Environmental Review Coordinator

PB:dw

SF-00006-04

STATE OF MINNESOTA

DEPARTMENT OF NATURAL RESOURCES
Office of Planning

Office Memorandum

EXHIBIT B

TO: John Morley, EQB
High-Level Radioactive Waste Program

DATE: Jan. 14, 1986

FROM: Thomas W. Balcom T.B.
Environmental Review Coordinator

PHONE: 6-4796

SUBJECT: IN THE MATTER OF THE PROPOSED RULES RELATING TO EXPLORATORY DRILLING FOR THE DISPOSAL OF HIGH-LEVEL RADIOACTIVE WASTE (MINN. RULES PARTS 4410.7900 TO 4410.7934) (11/22/85 DRAFT)

The Department of Natural Resources (DNR) has reviewed the above-referenced proposed rules and submits the following comments and recommendations for your consideration. The Department has previously reviewed and commented on the October 10, 1985 draft. The DNR is not indicating a need for a public hearing on these proposed rules. It is our position that our comments serve to clarify issues, can be incorporated, and do not constitute significant changes in the rules as proposed.

We note that as recommended by DNR, provisions requiring applicant registration with the DNR as exploratory borers have been deleted.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT

Subpart 2. Content of an application for drilling permit.

Part 4410.7906, Subp. 2.G. addresses a time schedule for acquisition and construction of rights-of-way starting with the beginning of any investigative activities. Investigative activities as defined in part 4410.7900, Subp. 7 broadly include laboratory and in field analysis, drilling, mapping, and photography, etc. In all instances, a great deal of "investigative activity" is performed prior to selecting an area for exploratory drilling. In view of this definition, the rules are unclear as to how this broad definition of investigative activities will be reconciled with respect to the requirement for the time schedule to accompany a drilling permit.

Subp. 2.I(2) requires the description of the environmental setting and the potential environmental impacts to include surface water. The term "surface water" (though not defined in these rules) is acceptable assuming it includes wetland and/or watercourse habitat that may not retain water throughout a given year. Impacts to wetland basins or watercourse beds that contain surface water during all or a portion of a year should be discussed (even though these areas may not contain water at the time of drilling). The term "water bodies" is used elsewhere in the rules but it is unclear whether water bodies is to be used interchangeably with surface water(s) or whether non-surface water systems are also intended by the term water bodies.

4410.7908 INFORMATION MEETINGS

According to Subp. 1(1), a public meeting is to be held in the potentially impacted area after the application has been filed and before the hearing required by part 4410.7950. However, the rules cover parts 4410.7900 to 4410.7934 and do not include part 4410.7950. The text needs to be appropriately revised or clarified.

PART 4410.7910 HEARING PROVISIONS
PART 4410.7912 BOARD CONSIDERATION

While it is clear that the EQB chair has 30 days to review the drilling permit application or resubmission, the rules do not appear to contain any deadlines for either the period of time within which the hearing must be held after EQB chair acceptance of the application, or the period within which the entire EQB must act once all the requirements of Subpart 1 have been completed. For example, it is unclear whether the board has to act to accept or reject within "X" days after receipt of the Administrative Law Judge's report. A clarification of intent is required on these issues.

4410.7914 RIGHT-OF-WAY CLEARANCE AND MAINTENANCE

The screen of natural vegetation (4410.7914 C.) left adjacent to surface waters should be the maximum width possible. Determination of this maximum width should be done on a case-by-case basis.

To assure appropriate stabilization and reclamation of disturbed stream banks, part 4410.7914 E. should be changed to "Stream banks disturbed during right-of-way clearance or investigative activities shall be stabilized, reclaimed, and revetated by the permittee using native plant species indigenous to the area."

In order to clarify the importance of the type of reseeding used, part 4410.7914 F. should be changed to "Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be revegetated by the permittee using native plant species indigenous to the area within one full growing season after temporary abandonment."

The restoration of "other areas" to substantially their original condition should be defined/described in greater detail. The current language seems vague and unclear when compared to other items (part 4410.7914 N, O, and P.). This is especially important with regard to natural area restoration.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS.

Minn. Rules part 4727.1100 (rules relating to explorers and exploratory borings) provide explicit requirements for the temporary abandonment of exploratory borings and these rules should probably be used instead of the more general provisions of the Minnesota Water Well Construction Code (4410.7920 B.).

The Water Well Construction Code includes sections relating to production of sand free water, yield testing, sampling, etc. which are not particularly relevant here. The rules relating to temporary abandonment of exploratory borings are more appropriate to the drilling contemplated by the rules since they deal with construction so as to exclude all water-bearing units. Therefore the proposed language could be changed to "Drill holes not permanently abandoned within 30 days of completion shall be constructed such that they meet the requirements of Minn. Rules part 4727.1100, and any federal statutes and regulations applicable to deep wells."

Please contact Charlotte Cohn (296-9229) if you have any questions concerning these comments.

TWB/CWC:jl

c: Dave Johnson
Gene Hollenstein
Sarah Tufford
Kathy Lewis
Gregg Larson - EQB

MINNESOTA HISTORICAL SOCIETY
FOUNDED IN 1849
690 Cedar Street, St. Paul, Minnesota 55101 • (612) 296-6126

January 13, 1986

EXHIBIT C

Mr. John Morley
High-Level Radioactive Waste Program
Environmental Quality Board
Room 100, Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101

Dear Mr. Morley:

Re: Proposed Rules Relating to Exploratory Drilling
for the Disposal of High-Level Radioactive Waste
Statewide
MHS Referral File Number: Z-350

Thank you for providing us with a copy of the above referenced rules. I ask that you include a provision, perhaps under 4410.7906, Procedure for the Issuance of a Drilling Permit, Sub-part 2, that the applicant contact the Minnesota Historical Society to ascertain potential impacts on historic or archaeological properties. The contact at the the Minnesota Historical Society is:

Ted Lofstrom
Environmental Assessment Officer
Minnesota Historical Society
Fort Snelling History Center
St. Paul, Minnesota 55111
(612) 726-1171

Thank you for your continued close attention to historical and archaeological values.

Sincerely,

Dennis A Gimmestad for

Russell W. Fridley
Director
Minnesota Historical Society

RWF:dmb

CERTIFICATE OF BOARD'S
RESOLUTION ADOPTING THE RULE

I, John C. Ditmore, do hereby certify that I am a member and the Chair of the Environmental Quality Board, a board duly authorized under the laws of the State of Minnesota, and that the following is a true, complete, and correct copy of a resolution adopted at a meeting of the Environmental Quality Board, duly and properly called and held on the 20th day of February, 1986, that a quorum was present at said meeting, that a majority of those present voted for the resolution, and that said resolution is set forth in the minutes of said meeting and has not been rescinded or modified.

> "RESOLVED, that the rule relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste is approved and adopted, pursuant to authority vested in us by Minnesota Statutes 116C.724 and that John C. Ditmore, the Chair of the Environmental Quality Board, is authorized to sign the findings of fact, conclusions, and order adopting the rule and further is authorized to perform the necessary acts to provide that the rule shall have the force and effect of law."

IN WITNESS WHEREOF, I have hereunto subscribed my name this 20TH day of February, 1986.

State of Minnesota

John C. Ditmore
Chair
Environmental Quality Board

Barbara L. Lyden
Attest by one other Board member

STATE OF MINNESOTA

COUNTY OF RAMSEY

In the Matter of the Proposed Rules Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste

MINNESOTA ENVIRONMENTAL QUALITY BOARD

No. EQB-85-010-JM

STATEMENT OF NEED AND REASONABLENESS

INTRODUCTION

In January of 1982, Congress passed the Nuclear Waste Policy Act, (NWPA), which directed the Department of Energy (DOE) to site and build one deep geologic repository and site a second for the disposal of high-level radioactive waste. The crystalline rocks of northern and western Minnesota are under consideration for the second of these disposal sites. In January of 1986, the DOE will narrow its search to 15-20 areas in 4-6 states. These areas will be listed in the Draft Area Recommendation Report. States and other parties will be allowed to comment on the draft before it becomes final in mid 1986. Minnesota is expected to have several of these areas. The areas will then be subject to "area characterization," meaning intensive geologic and environmental investigation, including exploratory boring to great depths. The investigations are expected to begin in late 1986 and will be done under the auspices of the Department of Energy. The proposed rules are not anticipated to affect small businesses directly, as they are intended to apply to the Department of Energy or its agents. Accordingly, Minn. Stat. section 14.115 is not applicable.

Area characterization will be a long and complicated process. The geologic studies will begin with detailed surficial mapping and surveying, aerial photography, and general observations. Subsurface studies will include remote sensing from aeromagnetic and seismic reflection and refraction techniques. The environmental impacts of the above techniques should be minimal.

Geophysical shotholes, are holes drilled through the glacial drift to the bedrock. Explosive charges are placed on top of the bedrock or at shallow depth and detonated. The resulting pattern of reflected and refracted soundwaves is an important tool in judging the homogeniety of the rock body and in detecting discontinuities such as fracture zones, faults, etc. Even though drilling is involved, geophysical shothole testing was deliberately excluded from the drilling rules because the potential for environmental impact is minimal. Whereas exploratory drilling could go to depths beyond 3000 feet, and stay open for many years, the shothole drilling will be very shallow and will stay open only long enough to detonate the charge.

The Department of Energy's current plans call for the drilling of only a few holes (less than 10) within each potentially impacted area. (A potentially impacted area is defined in Minnesota Statutes, section 116C.71, subdivision 18 as "the area designated or described in a draft or final area recommendation report or area characterization plan for study or consideration.) The DOE is reluctant to engage in extensive drilling, because drill holes could compromise the isolation capability of the rock body by actually becoming a channel or pathway for future radionuclide movement.

Instead, the DOE plans to rely heavily on geophysical methods, even though crystalline rock bodies are difficult to accurately characterize using these techniques. This was seen in the Canadian work at East Bull Lake, where geophysical measurements of the depth of the rock body were off by approximately 300 meters (1000 feet). The accuracy of geophysical methods in fracture and discontinuity detection is also unpredictable. The only widely accepted technique for positive fracture identification is widespread drilling.

Exploratory drilling is the major environmental concern associated with the area characterization process. Drill holes could go thousands of feet deep and stay open for many years. They could pierce numerous ground water aquifers and water-bearing fracture systems along the way. Some of these aquifers may supply municipal or rural water needs and must not become contaminated. Deep drilling however, increases the chance of contamination from two sources. Pollution from the surface could be channelled down the drill hole and mix with ground water and the drilling operations could introduce sources of pollution to the immediate area surrounding the drill hole. The second source of potential ground water contamination comes from other ground water. Ground water aquifers are often confined, meaning that an impermeable layer exists between aquifers and prevents any flow from one to another. Some aquifers are contaminated and unfit for human use. They may be saline or contain undesirable minerals or manmade pollutants. The construction of drill holes could create channels and allow inter-aquifer flow.

There are additional environmental concerns. These relate primarily to the right-of-way construction and maintenance. Erosion, soil compaction, waste rock tailings and drilling fluids could be problems that these rules attempt to anticipate and alleviate.

The information needs of the affected landowners is also of concern. Though the Board cannot act as the legal representative of the affected landowners, it can foster communication by requiring informational meetings and dissemination of the permit applications and approved permit. The State's informational needs are also addressed with regard to affected landowner notification, emergency notification in the event of an accident which could have environmental impacts, and submission of data acquired from the investigation.

Minnesota's exploratory boring laws under chapter 156A and parts 4727 are defined under chapter 156A.02 subd. 5 as "any surface drilling done for the purpose of exploring or prospecting for oil, natural gas, and metallic minerals...." These laws do not cover exploratory drilling related to the disposal of high-level radioactive waste since the purpose of the drilling is not to explore for these deposits of metallic ores or petroleum. With the passage of chapter 116C.724, however, the states exploratory boring regulations under chapter 156A.071 and parts 4727.0100 - 4727.1300 were incorporated into the radioactive waste management statutes.

The present exploratory boring regulations adequately provides for only two aspects of the drilling process: licensing and abandonment. The licensing procedures include competence testing and/or proof of professional affiliation. Although not as extensive as the water well drillers license, the exploratory boring license requires certain qualifications for designation as a responsible driller. The purpose of abandonment requirements is to assure that drill holes don't become channels for contaminants to pollute ground water aquifers after closure. Both temporary and permanent abandonment are covered in the current statutes. However, these two areas make up only a small segment in the drilling process. The purpose of these drilling rules and the subsequent permit is to provide for those areas that are not sufficiently provided for by current statutes.

Chapter 116C.724 states that a perspective driller shall obtain a permit "from the environmental quality board (Board), in accordance with chapter 14, for any geologic and hydrologic drilling related to the disposal [of high-level radioactive waste]. The statute directs the Board to specify by rule the "conditions of obtaining and retaining the permit."

Under chapter 15.0412, subd. 4c, of the Minnesota Statutes, the Board is required to "make an affirmative presentation of fact establishing the need for and reasonableness of the rule proposed for adoption...." The rules of both the Office of Administrative Hearings and the Attorney General require submission of a Statement of Need and Reasonableness. Basically, the statute and rules require the board present the reasons for its proposals and that the reasons must not be arbitrary or capricious. To the extent that need and reasonableness are separate tests, needs means identification of the problem requiring administrative attention and reasonableness means that the solution proposed by the board is appropriate.

DEFINITIONS

Definitions are provided to clarify references to specific terms used in the rules. Minnesota Statutes section 116C.71 contains other definitions.

4410.7902 PRE-APPLICATION RESPONSIBILITIES OF THE APPLICANT

The usual time sequence in performing investigative activities, begins with a search of the available literature, then field research which may include mapping, surveying, placement of aerial photography markers, soil augering and general observations and inspections, followed by possible detailed geological/geophysical monitoring and, finally, drilling. These activities are directly related to the drilling since the results of these investigations will determine the locations of the drill holes. The drilling permit will be obtained after the determination of the drill hole locations.

Chapter 116C.724 subdivision 2, paragraph (c), states:

> "Before a person engages in negotiations regarding property interests in land or water, or permitting activities, the person shall notify the chairman in writing. Copies of terms and agreements shall also be provided to the chairman."

A. Pursuant to Minnesota Statutes, section 116.724, subdivision 3, paragraph (c), the applicant shall provide a notice of intent in writing to the chair at least ten days prior to initiating any contact with the landowner/tenant regarding negotiation of easement rights or other property interests which relate to predrilling right-of-way investigative activities. The notice of intent shall contain the legal description of the right-of-way, the property interest in that right-of-way, and the procedure by which the property interest is to be acquired.

DISCUSSION: The notice of intent is designed to inform the Board in advance of the exact areas under consideration for investigative activities. The information required in the notice of intent reflects the Board's needs. The legal description and the specific interest in the property are necessary to assure that the applicant has fulfilled his legal obligations to the State for those particular areas. Method of acquisition is aimed at assuring that the access will be obtained by a legal process.

The requested information is not unreasonable. It does not require lengthy preparation nor the release of confidential information. Notification ten days prior to initiating contact is ample time for the chair to review the notice of intent and it does not create a burden for the applicant by being too far in advance of initial contact with the affected landowners.

B. The applicant shall provide the chair with copies of any permit, lease, permission, and/or easement agreements, within ten days of reaching the agreement, negotiated with landowners and/or tenants during the entire period a potentially impacted area is under consideration for investigative activities related to drilling. These agreements shall provide unrestricted access to the right-of-way as set forth in Minnesota Statutes, section 116C.724, subdivision 2, clause (4), and parts 4410.7900 to 4410.7934.

DISCUSSION: Although the state has no formal conditions for lease, permission and/or easement agreement, the negotiations must follow the common principles of real estate transactions. Also, the state requires proof that access to the right of way "has been obtained by negotiated agreement or other legal process" pursuant to chapter 116C.724, subd. 2, clause (2).

Another reason for the Board to be provided copies of all access agreements is to understand the scope of these agreements. Although landowners could sign generic access agreements, each affected landowner may have separate needs and requirements for the individual right-of-ways that the Board needs to review in imposing conditions to be set forth in the permit.

4410.7904 LICENSING OF EXPLORERS

An applicant shall comply with Minnesota Statutes, section 156A.071, subdivision 2, and parts 4727.0400 to 4727.0900, relating to the regulation of exploratory boring.

DISCUSSION: All drillers exploring for minerals are required by section 156A to be licensed by the Minnesota Department of Health. With the passage of section 116C.71, explorers conducting drilling work related the disposal of high-level radioactive waste are required to be licensed under section 156A.

4410.7906 PROCEDURE FOR THE ISSUANCE OF A DRILLING PERMIT.

Subpart 1. Drilling permit required. A drilling permit shall be obtained from the board for each potentially impacted area prior to commencing any drilling to obtain geologic and hydrologic information other than the drilling of geophysical shot holes, relating to the disposal of high level radioactive waste.

DISCUSSION: A question arises regarding the geographic extent of the drilling permit. Possibilities range from one permit for the entire state to one permit for each individual drill hole. The geographic extent designated by the "potentially impacted area" was chosen for a number of reasons.

A potentially impacted area is defined in 116C.71 as the "area designated or described in a draft or final area recommendation report or area characterization plan for study or consideration." This area will be of manageable size (50 to several hundred square miles), and is likely to have relatively uniform geologic and environmental characteristics. Minnesota could have at least one or more potentially impacted areas. If the entire state were to be covered under one permit, the application would be too broad and complex. On the other hand, if a permit were required for each drill hole, or cluster of drill holes, the preparation by the applicant and processing by the Board would be prohibitively burdensome.

Subpart 2. Content of an application for drilling permit. An application for a drilling permit shall be filed by the applicant with the board and shall include:

A. the name of the applicant seeking a drilling permit;

B. the name and address of an agent for the applicant;

C. the applicant's explorer's license, issued under Minnesota Statutes, section 156A.071, subdivision 3;

DISCUSSION: Certain basic information is necessary to identify the persons responsible for the application. The applicant is defined as "any person who applies to the board for a drilling permit." Person, in turn, is defined in 116C.71 as "any individual, corporation, partnership or other unincorporated association or government agency." The applicant may be either DOE or a DOE contractor.

Identification of an agent who will act on behalf of the applicant is important, not only as a contact person, but also as one who is authorized to make decisions relevant to the immediate needs of the drilling operation.

The explorer's license is a requirement of section 116C.724.

D. a description of the proposed drilling operation including the number, type, size and depth of the drill holes;

DISCUSSION: Size, number of drill holes and, especially, depth and drilling method will be vital in understanding the environmental consequences of the operation.

E. United States Geological Survey topographical maps to the scale of 1 : 24,000 or smaller on which are drawn to scale the exact locations of the right-of-way and the proposed drill holes;

DISCUSSION: In order for the Board to make an accurate assessment of the potential impacts of the drilling, it must understand of the environmental setting of the proposed right-of-ways. U.S.G.S. topographic maps show features such as agricultural lands, lakes, wetlands, streams and other sensitive areas, topography and man-made features. U.S.G.S. topographic maps to this scale are easily obtainable and not prohibitivly expensive.

F. A development plan showing the right-of-ways and the geographical and cultural features existing on each side of the right-of-ways in an area not less than 200 feet in width on each side of the right-of-way. The scale of the plan shall not greater than 200 feet per inch. The development plan shall show, to the scale of the plan, dimensions, contours (contours intervals not less than five feet or less) drill hole locations, field construction of drilling equipment, and present and planned pertinent features, including, but not limited to, roads, buildings, encampments, shelterbelts, fencing, surface water and their diversion or drainage and present land use. The plan shall show the stages development from right-of-way preparation through all phases of construction and maintenance.

DISCUSSION: A development plan, like a map, will identify natural features which could be disturbed in the investigative activities. The purpose of the development plan is to anticipate potential problems before the activities begin. In order to accurately assess the natural characteristics, a plan of sufficient scale and detail which shows the entire scope of the investigative activities is needed.

A development plan is not new nor unheard of in similar projects. The Minnesota Pollution Control Agency requires a development plan in applications for solid waste disposal permits. The State of Montana requires a similar plan when constructing a right-of-way for mining activities.

The information in the development plan should be readily available and not overly complicated. Field geology, such as mapping and surveying, will be done even before the drilling locations are selected. Since the plan consists primarily of these maps and accompanying written materials, the applicant will not have to go to any unreasonable level of work in order to complete this requirement.

G. A time schedule for acquisition and construction for each right-of-way starting with the beginning of any field investigations. The time schedule shall include the commencement and finishing dates of each stage of the investigative activities, and shall also include proposed date of right of way clearance, temporary and permanent abandonment and right of way restoration activities, and the method and schedule of drill hole monitoring.

DISCUSSION: The Board will have to consider the time schedule closely when assessing potential environmental impacts. State monitoring activities, are dependent upon the schedule of the investigative activities.

The investigative activities should be a reasonably well planned process. After mapping and other preliminary field research, the applicant should have a project schedule and a firm estimate regarding the required time needed to complete the investigations.

H) A listing of the federal, state and local permits that may be required for the proposed drilling and the accompanying right of way clearance.

DISCUSSION: This section is in the interest of both the Board and the applicant. Not only does it allow the Board to judge the application with regard to pertinent regulations not included by statute in these rules, but it also suggests that the applicant look ahead to compliance with other regulations.

I. a description of the environmental setting and the potential environmental impacts of right of way clearance and drilling on the following:

(1)ground water-bearing formations, whether in bedrock, glacial or postglacial sediments;

(2) surface water;

(3) agricultural lands;

(4) man-made structures;

(5) transportation routes;

(6) residences;

(7) water wells;

(8) rare and endangered species;

(9) wildlife habitat, native grasslands and other natural areas.

DISCUSSION: This section deals specificically with sensitive features such as ground and surface waters and agricultural lands. Man-made features such as residences, commercial development and transportation routes are also considered as particularly sensitive due to safety concerns.

It is logical to include features such as surface and ground water resources and water wells separately because of their sensitivity to contamination. Agricultural lands, rare and endangered species, wildlife habitat, etc., are all particularly susceptible to the effects of erosion. Man-made structures, transportation routes and residences are included for public health and safety reasons.

J. existing or potential point and nonpoint sources of pollution on or near the right-of-way that could contaminate surficial water bodies or water-bearing formations underground because of investigative activities.

DISCUSSION: The Board desires to be informed of existing or potential point or non-point sources that could contaminate surface or ground water as a result of drilling operations. This information could affect permit conditions regarding drill hole location, construction, clean-up or abandonment.

The liquids exiting the drill holes (drilling fluids, muds, saline ground water) must be adequately contained. If the reserve pits are not managed properly, the contaminated water could enter nearby surface waters or seep into ground water. These pits must not be simply covered over like a landfill. The preferred method of containment is to store them in tanks. If reserve pits are used, they must be adequately lined with impermeable materials to prevent any escape to the surrounding environment. At the close of the drilling operation, the liquids must be put in tanks and disposed of according to the liquid waste regulations of the Pollution Control Agency.

Subp. 3. Acceptance of a drilling permit application. Within 30 days of receipt of a permit application, the chair shall review it for completeness pursuant to subpart 2 and accept or reject the application. If the chair rejects the application, he shall upon rejection inform the applicant which deficiencies, if corrected, will allow the application to be accepted. Upon resubmission, the chair shall have 30 days to review the amended application and accept or reject it. After acceptance of the application, the applicant shall provide any additional relevant information which the chair or the board determines necessary for board approval of the application.

DISCUSSION: Before the board can consider a drilling permit, the application must be complete. Completeness means that the application includes the information pursuant to part 4410.7906, subp. 2 in adequate detail in order for the Board to make a proper judgement. Because this is mainly an administrative task, it is more efficiently handled by the chairman and the Board staff.

Subp. 4. Copy of application to county auditor. When an applicant files a permit application with the board, the applicant shall simutaneously send a copy of the application to the office of the county auditor in each county or any portion of a county within the potentially impacted area. The county auditor shall retain and file the application in a manner making it accessible to the public.

DISCUSSION: The public and especially the affected landowners should have access to the permit applications. Mailing an entire application with development plans, maps, etc. to each affected landowner could be overly burdensome, depending upon the size of the right of way, the number of affected landowners and the number and length of the applications. The county auditor deals frequently with the public and is usually located in a major town within the county. Filing the application with the auditor should afford adequate public accessibility.

4410.7908 INFORMATION MEETINGS

Subpart 1. Information meetings required. The applicant or permittee, as appropriate, shall hold public information meeting as required by Minnesota Statutes, section 116C.724, subdivision 3, paragraph (b).

(1) The applicant shall hold one public meeting in the potentially impacted area after the permit application has been filed with the board and before the hearing required by part 4410.7950. At the meeting the applicant shall explain the scope of the planned investigative activities and the potential short- and long-term environmental, health, safety impacts, if any, of the investigative activities.

(2) The permittee shall hold at least one public meeting every three months in the potentially impacted area during the investigation to answer questions, concerns and complaints and to provide the public with all current raw and interpreted data on the progress of the investigation.

DISCUSSION: The purpose of information meetings is to inform the general public and especially affected landowners of the investigative activities. The applicant is required by law to hold one meeting before the permit is issued and at least one every three months during the investigation.

The first meeting is to be held between the time the application is filed with the Board and the hearing. This will allow the public to respond to the contents of the application before it is acted upon at the hearing and the Board meeting.

The purpose of the later meetings is to release and discuss the implications of the data obtained during the investigation as required by Minnesota Statute.

Subp. 2. Agenda. The applicant or permittee, as appropriate, shall provide the agenda, and responses to concerns and issues raised at the pubic information meeting, in writing to the chair within 20 days of the meeting.

DISCUSSION: It is desirable for the Board, as the regulating body, to follow the issues and concerns raised at the meetings, particularly with regard to compliance with the drilling permit. It may not be possible, however, for the Board members to personally attend these meetings and an agenda and summation of responses will be helpful in keeping Board members informed.

Subp. 3. Evidence. Any person may appear at the public information meetings and present written and/or oral testimony and exhibits relevant to the investigative activities.

DISCUSSION: Because the applicant or permittee convenes the meeting, there is a possibility that the meeting will one sided and inadequately cover the broad range of important issues. This provision is intended to ensure an open meeting and facilitate discussion and questions.

Subp. 4. Schedule and location. The public information meetings shall be scheduled on weekday evenings that do not fall on a public holiday and shall begin no earlier than 7:00 p.m. The public information meetings shall be held in a facility centrally located within the potentially impacted area and sufficient in size to accommodate the reasonably projected attendance. If no adequate facility exists within the potentially impacted area, the meetings shall be held in an adequate facility near the potentially impacted area.

DISCUSSION: There is a need to promote and allow maximum participation by interested persons, especially the affected landowners. A public meeting held at a great distance from the potentially impacted area, at an inconvenient hour or in a facility too small to allow the interested persons to participate could limit such participation.

A weekday evening after 7:00 p.m. was selected as an appropriate time based on past experiences with power line siting issues and other public meetings regarding the high-level radioactive waste siting process. This time frame seems to be acceptable to the maximum number of interested persons. Since there is no precise method of projecting the exact attendance of the meetings, it is left to the discretion of the applicant/permittee to "reasonably" forecast the attendance and select a facility accordingly.

Subp. 5. Notice. Notice of each public information meeting held pursuant to subpart 1 shall be given by the applicant or permittee, as appropriate, by paid advertisement in a qualified newspaper, as defined in Minnesota Statutes, section 331A.01, subdivision 8, in general circulation in the potentially impacted area. The notice shall be published at least ten days and not more than 30 days prior to the meeting. The applicant or permittee shall notify the chair and the county auditor of each county or portion of each county within the potentially impacted area in writing at least ten days in advance of the meeting. The notice shall include the following information:

A. the date, time and place of the meeting;

B. the agenda;

C. the identity of the applicant or permittee and the name of the agent and the address and phone number where that person can be reached;

D. the locations where, after a drilling application has been submitted has been submitted to the board or a permit has been issued, the most recent permit application or drilling permit is available to the public.

DISCUSSION: Public meetings will be of little purpose if the interested parties are unaware of their occurrance.

Any contested case hearing is required to follow the notice and hearing procedures in Minn. Stat. chapter 14.58. This section provides that "the notice shall state the time, place and issues involved." Provisions "A" and "B" cover the requirements of chapter 14.58. Provision "C" is included to allow interested persons to an opportunity to contact the applicant or agent. Provision "D" is included to inform interested persons of the location where the permit or the permit application is available to the public.

4410.7910 HEARING PROVISIONS

A contested case hearing under Minnesota Statutes, chapter 14 and parts 1400.5100 to 1400.8300 shall be held by the board for the purposes of collecting and verifying data, and establishing a complete and accurate record upon which to base a decision to grant or deny a drilling permit. The hearing shall be held after the chair accepts the application for completeness and before the board acts to approve or reject the application. The hearing shall be conducted by an administrative law judge from the State Office of Administrative Hearings. The board shall give notice of the public hearings pursuant to part 1400.5600 and the notice shall include all information required by part 1400.5600, subpart 2.

DISCUSSION: The necessity of a hearing, as stated in the rules, is to "collect and verify data, and establish a complete and accurate record." An independent and thorough record is needed not only to aid the board in its information requirements, but to ensure due process.

4410.7912 BOARD CONSIDERATION

Subpart 1. Consideration and approval of a drilling permit application. After acceptance of the application by the chair of the board, and consideration of the findings, conclusion and recommendation of the administrative law judge, the board shall either approve or reject the application. The board shall approve the application for a permit provided

A. the application is complete

B. the applicant has complied with all the requirements of Minnesota Statutes section 116C.724 and parts 4410.7900 to 4410.3934; and

C. that the investigative activities will not materially and adversely affect the environment, unless there is no feasible and prudent alternative and the conduct at issue is consistent with and reasonably required for promotion of the public health, safety, and welfare in light of the state's paramount concern for the protection of its air, water, land, and other natural resources from pollution, impairment, or destruction.

If the board approves the application, the board shall within 90 days issue a permit to commence drilling in accordance with the time schedule and plans set forth in the application. The drilling permit shall contain the terms and conditions to assure compliance with Minnesota Statutes 116C.724, parts 4410.7900 to 4410.7934, and all applicable federal, state and local ordinances. Upon receipt of the drilling permit, the permittee may begin the approved investigative activities relevant to drilling.

DISCUSSION: The Board needs definitive approval criteria in order to weigh the application. These criteria include completeness of the application, and compliance with applicable statutes and regulations, including these rules. Provision C outlines the board's duty to adhere to the Minnesota Environmental Policy Act. The Board has the authority to attach terms and conditions to the drilling permit that will ensure compliance with the federal, state and local law. This authority is necessary because the Board can not anticipate in advance unique or special aspects associated with the permit applications.

Subp. 2. Copy of permit to county auditor. The permittee shall, within three days of receipt of the permit from the board, send a copy of the drilling permit to the office of the county auditor in each county or portion of a county within the potentially impacted area. The county auditor shall retain and file the permit in a manner making it accessible to the public.

DISCUSSION: As discussed in part 4410.7908, subp. 3, it is vital to have the drilling permit available for public inspection.

Subp. 3. Report of complaints. The permittee must promptly report to the chair any complaint received about investigative activities, right-of-way preparation, maintenance, restoration, and temporary and permanent abandonment.

DISCUSSION: Permit violations could be reported in a number of ways. The first could be through the drilling monitors and qualified professionals hired by the State to oversee and monitor the investigative activities. The second could be the affected landowners and members of the public who report potential violations as complaints. This provision is necessary because members of the public may direct their complaints to the permittee first, rather than to the Board.

There is good reason to believe that complaints would be directed to the source of the problem and not to the Board. Many affected landowners may not fully understand the regulatory role of the Board in the permitting process. There also may not be time to direct the complaint through the proper channels because the situation required immediate attention. However, it is vital for the Board be promptly notified of any complaint so that it may act to prevent or mitigate any potential permit violation in the same way that the Board would act if the State personnel were to report a complaint or potential violation.

Complaints reported either directly to the Board or through the permittee which do not relate the terms and conditions of the permit and which the Board has no jurisdiction over will not be handled by the Board. However, it is not the responsibility or privilege of the permittee to selectively choose which complaints come under the Board's jurisdiction. The permittee must promptly report all complaints.

Subp. 4. Rejection of drilling permit application. The board shall reject the application if it determines that the application has not met any of the conditions of subpart 1, items A to C. If the board rejects the application, it shall upon rejection inform the applicant which deficiencies if corrected will allow the application to be approved. If the deficiencies are corrected and the amended application is submitted to the board at least 30 days in advance of the board's next regularly scheduled meeting, the board shall consider the amended application at the next regularly scheduled meeting.

DISCUSSION: Just as the Board needs criteria to approve a drilling permit application, it needs criteria to reject one as well. The most reasonable criteria for rejection is failure to meet the standards set for approval of the permit application. The Board will reconsider the application at its next regularly scheduled meeting if the deficiencies have been corrected within a reasonable time period prior to that meeting.

4410.7914 RIGHT OF WAY CLEARANCE AND MAINTENANCE

A. The permittee shall ensure that it clears the right of way only to the extent necessary to assure safe drilling operations and to provide suitable access for construction and operation.

DISCUSSION: Right of way clearing will be an environmentally significant part of the investigative activities. It is assumed that some clearing must take place, and the permittee will given the discretion regarding the extent to "assure safe drilling operations." However, the land must be protected from unnecessary or careless clearing that could result in significant environmental impacts, such as increased soil erosion in already fragile ecosystems or the loss of protective wildlife habitat. In order to lesson the potential for impacts, the right of way should be kept to a minimum.

The intent of this provision is not to enact specific guidelines regarding right-of-way clearance. It is not in the best interest of the Board to attempt to blanket every possible environmental setting with specific conditions in these rules. Too many restrictions can be as harmful as too few. Specific conditions, if they are necessary, can be included either in the drilling permit or in lease agreements.

B. Equipment used in right-of-way preparation and maintenance shall comply with the noise control rules of the Pollution Control Agency published in chapter 7010.

DISCUSSION: Right-of-way clearing machines and other equipment used in the investigative activities may generate significant levels of noise that could have detrimental effects upon residents and farm animals in the vicinity of the right-of-way.

C. Where the right-of-way as planned contacts water bodies and roads, clearing by the permittee shall be done so that a screen of any existing natural vegetation is left in the right-of-way adjacent to the water body or road. If the natural vegetation which existed prior to clearing cannot be left as a screen and suitable natural regeneration is not likely to occur within one full growing season following right of way restoration, native types of shrubs and trees shall be planted by the permittee to provide adequate screen. Where the right-of-way as planned contacts water bodies of any size and type, the permittee shall act in accordance with federal law including Executive Order 11990, which protect wetlands of all sizes and types, in accordance with Minnesota Statutes, chapters 104 and 105, which cover shoreland management, floodplain management, wild and scenic rivers, and permits required for protected waters, and any other federal, state and local regulations. The amount and species of vegetation that will be planted to replace those removed from the Minnesota highway right-of-way shall be specified by the Minnesota Department of Transportation or appropriate county or local authority.

D. Investigative activities by the permittee in the vicinity of streams shall comply with Minnesota Statutes, chapter 105, permit requirements of the Department of Natural Resources so as to minimize damage to the natural condition of the area.

E. Streams banks disturbed during right of way clearance or exploratory operations shall be stabilized, reclaimed, and seeded by the permittee.

DISCUSSION: These three sections all deal with protection of water bodies and streams within and adjacent to the right-of-way and the sensitive environment near road ways. Special attention must be given to these areas due to their vulnerability to erosion. Although other federal, state and local regulations may cover these environments, it is necessary to point out the applicability of these regulations to the right of way. It also is important that proper measures are taken depending on the controlling authority to revegetate disturbed areas near wetlands or water bodies.

F. Areas where natural vegetation has been removed and suitable natural regeneration is not likely to occur within one full growing season, shall be reseeded by the permittee within one one full growing season after temporary abandonment;

G. Where significant grading or excavation is required, precautions shall be taken by the permittee to protect and segregate top soil.

DISCUSSION: The removal of the natural vegetation can cause serious erosion if the proper amelioratory measures are not taken with a reasonable time. Likewise, topsoil is a precious and irreplaceable resource, which, if mixed with the underlying layers would loose its practical value. Therefore, it is both necessary and reasonable to take all measures to minimize erosion to protect the top soil.

H) Compaction of cropland by the permittee shall be kept to a minimum and confined to as small an area as practicable.

DISCUSSION: Cropland is an important Minnesota resource. Right-of-ways which offer no alternative than to cross croplands should do so with minimum impact to avoid compaction, which could reduce cropland productivity and contribute to erosion.

Although the actual degree of compaction is a site-specific matter which must be worked out in individual access agreements, it is reasonable for the board to require as little compaction as practicable.

I. Precautions to protect livestock and crops shall be taken by the permittee.

DISCUSSION: Damage could occur if cars, trucks and workers don't adhere to the boundaries of the right-of-way and stay off cropland as much as possible.

Livestock could also be endangered by the investigative activities. Broken fences and gates and inadequate decontamination procedures are only a few of the problems that could affect livestock. Adverse impacts can be avoided by requiring the permittee to take proper precautions in the vicinity of crops and livestock.

J. All appropriate precautions to protect against pollution of the environment shall be taken by the permittee.

DISCUSSION: It is not possible to list all the potential sources of pollution that could result from investigative activities. This provision informs the permittee that the Board expects the permittee to take all precautions to protect against unspecified sources, as well as those identified above.

K. The permittee will repair or replace all drainage tiles broken or damaged during right-of-way preparation or investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate, on whose property the tiles are located.

L. The permittee is responsible for the repair of private roads and lanes damaged when moving equipment or when obtaining access to the right-of-way and for the reimbursement to the landowner or tenant, as appropriate, for crop loss resulting from access to right-of-way damaged during preparation or drilling operations.

M. The permittee shall replace or repair all fences and gates removed or damaged during right-of-way preparation and investigative activities unless otherwise negotiated with the landowner or tenant, as appropriate.

DISCUSSION: Heavy equipment may be used for the investigative activities. This machinery could damage drainage tiles, fences, roads and crops. Replacement or adequate compensation is reasonable.

The Board is not acting as the legal representative of the landowner or tenant. It does not decide who is the appropriate party to deal with the compensation decisions. That should be outlined in the individual lease agreements between the landowner and tenant. Disputes regarding adequate compensation are not the duty of the Board nor is the Board qualified to resolve such disputes. Other arenas, such as the court systems, are more able to handle cases of this kind.

N. Shelterbelts and trees shall be protected by the permittee whenever possible. If shelterbelts and trees must be cut, native shrubs and trees shall be planted to provide protection in accordance with the request of the landowner or tenant, as appropriate, unless otherwise negotiated with the landowner or tenant, as appropriate.

O. The permittee shall restore cropland to substantially its original condition, unless otherwise negotiated with the landowner or tenant, as appropriate. Restoration shall include grading, topsoil replacement, subsoiling and disking, or other methods as negotiated with the landowner or tenant, as appropriate.

P. The permittee shall return pasture to its former level of productivity, unless otherwise negotiated with the landowner or tenant, as appropriate. Pasture restoration shall include planting native or tame grasses or other restoration methods as negotiated with the landowner or tenant, as appropriate.

Q. The permittee shall restore other areas to substantially their original condition.

DISCUSSION: It would be best to drill in established right of ways, thereby minimizing potential damage to croplands, shelterbelts and other surface features. but geology will, to a large extent, determine drill hole location.

Right of ways could be constructed through valuable agricultural lands, and features important to agricultural activity such as shelterbelts. Other areas such as forestlands, native grasslands, and other natural wildlife habitat could also be affected.

Not only could tangible economic resources, such as crops, forest or pasture be lost, but long-term and less foreseeable effects such as erosion or soil mixing could result from the drilling operations. Full restoration or adequate compensation, as desired by the landowner or tenant, as dictated in their lease agreement, is needed.

4410.7916 EMERGENCY NOTIFICATION

The applicant or permittee, as appropriate, shall promptly notify the chair, the commissioner of health, the commissioner of natural resources, the pollution control agency, and the county health officer of each county or portion of a county in which investigative activities are conducted of any occurrance during investigative activities and related actions that has potential for significant adverse health or environmental effects and shall take action as quickly as may be reasonably possible to minimize adverse effects.

DISCUSSION: Accidents, such as an oil spill, gas line rupture or contaminants down the drill hole could occur during the investigative activities. Even a small accident could have significant environmental or health implications if not properly and promptly dealt with. In such an emergency all the proper authorities must be notified.

4410.7918 LOCATION OF DRILL HOLES.

A permittee shall comply to the extent practicable with a the following standards with respect to location of a drill hole.

A. A drill hole shall be located:

(1) when possible on a right-of-way that has good surface drainage, at a higher elevation than, and at a sufficient distance from cesspools, buried sewers, septic tanks, privies, barnyards, and feedlots or other possible sources of contamination, as provided in the Minnesota Water Well Construction Code, chapter 4725;

(2) so that the drill hole and its surrounding area can be kept in a sanitary condition;

(3) to exclude all sources of pollution that are known to the permittee, or reasonably should have been known to the permittee, from entering the drill hole; and

(4) 50 feet from any building and at least 1,000 feet from any occupied residence or occupied animal barn, or as negotiated with the landowner or tenant, as appropriate.

DISCUSSION: When drafting the water well and exploratory boring regulations, the legislature had an obvious intent to prevent contamination of the ground water, as written in Minnesota Statutes section 156A.01:

> It is the legislative intent and purpose in sections 156A.01 to 156A.08 to reduce and minimize the waste of ground water resources within the state by reasonable legislation in licensing of drillers or makers of water wells and the regulation of exploratory borings in Minnesota and to protect the health and general welfare by providing a means for the development and protection of the natural resource of underground water in an orderly, sanitary and reasonable manner.

As discussed in the introduction, pollution from the surface could be channelled down a drill hole to contaminate ground water resources. When the pollution sources, such as feedlots, septic systems, etc., are located near or within the upstream watershed of the drill hole, the chances of ground water contamination are greatly increased. To protect these ground water resources, it is necessary to regulate the drill hole location. Applying the relevant parts of the Water Well Construction Code to the location of drill holes is the easiest, and surest means of protecting these ground water resources.

As seen in Minnesota Statutes section 156A.01, as above, and in a letter from Representative Mary Murphy, the author of the exploratory boring regulations, it was clearly the intent of the legislature to limit the location of exploratory drill holes. In a letter to Hearing Examiner Richard Luis of the Office of Administrative Hearings on October 1, 1980, Representative Mary Murphy stated "As author of the bill (Chapter 535, Laws of 1980) which directed the Department of Health to adopt rules to regulate exploratory borings, I can unequivocally state that it certainly was my intent and, I believe, that of the other authors as well as the committee, to apply the relevant portions of the water well construction code to all aspects of exploratory borings--location, constuction, maintenance and abandonment." Minnesota Statutes Chapter 535 have since been renumerated to section 156A.

In addition, large and deep drill holes will be required in the investigative activities. Normal exploratory boring in Minnesota rarely exceed a three inch hole and a few hundred feet in depth. In contrast, the exploratory drilling related to the disposal of high-level radioactive waste could require drill holes five inches in diameter and thousands of feet deep. For comparison, a normal residential water well may also have a five inch hole, but go down less than 100 feet.

The great depths and abnormal size of these exploratory drill holes justify their strict location requirements. Drill holes thousands of feet deep stand a higher chance of piercing through ground water aquifers than do shallower exploratory borings. Previously undisturbed ground water could be penetrated and contamination. Larger drill holes would be able to channel greater quantities of contaminants to underground water supplies. Deeper and larger drill holes translate into greater potential for ground water pollution.

Mineral exploration drill holes are generally kept open long enough to extract the drill core, after which they are abandoned. Drill holes related to the disposal of high-level radioactive waste may also be kept open for long periods of time. The in-situ tests and ground water sampling planned for the drill holes could extend over several years. This increases the chances of ground water contamination simply by greatly extending the period that pollutant may enter the drill hole.

It is understood that geology is likely to determine the location of the drill holes. This is reflected in the rules by stating that "a permittee shall comply to the extent practicable" with the location requirements. Therefore the driller may site the drill hole near a potential pollution source if no other option exists, but the driller must prove why that specific, and potentially vulnerable, location is necessary and worth the risk of ground water contamination.

4410.7920 DRILL HOLE CONSTRUCTION STANDARDS

A permittee shall comply with the following standards with respect to construction of a drill hole.

A. Drill holes shall be constructed in such a fashion as to facilitate testing and prevent any contamination of aquifers.

B. Drill holes not permanently abandoned within 30 days of completion must be constructed to the standards of the Minnesota Water Well Construction Code, chapter 4725, and any federal statutes and regulations applicable to deep wells.

DISCUSSION: Drill holes could not only channel pollution from the surface to underground water resources, but they could also act as pathways between otherwise isolated and confined aquifers. This could be harmful because some ground water aquifers are naturally or artificially polluted with undesirable constituents such as salt or certain minerals or chemicals. Construction standards for drill holes are needed to prevent this interformational contamination.

The provisions in this part are a feasible method of preventing potential interformational contamination. Provision A also requires that drill holes allow for testing during its use so long as the permittee prevents any polluted water from contaminating other ground water resources. This provision applys to open drill holes and those temporarily abandoned.

Provision B stipulates that after completion of drilling and/or testing, the permittee shall either abandon the holes within 30 days or they shall be constructed to the standards of the Water Well Construction Code. The Water Well Construction Code is an adequate set of guidelines for those holes which are not ready to be permanently abandoned.

4410.7922 USE OF DRILL HOLE FOR DISPOSAL PROHIBITED

A drill hole shall not be used by the permittee for disposal of surface water, near surface water or ground water or any other liquid, gas, chemical, or solid waste including drilling fluids.

DISCUSSION: A drill hole could be a quick and easy disposal method for burdensome surface waters or unwanted waste water, drilling fluids and other liquids or solids. Together with the preceeding parts on preventing ground water contamination from activities not related to the drilling operations, there also needs to be a provision preventing intentional disposal of potential contaminants directly into the drill hole.

As discussed previously, a drill hole could act as a channel for pollution to contaminate underground water resources. The language in this provision is taken from the Water Well Construction Code, part 4725.2300, and is applied in the same context. With deep exploratory holes there is an equal need to prohibit intentional disposal of burdensome surface waters, unwanted waste water, drilling fluids or other liquids or solids that could contaminate ground water resources.

Instead of disposing of waste or unwanted material down the drill hole, the permittee must follow solid and liquid waste regulations promulgated by the Minnesota Pollution Control Agency (MPCA).

4410.7924 CLEANUP PROCEDURES

A permittee shall comply with the following clean-up procedures.

A. Cleanup of personal litter, including cans, bottles, and paper, deposited by drilling operation or right-of-way preparation crews on and off the right-of-way shall be on a daily and continuous basis.

B. Interim cleanup and proper disposal of all waste and scrap materials on and off the right-of-way work areas shall be carried out after each phase of the drilling operation.

C. After all the work has been performed, the land shall be restored to approximate original contour within a reasonable period of time, unless negotiated with the landowner or tenant, as appropriate.

D. All waste and scrap shall be removed or properly disposed of in accordance with the solid and liquid waste regulations of chapters 7035 and 7001.

DISCUSSION: The investigative activities could produce significant personal litter and industrial waste, (as defined by the MPCA). Personal litter would come from the normal, daily activities of the permittee and his employees. This could include sanitation facilities at personnel encampments. Industrial waste is defined in Minnesota Statutes section 116 and includes any liquid, gaseous or solid waste substances resulting from any process relating to the drilling activities. Waste rock, recirculation pit water, drilling fluids, and any materials brought onto the right-of-way by the drilling operations would be regarded as industrial waste.

Chapter 7035.0100 of the MPCA solid waste regulations states that "Improper waste storage, collection, transportation, and disposal endangers public health, safety, and welfare, create public nuisances, result in scenic blight and adversely affect land values."

The provisions in this section are reasonable requirements and do not create obstructions for the drilling activities. These requirements are basic to safety and environmental protection.

4410.7926 ABANDONMENT OF EXPLORATORY BORINGS.

Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clause (1), any abandonment, whether temporary or permanent, shall comply with the state drilling and drill hole abandonment and restoration rules governing exploratory boring under Minnesota Statutes, chapter 156A, and parts 4727.1000 to 4727.1300.

DISCUSSION: Proper temporary and permanent abandonment is necessary to prevent long-term contamination of ground water resources and is required by the exploratory boring regulations under Minnesota Statutes section 156A and section 116C.724.

4410.2928 SUBMISSION OF SPLITS AND DATA.

Subpart 1. Request for data samples or data. Pursuant to Minnesota Statutes, section 116C.724, subdivision 2, clauses (5) and (6), the permittee shall submit spits or portions of a core sample to the commissioner of natural resources at the commissioner's request or to the director of the Minnesota geological survey at the director's request. If the permittee needs a sample in its entirety, the commissioner or director may accept certified and uninterpreted data of the sample in lieu of an actual portion if that data provides all the information necessary to obtain complete and accurate conclusions. Splits or certified data shall be presented to the commissioner or director within 30 days after the request is made and all samples submitted shall become property of the state.

DISCUSSION: These provisions are in accordance with Minnesota Statutes section 116C.724 and do not put an unreasonable burden on the permittee. Core splitting is not an unusual practice and, together with peer review, often results in more complete and credible conclusions. The possibility of substituting certified data instead of actual cores allows the permittee to retain the cores if necessary or if the cores are too fragile to split.

Subp. 2. Required data. Pursuant to Minnesota Statutes, section 116C.724, subdivision 3, the permittee or any person conducting geologic, hydrologic, or geophysical testing or any other studies relating to disposal is required to provide unrestricted access to both all raw and interpreted data to the chair and director of the Minnesota geological survey or their designated representative within 30 days. The raw and interpreted data includes:

DISCUSSION: The objective of the investigative activities is to determine the range of geologic conditions and related parameters for the potentially impacted area through currently used exploratory and testing techniques. The required data under subdivision 2 are a partial listing of the conditions and parameters which are likely to be evaluated and could be needed by the State in its analysis.

4410.7930 PERMIT AMENDMENTS

Subpart 1. Amendments proposed by permittee. Proposed amendments to the conditions set forth in the drilling permit regarding size, type, depth, number, and location of drill holes or the location of right-of-ways shall be sent in writing to the chair of the board. Revised maps, development plans, and descriptions of the environmental setting in accordance with part 4410.7906, subpart 1, shall accompany a detailed statement explaining the necessity and reasonableness of the amendments, all of which shall be sent by the permittee to be received by the chair at least ten working days before the day the proposed amendments are intended to become effective.

A. Within the ten working days the chair shall decide whether the proposed amendments require board approval and notify the permittee as to the status of the proposed permit amendments.

B. If, in the opinion of the chair, the proposed amendments would not significantly change the terms and conditions set forth in the drilling permit, or materially and adversely affect the environment, the amendments may be approved by the chair.

C. If, in the opinion of the chair, the proposed amendments would cause significant changes in the terms and conditions of the permit, or materially and adversely affect the environment, the chair shall submit the proposed amendments to the board at its next scheduled meeting following the chair's determination, providing his determination is made 20 days in advance of the next scheduled board meeting. The board shall approve the proposed amendments if the application as amended complies with all the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. The board shall reject the proposed amendment if it determines that the application as amended would not comply with the requirements of Minnesota Statutes, section 116C.724 and parts 4410.7900 to 4410.7934. Proposed amendments submitted to the board shall not be implemented until the board approves them.

DISCUSSION: Unanticipated circumstances may arise that require a permit amendment. The same criteria should be used to assess the amendments as was used to assess the original permit.

The issuance of a permit amendment could be a long and complicated process for both the permittee and the Board. Requesting that every change in the drilling operation be cleared by the Board would be an overwhelming burden on the permittee and the Board. Time schedule changes, drill bit alterations, and other minor and frequent problems should not be the focus of the Board's attention. Only those changes to the terms and conditions of the permit which could result in environmental impact should require Board action. The actual construction of the right-of-ways and the drill holes are the most important areas for Board consideration.

Even changes with regard to the right-of-way and drill hole construction may not be important enough for full Board approval. Again, it may not be necessary for the Board to consider the issue, and it may cause unreasonable delays in the drilling operation. Therefore, it is the duty of the chair to review the proposed amendments and present the proposed amendment to the full board for their approval or rejection if he finds that the amendments could significantly change the terms and conditions of the permit, or result in adverse environmental effects. If the chair believes that the proposed amendment will have no significant change on the terms and conditions of the permit or no adverse environmental effects, than he may approve the proposed amendments without Board approval. Not only will this allow the Board to take action only on the significant issues, but it will eliminate unreasonable delays incurred by the drilling operation during the review process on

Subp. 2. Amendments proposed by the board. The board shall, acting on its own initiative, amend the permit to prevent any material and adverse effect to the environment and to prevent any violation of parts 4410.7900 to 4410.7934 or the terms of the permit. The board shall give at least ten working days written notice to the permittee of board action to amend the permit. The permittee may appear before the board and offer evidence relevant to the proposed amendment.

DISCUSSION: There may be a need for a Board initiated amendment to the permit. For instance, if the terms and conditions of the permit were found to be inadequate with regard to parts 4410.7900 to 4410.7934, Minnesota Statutes 116C.724 or some unanticipated adverse environmental impact, then the Board may want to amend the permit to ameliorate the deficiencies. The Board may also seek an amendment if the terms and conditions of the permit were found to be too burdensome or strict. Also, other relevant environmental regulations may change which, in turn, could affect the drilling permit.

Board initiated amendments to the drilling permit is the most feasible and reasonable method of meeting the above need. It will be very difficult to anticipate every adverse environmental impact during the application process. The drilling operation itself will still be in conceptual stage, and since drilling activities of this magnitude are not normal to Minnesota, many potential adverse impacts may not be forseen. Instead of imposing overbearing regulations intended at mitigating every possible adverse impact and at the same time creating a regulatory maze for the permittee, the Board prefers to establish a framework of terms and conditions which can be filled in according to site specific needs.

4410.7932 PERMIT REVOCATION

Subpart 1. Initiation of revocation. The board may initiate action to revoke a drilling permit upon a prima facie showing by affadavit and documentation that a violation may have occurred or is likely to occur of the terms and conditions of the permit or parts 4410.7900 to 4410.7934.

DISCUSSION: An enforcement procedure is basic to any type of regulation. In this case, the Board needs a penalizing mechanism for violations or potential violations of the drilling permit. Without it, the Board could take no meaningful action in the event of a permit violation and the permittee would have no incentive to adhere to the terms and conditions of the permit.

Permit revocation is the most reasonable means of permit enforcement. Without the permit, the drilling activities could not continue. In addition, since a permit is applicable for an entire potentially impacted area, the loss of a permit because of a violation at one particular site would halt all drilling operations within that potentially impacted area.

Permit revocation is preferable to a fine or other indirect penalty. The Board's revocation privileges not only provides the permittee with an incentive to adhere to the terms and conditions of the permit, but if the violation is an imminent threat to the public health or safety, or could have adverse environmental impacts revocation will force the operation to shut down. To ensure that revocation is not arbitrary or unjustified, the Board requires proper documentation that a violation has occurred.

Subp. 2. Hearing. If the board determines that a hearing is necessary before revocation of a drilling permit, it shall order a contested case hearing. The findings, conclusions, and recommendations of the administrative law judge shall contain the opinion of the judge whether a violation has occurred or is likely to occur and whether corrective measures, permit revocation, or both, are necessary.

DISCUSSION: A violation may be so blatant or obvious that the Board will have no difficulty deciding whether a violation has occurred. The course of action may also be noncontroversial or agreed to by the permittee. It may be necessary, however, to hold a public hearing to consider revocation and give the permittee an opportunity to be heard.

The Office of Administrative Hearings is ideally suited for this type of controversial issue. A contested case hearing before an administrative law judge would allow both sides to present their evidence regarding the potential violation. The administrative law judge would, in turn, present an objective analysis of the potential violation together with his conclusions and recommendations. The Board would have a solid and credible set of findings and conclusions on which to base its decision.

Subp. 3. Considerations for board action. Based upon the record and the findings, conclusions, and recommendations of the administrative law judge, if a contested case hearing was held, the board shall consider the following matters at its meeting:

A. whether a violation of any of the conditions in Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the drilling permit has occurred or is likely to occur;

B. whether the violation has resulted or will result in any significant adverse environmental effects; and

C. whether the results of the violation can be corrected or ameliorated.

DISCUSSION: After the Board initiates the revocation process, it must determine whether a violation has occurred and what implications arise from the revocation process.

If a contested case hearing was held, it is reasonable for the Board to take into account the findings and recommendations of the administrative law judge plus the results of its own investigation, if it holds one, and make a decision whether a violation has occurred that will result in significant adverse environmental effects. If no hearing was held, then the Board must decide through its own investigation the potential violation.

Lastly, the Board's verdict should reflect consideration of whether corrective measures taken by the permittee mitigate past violations and alleviate future problems.

Subp. 4. Board action. If the board finds that a violation of Minnesota Statutes, section 116C.724, subdivision 2, parts 4410.7900 to 4410.7934, or the term and conditions of the drilling permit has occurred or is likely to occur, or that a material and adverse effect upon the environment has occurred or is likely to occur, the board shall require corrective measures or amend or revoke the permit, unless the permittee has undertaken effective corrective or ameliorative measures to correct the violations.

DISCUSSION: After all the facts, findings and conclusions are brought before the Board, it is necessary for the Board to make a decision regarding revocation. Instead of revocation, the Board may choose other options such permit amendment or corrective measures. This is necessary because the Board may find that permit revocation alone is not be the best or safest course of action. The permittee may also have acted in the interim to correct the violation and eliminate the basis for revocation.

Subp. 5. Action by the chair. The chair shall have the power to revoke a permit if all of the following conditions are present:

A. the three days needed to call an emergency board meeting would be too late to prevent a further violation; and

B. the violation is an imminent threat to the public health or safety or a serious or irreversible threat to natural resources.

If a permit is revoked by the chair, the board shall at its next meeting review the decision of the chair and vote to uphold or reverse the permit revocation or vote to hold a contested case hearing on the issue of revocation.

DISCUSSION: A situation may arise where a permit must be revoked immediately in order to prevent a violation that threatens public health or safety or could adversely impact the environment. In this situation, there would be no time to hold a contested case hearing, nor even the time for an emergency meeting of the Board. Therefore, there must be a mechanism to revoke a permit on very short notice and alleviate the imminent threat associated with a violation.

A decision by the chair is the quickest and most logical method of revocation in a short period of time. The chair can be quickly briefed on the developments in the field and will have access to all permit materials and data collected in the field. To prevent any arbitrary action by the chair, the Board will review any revocation or a permit at its next meeting.

Subp. 6. Effect of revocation. If a permit is revoked, the permittee shall halt all drilling and investigative activities immediately. The permit may be reinstated by the board only after the violations are corrected. If the violations are corrected and the corrective action and results are submitted to the board at least 30 days in advance of the board's next scheduled meeting, the board shall consider reinstating the permit at that meeting. If it finds the violations are not corrected, the board shall inform the permittee which deficiencies, if corrected, will allow the permit to be reinstated.

DISCUSSION: Revoking a permit will halt all drilling operations until violations are corrected. Without stopping the drilling operations, there would be no incentive for the permittee to comply with the terms and conditions of the permit and no assurance that public health, safety and the environment would not be adversely affected.

These rules also provide a reasonable time schedule and criteria for reinstating the permit if the violations are corrected. The results of the corrective actions must reach the Board at least 30 days in advance of the next scheduled meeting. This is normal practice for any item on the Board's agenda. Agenda material must be sent to the members with adequate time for review before the Board meeting.

4410.7934 APPLICATION AND MONITORING FEES.

Subpart 1. Application fees. Every applicant for a drilling permit shall pay to the board a base fee of $20,000 to be paid as follows:

A. 50 percent accompanying the application; and

B. 50 percent to be paid five days before the hearing held pursuant to part 4410.7910.

DISCUSSION: The Board has no State appropriation to fund the processing of an application or amendments, the required hearings, and any permit revocation costs, if there were to be any. The staff time involved in the processing of the application, plus the cost of the hearings can not be merely absorbed by the Board.

As directed in Minnesota Statutes 116C.724, subdivision 2, (3), the permittee shall pay all the costs of the processing an application for a permit. A fee is the practical way to cover the costs incurred. The costs are incurred at the initiation of, and solely for the benefit of the applicant. Similar fee assessments are used by numerous other agencies and departments when issuing various types of permits and licenses.

The Power Plant Siting Act of 1973 also directed the Board to collect a route fee similar to the application fee required here. A power line route is similar to a drilling right-of-way in its construction and potential environmental impacts. More importantly, the application process for a power line construction permit and for a drilling permit are very similar. Both require staff processing and review, and both require hearings.

The base fee of $20,000 is a reasonable estimation of the staff time involved in processing any application, holding hearings, and any other costs which may be incurred through processing of amendments or permit revocation proceedings.

The majority of the fee will cover the cost of hearing pursuant to part 4410.7910. According to the Office of Administrative Hearings, a five day hearing would cost $7500 for the services of the Administrative Law Judge and a transcript. This is only a "best guess" however, and could fluctuate dramatically with the scope of the hearing. The hearings will not deal with the broad subject of the hazards of nuclear waste nor with the particular concerns of transportation or disposal. Nonetheless, the controversial nature of the exploratory drilling could result in hearings that are longer than anticipated.

The fees paid to the Board will be deposited into the general fund. As needed, money would be appropriated from the general fund to the Board, to the Office of Administrative Hearings and other agencies or departments which incur administrative costs as a result of the drilling permit. Because the Board has no authority to appropriate money to itself, this action will have to be written into statute before it can become effective. The Board does have the authority, however, to assess the fee to the applicant.

Subp. 2. Additional costs. If the actual cost of processing an application, or amendments, holding hearings, whether required or initiated by the board, or costs incurred through permit revocation, exceeds the above fee, the board shall assess the permittee any additional fees necessary to cover the actual costs. All money received pursuant to this subpart shall be deposited in the general fund.

The board shall assess to the permittee all costs incurred in monitoring the investigative activities. The permittee shall be assessed staff and consultant expenses including housing, travel, office space within the potentially impacted area, equipment, administrative, logistical, and all other costs relating to the monitoring of the investigative activities.

DISCUSSION: In order for the Board to fulfill its obligations under these rules, it may require more money than the initial application fee. If costs exceed the application fee, the Board must have a means of assessing the additional costs to the permittee.

The reasoning behind this provision is similar to the application fee. The permittee should pay for the costs incurred to the Board as stated in Minnesota Statutes section 116C.724.

Monitoring fees are also a necessity of the Board. Due to the long-term potential of radioactive waste disposal, the Board needs total confidence in the data and the results that are obtained from the investigative activities. The only way this can be done is if the Board has its own monitors, consultants and personnel familiar with the types of activities anticipated in the drilling operation. They can provide the oversight and peer review necessary to give the Board an idea of the credibility of the investigative activities.

Credibility will be a difficult and important concept to apply to the investigative activities. Many parts of the research will be subject to interpretation. This is not uncommon in the earth sciences where two or more answers may be considered correct. However, in this case, the data and conclusions must be subject to intense and objective peer review to obtain credible results. The monitors and consultants are intended to provide this review.

Again, as directed by Minnesota Statutes 116C.724, subdivision 2, (3), it is reasonable to expect that the permittee should pay for the costs of the monitoring. The Board is burdened with the responsibility of assuring environmental protection and the prevention of adverse effects.

Subp. 3. Method of assessment. The costs assessed under subpart 2 shall be assessed quarterly, at least 30 days before the start of each calendar quarter, by the board against the permittee. The money paid pursuant to the assessment shall be paid to the board within 30 days after receipt of the assessment, which assessment shall constitute notice of the assessment and demand for payment thereof. The total amount which may be assessed to the permittee under authority of this part shall not exceed the sum of the costs incurred through the monitoring, processing, and related activities. Money received by the board pursuant to any assessment shall be paid to the general fund.

DISCUSSION: There is a need for a method of assessment for the expenses of the initial application fee and the costs of monitoring activities.

In order to assess costs as accurately as possible, they will be calculated quarterly, instead of semi-annually or yearly. Changes in the drilling program would allow the Board to respond in a timely fashion. In addition, this will relieve the permittee from paying one large, bulk sum for the projected monitoring budget.

In the Matter of the Proposed Adoption of the Rules of the Environmental Quality Board Relating to Exploratory Drilling for the Disposal of High-Level Radioactive Waste

CERTIFICATE OF COUNSEL

I, Christie Bennett Eller, Special Assistant Attorney General, do hereby declare that I have examined the above-captioned rules, and the rulemaking record, and that, based on my examination, the Administrative Procedures Act and the rules of the Attorney General have been followed. Any exceptions are noted below.

Christie Bennett Eller

Christie Bennett Eller
Special Assistant
Attorney General

Dated: April 1, 1986

SF-00006-03

DEPARTMENT of Finance

STATE OF MINNESOTA

Office Memorandum

TO: John Morley
Environmental Quality Board

DATE: March 17, 1986

FROM: John Heintz
Executive Budget Officer

PHONE: 6-6278

SUBJECT: Cost Recovery Assessment for Proposed Drilling Rules

The purpose of this memo is to follow up on our previous conversations regarding the nature of this assessment to recover costs involved in the High-Level Radioactive Waste siting process.

As you detail in your memo of 2/7/86, the purpose of the assessment is to recover the state's direct costs in the processing of applications and monitoring of testing a particular site or area.

I have consulted with persons in our Budget Support unit, which is responsible for reviewing fees and rates, and we concur that this is not a fee that need be fixed by rule based on our reading of M.S. 16A.128, subdivision 2. Notwithstanding the periodic billing of the assessment, we consider this to be a one-time fee as it involves one particular site or area, and any testing at a different site requires a separate assessment. Additionally and unrelated to the first point is the fact that the sole purpose of the assessment is to recover the state's direct costs of reviewing and monitoring the siting process. The costs of the application process as laid out in your memo seem reasonable, and we agree that it would be fruitless to attempt to estimate monitoring costs at this time.

We agree that the cost recovery assessment is the best way to handle this situation. Please let me know if I can be of further assistance.

EB/JH/JMS/303T



24.6

Minnesota
Environmental Quality Board
100 Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101
Phone _____

February 7, 1986

TO : John Heintz
Department of Finance

FROM : John Morley 297-2607
Environmental Quality Board

SUBJECT: Cost Recovery Assessment for Proposed Drilling Rules

Minn. Statutes section 116C.724 subd. 2 (3) states "payment by the permittee of a fee covering the costs of processing and monitoring drilling activities." The term "fee" as used here implies a one-time payment and does not project the long-term and cost recovery nature of the drilling rules. In place of the term "fee," we propose the use of the term "cost recovery assessment" in the drilling rules. This term better reflects the purpose of the payments as stated above in statute.

Under this approach, an application filed with the EQB would not require an application fee, but an initial assessment. This foreshadows future assessments and directly ties the cost recovery of processing the application to the cost recovery of monitoring. The initial assessment would remain at $20,000.00 and subsequent assessments would still be billed on a quarterly basis.

We believe that a $20,000.00 initial assessment is appropriate for the drilling application process for a number of reasons. The initial assessment assures that the EQB is not stuck with expenses that should be paid by the applicant. Half of the initial assessment must be delivered with the application or the application will not be processed.

It also provides the applicant with a clear understanding of the application cost in advance and eliminates any element of surprise. In addition, the $20,000.00 initial assessment closely approximates the actual cost of the processing.

Enclosed is the staff work schedule for the application process. It outlines the primary tasks anticipated for the EQB staff and the other costs such as the contested case hearing and logistical expenses.

With the selection of 3 potentially acceptable sites under the federal siting process, we expect to process 3 permit applications in the next few years.

enc. As Stated

AN EQUAL OPPORTUNITY EMPLOYER

Proposed Drilling Rules Relating to
the Disposal of High-Level Radioactive Waste

SCHEDULE FOR APPLICATION PROCESS

This schedule lists the tasks required of the EQB staff under the proposed rules. Approximate time requirements have been estimated and the appropriate costs calculated. The key variable is the scope of the hearing and the subsequent report. If intense controversary surrounds this issue, the hearing and EQB consideration could alter the time schedule and increase the final cost.

Notice of Intent

The applicant is required to provide notice of intent to the Chair before initiating contact with any landowner. A legal description of the affected land will be included. Staff will cross reference this description with maps to make sure that the land is within a Department of Energy (DOE) designated potentially acceptable site.

Individual notices of intent could be issued for each individual landowner, or one blanket notice could be issued for the entire potentially impacted area. An individual notice of intent would take about 1 hour to review. The maximum number of notices per potentially impacted area is expected to be 50. This potentially impacted area will range from 50 square miles to 400 square miles. Depending upon the size of the area and the number of notices, this work could take up to 20 hours of staff time.

20 Hr. X $20.00/Hr. = $400.00

Lease, Permission, Easement Agreements

The staff will review the access agreements to ensure that they include provisions to allow drilling.

Again, the amount of time is dependent upon the number of access agreements and the size of the area. The maximum number of landowners per potentially impacted area is expected to be 50. Each lease agreement will take about 1 hour to review.

50 Hr. X $20.00/Hr. = $1000.00

Permit Application

An applicant for a drilling permit must complete an in-depth environmentally-oriented application, similar to an environmental impact statement. The application must be checked for accuracy and completeness. A field visit by the staff will be necessary, and processing of the application will require extensive cross referencing of topographic maps, soil surveys, hydrologic atlases and other applicable sources.

A thorough review of the application can be expected to require at least 120 - 160 hours of staff time.

Widespread deep drilling has never been done before in Minnesota. Outside expertise, such as the Minnesota Geological Survey or private consultants may also be needed to review the application. Their use will be limited to only those areas where the staff lacks expertise. Consultant work is not expected to exceed 40 hours of review.

(Staff) 160 Hr. X $20.00/Hr. = $3200.00
(Consultant) 40 Hr. X $60.00/Hr. = $2400.00
$5600.00

Information Meeting

The staff will attend the information meeting held by the applicant and participate in an appropriate manner.

An information meeting, with preparation and travel time can be expected to require 8 - 20 hours, depending upon the preparation needs and location.

20 Hr. X $20.00/Hr. = $400.00

Contested Case Hearing

The staff will prepare the case for the State. The State will present the data that has been collected and outline any deficiencies in the application. The applicant and any intervening parties will also participate in the hearing. Due to the controversary surrounding this issue, the hearing could last beyond estimated projections.

A 5 day hearing (as projected by the Office of Administrative Hearings) will cost an initial $7500 for the services of the Hearing Examiner and a transcript. This is a "best guess" and could be altered significantly with the length of the hearing.

Staff time for the hearing will include 40 hours of direct hearing time, 40 - 50 hours for preparation and briefing and 3 - 10 hours for travel. Total staff time would be approximately 100 hours.

(Staff) 100 Hr. X $20.00/Hr. = $2000.00
(Hearing Examiner) + $7500.00
$9500.00

Board Consideration

The staff will present the Board with its findings, together with those of the Hearing Examiner.

This will require staff review of the Hearing Examiner's report, preparation of staff findings-of-fact, preparation for the Board meeting and briefing of the technical representatives and citizen members.

Depending upon the length of the Hearing Examiner's report and the controversary surrounding the issue, the staff will spend 80 - 120 hours on this part.

120 Hr. X $20.00/Hr. = $2400.00

Issuance of a Drilling Permit

The permit will be a document unique to each potentially impacted area. It will contain the site-specific terms and conditions necessary to mitigate potential adverse environmental impacts. These terms and conditions will require significant field research and subsequent cross referencing with applicable local, state and federal regulations. The staff effort is dependent upon the size of the area, the sensitivity of the environment and the applicability of the drilling rules.

Primary and secondary research and drafting of this document is expected to require between 80 - 120 hours.

120 Hr. X $20.00/Hr. = $2400.00

Logistical Costs

The accompanying clerical support, travel, housing, mailing, graphics, reproduction and administrative costs are estimated at 10 percent of the above staff time costs.

Subtotal = $21,300.00

(logistical costs) 10% = $2,130.00

TOTAL $23,430.00

116C.724 FIELD INVESTIGATIONS, TESTS, AND STUDIES.

Subdivision 1. [Repealed, 1Sp1985 c 13 s 245]

Subd. 2. **Drilling.** A permit shall be obtained from the environmental quality board, in accordance with chapter 14, for any geologic and hydrologic drilling related to disposal. Conditions of obtaining and retaining the permit must be specified by rule and must include:

(1) compliance with state drilling and drill hole restoration regulations as an exploratory boring under chapter 156A;

(2) proof that access to the test site has been obtained by a negotiated agreement or other legal process;

(3) payment by the permittee of a fee covering the costs of processing and monitoring drilling activities;

(4) unrestricted access by the commissioner of health, the commissioner of natural resources, the director of the pollution control agency, the director of the Minnesota geological survey, the county health officer, and their employees and agents to the drilling sites to inspect and monitor the drill holes, drilling operations, and abandoned sites, and to sample air and water that may be affected by drilling;

(5) submission of splits or portions of a core sample, requested by the commissioner of natural resources or director of the Minnesota geological survey, except that the commissioner or director may accept certified data on the sample in lieu of a sample if certain samples are required in their entirety by the permittee; and

(6) that a sample submitted may become property of the state.

Subd. 3. **Other requirements.** (a) A person who conducts geologic, hydrologic, or geophysical testing or studies shall provide unrestricted access to both raw and interpretive data to the chairman and the director of the Minnesota geological survey or their designated representatives. The raw and interpretive data includes core samples, well logs, water samples and chemical analyses, survey charts and graphs, and predecisional reports. Studies and data shall be made available within 30 days of a formal request by the chairman.

(b) A person proposing to investigate shall hold at least one public meeting before a required permit is issued, and during the investigation at least once every three months, during the investigation within the potentially impacted area. The meetings shall provide the public with current information on the progress of the investigation. The person investigating shall respond in writing to the environmental quality board about concerns and issues raised at the public meetings.

(c) Before a person engages in negotiations regarding property interests in land or water, or permitting activities, the person shall notify the chairman in writing. Copies of terms and agreements shall also be provided to the chairman.

History: *1Sp1985 c 13 s 245*

SF-00006-03

STATE OF MINNESOTA

DEPARTMENT ATTORNEY GENERAL - BREMER TOWER **Office Memorandum**

TO: JUDITH WEHRWEIN
Legal Assistant
204 Administration Building

DATE: April 2, 1986

FROM: CHRISTIE B. ELLER CBE
Special Assistant
Attorney General

PHONE: 296-9200

SUBJECT: PROPOSED EQB RULES RELATING TO EXPLORATORY DRILLING FOR THE DISPOSAL OF HIGH LEVEL RADIOACTIVE WASTE

Enclosed please find documents relating to the above-entitled rules which are hereby submitted to the office of the Attorney General. According to EQB staff, no one requested notice of submission of the rule to the Attorney General.

The Department of Finance determined the fees in the proposed rules are not subject to Minn. Stat. § 16A.128, subd. 2. Attached is a memo from John Heintz, Department of Finance, which confirms, in writing, that determination.

The attorney general docket number for the project is 40 A202 9098.

Please do not hesitate to contact me if you have any questions regarding the above-entitled rules.

CBE/rmk
Enclosures

Minnesota
Environmental Quality Board
100 Capitol Square Building
550 Cedar Street
St. Paul, Minnesota 55101
Phone _____

DATE: March 21, 1986

TO : Christie Bennett Eller
Special Assistant Attorney General

FROM : John Morley
EQB/High-Level Radioactive Waste Program

SUBJECT : Drilling Rule Documents Needed for
Submission to Attorney General

As you know, to submit a rule adopted without a public hearing to the Attorney General for review and approval pursuant to Minnesota Statutes, section 14.26, the Environmental Quality Board must submit to the Attorney General the following documents:

A. Certificate of Board's resolution adopting the rule.

B. Notice of intent to solicit outside opinion.

C. Comments/materials in response to notice of intent to solicit outside opinion.

D. Order of notice of intent to adopt without a public hearing.

E. Certificate of Board's authorizing resolution ordering notice.

F. Mailing list certificate.

G. Findings of fact with order adopting rule and written comments to rules received after notice of intent to adopt.

H. Statement of Need and Reasonableness.

I. Opinion of the Department of Finance regarding cost recovery asseessment.

J. Certificate of Counsel.

K. Affidavit of mailing the notice of proposed adoption of a rule without a public hearing.

L. Notice of proposed adoption of rules without a public hearing.

M. Copy of rules as proposed - 11/22/85 version.

N. Copy of rules as adopted - 2/27/86 version.

Enclosed are the above documents for your review and submittal to the Attorney General.

AN EQUAL OPPORTUNITY EMPLOYER

RECEIVED

MAR 24 1986

Attorney General's Office
Bremer Towers Office