

Blue Book

**Department of Environmental Quality
Office of Oil, Gas, and Minerals**

10 - Clarifications

STATE OF MICHIGAN



JAMES J BLANCHARD Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING
P.O. BOX 30028
LANSING MI 48909

DAVID F HALES Director

April 24, 1989

VI-20 a.

Notice to Oil and Gas Operators
Concerning
Applications for Permits to Drill Antrim Wells

Nearly seventy percent of all oil and gas well applications presently received by this agency are for drilling Antrim wells. Recent Antrim wells drilled or proposed to be drilled are concentrated in one geographic area of the State: Otsego, Antrim and Montmorency counties.

Most Antrim wells are planned on a project basis. A project includes several wells, tied together by flow and gathering lines, location of one or more associated production facilities, construction of a brine disposal well facility, locating and/or building access roads and plans for handling of drilling cuttings.

Such a concentrated activity in one geographic area causes a much longer amount of time necessary for Department personnel to perform their quality review. In order to prevent unnecessary surface impacts by the "Antrim Play", Antrim well applications, where appropriate, should be reviewed on a project-by-project basis rather than a well-by-well basis. It is strongly recommended, therefore, that any person applying for future Antrim drilling permits do the following.

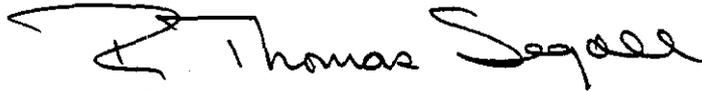
Submit all proposed Antrim well applications associated with one project as a package. In addition to the maps and plats in the well applications, provide 4 copies of a map (preferably letter or legal size) showing to scale all proposed locations of wells, pipelines, drilling mud pits, access roads (new and existing), and production and brine disposal facilities associated with the project. This approach promotes planned and orderly development. Applicants can include as part of their projects the location of proposed drilling mud pits that will contain drill cuttings from more than three of the project wells.

Oil and Gas Operators
Page 2
April 24, 1989

Uncontrolled access to State lands caused by road construction for Antrim drilling is a concern of the Department's foresters. To control access, applicants are now required to gate the road entrance when so directed by the Area Forester.

Antrim well applications received as projects will be given priority review status over single well Antrim applications.

Antrim well applications now on file in Lansing, which have not been sent to field for review, will be returned for resubmission as project proposals if applicable.

A handwritten signature in cursive script that reads "R. Thomas Segall". The signature is written in dark ink and is positioned above the typed name and title.

R. Thomas Segall
Chief and Assistant Supervisor of Wells
Geological Survey Division

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

May 9, 1984

TO: Regional Supervisors, District Supervisors, Field Office
Geological Survey Division

FROM: Samuel Alguire, Supervisor, Regulatory Control Unit
Oil and Gas Section, Geological Survey Division

SUBJECT: Single Well Bonding relative to directional redrill holes.

The following is a policy dealing with bonding when wells are directionally redrilled:

In the recent past a practice of transferring a single well bond from the primary well to the directionally redrilled well arose. This practice in reality terminates the bond on the primary hole before all work ends and the records are filed and approved.

Current practice is being modified to keep a bond on every permit. Every permit application to kick a well covered by a single well bond must be accompanied by an endorsement or rider with Power-of-Attorney enjoining the directional redrill application to the primary well bond. Otherwise a new bond will be required for the directional redrill permit. This applies to every directional redrill permit so long as the operator named and well name remain the same except for the directional redrill designation.

SA:lr

cc: J. Lorenz
I. Pothacamury
Permit Coordinators

S. L. Alguire
373-9290

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

April 24, 1984

TO: Samuel L. Alguire, Supervisor, Regulatory Control Unit, Oil & Gas Section, Geological Survey Division

FROM: S. J. Szyszkowski, Permit Coordinator, Regulatory Control Unit, Oil & Gas Section, Geological Survey Division

SUBJECT: Single Well Bonding Relative to Kicked Holes

The basic purpose of the law (Act 61) is to regulate the drilling and production of oil to prevent waste and to protect the public and its natural resources. Under Act 61 all drilling permits are required to have a bond. This subject deals with the potential problem of single well bonds relative to permits issued for kicked holes.

In order to maintain strict accord with the regulation of Act 61 the application for a permit to drill requires the filing of a bond with the department. This means that in case of a kick two or more bonds would be required for the same drill site. The original bond for the primary permit would be terminated upon receipt of approved plugging records for the primary hole and upon receipt of all other required records. In part Rule 107 states that liability shall continue until:

- (C) All logs, plugging records, and other pertinent information required by law, of the rules, regulations or orders of the supervisor have been filed with and approved by the supervisor.

Further, in accordance with Rule 110 relative to this subject, "a bond shall be terminated", in part, "when the well or wells have been plugged and all records filed and approved as provided in rule 107".

At the same time it is the responsibility of the department to enhance and facilitate the development of the oil and gas industry in the State which directly and indirectly benefits the public as well.

Recently adopted (but unapproved) practice, is to require an endorsement or a rider with power-of-attorney to, in effect, transfer the existing single well bond from the primary permit to the new permit(s) for the hole to be kicked. In doing this the department, in reality, terminates the bonding coverage over the primary permit or hole. If the primary hole is not plugged back effectively or satisfactorily and if all records have not been filed with the department then the department has lost its leverage to obtain satisfactory and approved records by this transfer of bond.

This procedure for transferring a bond from primary permit to permit to kick has been followed for the past year plus because there has been no clear policy

prescribing bond requirements in this situation. Requirements in Rule 106 (R 299.1106) relates to drilling of a well rather than permitting. It does not address the possibility of more than one permit for a surface wellsite. In previous times a wellsite equated with a permit so the question of whether a bond as a surface wellsite requirement or permit requirement did not exist. The existing practice does not appear to fulfill every technical legal requirement for a permit bond but does seem to adequately meet the needs of surface wellsite bond.

There has been no problem to-date acquiring records and it has facilitated the permit issuance procedure for the department and the oil industry.

A possible alternative however would be to maintain the bond for the primary permit as such. Every permit application to kick would be accompanied by an endorsement or a rider with power-of-attorney enjoining the kick application to the existing bond. This procedure would apply for each and every application to kick from the same site so long as the same operator is involved. This method would have the advantage of maintaining bond coverage over all kicked holes from the one bond. It is recommended that the department adopt this approach.

SJS:ljc

cc: File

STATE OF MICHIGAN



JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
BOX 30028
LANSING MI 48909

RONALD O. SKOOG, Director

February 15, 1985

MAR 11 1985

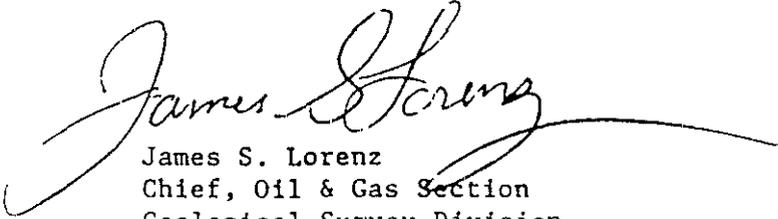
NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
R. CAROLLO
MARLENE J. FLEMING
STEPHEN F. MONSMA
O. STEWART MYERS
RAYMOND POUPORE
-ARRY H. WHITELEY

ATTENTION: ALL OIL & GAS OPERATORS AND DRILLING CONTRACTOR

New Drilling Permit Condition No. 14 Requires:

14. Blowout preventers, accumulators, and pumps shall be certified as operable under the product manufacturer's minimum operational specifications. This certification shall include proper operation of the closing unit valving, pressure gauges, and manufacturer's recommended accumulatory fluids. Certification may be obtained through those companies presently used to test the blow-out preventors stack and casing. Certification shall be required annually and shall be posted on the rig floor.

The Supervisor of Wells intends to begin enforcing the above condition. Beginning April 1, 1985, Geological Survey Division Personnel will be inspecting rotary drilling rigs to see if proper certification on DNR form PR-7200-11 is posted. For rigs not having the certification posted, the contractor and/or operator will be issued a warning. If a valid certificate is not posted as required by July 1, 1985, the rig may be shut-down by order of the Supervisor of Wells.


James S. Lorenz
Chief, Oil & Gas Section
Geological Survey Division
517-373-8760

JSI:pps

ANNUAL CERTIFICATION FOR BLOWOUT PREVENTERS, ACCUMULATORS, PUMPS AND SECONDARY SYSTEM

Company and Address		Rig and Type								
Blowout Preventer Assembly Components Tested	ANNULAR	BLIND RAM		PIPE RAM						
	Manufacturer									
	Model No.									
	Serial No.									
	Working pressure									
	Test pressure									
	Opening Volume									
Closing Volume										
C. Blowout Preventer Assembly Pressure Test	UNIT	PRESSURE APPLIED	TIME HELD	FINAL PRESSURE	OPERATE LOCKING SCREWS					
	Annular									
	Blind Rams									
	Pipe Rams									
	Upper Kelly Ck.									
	Lower Kelly Ck.									
	Inside BOP									
D. Accumulator and BOP Control	System Pressure Reducing Valve: Yes No		Annular Regulating Valve: Yes No							
	Accumulator volume & type		Bottle precharge pressure							
			No.1 PSI	No.2 PSI	No.3 PSI	No.4 PSI				
	Hydraulic Pumps				System Pressure Rating					
	No. 1 type		GPM	No. 2 Type		GPM				
	Air: Yes: No:		Nitrogen: Yes: No:		No of Stations:					
	Electrical: Yes: No:		Other: Yes: No:		Blind Ram Control Guard: Yes: No:					
	Reservoir Tank Volume: Total Gals Capacity _____ Gals/in		Reservoir Level: Bottles Empty _____ in. Bottles Full _____ in.		Controls Labelled Correctly Yes _____ No _____					
	E. Remote Station Yes _____ No _____	Number of Stations:	Power Supply:	Location:	Labelled Correctly: Yes No	Blind Ram Control Guard On: Yes No				
		Control Line Tested: Yes No		Pressure on Line: PSI	Fluid in System: Air Liquid					
F. Accumulator Performance Test	Blowout Preventer Unit	Accumulator Only Pressure			Pump Only Pressure			Accumulator Recharge Time		
		Time	Initial	Final	Time	Initial	Final	Minutes	Seconds	
	Annular									
	Blind Rams									
	Top Pipe Rams									
Pipe Rams										
G. Check of Accumulator Bottles	(Pumps/Power Off) Starting Pressure _____ PSI		After closing bottom rams _____ PSI			After closing top rams _____ PSI			After closing annular _____ PSI	
H. Visual Check	Comments:									
I. What two (2) types of OPERABLE secondary closing systems are installed:										
J. Yes _____ No _____ Are all kill, choke valves and checks independently pressure tested to manufacturers working pressure? ANNULAR BOP, BLIND RAMS, PIPE RAMS AND ACCUMULATOR ARE CERTIFIED AS A SINGLE UNIT. ANY CHANCE TO THE COMPONENTS DESCRIBED IN B. & D. ABOVE WILL REQUIRE IMMEDIATE RECERTIFICATION.										
K. I hereby certify that the above are true tests and cumulatively comply with the product manufacturer's minimal operational specifications.										
Representative			Signature				Date Certification			

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

May 2, 1985

TO: Regional & District Geologists

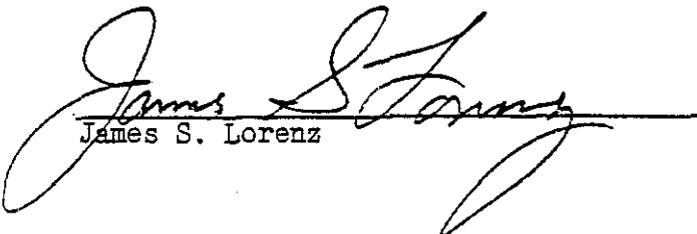
FROM: James S. Lorenz, Chief, Oil & Gas Section
Geological Survey Division

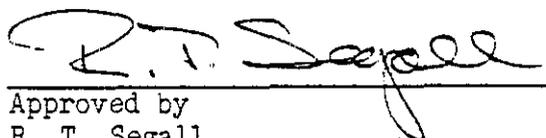
SUBJECT: Change of Well Status

In order to prevent any problems for an operator and our record keeping system, please remember:

1. Verification of spacing patterns and assignment of drilling units is a function of the Permit Unit.
2. Disposal wells do not have to conform to spacing patterns or drilling units.
3. When an application for change of status is received in the field to convert a) a disposal well to a producing well, or b) to produce from a different formation(s) than originally permitted, it should not be approved until approval from the Permit Unit is obtained.

JSL:lb


James S. Lorenz


Approved by
R. T. Segall

INTEROFFICE COMMUNICATION

April 22, 1982

TO: Floyd Layton, Regional Geologist, Region II
Irvin Kuehner, Regional Geologist, Region III

FROM: James S. Lorenz, Chief, Oil and Gas Section

SUBJECT: Conductor Pipe and Well Site Preparation

The following is my response to you seeking my opinion relative to when well site preparation and/or the setting of the conductor pipe can be commenced. Is it allowed before or after a permit is issued and posted?

As a result of consulting with several field/staff personnel, various points on this matter came to light.

Some of them are:

1. If the permit is to be posted prior to the setting of the conductor pipe:
 - a. It could result in the construction of more than one drilling pad on a drilling unit. This would be unwarranted destruction of the surface.
 - b. It would allow the operator to claim, without active drilling, that site preparation held an expiring lease.
 - c. It would allow an operator to move forward while a permit is being processed (site preparation).
 - d. The operator may claim that there are no promulgated rules preventing site preparation prior to the issuing of a permit. Further, he may maintain that this issue is a condition of his lease, and as such, is the sole business of the leasee and lessor.
2. If the permit is posted after the conductor is set but prior to the drilling of the surface pipe:
 - a. All of the points in No. 1 above would apply.
 - b. It could result in a hole being drilled penetrating a fresh water aquifer without the protection of a bond or the rules. There have been cases when this happened - where drilling was not pursued and the hole left unplugged.
3. If the permit is required to be posted prior to site preparation and the setting of the conductor pipe, all the arguments and conditions in Nos. 1 and 2 would be negated.

April 22, 1982

After due consideration, I have concluded that the law is quite clear and our position should be to require the permit to be posted prior to the setting of the conductor pipe as well as site preparation pursuant to Act 347, P.A. 1972.

Act 61, P.A. 1939, says "Sec. 23. A person shall not drill or begin the drilling of any well for oil or gas...and received and posted in a conspicuous place at the location of the well a permit..." The conductor pipe is part of the well construction and setting it is considered to be part of the drilling.

As far as site preparation is concerned, the Act 61 rules are silent. But, on November 1, 1974, the Assistant Supervisor of Wells issued a letter to industry that said: "Effective January 1, 1975, all oil, gas, and mineral well owner-operators must include necessary soil erosion and sedimentation control measures in accordance with Act 347 of the Public Acts of 1972 and its General Rules, as part of the construction of oil, gas, and mineral well installations permitted by the Supervisor of Wells."

Rule No. 1704 promulgated by the authority of Act 347 says:

"R 323.1704. Permit requirements. Rule 1704. (1) A land owner or developer who contracts for, allows or engages in an earth change in this state shall obtain a permit from the appropriate enforcing agency prior to commencement of an earth change which is connected with any of the following land use activities which disturb 1 or more acres of land, or if the earth change is within 500 feet of a lake or stream of this state: (g) Oil, gas and mineral wells, except the installation of those wells under permit from the Supervisor of Wells and wherein the owner-operator is found by Supervisor of Wells to be in compliance with the conditions of the sediment act."

The key words can be found in (g) "...under permit from the Supervisor of Wells ..." This means that an operator who has a drilling permit is not required to obtain an earth change permit from a local agency. But, until they have the drilling permit, or a permit from the local agency as defined in Act 347, no earth change can take place of over one or more acres or within 500 feet of a lake or stream.

JSL:jjk

cc: T. Segall
S. Alguire

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 10, 1988

VII-8 a.

TO: James S. Lorenz, Supervisor, Permits & Technical Evaluation Section
Samuel L. Alguire, Supervisor, Permits & Bonding Unit

FROM: R. Thomas Segall, Assistant Supervisor of Wells

SUBJECT: Implementation of the requirements of Rule 201(b)(1), Special Order No. 1-73 paragraph (B), and Special Order No. 1-86 paragraph 4, all dealing with the subject of drilling unit exceptions. (See Attachment)

These three sections, though from different sources, address a common regulatory requirement. The essential difference between them is that the first one addresses drilling units established under the General Rules and the last two address drilling units established by a special order of the Supervisor of Wells. The orders were adopted in accordance with the General Rules provisions for the adoption of special spacing orders.

Since these all address a common regulatory requirement it is important that we implement a common standard; therefore, the following criteria is established:

Implementation

1. The certified statement that a "reasonable effort" has been made to obtain the lease or leases or to obtain a communitization agreement to form the full drilling unit and that such effort has failed shall be a written document, separate from a cover letter or Environmental Impact Assessment.
2. The certified statement shall be by a person who, by personal knowledge of the attempt(s), can attest that reasonable effort was made to obtain the lease or leases or to obtain a communitization agreement to form the full drilling unit and that such effort has failed.
3. For the purpose of providing sufficient opportunity for the pooling or communitizing of drilling units, "reasonable effort" shall include a written offer to participate to all of the known unleased or uncommunitized interests in a drilling unit. Such interests shall have ample opportunity to reply.

ATTACHMENT

Rule 201(b)(1)

(b) Drilling unit exceptions

(1) Exception for location of exploratory well:

The supervisor may issue a permit to drill an exploratory well on a tract less than a 40-acre drilling unit which is not a part of a pooled or communitized drilling unit providing the application for permit is accompanied by a certified statement that a reasonable effort has been made to obtain the lease or leases or to obtain a communitization agreement to form the full 40-acre drilling unit and that such effort has failed. Should a discovery well be completed on such partial drilling unit, a full drilling unit shall be formed by voluntary or compulsory pooling. This pooled unit shall conform with the provisions of Rule 201 (a) or shall conform to a drilling unit to be adopted following public hearing in accordance with Rule 203.

Special Order No. 1-73, Paragraph(B)

(B) Drilling Unit Exception:

The Supervisor may issue a permit to drill an oil or gas well on a tract less than an eighty (80) acre drilling unit which is not a part of a pooled or communitized drilling unit providing the application for permit is accompanied by a certified statement that a reasonable effort has been made to obtain the lease or leases or to obtain a communitization agreement to form the full eighty (80) acre drilling unit and that such effort has failed.

Should a well be completed on such partial drilling unit, a full drilling unit shall be formed by voluntary or compulsory pooling. This pooled unit shall conform with the provisions of (A) above or shall conform to a drilling unit to be adopted following public hearing.

Special Order No. 1-86, Paragraph 4

4. The Supervisor may issue a permit to drill for gas on a drilling unit described in this order which is not totally pooled, nor communitized on condition that the application for permit is accompanied by a certified statement detailing efforts that have been made to obtain the lease or leases or to obtain a communitization agreement to form the full drilling unit and that such effort has failed. Should a well be completed on such drilling unit, a pooled drilling unit shall be formed by voluntary or compulsory pooling. This pooled unit shall conform to this order or shall conform to a drilling unit adopted following public hearing.



Instructions and preparation guidelines for an Environmental Impact Assessment for an Oil and Gas well (Act 61, PA 1939), or Mineral Well (Act 315, PA 1969) operations.

- 1) An Environmental Impact Assessment (preparation guidelines are outlined below) must be submitted by an applicant for all wells for which applications for drilling permits are filed under the provisions of Act No. 61, P.A. 1939, as amended, or Act 315, P.A. 1969 as amended.
- 2) An application for a drilling permit will be considered incomplete until all the guidelines as shown below, are discussed and evaluated in an Environmental Impact Assessment.
- 3) If the Environmental Impact Assessment is considered to be unacceptable, a Supplemental will be required.

PREPARATION GUIDELINES

Note: Type or print. The applicant should use as many pages or attachments as needed to assess the environmental impact of the proposed well.

Well Identification

Name of Applicant:
Address:
Well Name and Number:
Location:

i. Describe the following

- A. 1. The project, including property ownership, drilling unit as applicable and the purpose of the well. Also discuss any unusual circumstances i.e. intended replacement well, re-entry, unleased acreage, pending public hearing, unit size, larger than normal unit size, off-pattern for environmental reasons, etc.
 2. The surface owner of the proposed well site has to be notified and be aware of the application. Include a copy of the letter of notification that was sent to the surface owner, or a statement regarding notification efforts.
 3. Where State or Federal mineral and/or land interests are part of the drilling unit, provide us with all the lease restrictions.
- B. The general topography.
 - C. The land cover, species of trees (size, number, stock), etc.
 - D. The present land use.
 - E. Any rivers, streams, lakes, swamps, or drainageways within one-quarter mile of the well site and state distance.
 - F. Access roads available and new roads that will be needed for drilling and operating purposes.

II. Environmental Impact Assessment:

- A. Detail the impacts drilling and well operations will have on the ecological systems such as land cover, wildlife and aquatic life.
- B. Detail any impacts, that the drilling and well operations may have on nearby residents (i.e. noise, H₂S, water etc.), land and water use, and public services. What will be the future impacts on the above?
- C. How much area is needed for drilling? If the well is operational how much area is needed for installation of facilities, and lease equipment, and their location in relation to the well head?
- D. What will be the source for drilling brine?
- E. What methods will be used in the handling, containment and disposal of drilling fluids, brines and muds (Supervisor of Wells Special Order #1-81 and Letters of Instruction #3-81 and 1-84, and Supervisor of Mineral Wells Letter of Instruction 1-84?)
- F. What will be the source for fresh water? If a fresh water well is drilled, will it be used exclusively for the drilling and/or production from the well (exclusive use well) or will it be used as a source of drinking water, be turned over to the landowner or be used for any purposes other than oil, gas or mineral well drilling or operations (Public Health Department approval may be required), (SEE NOTICE AND REQUIREMENTS FOR SOURCES OF WATER AND WATER WELLS USED IN CONJUNCTION WITH OIL AND GAS OR MINERAL WELL DRILLING AND OPERATIONS, December 1, 1984).
- G. What earth changes will be undertaken for roadways? For drilling? For operations? Detail a plan, where applicable, for soil erosion and sedimentation control which conforms to Act 347 of the Public Acts of 1972 and its corresponding General Rules.

Note: (Earth change) means a man-made change in the natural cover or topography of land, including cut and fill activities which may result in or contribute to soil erosion or sedimentation of the waters of the State.

H. If the well becomes operational:

1. What disposal method will be used for operational wastes? How will these wastes be transported from or to production or disposal facilities?
 2. List the existing pipelines in the vicinity available to: a. Transport the oil and gas or brine from the production facility to the sales point; b. Transport the oil and gas, brine, or waste stream. Detail the environmental impacts if it is necessary to construct pipelines for these purposes.
 3. What effect will the operation have on air or water quality?
 4. What effect might this operation have on the health and welfare of the public?
 5. What is the cumulative long-term effect on the immediate environment?
 6. Will this operation have other consequences adverse to the environment?
- F. Should the well be unsuccessful or when it is abandoned what plans and arrangements have been made for restoration of the well site location and access roads and within what period of time?

III. Possible Alternatives to the Proposed Well Location:

Objective evaluation of alternative surface locations. An alternative surface location may be preferred because of environmental considerations.

IV. Any Irreversible and Irretrievable Commitment of Resources:

To what extent will the well curtail the range of beneficial uses of the surrounding environment?

V. Summary:

Brief evaluation of project and the impact or effect it might have on existing environmental conditions.



STATE OF MICHIGAN

OFFICE OF THE GOVERNOR

LANSING

WILLIAM G. MILLIKEN
GOVERNOR

September 30, 1971

EXECUTIVE DIRECTIVE

1971 - 10

TO: All Department Heads

FROM: Governor William G. Milliken

SUBJECT: Environmental Impact Review

I believe it is the responsibility of State government to lead the way in all aspects of environmental quality protection. Major state activities which effect the environment need to be carefully scrutinized, so that the changes brought about in land, water, or air use are consistent with overall State environmental policy objectives.

I am directing that each agency of State government review all major activities within their jurisdiction to determine their effects on the environment. Such review must include the following:

1. The probable impact of the action on the environment; this includes the impact on human life or other ecological systems such as wildlife, fish and aquatic life; or on air, water, or land resources;
2. Probable adverse environmental effects of the action which cannot be avoided (such as air or water pollution, damage to life systems, urban congestion, threats to health or other adverse effects on human life);
3. Evaluation of alternatives to the proposed action that might avoid some or all of the environmental effects indicated above. This should include a full explanation of the reasons why the agency decided to pursue the action in its contemplated form rather than an alternative course of action;
4. The possible modifications to the project which would eliminate or minimize adverse environmental effects, including a discussion of the additional costs involved in such modifications.

I further direct that The Advisory Council for Environmental Quality coordinate the State's environmental impact review program. The Council shall issue specific instructions and guidelines within 60 days establishing which agency activities must be reviewed and the procedures to effectuate the review. The Council shall determine which actions should be suspended or modified and will request that the agency take appropriate action in response to the Council's determination. The Council's decision shall be conclusive but subject to my review when deemed appropriate.

The Inter-Departmental Committee on Water and Related Land Resources is directed to screen agency impact statements and forward to the Council for its evaluation those which contain unresolved issues or which concern actions having significant implications for the State's environment. The Committee shall transmit to the Council each month a complete list of impact statements that have been reviewed and the Council may in its discretion direct that any statement not previously forwarded by the Committee, be transmitted for evaluation. Environmental impact statements ~~must be completed by the agency in sufficient time to permit alternative~~ courses of action if necessary in the interest of environmental protection.

The Council will circulate impact statements to other state and local agencies for their review and comments as appropriate. Statements will also be made available on request to private groups or interested citizens. The Advisory Council with the assistance of the agency involved shall provide a forum for public review of any major action if it determines that the public has not had sufficient opportunity to be heard. The Council may grant an emergency exemption from the normal review requirement set forth above if, in its judgment, the public interest would best be served. If an emergency should occur, the agency shall contact the Council which will immediately consider and determine the request for exemption.

Whenever a federal environmental impact statement is required for a major action under the terms of the National Environmental Protection Act, the agency shall forward a copy of that statement to the Advisory Council for Environmental Quality. The statement may be accepted as fulfilling state requirements under this Directive or the Council may direct that additional environmental impact evaluation be undertaken.

I intend to see that an efficient process is developed to provide environmental assessment without delaying the work of state agencies. Therefore, I am instructing the Council to require agencies to submit only that material which will be necessary to determine the specific environmental impacts of major actions.

William H. Miller

STATE OF MICHIGAN

NATURAL RESOURCES COMMISSION

CARL T. JOHNSON
Chairman
E. M. LAITALA
AUGUST SCHOLLE
HARRY H. WHITELEY
HILARY F. SNELL



WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES
STEVENS T. MASON BUILDING, LANSING, MICHIGAN 48926
RALPH A. MAC MULLAN, Director

Department Letter No. 191

January 31, 1972

TO: All Supervisory Personnel

FROM: Ralph A. MacMullar, Director

SUBJECT: Procedures for writing environmental impact statements involving Department of Natural Resources projects, programs or policies--as required under the Governor's Executive Directive 1971-10

An Environmental Impact Statement is exactly what its name implies. It is a written analysis of the environmental aspects of any proposed policy, project or program that, by virtue of its scope or complexity, could cause a sizable or serious undesirable impact on or alteration of the human and natural environment (man is an integral part), or could cause an alteration in the quality of human life.

Governor Milliken now requires that environmental impact statements will be prepared by all State agencies who have the responsibility for either conducting or approving programs or projects that do or could affect man's environment. This letter is to complement Executive Directive 1971-10 (copy attached), to implement this directive and to provide additional guidance on:

1. The nature and content of an Environmental Impact Statement.
2. The persons or agencies responsible for the preparation and processing of statements.
3. The types of projects and programs about which statements should be prepared.



4. The desirable format of these statements.
5. The procedure for inter- and intra-departmental and public review and approval.

The real objective of an environmental impact statement is to prevent deleterious actions or programs BEFORE they occur (1) by causing the proposing agency, person, or organization to consider the effects of their project, to examine the various alternatives for accomplishing the same objective (including the alternative of no action at all), (2) by presenting all the advantages and disadvantages involved in such a way that they can be weighed against each other, (3) by pointing out possible alterations in the project plan to eliminate or ameliorate the adverse effects and, where appropriate, to outline the probable adverse effects that cannot be avoided, and finally (4) by bringing all the facts to the attention of the public in such a way as to insure their understanding of the issues involved and to give the public an opportunity to provide important information concerning the project--to give the public a voice in the decision-making process.

In short, an Environmental Impact Statement says, "Here are all the facts--all the pros and cons--the 'costs' and 'benefits.' Now, should we go ahead with it or authorize it? Should it be changed somewhat? Should it be shelved temporarily or permanently? If we do decide to go ahead with it because it's 'unavoidable,' are we willing to pay the environmental price, in the broadest sense?"

This Department Letter is concerned only with Department of Natural Resources projects or programs financed wholly or in part by State funds.

Major action by private individuals, corporations, or organizations that require approval by the Department of Natural Resources or a permit from the Department will also be subject to the requirements outlined herein. The person or organization proposing the action has the initial responsibility for preparing an evaluation of the environmental impact. The Department of Natural Resources will carefully review these statements before issuing the permit and may prepare its own Environmental Impact Statement on the proposal.

Proposed actions by another governmental unit using Department of Natural Resources funds or funds authorized by this Department (i. e., the Recreation Bond or Clean Water Bond programs) are also subject to these requirements. An evaluation of the environmental impact will be prepared by the initiating governmental unit. The Department will review this statement and must concur prior to approving the project or program.

Specific instructions concerning projects that do not involve the Department of Natural Resources funds or specific approval (i. e., review of most Federal

projects or State highway construction projects) will be the subject of another Letter.

Executive Directive (from the Governor's office) 1971-10 may be briefly paraphrased or summarized as follows:

* * * * *

Each agency of state government will review all major activities to determine their effects on the environment. Such review must include:

1. The probable impact on all natural resources and on human life and on all environmental elements that affect these values.
2. The probable adverse effects of a proposed action that cannot be avoided.
3. An evaluation of alternatives for accomplishing the same objective.
4. Possible modification to ameliorate any adverse effects.

The Inter-departmental Committee on Water and Land-related Resources will review all statements, and pass on to the Governor's Advisory Council for Environmental Quality those with unresolved issues. Obviously the issues concerning most proposed programs or projects can be resolved at the Staff level or by the Inter-departmental Committee.

The Advisory Council for Environmental Quality will review all impact statements that it receives and request the proposing agencies to act in accordance with its desires.

When appropriate, the Advisory Council will circulate statements to different agencies and to the public for review. Such matters as the Advisory Council cannot resolve will be referred to the Governor.

If a Federal environmental impact statement is required under the terms of the National Environmental Protection Act, it may serve for purposes of this Letter.

Statements must be prepared early enough so as to permit public input into the decision-making process and to permit change in planning--to enable good judgment to be made and before any action takes place--especially irreversible action.

Impact statements must be prepared on:

1. Major projects or programs.

2. Any project or program regardless of size that could have a significant environmental impact.
3. Controversial cases.

* * * * *

It is important to remember that this Letter concerns only DNR policies, programs, or projects, or those involving DNR funds. Impact statements involving other units of government and the private sector of society will be considered in another memorandum.

WHO WILL PREPARE AND SUBMIT ENVIRONMENTAL IMPACT STATEMENTS

In order to insure the most complete consideration of all the issues involved, the originating or most "responsible" division should prepare the statement. It is logical to expect that division to be most knowledgeable about the nature of the project or program. However, they have the primary responsibility for obtaining relevant material from any or all other divisions-- Field and Staff. They will also seek counsel from the Environmental Quality Section of the Research and Development Division. For example: if the Wildlife Division proposes to construct a major impoundment for waterfowl production and harvest, it must seek input on fisheries considerations from the Fisheries Division, water quality data from the Water Management Bureau, inputs from local units of government, any pertinent data on area road systems from the Department of State Highways, economic information from the Office of Planning Services, etc.

TYPES OF PROJECTS OR PROGRAMS REQUIRING A STATEMENT

1. Any MAJOR Department action or program or project or one, while not major, that would or is likely to alter a SIGNIFICANT element or part of the natural environment or resource, or permit such to be altered, or any such action that would either directly or indirectly alter the quality of human life. The project or program does not necessarily have to be big, physically, but it must involve either a long-term or intense effect.
2. Any CONTROVERSIAL action or program that involves a reasonably important "segment" of opinion. Obviously, and unfortunately, any DNR proposal seems to excite somebody. We do not propose to make an environmental impact study because someone writes to the Director, or to his Legislator, or to the editor of his local paper.

Except when directed otherwise by the Governor, the Natural Resources Commission or the Director will determine which issues are controversial.

3. An Environmental Impact Statement will be prepared if the Governor or his Advisory Council for Environmental Quality makes such a request concerning a specific program or project.

There are two classes of actions that could require statements:

1. Individual actions or projects. For example; the construction of one dam or approval of one land exchange, or one massive planting of an exotic fish species.
2. A continuing class of action, or program, or policy supporting such. For example; the general department activities in the following areas:

Controlled burning to improve wildlife range.
Chemical reclamation of lakes and streams.
Issuance of permits for oil, gas and mineral exploration and exploitation.
Tourist industry promotion.
Forest management including pest control.
Dredging and filling.
Establishing hunting and fishing seasons.
Land sales and exchanges.

It is obvious that it is not possible to write a useful environmental impact statement on a general policy covering these types of class actions that would, in any practical way, resemble a statement prepared for a specific project (i. e., construction of a 1,000-acre impoundment on the Huron River). Keep in mind that the objective of an Environmental Impact Statement is to prevent an inadvisable action or to cause a beneficial action to happen. A policy merely "authorizes" a class of action because no policy could be expected to provide specific guidelines for every specific action under that policy.

Therefore, a comprehensive policy statement governing these types of programs will serve as the impact statement if one is desired.

Policy statements should include exactly why this policy has been adopted--as compared to other approaches. It should be a confirmation of the fact that alternatives have been carefully considered and that in the long run--considering all available facts--this is the best course of action.

SPECIFIC KINDS OF PROJECTS REQUIRING IMPACT STATEMENTS

It is not possible to prepare an all-inclusive list that is not subject to almost immediate revision. The rule should be: if in doubt, contact the appropriate Deputy Director. Deputy directors will, if there is some question, consult with the Director.

Keep in mind that within these "types of projects" we are only concerned with those that are either MAJOR, or have a SIGNIFICANT environmental impact or impact on the quality of life, or are truly CONTROVERSIAL.

Examples of individual actions:

- Major impoundments or alterations in natural water courses or ground water levels.
- Major drainage projects.
- Major land exchanges or sales or purchases-- including easements.
- Major fish or wildlife plantings.
- Unusually large-scale chemical treatment of water or land.
- Unusually large alterations of State-owned forest cover by any means, including planting.
- Major intensive or extensive development of a park, wildlife, or recreation area.
- Major road construction projects.
- Unusually large sales of oil, gas, gravel or other minerals.
- Major changes in land use rules.
- Unusually large tourist promotion campaigns.
- Major changes in water quality standards.
- Possibly some water access site or harbor developments.

ENVIRONMENTAL IMPACT STATEMENT CONTENT

1. Standard title sheet (copy attached).
2. Description of the proposed action or program--include its nature, location, size or extent, cost estimate, and why the impact statement is being submitted.
3. The objective of the action or project. Remember, the object of an impoundment is not to impound water per se. Its true objective may be to provide fish or wildlife habitat, water storage, quality recreational opportunity, flood control.

4. The probable effects of the action or program on the environment and on the quality of life. The issues included and evaluated should be as complete as possible. All natural resources should be included. Obviously, a water impoundment affects more than fish or water quality.

Some specific values that could be affected by almost every Department action or program could include:

- Terrestrial and aquatic life.
- Water quality, quantity and distribution.
- The terrestrial and aquatic habitat.
- Aesthetics and natural beauty.
- Soil quality, stability and moisture.
- Wilderness values.
- Human pressures on resources.
- Local and state tax base considerations.
- Transportation requirements.
- Law enforcement effort and effectiveness.
- Distribution and density of people.
- Economic considerations (business, industry, dollar turnover and employment).
- Food and fiber production.
- Recreational opportunities and quality of these recreational experiences.
- Increased suburbanization, or urbanization, or lake and stream-side development.
- Noise pollution and tranquility, and any other pertinent social considerations.
- Historic sites and unique and natural areas.

The initiating division will be responsible, where applicable, to see that these kinds of values are considered.

5. A listing and an evaluation of alternatives for accomplishing the same objective. This does not mean to say that an impact statement must be prepared for all alternatives. Alternatives, either in time, place, nature, or "intensity" should be stated. The alternative of no action should also be discussed. Specifically, this section calls for a statement as to why one alternative was chosen over the other or others.
6. Adverse effects of a proposed action that cannot be avoided.
7. Possible modifications, and their costs in both money and other costs or "complications," to ameliorate any undesirable effect.

There will be two stages of development of environmental impact statements--the draft and final statement. The course of all environmental impact statements through the Department shall be as follows:

1. A draft environmental impact statement will be prepared by the division(s) proposing the action.
2. Upon approval by division chief(s), it will be signed and transmitted to the appropriate deputy director(s).
3. It will then be referred to the Environmental Quality Section of the Research and Development Division for review and comment.
4. It will then be returned to the deputy director(s) for approval, suggestion for change, or disapproval. If not acceptable, it will be returned to the division chief(s). If accepted, the appropriate deputy director will then submit it to the Director.
5. A draft statement will be made freely available to the public early in the planning process and early enough to permit the Inter-departmental Committee or the Environmental Quality Council to receive the feelings of the interested public. A public hearing may or may not be held depending on the circumstances. An appropriate news release for local and statewide covering will be made at least 30 days prior to the submission of the statement to Inter-Comm. The final statement will also be made available to the public upon request.
6. Suggestions from the public on the draft statement will be given careful attention, and changes may be made in the proposal as a result. The nature or substance of any changes will determine the intensity of the review. If changes are substantial, a revised draft environmental impact statement will be prepared by the division chief(s) concerned, and will be reprocessed.
7. If approved by the Director and possibly the Natural Resources Commission, it shall be transmitted to the Inter-departmental Committee for Water and Land-related Resources for their screening (for the Advisory Council for Environmental Quality). The Director's office shall be responsible for this transmission.
8. When the statement is returned from either the Inter-departmental Committee or from the Council--either approved or disapproved--it shall be returned to the appropriate division chief(s) for re-processing, or for incorporation into decision-making, in which case it will become a final statement.

9. The Environmental Quality Section of the Research and Development Division will act in an advisory capacity at all stages of the environmental impact statement process.

FORMAT

Unless unusual circumstances suggest otherwise, the following format will be used by the Department of Natural Resources:

1. Title sheet--copy attached.
2. Description of project.
3. Objective.
4. Probable environmental effects--desirable and undesirable.
5. Evaluation of alternatives.
6. Unavoidable adverse effects.
7. Possible modifications.

We are entering a new field of natural resources management. The preparation of environmental impact statements is only one step or action taken by the Department, and other State agencies, to improve the quality of our environment and our life. Obviously, nothing as important as this letter will remain as originally written for any extended period of time. These procedures will be changed as the need arises.

The policy outlined above shall become effective immediately.



Distribution--B
Attachment

Title Sheet for Environmental Statement

STATE OF MICHIGAN
ENVIRONMENTAL IMPACT STATEMENT

Prepared by

Division

Department

for

(Brief description of proposed project incl. City & County)

Submitted by

Date

Signature of Appropriate Division Chief

Approved by

Date

Signature--Director's Office

HILARY P. SNELL
Chairman
CARL T. JOHNSON
E. M. LAUTALA
HARRY H. WHITELEY
JOAN L. WOLFE
CHARLES G. YOUNGLOVE



WILLIAM G. MILLIKEN, Governor

DEPARTMENT OF NATURAL RESOURCES
STEVENS T. MASON BUILDING, LANSING, MICHIGAN 48928
A. GENE GAZLAY, Director

November 1, 1974

NOV 14 1974

ATTENTION: All Oil, Gas, and Mineral Well Owners, Operators, and Drilling Contractors, State of Michigan

Effective January 1, 1975, all oil, gas and mineral well owner-operators must include necessary soil erosion and sedimentation control measures in accordance with Act 347 of the Public Acts of 1972 and its General Rules, as part of the construction of oil, gas and mineral well installations permitted by the Supervisor of Wells.

Act 347 is a law to control soil erosion and to protect the waters of the State from sedimentation. It has been in effect since January 1, 1973 and General Rules have been promulgated which apply to earth change activities. Rule 1704 (g) provides for exception to the requirement of obtaining a permit from the local enforcing agency for preparation and utilization of an oil, gas or mineral well drilling site but this exemption does not relieve owner-operators from the obligation of conforming to soil erosion and sedimentation control practices or compliance with the Act.

Where necessary, well site development must include soil erosion and sedimentation control measures.

Wherever or whenever control measures are a necessary part of site development a control plan shall be included as a part of the presently required Environmental Impact Assessment. Revised Environmental Impact Assessment forms with instructions and guidelines for completion may be obtained from this office and all field offices of the Geological Survey Division.

For your general information pertinent sections of Rule 1704 and Rules 1708, 1709, and 1710 are copied and attached. You are urged, however, to obtain a copy of Act 347 and its General Rules from the Bureau of Water Management, Water Development Services Division, Department of Natural Resources, 8th Floor, Stevens T. Mason Building, Lansing, Michigan 48926.

Arthur E. Slaughter
Arthur E. Slaughter
Assistant Supervisor of Wells

GEOLOGICAL SURVEY DIVISION



474 Attachments

DEPARTMENT OF NATURAL RESOURCES
WATER RESOURCES COMMISSION
Excerpts from
GENERAL RULES

III-7d attachment

R 323.1704. Permit requirements.

Rule 1704. (1) A land owner or developer who contracts for, allows or engages in an earth change in this state shall obtain a permit from the appropriate enforcing agency prior to commencement of an earth change which is connected with any of the following land use activities which disturb 1 or more acres of land, or if the earth change is within 500 feet of a lake or stream of this state:

(g) Oil, gas and mineral wells, except the installation of those wells under permit from the supervisor of wells and wherein the owner-operator is found by supervisor of wells to be in compliance with the conditions of the sediment act.

R 323.1708. Soil erosion and sedimentation control procedures and measures, general.

Rule 1708. Soil erosion and sedimentation control procedures and measures prescribe by rules 1709 and 1710 shall be appropriately incorporated into the soil erosion and sedimentation control plan and shall be applied to all earth changes identified therein, unless the person preparing the plan shows to the satisfaction of the appropriate enforcing agency that any alteration of the control procedures or measures, or the inclusion of other control procedures or measures will prevent accelerated soil erosion and sedimentation during the earth change.

R 323.1709. Earth change requirements.

Rule 1709. (1) All earth changes shall be designed, constructed and completed in such a manner which shall limit the exposed area of any disturbed land for the shortest possible period of time as determined by the county or local enforcing agency.

(2) Sediment caused by accelerated soil erosion shall be removed from runoff water before it leaves the site of the earth change.

(3) Any temporary or permanent facility designed and constructed for the conveyance of water around, through or from the earth change area shall be designed to limit the water flow to a non-erosive velocity.

(4) Temporary soil erosion control facilities shall be removed after permanent soil erosion measures have been implemented. All earth change areas shall be graded and stabilized with permanent soil erosion control measures pursuant to approved standards and specifications as prescribed by rule 1710.

(5) Permanent soil erosion control measures for all slopes, channels, ditches or any disturbed land area shall be completed within 15 calendar days after final grading or the final earth change has been completed. When it is not possible to permanently stabilize a disturbed area after an earth change has been completed or where significant earth change activity ceases, temporary soil erosion control measures shall be implemented within 30 calendar days. All temporary soil erosion control measures shall be maintained until permanent soil erosion control measures are implemented.

R 323.1710. Soil Conservation District standards and specifications.

Rule 1710. Current local soil conservation district soil erosion and sedimentation on control standards and specifications or revisions thereof, as approved by the local or county enforcing agency in consultation with the local soil conservation district, shall be followed and utilized as they apply to an individual earth change which requires an erosion and sedimentation control plan.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 7, 1988

TO: John H. Kennaugh, Soil Erosion and Sedimentation Control,
Land and Water Management Division

FROM: R. Thomas Segall, Chief, Geological Survey Division

SUBJECT: Administration of the Soil Erosion and Sedimentation Control
Act, 1972 PA 347, as amended

I will first apologize for the delay in responding to your request for comments on your August 29, 1988 draft letter on the above subject. This was an item for discussion at our September 21, 1988 Division staff meeting and I was able to solicit comments from several of my field staff.

On page 2 of your draft letter you provide a short synopsis of the July 18, 1988 meeting. You are correct when you state the Geological Survey Division does not have rules under the Michigan Oil and Gas Act, 1939 PA 61, as amended, to regulate soil erosion and sedimentation. However, you have failed to make reference to Item 11, G of our instructions for the preparation of the Environmental Impact Assessment (EIA) for an oil and gas or mineral well permit application. (Copy attached.) This requires the permit applicant to address the provisions of the Soil Erosion and Sedimentation Control Act and its corresponding rules.

On page 3 you stated, "Grass is not considered a fire hazard. Sometimes grass is required on the bank slopes to protect wetlands." We do not agree with this statement. Rule 904 (R 299.1904) specifically provides that all dikes be kept free of vegetation of any flammable material.

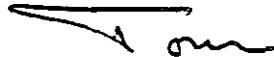
On page 5 you have delineated the scope of the permit issued by the Supervisor of Wells to include the drilling site, flowlands and storage tanks but does not include the ingress and egress roads and transmission pipelines. We have no problem with this statement if you understand where a transmission pipeline begins. We define a transmission pipeline to begin at the first point of sale, which is usually where the transmission line leaves the production site.

On page 5a (you did not have a number on this page) you make the statement an application for permit to drill includes an Environmental Impact Statement; however, the proper term is an Environmental Assessment. We also disagree the instructions for preparing the EIA implies there will be an operational plan prepared. The exact wording is "Detail a plan, where applicable, for soil erosion and sedimentation control . . ." which means we did want the discretion as to when an operator would be required to prepare a plan to address the concerns of 1972 PA 347, as amended.

John H. Kennaugh
Page 2
October 7, 1988

Also, at the bottom of page 5a you state the November 1, 1974 letter from Arthur E. Slaughter directed all oil, gas and mineral well owners, operators and drilling contractors. We do not agree. The specific wording is ". . . this exemption does not relieve owner-operators from the obligation of conforming to soil erosion and sedimentation control practices . . ." The letter also states, "Where necessary, well site development must include soil erosion and sedimentation control measures." We read this letter from Mr. Slaughter as a notification to the industry of 1972 PA 347, as amended, not a directive that they must comply.

On pages 6 and 7 you end the letter with four specific conclusions. We agree with your first conclusion on the jurisdiction over access roads, but we do not support your other three conclusions. We do not feel it is necessary for all applications for permit involving earth change activities to include a Soil Erosion Sedimentation Control Plan. We do not feel the standards and specifications developed by a local soil conservation district should be required to apply to oil and gas and mineral well permitted activities. We also do not believe it was the intent of 1972 PA 347, as amended, to define the Supervisor of Wells as an Authorized Public Agency under the statute; if so, they would not have exempted the activities permitted by the Supervisor.



cc: Mr. Floyd L. Layton, DNR
Mr. Elmore E. Eltzroth, DNR
Mr. Rodger Whitener, DNR

Geological Survey Division
Michigan Department of Natural Resources
P.O. Box 30028, Lansing, MI 48909

Instructions and preparation guidelines for an Environmental Impact Assessment for an Oil and Gas (Act 61, PA 1939), or Mineral Well (Act 315, PA 1969) operations.

- 1) An Environmental Impact Assessment (preparation guidelines are outlined below) must be submitted by an applicant for all wells for which applications for drilling permits are filed under the provisions of Act No. 61, P.A. 1939, as amended, or Act 315, P.A. 1969 as amended.
- 2) An application for a drilling permit will be considered incomplete until all the guidelines as shown below, are discussed and evaluated in an Environmental Impact Assessment.
- 3) If the Environmental Impact Assessment is considered to be unacceptable, a Supplemental will be required.

PREPARATION GUIDELINES

Note: Type or print. The applicant should use as many pages or attachments as needed to assess the environmental impact of the proposed well.

Well Identification

Name of Applicant:
Address:
Well Name and Number:
Location:

I. Describe the following

- A. 1. The project, including property ownership, drilling unit as applicable and the purpose of the well. Also discuss any unusual circumstances i.e. intended replacement well, re-entry, unleased acreage, pending public hearing, unit size, larger than normal unit size, off-pattern for environmental reasons, etc.
2. The surface owner of the proposed well site has to be notified and be aware of the application. Include a copy of the letter of notification that was sent to the surface owner, or a statement regarding notification efforts.
3. Where State or Federal mineral and/or land interests are part of the drilling unit, provide us with all the lease restrictions.
- B. The general topography.
- C. The land cover, species of trees (size, number, stock), etc.
- D. The present land use.
- E. Any rivers, streams, lakes, swamps, or drainageways within one-quarter mile of the well site and state distance.
- F. Access roads available and new roads that will be needed for drilling and operating purposes.

II. Environmental Impact Assessment:

- A. Detail the impacts drilling and well operations will have on the ecological systems such as land cover, wildlife and aquatic life.
- B. Detail any impacts, that the drilling and well operations may have on nearby residents (i.e. noise, H₂S, water etc.), land and water use, and public services. What will be the future impacts on the above?
- C. How much area is needed for drilling? If the well is operational how much area is needed for installation of facilities, and lease equipment, and their location in relation to the well head?
- D. What will be the source for drilling brine?
- E. What methods will be used in the handling, containment and disposal of drilling fluids, brines and muds (Supervisor of Wells Special Order #1-81 and Letters of Instruction #3-81 and 1-84, and Supervisor of Mineral Wells Letter of Instruction 1-84?)
- F. What will be the source for fresh water? If a fresh water well is drilled, will it be used exclusively for the drilling and/or production from the well (exclusive use well) or will it be used as a source of drinking water, be turned over to the landowner or be used for any purposes other than oil, gas or mineral well drilling or operations (Public Health Department approval may be required), (SEE NOTICE AND REQUIREMENTS FOR SOURCES OF WATER AND WATER WELLS USED IN CONJUNCTION WITH OIL AND GAS OR MINERAL WELL DRILLING AND OPERATIONS, December 1, 1984).
- G. What earth changes will be undertaken for roadways? For drilling? For operations? Detail a plan, where applicable, for soil erosion and sedimentation control which conforms to Act 347 of the Public Acts of 1972 and its corresponding General Rules.

Note: (Earth change) means a man-made change in the natural cover or topography of land, including cut and fill activities which may result in or contribute to soil erosion or sedimentation of the waters of the State.

- H. If the well becomes operational:
 1. What disposal method will be used for operational wastes? How will these wastes be transported from or to production or disposal facilities?.
 2. List the existing pipelines in the vicinity available to: a. Transport the oil and gas or brine from the production facility to the sales point; b. Transport the oil and gas, brine, or waste stream. Detail the environmental impacts if it is necessary to construct pipelines for these purposes.
 3. What effect will the operation have on air or water quality?
 4. What effect might this operation have on the health and welfare of the public?
 5. What is the cumulative long-term effect on the immediate environment?
 6. Will this operation have other consequences adverse to the environment?
- F. Should the well be unsuccessful or when it is abandoned what plans and arrangements have been made for restoration of the well site location and access roads and within what period of time?

III. Possible Alternatives to the Proposed Well Location:

Objective evaluation of alternative surface locations. An alternative surface location may be preferred because of environmental considerations.

IV. Any Irreversible and Irretrievable Commitment of Resources:

To what extent will the well curtail the range of beneficial uses of the surrounding environment?

V. Summary:

Brief evaluation of project and the impact or effect it might have on existing environmental conditions.

STATE OF MICHIGAN



JAMES J BLANCHARD Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T MASON BUILDING
P.O. BOX 30028
LANSING MI 48909

DAVID F HALES Director

NATURAL RESOURCES COMMISSION

THOMAS J ANDERSON
MARLENE J FLUHARTY
GORDON E GUYER
KERRY KAMMER
O STEWART MYERS
DAVID D OLSON
RAYMOND POUPORE

October 14, 1988

Mr. Roger Williams
Director of Planning
Grand Traverse County Planning Commission
Governmental Center
P.O. Box 552
Traverse City, Michigan 49685-0552

Dear Mr. Williams:

I appreciated the opportunity on October 11, 1988, to meet with you, county board members and other county officials relating to erosion and sedimentation control at oil and gas sites. I found the discussions to be fruitful.

The following summarizes the understanding reached at the meeting:

1. Oil and gas drilling and production lease (tanks, pump and separator location) sites are, in fact, exempt from Act 347.
2. Access roads to the drilling/production sites are not exempt from Act 347.
3. The Geological Survey Division will continue to require operators to indicate within their environmental assessments the erosion control measures they plan to implement.
4. The Geological Survey Division has no objection to the County issuing soil erosion and sedimentation control permits to the oil and gas drilling and/or production lease sites.
5. If county officials determine that there is an erosion problem at an oil and gas site they will contact the oil and gas operator to resolve the problem. If that contact is unsatisfactory, then the county official will contact our District staff (located at DNR Cadillac District Office) to see if they can get the problem resolved.

Mr. Roger Williams

Page 2

October 14, 1988

Please let me know if there are any additional concerns or questions related to this problem. Thanks again for picking me up at the airport. It was a productive meeting!

Sincerely,



R. Thomas Segall
Assistant Supervisor of Wells
and Chief
Geological Survey Division
517-334-6923

RTS:cs

cc: Mr. John H. Kennaugh, DNR
Mr. Jack L. VanAlstine, DNR
Mr. Floyd L. Layton, DNR
Mr. Jack Snider, DNR
Mr. Rodger Whitener, DNR

D

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

September 28, 1993

TO: Lawrence N. Witte, Chief, Land and Water Management Division
R. Thomas Segall, Chief, Geological Survey Division

FROM: Michael D. Moore, Deputy Director, Resource Management

SUBJECT: Antrim Gas Development: Jurisdiction of Erosion and Sedimentation Control Measures

III-79

This memo clarifies regulatory jurisdiction related to soil erosion and sedimentation control associated with earth change activities from the installation of access roads constructed to serve any oil and/or gas well operation and Antrim well flow/gathering lines. Up to this point in time, the Geological Survey Division (GSD) has maintained exclusive jurisdiction of erosion and sedimentation controls associated with oil and/or gas wells pursuant to the authority of Act No. 61, PA 1939, as amended. With the advent of Antrim gas development, numerous wells needed to be connected by flow/gathering lines of unusually long lengths. Erosion and sedimentation problems for these long lines are not being properly addressed in the oil and gas permit applicant's environmental assessments. The result has been that these earth change activities are not in compliance with the conditions of Act 347.

Pursuant to Rule 1704 of Act 347, soil erosion permits are required for those oil and gas activities that are determined not to be in compliance with the conditions of the Act. Therefore, Act 347 shall have jurisdiction over earth change activities resulting from the installation of Antrim gas gathering/flow lines which collect gas from more than one Antrim gas well. Act 61 retains jurisdiction over all earth change activities associated with the location, development, and closing of all oil and gas wells.

There has also been some question about the applicability of Act 347 on earth change activities associated with the construction of well site access roads. These earth change activities are subject to Act 347 jurisdiction.

Implementation:

1. The GSD will be responsible to ensure that adequate soil erosion and sedimentation control measures are installed and maintained to prevent off-site sedimentation for all earth change activities permitted by the supervisor of wells.
2. The GSD shall be responsible to notify the appropriate county or local enforcing agency upon receipt of an application to install an oil and/or gas well indicating proposed earth change activities for access roads and/or installation of Antrim gas flow/gathering lines which may be subject to a permit under Act No. 347.

3. The Land and Water Management Division (LWMD) shall provide an adequate supply of a directory of county and local 347 enforcing agencies to equip all GSD offices.
4. the LWMD shall arrange and provide for erosion and sedimentation control training opportunities to GSD staff.

A handwritten signature in black ink, appearing to be 'Witte', written in a cursive style.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

VI-111A

INTEROFFICE COMMUNICATION

October 3, 1988

TO: James S. Lorenz, Supervisor, Permits and Technical
Evaluation Section, Geological Survey Division

Gordon L. Lewis, Senior Geologist, Hearings Unit,
Geological Survey Division

FROM: R. Thomas Segall, Assistant Supervisor of Wells and
Chief, Geological Survey Division

SUBJECT: Public hearing notification for H₂S rules

Industry inquiries have been made as to what constitutes proper interests for notification who are to be notified as required by the rules when a petition is filed seeking an exception to the H₂S rules. The intent of the rules calls for proper notice to interests² that would be affected. In my opinion the following would satisfy the requirement.

1. When a petition is filed for a H₂S rule exception that pertains to a well and/or the production facilities located within the spacing unit, notification should be sent to the lessor(s) and the surface owner(s) within the spaced unit and within 1000 feet of that part of the facility for which the exception is being requested.
2. When a petition is filed for a H₂S rule exception that pertains to a production facility located outside of the wells spacing unit, notification should be sent to the operator(s) and the surface owner(s) within 1000 feet of that part of the facility for which the exception is being requested.
3. When a petition is filed for a H₂S rule exception that pertains to pipelines, notification should be sent to the surface owner(s) within 300 feet of that part of the pipeline for which the exception is being petitioned.

R. Thomas Segall

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

May 21, 1990

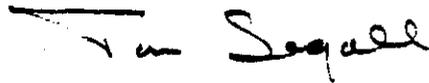
VIII-6a.

TO: Geological Survey Division Supervisors
FROM: R. Thomas Segall, Chief
SUBJECT: Handling, Use, Storage and Disposal of Hazardous Materials

This is a reminder of your responsibility as supervisors concerning the health and safety of your employees and to protect the environment by the safe handling, use, storage and disposal of hazardous materials.

Director David F. Hales believes that standards for environmental damage through negligence or otherwise are equally applicable to both corporate officials and public servants. Please read the Director's attached memorandum and U.S. District Court Opinion, and also review Director's Letter No. 104 on "Right to Know" and Director's Letter No. 111 on the "Responsibility for Environmental Compliance at Department Facilities."

Thank you for your continued cooperation.



Attachments

cc: Mr. Jack Bails, Deputy Director, DNR
Mr. Jack VanAlstine, DNR
Mr. Richard Bissell, DNR
Mr. Gunther Schmidt, DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

February 23, 1990

TO: Deputy Directors
Division/Office Chiefs

FROM: David F. Hales

SUBJECT: Kelley, et al v Arco Industries Corporation, et al
U. S. District Court, Western District of Michigan
September 26, 1989 Decision of Judge Richard Enslen

In light of recent discussions concerning the disposal of hazardous waste and other materials used or generated by this Department, and the recent Director's Letter No. 111, concerning "Responsibility for Environmental Compliance at Department Facilities," I want to bring this Opinion to your attention.

Judge Enslen has written the attached Opinion, which clarifies the legal standard under which personal liability may be imposed on corporate officials and directors for violations of the Comprehensive Environmental Response, Compensation, and Liability Act. I believe that the standards set forth in this Opinion are equally applicable to officials and directors in the public sector who allow, through negligence or otherwise, damage to the environment, and are particularly applicable to you, as those charged with the responsibility to manage and protect our state's natural resources.

I commend to you specifically the discussion on pages 7 through 9 of the Opinion and quote the following excerpts to emphasize the importance I attach to these concepts:

I believe that a court under the circumstances before me should weigh the factors of the . . . individual's degree of authority in general and specific responsibility for health and safety practices, including hazardous waste disposal. These factors should be applied in order to answer the question of whether the individual . . . could have prevented or significantly abated the hazardous waste discharge that is the basis of the claim. * * * [A]n individual's power to control the practice and policy of the corporation, and the responsibility undertaken by that individual in this area should be considered.

This court will look to evidence of an individual's authority to control, among other things, waste handling practices--evidence such as whether the individual holds the position of officer or director, especially where there is a co-existing management position; distribution of power within the corporation, including position in the corporate hierarchy Weighed along with the power factor will be evidence of responsibility undertaken . . . and neglected, as well as affirmative attempts to prevent unlawful hazardous waste disposal. Besides responsibility neglected, it is important to look at the positive efforts of one who took clear measures to avoid or abate the hazardous waste damage.

* * *

[T]he focus on the inquiry is whether the . . . individual could have prevented the hazardous waste discharge at issue.

* * *

[T]his standard will encourage increased responsibility with increased authority within a corporation.

Responsibility does increase with authority, particularly when the authority is exercised on behalf of the people of this state.

I intend to hold all of us to the standards set forth in this Opinion. Please read this Opinion, familiarize yourselves with the standards set forth in it, and incorporate them into your professional ethics.

Attachment



RECEIVED

FEB 27 1990

NATURAL RESOURCES
WILDLIFE DIVISION

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

November 26, 1991

VI-17 a.

TO: Region and District Supervisors
FROM: R. Thomas Segall, Chief, Geological Survey Division
SUBJECT: Special Permit Requirements

I have learned that, in some instances, proposed special permit requirements are being attached to drilling permits which do not have any legal basis (pursant to specific statute, rule, order or instructions requirements). An example of this is the BLANKET requirement imposed by the Cadillac and Mio districts requiring liners under the drilling rig substructures. This type of BLANKET requirement cannot be imposed independently and without my authorization and should be discontinued immediately.

Additionally, if any additional or special permit requirements being proposed other than those required by statute, rule, order or instructions, the agent of the permit applicant must be contacted. If the applicant disagrees with you, they have the right to appeal their position to a higher level.



cc: Michael D. Moore, Deputy Director
Jack VanAlstine
Sam Alguire
Rodger Whitener ✓
Tom Wellman

RTS:blm

Whitener

DEPARTMENT OF
ATTORNEY GENERAL
M E M O R A N D U M

X-4a

October 2, 1992

TO: R. Thomas Segall, Chief
Geological Survey Division

FROM: Gary L. Hicks
Assistant Attorney General
Natural Resources Division *Gary*

RE: Authority To Issue Mineral Well Permit
To Oakland County Road Commission

You have requested review of a proposed letter agreement between the Oakland County Road Commission and the DNR relating to the Road Commission's desire to apply for a mineral well permit under the Mineral Well Act, 1969 PA 315, MCL 319.211 et seq. The proposed agreement was prepared by the road commission based on the assumption, shared by yourself, that the road commission does not meet the definition of a person under section 2(a) of the Mineral Well Act; MCL 319.212(a), which states:

"(a) "Person" means any individual, corporation, company, association, joint venture, partnership, receiver, trustee, guardian, executor, administrator, personal representative or private organization of any kind." (emphasis added).

Because a board of county road commissioners is a "body corporate" under MCL 224.9(1), it is my opinion that the board of county road commissioners of the county of Oakland is a person within the meaning of section 2(a) of the Mineral Well Act, MCL 319.212(a), and that the proposed letter agreement is unnecessary. See Bay City Plumbing & Heating Co v Lind, 235 Mich 455 (1926) (word "corporation" as used in state constitutional provision includes municipal corporations).

GLH:rsc
5/memo-ts

cc: Thomas J. Emery
Dennis Hall

ATTORNEY GENERAL

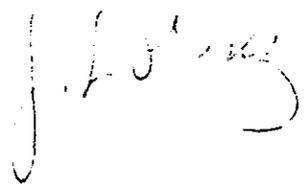
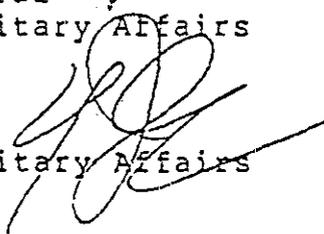
MEMORANDUM

March 10, 1987

VI-11a

TO: Michael C. McDaniel
Assistant Attorney General
Natural Resources & Military Affairs

FROM: Thomas J. Emery
Assistant in Charge
Natural Resources & Military Affairs



RE: Your Recommendation on Act 61 "Hold Permits"

I have read your recommendations in your memorandum to me dated March 3, 1987. I concur in your recommendations and analysis. The DNR should undertake implementation of them.

TJE/csl

cc: R. Thomas Segal
Donald Inman
John Shauver
James Riley

RECEIVED
GEOLOGICAL SURVEY DIV.
MAR 12 1987
AM PM
7/8/9/10/11/12/1/2/3/4/5/6
↓

ATTORNEY GENERAL

MEMORANDUM

March 3, 1987

TO: Thomas J. Emery
Assistant Attorney General

FROM: Michael C. McDaniel MCM
Assistant Attorney General
Natural Resources and Military Affairs Division

On Friday, February 27, 1987, I met with Don Inman and John Shauver of the Environmental Enforcement Division of the DNR to discuss the constitutionality of the Geological Survey Division's "hold permits" procedure and any necessary changes.

Section 23 of Act 61, MCL 319.23, states in pertinent part:

". . . A permit shall not be issued to any owner or his authorized representative who has not complied with or is in violation of this act, or any of the rules, requirements or orders issued by the supervisor, or the Department of Natural Resources."

As a result, an entire program has evolved within the Geological Survey Division whereby a monthly listing is compiled of all operators or producers who cannot receive drilling permits due to violations or noncompliance. Violations of the statute or rules, or noncompliance therewith, is often determined by field staff at the point at which they refer a case to the Compliance Unit in Lansing for further administrative action. After review by Compliance staff, the operator's name and the date of the letter of noncompliance issued by field staff is submitted to James Lorenz or his section.

I would note at the outset that Section 23 is a statutory prerequisite to the issuance of a drilling permit, not an independent avenue of review. Further, there is no requirement that a hearing be held prior to issuance or denial of an initial permit. See, for example, Michigan Waste Systems v DNR, 147 Mich App 729 (1985). In this situation, however, we may be viewed as denying all future drilling permits instead of on a case-by-case basis. Further, some property rights may attach in the drilling unit, even if not in the permit itself. Also, to make a determination that a violation exists, some due process would seem to be required. As stated in Sponick v Detroit Police Dept, 49 Mich App 162 (1973):

"'Rudimentary due process' demands: (i) timely written notice detailing the reasons for proposed administrative action; (ii) an effective opportunity to defend by confronting any adverse witnesses and by being allowed to present in person witnesses, evidence, and arguments; (iii) a hearing examiner other than the individual who made the decision or determination under review; and (iv) a written, although relatively informal, statement of findings. Goldberg v Kelly, supra; Wheeler v Montgomery, 397 US 280; 90 S Ct 1026; 25 L Ed 2d 307 (1970); Morrissey v Brewer, supra; and Gagnon v Scarpelli, 411 US 778, 786; 93 S Ct 1756, 1761-1762; 36 L Ed 2d 656, 664 (1973). See also Dation v Ford Motor Co, 314 Mich 152, 163; 22 NW2d 252, 256 (1946); Napuche v Liquor Control Commission, 336 Mich 398, 403; 58 NW2d 118, 120-121 (1953)."

See also, Roseland Inn v McClain, 118 Mich App 724 (1982). In that case, after citing Sponick, supra, the court further stated as follows:

"Due process safeguards are designed to protect a liquor licensee from arbitrary or capricious decision-making by the local legislative body. We conclude that such due process also requires that the licensee be given notice of what criteria would result in a local body's initiation of nonrenewal or revocation proceedings."

I believe that the "rudimentary due process" requirement would be met with the following procedure:

- (A) "Timely written notice detailing the reasons" - staff should draft a detailed notice of violation;
- (B) "An effective opportunity to defend by confronting adverse witnesses" and "being allowed to present evidence and arguments" - staff should provide a Rogers hearing to determine noncompliance;

- (C) "A hearings examiner other than the individual" - staff should designate a neutral chairperson of the Rogers hearing outside of the compliance structure, of sufficient seniority and experience to lend credibility and authority to his decision;

- (D) "A written, although informal, statement of findings" - a memorandum to the Supervisor that Geological Survey Division staff has demonstrated noncompliance or violation with the statute or rules and that the respondent has failed to demonstrate compliance or other good and sufficient reasons why enforcement proceedings should not continue, and further, recommend that if permits are requested, there is evidence sufficient to withhold said permits under Section 23. Further, that a letter be issued to the respondent stating the reasons for the chairperson's decision, along with a simplified statement or chronology of the hearing.

I believe that if such procedure is instituted, our "hold permits" program may continue and be less susceptible to attack on constitutional grounds.

MCM/mz

cc: ✓ R. Thomas Segal
Donald Inman
John Shauver
James E. Riley

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

August 11, 1987

VI-11B

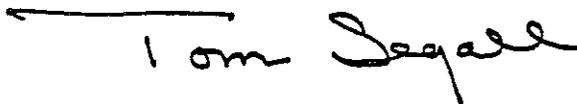
TO: Jim Lorenz and Sam Alguire
FROM: R. Thomas Segall, Chief, GSD
SUBJECT: Hold Permits

This memo supersedes my memo of July 24, 1987, on the same subject (copy attached).

Hold permits shall include:

1. Permits for drilling new Act 61 wells;
2. Permits for deepening Act 61 wells;
3. Permits to be transferred to owners who are on the hold permits list.

Additionally, no transfers will be allowed for those owners wishing to transfer a well in noncompliance to a new owner unless the owner of record (existing holder of permit) and/or proposed new owner of record agree in writing to bring the well into compliance or until which time the well does come into compliance.

Tom Segall

RTS:cs

cc: Jack VanAlstine
Dorothy Skillings
Rodger Whitener

INTEROFFICE COMMUNICATION

September 5, 1986

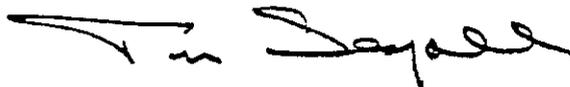
TO: Jim Lorenz, Sam Alguire and Dorothy Skillings
FROM: R. Thomas Segall, Chief, GSD
SUBJECT: Mr. Donnell's letter request of August 28, 1986--certain Sappington wells

As a result of our meeting on September 4, 1986, at which Jim Lorenz, Sam Alguire, Virginia Pierce, Jack VanAlstine, and I were present, certain decisions were made regarding the request of Mr. Donnell relating to the transfer of six (6) wells from the name of John, Walter and Diane Sappington to Sappington Crude Oil. The six wells questioned were:

W. Schmidt #A1, PN 17326
Fortdt #1, PN 23720
State Adams #1, PN11115
Brown #3, PN 25704
Collins #1P, PN 8988
Migut BD-1, PN 148

It was determined that since an Order was issued by the Supervisor that would bring Sappington in compliance with Act 61, John, Walter and Diane Sappington and Sappington Crude Oil should be removed from the "hold permit" list. This is in line with our existing procedure to remove names from the hold permit list when a consent order or negotiated settlement is agreed to between the Department and a person in noncompliance.

It was also determined that since Sappington should no longer be on the hold permit list, there is no reason to preclude the processing of the transfer of permits as long as all other requirements, including bonding provisions, etc., are met. Therefore, it is my determination that these permits may be transferred pursuant to normal procedures and requirements.



RTS:cs

cc: Mr. Walter Sappington
Mr. Douglas A. Donnell

STATE OF MICHIGAN



NATURAL RESOURCES COMMISSION

LARRY DEVUYST
PAUL EISELE
JAMES P. HILL
DAVID HOLLJ
O. STEWART MYERS
JOEY M. SPANO
JORDAN B. TATTER

JOHN ENGLER, Governor
DEPARTMENT OF NATURAL RESOURCES

ROLAND HARMES, Director

GEOLOGICAL SURVEY DIVISION
P.O. BOX 30256
LANSING, MICHIGAN 48909

VI-21 a.

April 7, 1993

TO OIL AND GAS OWNERS AND OPERATORS

Enclosed for your immediate use are copies of the newly revised
RECORD OF WELL PLUGGING OR REWORK, Form PR7200-8.

Please submit all future plugging or rework records on this new
form. Old records signed and dated on or before April 30, 1993
will still be accepted.

You may retain the enclosed original copies for duplicating as
needed or contact the Permit and Bonding Unit of the Geological
Survey Division at 517-334-6974 if you need additional blank
forms.

A handwritten signature in cursive script, appearing to read "Thomas Wellman".

Thomas Wellman
Supervisor
Permits and Bonding Unit
Geological Survey Division

Enclosure(s)



Permit Number	Well Name & Number
---------------	--------------------

RECORD OF WELL PLUGGING OR REWORK

REQUIRED BY AUTHORITY OF: ACT 61 PA 1939 as amended or ACT 315 PA 1969 as amended. Non-submission and / or falsification of this information may result in fines and / or imprisonment

Type of Well	Field Name
1/4 1/4 1/4, Section, Township, Range, County	
Date Plugging / Rework Started	Date Plugging / Rework Completed

Name and Address of Well OWNER

Name and Address of Contractor/Service Company
(attach additional sheets as needed)

Indicate Operation & Type of Well Permit
 PLUGGING REWORK Act 61 Oil & Gas Act 315 Mineral Wells
 Tools, tubing, etc. left in hole - describe in Daily Chronology.

Name of DNR employee issuing Plugging Permit or Approving Change of Well Status. _____ Date issued _____
 Well logs run - list types and depths in Daily Chronology.

For WELL PLUGGING Only (HOLE CONDITIONS AFTER PLUGGING)

CASING			
Casing Size	Where Set	Amount Casing Pulled	Depth Casing Cut/Perfed: Windows Milled

PLUGS				
Depth	Type of Bridge or Plug		Cement Plugs: Cement type, # sx, and additives	Tagged Top? Y/N
	Bottom	Top		

Check if NORM material was reinserted into wellbore. If so, describe materials fully in the Daily Chronology section on back of this form.

For WELL REWORK Only

- REWORK WAS TO: TEMPORARILY ABANDON
 CONVERT TO: Disposal Well Production Storage Enhanced Recovery Other
 REMEDIAL: Perf & Test Repair Casing / Cement Redrill Other
 PLUGBACK: New Production Zone Disposal Storage Enhanced Recovery Other

Well Casing Record - BEFORE Rework

Casing		Cement		Perforations			Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	if plugged, HOW?	

Well Casing Record - AFTER Rework (Indicate additions and changes only: complete Test Record on next page)

Casing		Cement		Perforations			Acid or Fracture Treatment Record
Size	Depth	Sacks	Type	From	To	if plugged, HOW?	

BEFORE REWORK		
Total Depth	Formation / Zone	Well Completed For

AFTER REWORK		
Total Depth	Formation / Zone	Well Completed For

STATE OF MICHIGAN



JAMES J. BLANCHARD, Governor

DEPARTMENT OF NATURAL RESOURCES

MAR 11 1985

STEVENS T. MASON BUILDING
BOX 30028
LANSING MI 48909

RONALD O. SKOOG Director

February 15, 1985

NATURAL RESOURCES COMMISSION
THOMAS J. ANDERSON
E. R. CAROLLO
MARLENE J. FLUHARTY
STEPHEN F. MONSMA
O. STEWART MYERS
RAYMOND POUPORE
HARRY H. WHITELEY

ATTENTION: ALL OIL & GAS OPERATORS AND DRILLING CONTRACTOR

New Drilling Permit Condition No. 14 Requires:

- 14. Blowout preventers, accumulators, and pumps shall be certified as operable under the product manufacturer's minimum operational specifications. This certification shall include proper operation of the closing unit valving, pressure gauges, and manufacturer's recommended accumulatory fluids. Certification may be obtained through those companies presently used to test the blow-out preventors stack and casing. Certification shall be required annually and shall be posted on the rig floor.

The Supervisor of Wells intends to begin enforcing the above condition. Beginning April 1, 1985, Geological Survey Division Personnel will be inspecting rotary drilling rigs to see if proper certification on DNR form PR-7200-11 is posted. For rigs not having the certification posted, the contractor and/or operator will be issued a warning. If a valid certificate is not posted as required by July 1, 1985, the rig may be shut-down by order of the Supervisor of Wells.


 James S. Lorenz
 Chief, Oil & Gas Section
 Geological Survey Division
 517-373-8760

JSI:pps

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES

Geological Survey Division
Box 30028
Lansing, Michigan 48909

ANNUAL CERTIFICATION FOR BLOWOUT PREVENTERS, ACCUMULATORS, PUMPS AND SECONDARY SYSTEM

A. Company and Address								Rig and Type		
B. Blowout Preventer Assembly Components Tested	ANNULAR			BLIND RAM			PIPE RAM			
	Manufacturer									
	Model No.									
	Serial No.									
	Working pressure									
	Test pressure									
	Opening Volume									
Closing Volume										
C. Blowout Preventer Assembly Pressure Test	UNIT	PRESSURE APPLIED	TIME HELD	FINAL PRESSURE	OPERATE LOCKING SCREWS					
	Annular									
	Blind Rams									
	Pipe Rams									
	Upper Kelly Ck.									
	Lower Kelly Ck.									
Inside BOP										
D. Accumulator and BOP Control Manifold	System Pressure Reducing Valve: Yes No		Annular Regulating Valve: Yes No							
	Accumulator volume & type			Bottle precharge pressure						
			No.1	PSI	No.2	PSI	No.3	PSI	No.4	PSI
	Hydraulic Pumps						System Pressure Rating			
	No. 1 type		GPM	No. 2 Type		GPM				
	Air: Yes: No:		Nitrogen: Yes: No:		No of Stations:					
	Electrical: Yes: No:		Other: Yes: No:		Blind Ram Control Guard: Yes: No:					
	Reservoir Tank Volume: Total Gals Capacity _____ Gals/in			Reservoir Level: Bottles Empty _____ in. Bottles Full _____ in.			Controls Labelled Correctly Yes _____ No _____			
	Number of Stations:		Power Supply:	Location:	Labelled Correctly: Yes No		Blind Ram Control Guard On: Yes No			
	Control Line Tested: Yes No		Pressure on Line: PSI		Fluid in System: Air Liquid					
F. Accumulator Performance Test	Blowout Preventer Unit	Accumulator Only Pressure			Pump Only Pressure			Accumulator Recharge Time		
		Time	Initial	Final	Time	Initial	Final	Minutes	Seconds	
	Annular									
	Blind Rams									
	Top Pipe Rams									
Pipe Rams										
G. Check of Accumulator Bottles	(Pumps/Power Off) Starting Pressure _____ PSI		After closing bottom rams _____ PSI							
	After closing top rams _____ PSI		After closing annular _____ PSI							
	Calculated Fluid Volume remaining _____ gals. to _____ PSI									
H. Visual Check	Comments:									
I. What two (2) types of OPERABLE secondary closing systems are installed:										
J. Yes ___ Are all kill, choke valves and checks independently pressure tested to manufacturers working pressure? No ___ ANNULAR BOP, BLIND RAMS, PIPE RAMS AND ACCUMULATOR ARE CERTIFIED AS A SINGLE UNIT. ANY CHANGE TO THE COMPONENTS DESCRIBED IN B. & D. ABOVE WILL REQUIRE IMMEDIATE RECERTIFICATION.										
K. I hereby certify that the above are true tests and cumulatively comply with the product manufacturer's minimal operational specifications.										
Representative			Signature			Date Certification				



NATURAL RESOURCES COMMISSION

JERRY C. BARTNIK
LARRY DEVUYST
PAUL ESELE
JAMES P. HILL
DAVID HOLLI
JOEY M. SPANO
JORDAN B. TATTER

JOHN ENGLER, Governor
DEPARTMENT OF NATURAL RESOURCES

ROLAND HARMES, Director

GEOLOGICAL SURVEY DIVISION

P.O. BOX 30256
LANSING MICHIGAN 48909

VII-5 a.

March 4, 1993

LETTER TO OWNERS OF WELLS PERMITTED
UNDER ACT 61, P.A. 1939, OR ACT 315, P.A. 1969
REGARDING REPORTING STANDARDS FOR THE
RECORD OF WELL DRILLING OR DEEPENING (FORM PR 7200-5)

I am concerned about the decline in the quality of reporting well completions on Form PR 7200-5 Record of Well Drilling or Deepening.

Information spaces left blank on Form PR 7200-5 are confusing or subject to various interpretations. Lack of care in reporting data leads to the inclusion in these reports of such things as casing depths which are reported deeper than the total depth of the well. The lack of comprehensive lithologic descriptions of rocks penetrated during drilling for the entire well rather than just for pay sections reflects an apparent disregard for the requirements set forth in Michigan's Oil and Gas Act, 1939 PA 61, and Michigan's Mineral Well Act, 1969 PA 315.

In order to remedy this situation, standards and instructions for the proper reporting on the Record of Well Drilling or Deepening have been developed and are attached to this letter for your information.

Effective April 1, 1993, incomplete or incorrect filings of the Record of Well Drilling or Deepening which do not conform to the standards set forth will be returned to the owner of the well for additional data or corrections as appropriate. This may result in delays in processing records, especially in the case of Antrim wells awaiting transfer to the Michigan Public Service Commission.

3/4/93
Dated

R. THOMAS SEGALL
ASSISTANT SUPERVISOR OF WELLS

STANDARDS FOR REPORTING: RECORD OF WELL DRILLING OR DEEPENING
(FORM PR 7200-5)

Title of Blank: REQUIRED BY AUTHORITY OF:

What to report: Check the box that applies: for oil and gas wells (Act 61, P.A. 1939, as amended); for mineral wells (Act 315, P.A. 1969, as amended).

Title of Blank: PERMIT NO./DEEPENING PERMIT NO.

What to report: The permit number of the well as shown on the Permit to Drill (Deepen, Rework or Operate). If the well is being deepened, the original permit number as well as the deepening permit number should be reported.

Title of Blank: TYPE OF WELL (after completion)

What to report: The result of the well AFTER testing or plugging, e.g., oil, gas, dry, brine disposal, observation, gas storage, injection as prescribed by Act 61 or brine, test, storage, disposal or other mineral well as prescribed by Act 315.

Title of Blank: FIELD/FACILITY NAME

What to report: The name of the Field/Facility for a well drilled under Act 61 for development of a reservoir for the storage of liquid or gaseous hydrocarbons, and for a well drilled under Act 315 for brine production, cavity storage or waste disposal in a Field/Facility development. Any other well should report "N.A." (Not Applicable).

Title of Blank: WELL NAME & NUMBER

What to report: The well name and number as it appears on the Permit To Drill (Deepen, Rework or Operate).

Title of Blank: SURFACE LOCATION

What to report: The surface location of the well as it appears on the Permit To Drill (Deepen, Rework or Operate).

Title of Blank: TOWNSHIP

What to report: The name of the Township for the surface location of the well as it appears on the Permit To Drill (Deepen, Rework or Operate).

Title of Blank: COUNTY

What to report: The name of the County for the surface location of the well as it appears on the Permit To Drill (Deepen, Rework or Operate).

Title of Blank: FOOTAGES

What to report: The distance in feet of the surface location from the North/South and East/West lines of the quarter section of land where the well is being drilled.

Title of Blank: SUBSURFACE LOCATION (if directionally drilled)

What to report: The subsurface location of the well as calculated from the directional survey of the well. If the well was NOT directionally drilled, the blank should report "N.A." (Not Applicable).

Title of Blank: TOWNSHIP

What to report: The name of the Township for the subsurface location of the well as it appears on the Permit To Drill (Deepen, Rework or Operate). If the well was NOT directionally drilled, the blank should report "N.A." (Not Applicable).

Title of Blank: COUNTY

What to report: The name of the County for the subsurface location of the well as it appears on the Permit To Drill (Deepen, Rework or Operate). If the well was NOT directionally drilled, the blank should report "N.A." (Not Applicable).

Title of Blank: FOOTAGES

What to report: The distance in feet of the subsurface location from the North/South and East/West lines of the quarter section of land where the well was drilled as calculated from the directional survey of the well. If the well was NOT directionally drilled, the blank should report "N.A." (Not Applicable).

Title of Blank: NAME AND ADDRESS OF OWNER

What to report: The name and address of the owner of the well as it appears on the Permit To Drill (Deepen, Rework or Operate).

Title of Blank: NAME AND ADDRESS OF DRILLING CONTRACTOR

What to report: The name and address of the contractor who actually drilled the well.

Title of Blank: DATE DRILLING BEGAN

What to report: The date actual drilling (excluding pre-setting of conductor pipe) was commenced.

Title of Blank: DATE DRILL COMPLETED

What to report: The date total depth of the well was reached.

Title of Blank: DATE WELL COMPLETED

What to report: The date of the last completion work prior to putting the well on production. If the well was not completed for production or its other intended use, the blank should report "N.A." (for not applicable).

Title of Blank: TOTAL DEPTH OF WELL - DRILLER

What to report: The total depth of the well as reported by the contractor who drilled the well.

Title of Blank: TOTAL DEPTH OF WELL - LOG

What to report: The total depth of the well as reported by the wireline service company in the case of a logged hole. If the well was not logged, the blank should report "N.A." (Not Applicable).

Title of Blank: FORMATION AT T.D.

What to report: The name of the geologic formation in which the well reached its total depth.

Title of Blank: PROD. FORMATION(S)

What to report: The name of the geologic formation(s) from which the well is producing. If the well was not capable of oil and gas production, e.g., dry hole, or if the well was drilled for another purpose, the blank should report "N.A." (Not Applicable).

Title of Blank: DATE OF FIRST INJECTION

What to report: In the case of injection wells, the first date that materials were injected into the target formation. If the well is not used for injection, the blank should report "N.A." (Not Applicable).

Title of Blank: INJECTED FORMATION

What to report: The name of the geologic formation in which materials are being injected. If the well is not used for injection, the blank should report "N.A." (Not Applicable).

Title of Blank: SOLUTION FORMATION

What to report: In the case of wells being utilized for solution mining, the name of the geologic formation where solution mining is taking place. If the well is not used for solution mining, the blank should report "N.A." (Not Applicable).

Title of Blank: FEET DRILLED - CABLE TOOLS

What to report: If cable tools were used during the drilling of the well, the depth interval where cable tools were used should be reported. If cable tools were not used, the blank should report "N.A." (Not Applicable).

Title of Blank: FEET DRILLED - ROTARY TOOLS

What to report: If rotary tools were used during the drilling of the well, the depth interval where rotary tools were used should be reported. If rotary tools were not used, the blank should report "N.A." (Not Applicable).

Title of Blank: ELEVATIONS

What to report: One or more of the blanks relating to well elevations must be reported, either K.B. (Kelly Bushing), R.F. (Rig Floor), R.T. (Rotary Table) or Grd. (Ground). Blanks where elevations were not recorded should report "N.R." (Not Recorded).

Title of Blank: CASING, LINERS AND CEMENTING, OPERATING STRINGS

What to report: The size (outside diameter) and lengths of all conductor pipe, casing strings and liners and the amounts of cement used are to be reported. In the case where pipe was salvaged, the number of feet removed (pulled) from the well shall be reported. If no pipe was pulled, the blank should report "None."

Title of Blank: PERFORATIONS

What to report: Report the date perforations took place, the number of holes shot, the depth interval of the perforations, and whether the perforations are open for production or not (squeezed). If the well was not perforated, the blank should report "N.A." (for not applicable). If the well was completed "open hole", a notation to that effect should be reported.

Title of Blank: GROSS PAY INTERVALS

What to report: The geologic formation, type of hydrocarbon, and depth interval of gross pay encountered in the well shall be reported. If no gross pay was observed or recorded, the blank should report "N.A." (Not Applicable) or "N.R." (Not Recorded).

Title of Blank: ALL OTHER OIL AND GAS SHOWS OBSERVED OR LOGGED

What to report: The geologic formation, type of hydrocarbon, depth of oil and gas shows and where the shows were observed should be reported. If no shows were observed or recorded, the blank should report "N.A." (Not Applicable) or "N.R." (Not Recorded).

Title of Blank: STIMULATION BY ACID OR FRACTURING

What to report: The date of stimulation, depth interval treated, and type and amount of materials used should be reported. If the well was not treated, the blank should report "None."

Title of Blank: WATER FILL UP (F.U.) OR LOST CIRCULATION (L.C.) (X)

What to report: The geologic formation where either fill up or lost circulation occurred, the depth where it occurred and amounts of fill up or loss should be reported. If neither of these events were observed, the blank should report "None."

Title of Blank: MECHANICAL LOGS, LIST EACH TYPE RUN

What to report: The brand name, type of log and logged depth intervals should be reported. If no logs were run, enter "None."

Title of Blank: DEPTH CORRECTION

What to report: Report any depth corrections made. If no depth corrections were made, enter "None."

Title of Blank: DEVIATION SURVEY

What to report: Report all deviation surveys including depth run and deviation from vertical (in degrees). If no deviation surveys were run, enter "None."

Title of Blank: PLUGGED BACK

What to report: If the well was plugged back, check the "YES" blank and report the depth to which the well was plugged back. If the well was not plugged back, check the "NO" blank.

Title of Blank: PRODUCTION TEST DATA

What to report: Fill in all blanks. If certain information is not available, it can be reported as "N.A." (Not Applicable) or "0" (zero) or "N.T." (Not Tested).

Title of Blank: I AM RESPONSIBLE FOR THIS REPORT. THE INFORMATION IS COMPLETE AND CORRECT.

What to report: Report the date when Form PR 7200-5 was completed, the name and title (Geologist/Engineer/Manager) of the person responsible for the report, and affix the original signature of the person responsible for the report.

REVERSE SIDE OF FORM PR 7200-5

Title of Blank: ELEVATION USED

What to report: Report the elevation which was used to measure depths to the various geologic formations (generally the Kelly Bushing elevation or the Ground elevation).

Title of Blank: GEOLOGIST NAME

What to report: Report the name of the geologist who examined the drill cutting samples and/or electric logs in order to determine the depths and thicknesses of the various geologic formations.

Title of Blank: TOPS TAKEN FROM:

What to report: Check one or more boxes to indicate the source of information for the geologic formations.

Title of Blank: FORMATION

What to report: List the depths at the beginning and at the end of significant lithologic changes, including geologic formation tops (reporting true vertical depths where appropriate). Lithologic descriptions of the reported intervals are to be recorded.

Title of Blank: IF WELL WAS CORED, ATTACH CORE DESCRIPTION

What to report: Self explanatory.

Title of Blank: DRILL STEM TEST DATA

What to report: Report depth intervals, pressure readings and the amounts and types of materials recovered for all drill stem tests conducted in the well.

Title of Blank: LIST ATTACHMENTS:

What to report: List all attachments to Form PR 7200-5, for example, core descriptions, mud log, mud pit plot, drill stem test data, directional surveys, etc.

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

October 27, 1983

TO: John MacGregor, Regional Director - Region II

FROM: R. Thomas Segall, Chief, Geological Survey Division

SUBJECT: Lakewood Petroleum Application Brown #1-6

I have asked field staff to reconsider subject application. There is no rule, requirement nor precedent which provides that any well be located at least 300 feet from a road or highway. Of course we should try to persuade such permit applicants to set the well back from roads and highways as far as practical.

In your memo to Bob Compeau dated October 17, 1983 I am concerned about your statement that Mr. Quirk of Lakewood Petroleum was advised that if the well was drilled (at applied-for location?) and resulted in being sour, that you would require them to plug the well and that it would not be produced. I don't believe that such a requirement for no due cause is legal. Shut-ins and orders for plugging wells are issued by the Supervisor or Assistant Supervisor of Wells as set by specific procedures pursuant to Act 61.

There is an item of importance regarding oil and gas permit application review which should be brought to your attention. Upon reviewing Department procedures (2303.3) you will note that under item 12, the Regional Director forwards his/her recommendations to the Geological Survey Division (whether approval or denial). I believe you mistakenly forwarded the denial recommendations to Deputy Director Compeau.

As always, I appreciate your time and attention to these matters.



RTS:cs

cc: R. Compeau
F. Layton
J. Snider
J. Lorenz
I. Pothacamury

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

March 8, 1989

TO: Regional and District Geologists
FROM: R. Thomas Segall, Chief, Geological Survey Division
SUBJECT: T & A/Shut-in Wells Subject to H₂S Rules

Wells subject to the H₂S rules that are to be shut in or temporarily abandoned beyond the time allowed in Rule number 299.1803 are to:

- A. be plugged by setting a bridge plug or a packer immediately above the perforations in such a manner as to prevent H₂S corrosive activity and formation pressures at the wellhead;
- B. have the space in the casing above the packer and/or plug filled with noncorrosive fluid;
- C. have both the casing and tubing outlets equipped with a working pressure gauge to detect any pressures and/or changes.

Wells that are granted an exception as in Rule 299.1803(2) shall be monitored for pressure changes by the area geologists each calendar quarter. If the pressure gauges indicate that the plug or packer has failed, the area geologist is to take the necessary steps to have the well repaired or to have the well plugged.

This is effective immediately.



cc: Mr. Jack L. VanAlstine, DNR
Mr. James S. Lorenz, DNR
Mr. Samuel L. Alguire, DNR
Mr. Raymond E. Ellison, DNR
Mr. Raymond Vugrinovich, DNR
Mr. Rodger Whitener, DNR

MICHIGAN DEPARTMENT OF NATURAL RESOURCES

INTEROFFICE COMMUNICATION

May 13, 1985

TO: Unit, Section, District and Region Supervisors, Geological Survey
FROM: R. Thomas Segall, Chief
SUBJECT: Preparation of Supervisor's Orders and/or Instructions

It has been brought to my attention that several persons have inquired to Mr. Gordon Lewis in regards to reviewing Supervisor's Orders before being issued. This is highly irregular and cannot be allowed without my specific approval.

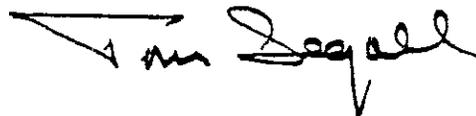
Only designated persons may, by job responsibility, partake in the drafting of Orders:

The Hearings Officer
The Administrative Assistant to Oil and Gas Section Chief
Designated Secretarial persons
Chief of the Oil and Gas Section
Assistant and/or Supervisor of Wells
Any person/persons specifically directed by the
Assistant/Supervisor of Wells

All draft orders submitted to me or the Acting Assistant Supervisor are subject to our review, interpretation and approval.

Please share this memo with your staff. Your cooperation would be appreciated.

cc: G. Lewis
Wm. Fulkerson





NATURAL RESOURCES COMMISSION
 MARLENE J. FLUHARTY
 GORDON E. GUYER
 O. STEWART MYERS
 RAYMOND POUPORE

JOHN ENGLER, Governor

DEPARTMENT OF NATURAL RESOURCES

STEVENS T. MASON BUILDING
 P.O. BOX 30028
 LANSING, MI 48909

DELBERT RECTOR, Director

August 19, 1991

Mr. Steve Savoie
 Terra Energy, Ltd.
 1503 North Garfield Road
 Traverse City, MI 49684

Dear Mr. Savoie:

PERMITTING PROCEDURES FOR VOLUNTARY POOLED ANTRIM WELLS

Recent interest in voluntarily pooling blocks of acreage to provide relief from the setback requirements for Antrim wells (330' from unit line) has resulted in some misconceptions and confusion regarding applications in pooled areas. This letter shall establish the requirements for Antrim wells applied for as an exception to the 330' setback and set forth the guidelines used by the Geological Survey Division in approving these applications.

First and foremost, voluntary pooling does NOT allow the Supervisor of Wells to abrogate spacing in any area. Neither does it allow "unitization" of an area (as that term is used in Act 197 of 1959). Both abrogation of spacing and unitization can only be done following a hearing and proper notice. Pooling does, however, allow some latitude in the setback requirements from the unit line because the pooling agreement serves to protect equity.

Documentation of Pooled Area

Any wells to be located in a voluntarily pooled area that will be less than 330' from their unit lines (sub 330') must have the following documentation provided to the Permit Unit of the Geological Survey Division.

1. Map or plat of the voluntarily pooled area.
2. Declaration of all Lease ownership (lessors) in the pooled areas. A description of the lessors ownership and number of acres (or may be shown on map).
3. The ratification of the pooling document with the signatures of all lessors.

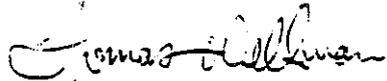
Mr. Steve Savoie
Page 2
August 19, 1991

Guidelines for Approval of Exception Locations

1. Applications will designate the 40 acre unit for the well.
2. The EIA must make note of the sub 330' spacing request and reference the pooling document to which it applies (a title, a file number, liber description or other designation is appropriate).
3. A 40 acre drilling unit shall contain only one well.
4. A minimum 660' spacing shall be maintained between wells.
5. No wells will be allowed less than 330' from the pooled area's border.

Any questions regarding these procedures can be directed to me at 517-334-6974.

Sincerely,



Thomas Wellman
Supervisor
Permits and Bonding Unit
Geological Survey Division
517-334-6974

TW:jt

cc: Mr. John MacGregor, DNR
Mr. David Freed, DNR
Mr. R. Thomas Segall, DNR
Mr. Floyd Layton, DNR
✓ Mr. Sam Alguire, DNR
Mr. Hal Fitch, DNR
Ms. Andrea Sullivan, DNR

MICHIGAN DEPARTMENT OF ENVIRONMENTAL QUALITY

INTEROFFICE COMMUNICATION

TO: All Supervisors, Office of Oil, Gas, and Minerals
Permits and Bonding Unit, Office of Oil, Gas, and Minerals
Joe Maki, Upper Peninsula District Office, Office of Oil, Gas, and Minerals
Melanie Humphrey, Upper Peninsula District Office, Office of Oil, Gas, and Minerals
Stafford Dusenbury, Kalamazoo District Office, Office of Oil, Gas and Minerals

FROM: Harold R. Fitch, Chief, Office of Oil, Gas, and Minerals

DATE: August 8, 2016 

SUBJECT: Criteria for Requiring a Permit under Part 637

A recent case raised the question of the criteria for requiring a permit under Part 637, Sand Dune Mining, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA). The specific question is whether sand removal requires a permit even if the sand is donated to a non-profit organization (in this case, a school).

I conclude that any removal of sand, regardless of volume, in a sand dune area requires a permit if either of the following conditions apply:

1. The sand is used on-site, or transported off-site, for the purpose of creating or manufacturing a valuable product.
2. The sand is transported off-site for any other purpose that has value.

This determination is based on interpretation of the language and intent of Part 637. Section 63704 of Part 637 states:

(1) A person shall not engage in *sand dune mining* within Great Lakes sand dune areas except as authorized by a permit issued by the department pursuant to part 13.

"Sand dune mining" is defined in Section 63701:

(l) "Sand dune mining" means the removal of sand from sand dune areas for *commercial or industrial* purposes, or both. The removal of sand from sand dune areas in volumes of less than 3,000 tons is not sand dune mining if the removal is a 1-time occurrence and the reason the sand is removed is not for the direct use for an *industrial or commercial* purpose.

The 3,000-ton exemption does not apply if the sand is used for an industrial or commercial purpose; the only practical distinction it makes is whether the sand removal is a one-time occurrence. Therefore, *any* removal of sand from a sand dune area for "commercial or industrial purposes" requires a permit, regardless of the tonnage of sand removed.

The next question is how to interpret "industrial" and "commercial." Neither term is defined in Part 637. Other parts of the NREPA are not necessarily applicable in interpretation of Part 637, but may be instructive. The NREPA has only one such instance of definition of the terms, and it

is not pertinent to the usage in Part 637. That definition is in Section 3120 of Part 31, which addresses fees for surface water permits and defines "industrial or commercial facility" as a facility that is "not a municipal facility."

Because the terms are not defined by statute, we look to the definition in Webster's dictionary. Webster's defines "industrial" and "commercial" as relating to "industry" and "commerce," respectively. The pertinent definitions of those terms in Webster's are:

Industry: systematic labor especially for some useful purpose or the creation of something of value; a department or branch of a craft, art, business, or manufacture; a distinct group of productive or profit-making enterprises...

Commerce: the exchange or buying and selling of commodities on a large scale involving transportation from place to place.

Note that the definitions do not rely on there being a monetary transaction; the activity can involve just an "exchange," where a person receives something of tangible or intangible value in the transaction. Therefore, whether the sand is sold, donated, or exchanged is immaterial.

While the NREPA does not define "industrial" or "commercial," it does use the terms in many citations in the context of land use. Those citations commonly refer to categories of land use that include industrial, commercial, residential, municipal, agricultural, and recreational. It can be concluded that excavation of sand strictly and solely for residential, municipal, agricultural, or recreational purposes does not constitute "sand dune mining" and does not require a permit under Part 637. Determinations must be made on a case-by-case basis; however, examples might include contouring of residential property where no sand is transported off-site, laying of water or sewer lines, levelling of agricultural fields, and grading or recontouring for public recreational use.

Finally, it is instructive to examine the intent of the statute. I have not conducted a review of the legislative proceedings leading up to the enactment of 1976 PA 222, the predecessor statute to Part 637; however, it is safe to assume that the intent of the legislature was to protect the environment from unnecessary impacts from mining of sand in shoreline areas while recognizing existing property rights and the societal need for sand resources. The environmental impact of sand mining is the same whether the sand is sold or just exchanged for a tangible or intangible value.