

STATE OF MICHIGAN
DEPARTMENT OF NATURAL RESOURCES AND ENVIRONMENT

ORDER OF THE SUPERVISOR OF WELLS

IN THE MATTER OF:

THE PETITIONS OF HIGHMOUNT MIDWEST ENERGY, LLC)	ORDER NO. 01-2010
FOR AN ORDER FROM THE SUPERVISOR OF WELLS)	02-2010
FORMING SIX FULL 80-ACRE ANTRIM SHALE FORMATION)	03-2010
DRILLING UNITS CONSISTENT WITH ORDER NO. (A) 14-9-)	04-2010
94 BY COMPULSORY POOLING ALL INTERESTS INTO THE)	05-2010
UNITS.)	06-2010

OPINION AND ORDER

This case involves six Petitions of HighMount Midwest Energy LLC (Petitioner). The Petitioner proposes to drill and complete six wells for oil and gas exploration within six drilling units in the stratigraphic interval known as the Antrim Shale Formation. Under Order No. (A) 14-9-94, as amended, the drilling unit size for an Antrim Shale Formation well is 80 acres. Since not all of the land owners within the proposed drilling units have agreed to voluntarily pool their interest, the Petitioner seeks Orders of the Supervisor of Wells (Supervisor) designating Petitioner as operator of the 80-acre drilling units and requiring compulsory pooling of all tracts and interests within the geographic areas for which the owners have not agreed to voluntary pooling. The six Petitions were consolidated as a matter of administrative efficiency.

JURISDICTION

The development of oil and gas in this State is regulated under Part 615, Supervisor of Wells, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended. MCL 324.61501 *et seq.* The purpose of Part 615 is to ensure the orderly development and production of the oil and gas resources in this State. MCL 324.61502. To that end, the Supervisor may establish drilling units and compulsorily pool mineral interests within said units. MCL 324.61513(2) and (4). However, the formation of drilling units by compulsory pooling of interests can only be effectuated after an evidentiary hearing. 1996 MR 9, R 324.302 and R 324.304. The evidentiary hearing is governed by the applicable provisions of the Administrative

Procedures Act, 1969 PA 306, as amended, MCL 24.201 *et. seq.* See 1996 MR 9, R 324.1203. The evidentiary hearing in this matter was held on February 18, 2010.

FINDINGS OF FACT

Petitioner specifically requests that the Supervisor issue an Order that:

1. Requires compulsory pooling of all tracts and mineral interests within the proposed drilling units that have not agreed to voluntary pooling.
2. Names Petitioner as operator of the proposed drilling units and the wells.
3. Authorizes Petitioner to recover certain costs and other additional compensation from the parties subject to the compulsory pooling order.

The Administrative Law Judge determined that the Notice of Hearing was properly served and published. Answers to the Petition were filed by Frontier Energy, LLC and SHR Limited Partnership but were later withdrawn. Only the Petitioner's representative appeared at the hearing. Therefore, the Petitioner is the only Party to this case. The Supervisor designated the hearing to be an uncontested evidentiary hearing pursuant to R 324.1205(1)(c) and directed evidence be presented in the form of verified statements.

In support of its case, the Petitioner offered the verified statements of Michael D. Seidelman, District Production Operations Supervisor, HighMount E & P and Tad D. Stuart, Landman, HighMount Midwest Energy LLC.

I. DRILLING UNIT

The spacing of wells targeting the Antrim Shale Formation is governed by Order No. (A) 14-9-94, as amended. This Order establishes drilling units of 80 acres, more or less, consisting of two contiguous governmental surveyed quarter-quarter sections of land with one common boundary of approximately 1,320 feet, with allowances being made for the differences in the size and shape of sections.

Under Order No. (A) 14-9-94, as amended, it is presumed that one well will efficiently and economically drain each unit of hydrocarbons. The Petitioner's proposed drilling units are all located in T30N, R5W, Star Township, Antrim County, Michigan, and are described as follows:

<u>Cause No.</u>	<u>Well name</u>	<u>Drilling unit description</u>
01-2010	Lakes of the North D4-33	S 1/2 of SE 1/4, Section 33.
02-2010	Lakes of the North A4-33	N 1/2 of NE 1/4, Section 33.
03-2010	Lakes of the North B3-33	SW 1/4 of NE 1/4 and SE 1/4 of NW 1/4, Section 33.
04-2010	Lakes of the North B4-33	SE 1/4 of NE 1/4, Section 33 and SW 1/4 of NW 1/4, Section 34.
05-2010	Lakes of the North C2-25	NE 1/4 of SW 1/4 and SE 1/4 of NW 1/4, Section 25.
06-2010	Lakes of the North D3-25	SW 1/4 of SE 1/4 and SE 1/4 of SW 1/4, Section 25.

I find that the proposed drilling units are consistent with Order No. (A) 14-9-94, as amended; and, as such, they are proper drilling units for their respective proposed wells.

II. DRILLING UNIT OPERATOR

Mr. Stuart's verified statement indicates that the Petitioner owns or controls the following oil and gas interests in each of the proposed 80-acre drilling units:

Cause 01-2010	79.43 acres	Cause 04-2010	78.80 acres
Cause 02-2010	77.21 acres	Cause 05-2010	76.28 acres
Cause 03-2010	79.95 acres	Cause 06-2010	76.94 acres

Given this, the Petitioner seeks to be designated as the operator of the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells. I find, as a Matter of Fact, the Petitioner is eligible to be designated operator of these six wells.

III. COMPULSORY POOLING

As found, the Petitioner has proposed six proper drilling units for the Antrim Shale Formation but was unable to obtain the agreement of all owners to gain its full control. The Petitioner may not produce a well on the drilling unit without first obtaining the control of all the oil and gas interests. In cases like this, the Petitioner may request compulsory pooling from the Supervisor. As discussed, an owner who does not agree to voluntarily pool his or her interest in a drilling unit may be subject to compulsory pooling. 1996 MR 9, R 324.304. The compulsory pooling of an interest must be

effectuated in a manner that ensures "each owner... is afforded the opportunity to receive his or her just and equitable share of the production of the unit." *Id.* In addition to protecting correlative rights, the compulsory pooling must prevent waste. MCL 324.61502. An operator must first seek voluntary pooling of mineral interests within a proposed drilling unit prior to obtaining compulsory pooling through an Order of the Supervisor.

All of the owners of oil and gas interests within the proposed drilling units agreed to voluntarily pool their interests, with the exception of the owners listed in Attachment A. Petitioner made numerous attempts through telephone calls, personal visits, and in writing, to obtain an agreement with the owners to participate in the formation of full drilling units for purposes of drilling the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells.

Mr. Stuart indicates none of the wells which Petitioner intends to drill will be located on unleased acreage.

Based on the foregoing, I find, as a Matter of Fact:

1. The Petitioner was unable to voluntarily pool interests ranging from 0.05 net acres to 3.72 net acres in each of the six proposed 80-acre Antrim Shale formation drilling units.
2. Compulsory pooling is necessary to form six full drilling units, to protect correlative rights of uncommitted owners, and to prevent waste by preventing the drilling of unnecessary wells.

Now that it has been determined compulsory pooling is necessary and proper in this case, the terms of such pooling must be addressed. When pooling is ordered, the owner of the compulsorily pooled lands (Pooled Owner) is provided an election on how he or she wishes to share in the costs of the project. R 324.1206(4). A Pooled Owner may participate in the project, or in the alternative be "carried" by the operator. If the Pooled Owner elects to participate, he or she assumes the economic risks of the project, specifically, by paying his or her proportionate share of the costs or giving bond for the payment. Conversely, if a Pooled Owner elects not to participate, the Pooled Owner is, from an economic perspective, "carried" by the operator. Under this option, if

the well is a dry hole, the Pooled Owner has no financial obligation because he or she did not assume any risk. If the well is a producer, the Supervisor considers the risks associated with the proposal and awards the operator compensation, out of production, for assuming all of the economic risks.

In order for a Pooled Owner to decide whether he or she will "participate" in the well or be "carried" by the operator, it is necessary to provide reliable cost estimates. In this regard, the Petitioner must present proofs on the estimated costs involved in drilling, completing, and equipping the proposed well. Petitioner's Authorization for Expenditures (AFE) for the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells itemize the costs to be incurred in the drilling, completing, equipping, and plugging of the wells (Exhibits B-G to the Verified Statement of Michael D. Seidelman). The estimated costs include \$158,325.00 for drilling and \$155,200.00 for completion of each of the six wells. Equipping costs are \$79,575.00 for the Lakes of the North D4-33, A4-33, B3-33, and B4-33 wells; and \$68,700.00 for both the Lakes of the North C2-25 and D3-25 wells. The total estimated producing well costs are: \$393,100.00 for the Lakes of the North D4-33, A4-33, B3-33, and B4-33 wells; and \$382,225.00 for both the Lakes of the North C2-25 and D3-25 wells. Id.

Mr. Seidelman stated the estimated costs set out in the AFEs are based on Petitioner's experience drilling, completing, and equipping other Antrim wells. There is no evidence on this record refuting these estimated costs. I find, as a Matter of Fact, the estimated costs are reasonable for the purpose of providing the Pooled Owner a basis on which to elect to participate or be carried. However, I find actual costs shall be used in determining the final share of costs and additional compensation assessed against a Pooled Owner.

The next issue is the allocation of these costs. Part 615 requires the allocation to be just and equitable. MCL 324.61513(4). Mr. Seidelman stated the entirety of each of the proposed units is underlain by the Antrim Shale Formation and that allocation of production on a surface acreage basis would be fair and equitable to all interest owners in the unit. The Petitioner requests the actual well costs and production from the well to be allocated based upon the ratio of the number of surface acres in the tracts of the Pooled Owners to the total number of surface acres in the drilling unit. Established

practices and industry standards suggest this to be a fair and equitable method of allocation of production and costs. Therefore, I find, as a Matter of Fact, utilizing surface acreage is a fair and equitable method to allocate to the various tracts in the proposed drilling unit each tract's just and equitable share of unit production and costs.

The final issue is the additional compensation for risk to be assessed against a Pooled Owner who elects to be carried. The administrative rules under Part 615 provide for the Supervisor to assess appropriate compensation for the risks associated with drilling a dry hole, and the mechanical and engineering risks associated with the completion and equipping of wells. 1996 AACS, R 324.1206(4)(b). Petitioner requests additional compensation of 200 percent for drilling, 200 percent for completing, and 200 percent for equipping costs for each well.

Mr. Seidelman's verified statement indicates the proposed wells have a fair amount of risk. From a mechanical standpoint, there is a risk of lost or collapsed holes, lost circulation, parted or collapsed casing, or failed cement jobs. In addition, due to variations in both the intensity of the local natural fracture network in the Antrim Shale (which cannot be predicted prior to drilling and completion) the stimulation of the wells, using hydraulic fracturing, may not be effective in connecting the well bores to those natural fractures. There are presently 42 Antrim production wells in the Lakes of the North project producing gas from the Antrim Shale Formation. Based on statistical data, it is Mr. Seidelman's opinion that the proposed wells have approximately a 50 percent chance of producing gas in economic quantities.

I find, as a Matter of Fact, the risk of the proposed Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells being dry holes supports compensation from the Pooled Owners of 200 percent of the actual drilling costs incurred. The mechanical and engineering risks associated with the well support additional compensation of 200 percent of the actual completing, and 200 percent of the actual equipping costs incurred. Operating costs are not subject to additional compensation for risk.

Due to the number of wells proposed and drilling restrictions in various leases, Petitioner requests that it be allowed 180 days to drill the six wells. I find that this request is reasonable.

CONCLUSIONS OF LAW

Based on the findings of fact, I conclude, as a matter of law:

1. Petitioner was unable to voluntarily pool all interests in the proposed drilling units. The Supervisor may compulsorily pool all properties when pooling cannot be agreed upon. Compulsory pooling is necessary to prevent waste and protect the correlative rights of the Pooled Owners in the proposed drilling unit. MCL 324.61513(4).
2. This order is necessary to provide for conditions under which each mineral owner who had not voluntarily agreed to pool all his or her interest in the pooled units may share in the working interest share of production. 1996 AACRS, R 324.1206(4).
3. The Petitioner is an owner within the drilling units and, therefore, is eligible to drill and operate the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells. 1996 AACRS, R 324.1206(4).
4. The Supervisor may authorize Petitioner to take from each nonparticipating interest's share of production, the cost of drilling, completing, equipping, and operating the wells, plus an additional percentage of the costs as identified in the Determination and Order section of this Order for the risks associated with drilling dry holes and the mechanical and engineering risks associated with the completion and equipping of the wells. 1996 AACRS, R 324.1206(4).
5. The applicable spacing for each proposed drilling unit is 80 acres, as established by Order No. (A) 14-9-94, as amended.
6. The pooling order shall authorize one of the owners within the affected unit to drill and operate the well within the affected unit and provide that the well shall be commenced within 90 days if drilling of the well has not already commenced, unless otherwise specified in the pooling order. 1996 AACRS, R 324.1206(4).

7. The Supervisor has jurisdiction over the subject matter and the persons interested therein.
8. Due notice of the time, place, and purpose of the hearing was given as required by law and all interested persons were afforded an opportunity to be heard. 1996 AACRS, R 324.1204.

DETERMINATION AND ORDER

Based on the Findings of Fact and the Conclusions of Law, the Supervisor determines that compulsory pooling to form six 80-acre Antrim Shale Formation drilling units is necessary to protect correlative rights and prevent waste caused by the drilling of unnecessary wells.

NOW, THEREFORE, IT IS ORDERED:

1. Six 80-acre Antrim Shale Formation drilling units located in T30N, R5W, Star Township, Antrim County, Michigan, are established and are described as follows:

<u>Cause No.</u>	<u>Well name</u>	<u>Drilling unit description</u>
01-2010	Lakes of the North D4-33	S 1/2 of SE 1/4, Section 33
02-2010	Lakes of the North A4-33	N 1/2 of NE 1/4, Section 33
03-2010	Lakes of the North B3-33	SW 1/4 of NE 1/4 and SE 1/4 of NW 1/4, Section 33
04-2010	Lakes of the North B4-33	SE 1/4 of NE 1/4, Section 33 and SW 1/4 of NW 1/4, Section 34
05-2010	Lakes of the North C2-25	NE 1/4 of SW 1/4 and SE 1/4 of NW 1/4, Section 25
06-2010	Lakes of the North D3-25	SW 1/4 of SE 1/4 and SE 1/4 of SW 1/4, Section 25

All properties, parts of properties, and interests in this area are pooled into the drilling units. This pooling is for the purpose of forming drilling units only and neither establishes a right, nor diminishes any independent right, of the Petitioner to operate on the surface or subsurface lands of a Pooled Owner.

2. Each Pooled Owner shall share in production and costs in the proportion that their net mineral acreage in the drilling units bears to the total acreage in the drilling units.
3. The Petitioner is named Operator of the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells. The Operator shall commence the drilling of the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells within 180 days of the effective date of this Order. This pooling Order applies to the drilling of the Lakes of the North D4-33, A4-33, B3-33, B4-33, C2-25, and D3-25 wells only.
4. A Pooled Owner shall be treated as a working interest owner to the extent of 100 percent of their interest owned in the drilling units. The Pooled Owner is considered to hold a 1/8 royalty interest, which shall be free of any charge for costs of drilling, completing, or equipping the well, or for compensation for the risks of the well, or operating the proposed wells including postproduction costs.
5. A Pooled Owner shall have ten days from the effective date of this Order to select one of the following alternatives and advise the Supervisor and the Petitioner, in writing, accordingly:
 - a. To participate, then within 10 days of making the election (or within a later date as agreed to by the Operator and Pooled Owner), pay to the Operator the Pooled Owner's share of the estimated costs for drilling, completing, and equipping the wells, or give bond for the payment of the Pooled Owner's share of such cost promptly upon completion; and authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production, the Pooled Owner's share of the actual costs of operating the wells; or

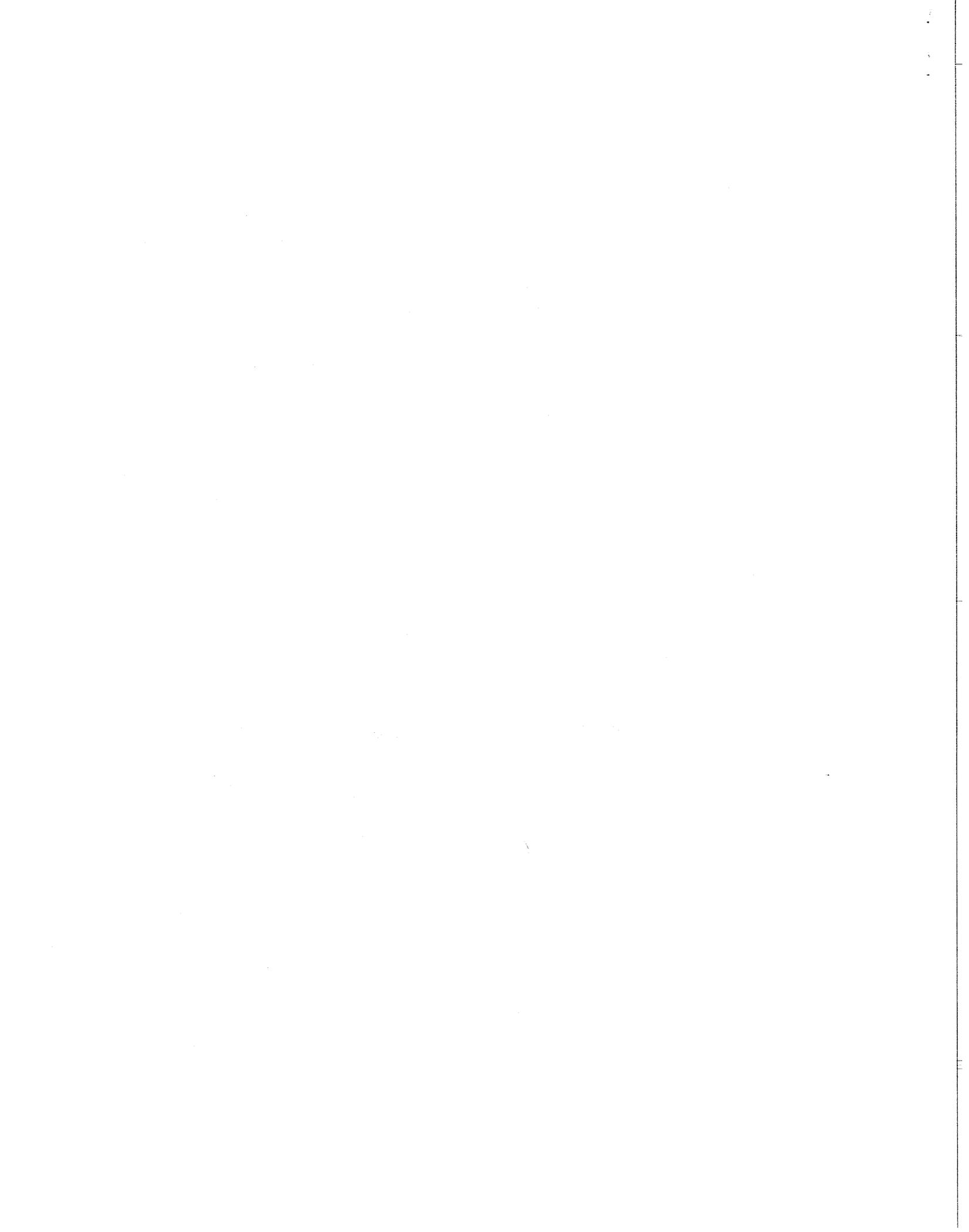
- b. To be carried, then, if any of the wells are put on production, authorize the Operator to take from the Pooled Owner's remaining 7/8 share of production:
- (i) The Pooled Owner's share of the actual cost of drilling, completing, and equipping each well.
 - (ii) An additional 200 percent of the actual drilling costs, 200 percent of the actual completion costs, and 200 percent of the actual equipping costs attributable to the Pooled Owner's share of production, as compensation to the Operator for the risk of a dry hole.
 - (iii) The Pooled Owner's share of the actual cost of operating each well.
6. In the event the Pooled Owner does not notify the Supervisor, in writing, of the decision within ten days from the effective date of this Order, the Pooled Owner will be deemed to have elected the alternative described in ¶ 5(b). If a Pooled Owner who elects the alternative in ¶ 5(a) does not, within 10 days of making their election (or within any alternate date agreed upon with the Operator), pay their proportionate share of costs or give bond for the payment of such share of such costs, the Pooled Owner shall be deemed to have elected the alternative described in ¶ 5(b) and the Operator may proceed to withhold and allocate proceeds for costs from the Pooled Owners' 7/8 share of production as described in 5.b.(i), (ii) and (iii).
7. For purposes of the Pooled Owners electing alternatives, the amounts of \$158,325.00 for estimated drilling costs (dry hole costs); and \$155,200.00 for estimated completion costs are fixed as well as costs for each of the six wells. Estimated equipping costs are \$79,575.00 for the Lakes of the North D4-33, A4-33, B3-33, and B4-33 wells; and \$68,700.00 for both the Lakes of the North C2-25 and D3-25 wells. Actual costs shall be used in determining the Pooled Owner's final share of well costs and in determining additional compensation for the risk of a dry hole. If a Pooled Owner has elected the alternative in ¶ 5(a) and the actual cost exceeds the estimated cost, the

Operator may recover the additional cost from the Pooled Owners' 7/8 share of production. Within 60 days after commencing drilling of the well, and every 30 days thereafter until all costs of drilling, completing, and equipping the well are accounted for, the Operator shall provide to the Pooled Owner a detailed statement of actual costs incurred as of the date of the statement and all costs and production proceeds allocated to that Pooled Owner.

8. The Operator shall certify to the Supervisor that the following information was supplied to each pooled owner no later than the effective date of the Order:
 - a. The Order;
 - b. The AFE; and
 - c. Each Pooled Owner's percent of charges from the AFE if the Pooled Owner were to choose option "a" in Paragraph 5, above.
9. The Supervisor retains jurisdiction in this matter.
10. The effective date of this Order is April 12, 2010

DATED: April 2, 2010


HAROLD R. FITCH
ASSISTANT SUPERVISOR OF WELLS
Office of Geological Survey
P.O. Box 30256
Lansing, MI 48909



ATTACHMENT A

Cause No. 01-2010, Lakes of the North D4-33 well

<u>LOT OWNER</u>	<u>INTEREST: Plat of Northover Hills</u>
Thomas P & Barbara A. Greene 4613 Summer Ridge Drive Howell, MI 48843	Lot 188: undivided $\frac{1}{2}$ interest Being .0029 of the D4-33 unit
Alexander J. Havasy Sr. 4190 Irene Lincoln Park, MI 48146	Lot 225: undivided $\frac{1}{4}$ interest Being .0018 of the D4-33 unit

<u>CLASS MEMBERS</u>	<u>INTEREST in Lots 70 and 228</u>
Bank of Oklahoma, N.A., as Agent for the following Trusts:	
Christina Lee Calvert; Antoinette Calvert 2000 Revocable Trust; Lyman John Goes, Jr. Trust; Anna Mae McAdams Ketring Trust; Theodore G. Neer Trust; Lincoln E. Smith Unitrust; Rhea Yabrove Trust, FBO Edward Yabrove Attn: Trent A. Baulch Sr. Vice President & Trust Officer P.O. Box 3499 Tulsa, OK 74104-3499	.113867 of undivided $\frac{1}{2}$ interest Being .00049 of the D4-33 unit

- and -

Barbara Ruth Syphrett
16171 Jacob Rd
Linden, MI 48451

Mosbacher Energy Co. Bob Williams 712 Main St, Ste 2200 Houston, TX 77002-3290	.025644 of undivided $\frac{1}{2}$ interest Being .00011 of the D4-33 unit
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Donna M. Feltman 107 South Delaware St St. Louis, MI 48880	.00028 of undivided $\frac{1}{2}$ interest Being .000001 of the D4-33 unit
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- and -

Legacy Royalties
P.O. Box 1360
Tyler, TX 75710

Estate of Frank Millikin, Deceased c/o Attorney Stewart W. James 7108 Hughson Ave P.O. Box 147 Hughson, CA 95326	.00028 of undivided $\frac{1}{2}$ interest Being .000001 of the D4-33 unit
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Penny L. Millikin 9517 South Grayling Rd Roscommon, MI 48653	.000031 of undivided $\frac{1}{2}$ interest Being .0000001 of the D4-33 unit
Robert Harold Millikin 4848 East Fletcher Rd Roscommon, MI 48653	.000031 of undivided $\frac{1}{2}$ interest Being .0000001 of the D4-33 unit
Estate of Charles Johnson, Deceased c/o William M. Fury Bensinger, Cotant & Menkes, PC P.O. Box 1000 Gaylord, MI 49734	.001399 of undivided interest Being .0000006 of the D4-33 unit
Daniel Widger 2280 Marwood Waterford, MI 48328	.0000753 of undivided $\frac{1}{2}$ interest Being .0000003 of the D4-33 unit
Ken Miller Trust c/o John Isagregg 6515 Island Rd, Ste 100 Waterford, MI 48327	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the D4-33 unit
Trustees of the Hurl N. Millikin Trust P.O. Box 1405 East Lansing, MI 48826-1405	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the D4-33 unit
Winona Marie VanSickle 2744 Briargrove Ln San Angelo, TX 76904-7406	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the D4-33 unit
John J. Devine Jr. 304 East Broadway Mt. Pleasant, MI. 48858	.000339 of undivided $\frac{1}{2}$ interest Being .000001 of the D4-33 unit

Cause 02-2010, Lakes of the North A4-33 well

<u>LOT OWNERS</u>	<u>INTEREST: Plat of Northover Hills</u>
Antrim County Treasurer interest PO Box 544 unit Bellaire, MI 49615	Lot 388, 480, 526, 536: undivided $\frac{1}{2}$ Being .012685 of the A4-33
Horace Gibson Jr. 17355 Melrose Drive Southfield, MI 48034	Lot 477: undivided $\frac{1}{2}$ interest Being .00575 of the A4-33 unit
Jose & Martha Zuniga 14 St. James Drive Palm Beach Gardens, FL 33418	Lot 479: undivided $\frac{1}{2}$ interest Being .00325 of the A4-33 unit

CLASS MEMBERS

INTEREST IN LOTS

(See Footnote for lots)

Bank of Oklahoma, N.A.,
as Agent for the following Trusts:

Christina Lee Calvert;	.113867 of undivided ½ interest
Antoinette Calvert 2000 Revocable Trust;	Being .00073 of the A4-33 unit
Lyman John Goes, Jr. Trust;	
Anna Mae McAdams Ketring Trust;	
Theodore G. Neer Trust;	
Lincoln E. Smith Unitrust;	
Rhea Yabrove Trust, FBO Edward Yabrove Attn: Trent A. Baulch Sr. Vice President & Trust Officer P.O. Box 3499 Tulsa, OK 74104-3499	

- and -

Barbara Ruth Syphrett
16171 Jacob Rd
Linden, MI 48451

Mosbacher Energy Co. Bob Williams 712 Main St, Ste 2200 Houston, TX 77002-3290	.025644 of undivided ½ interest Being .00016 of the A4-33 unit
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Donna M. Feltman 107 South Delaware St St. Louis, MI 48880	.00028 of undivided ½ interest Being .000002 of the A4-33 unit
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- and -

Legacy Royalties
P.O. Box 1360
Tyler, TX 75710

Estate of Frank Millikin, Deceased c/o Attorney Stewart W. James 7108 Hughson Ave P.O. Box 147 Hughson, CA 95326	.00028 of undivided ½ interest Being .000002 of the A4-33 unit
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Penny L. Millikin 9517 South Grayling Rd Roscommon, MI 48653	.000031 of undivided ½ interest Being .0000001 of the A4-33 unit
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Robert Harold Millikin 4848 East Fletcher Rd Roscommon, MI 48653	.000031 of undivided ½ interest Being .0000001 of the A4-33 unit
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Estate of Charles Johnson, Deceased c/o William M. Fury	.001399 of undivided ½ interest Being .000009 of the A4-33 unit
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Bensinger, Cotant & Menkes, PC
P.O. Box 1000
Gaylord, MI 49734

Daniel Widger
2280 Marwood
Waterford, MI 48328

.0000753 of undivided $\frac{1}{2}$ interest
Being .0000004 of the A4-33 unit

Ken Miller Trust
c/o John Isagregg
6515 Island Rd, Ste 100
Waterford, MI 48327

.000473 of undivided $\frac{1}{2}$ interest
Being .000003 of the A4-33 unit

Trustees of
the Hurl N. Millikin Trust
P.O. Box 1405
East Lansing, MI 48826-1405

.000473 of undivided $\frac{1}{2}$ interest
Being .000003 of the A4-33 unit

Winona Marie VanSickle
2744 Briargrove Ln
San Angelo, TX 76904-7406

.000473 of undivided $\frac{1}{2}$ interest
Being .000003 of the A4-33 unit

John J. Devine Jr.
304 East Broadway
Mt. Pleasant, MI. 48858

.000339 of undivided $\frac{1}{2}$ interest
Being .000002 of the A4-33 unit

Footnote: Covering Lots 492, 513 and 514
Plat of Northover Hills

Cause No. 03-2010, Lakes of the North B3-33 well

CLASS MEMBERS

INTEREST: Lots 211 and 397
Plat of Northover Hills

Bank of Oklahoma, N.A.,
as Agent for the following Trusts:

Christina Lee Calvert;
Antoinette Calvert 2000
Revocable Trust;
Lyman John Goes, Jr. Trust;
Anna Mae McAdams Ketring Trust;
Theodore G. Neer Trust;
Lincoln E. Smith Unitrust;
Rhea Yabrove Trust, FBO Edward Yabrove
Attn: Trent A. Baulch
Sr. Vice President & Trust Officer
P.O. Box 3499
Tulsa, OK 74104-3499

.113867 of undivided $\frac{1}{2}$ interest
Being .000486 of the B3-33 unit

- and -

Barbara Ruth Syphrett 16171 Jacob Rd Linden, MI 48451 Mosebacher Energy Co. Bob Williams 712 Main St, Ste 2200 Houston, TX 77002-3290	.025644 of undivided $\frac{1}{2}$ interest Being .00011 of the B3-33 unit
Donna M. Feltman 107 South Delaware St St. Louis, MI 48880 - and - Legacy Royalties P.O. Box 1360 Tyler, TX 75710	.00028 of undivided $\frac{1}{2}$ interest Being .00001 of the B3-33 unit
Estate of Frank Millikin, Deceased c/o Attorney Stewart W. James 7108 Hughson Ave P.O. Box 147 Hughson, CA 95326	.00028 of undivided $\frac{1}{2}$ interest Being .00001 of the B3-33 unit
Penny L. Millikin 9517 South Grayling Rd Roscommon, MI 48653	.000031 of undivided $\frac{1}{2}$ interest Being .000001 of the B3-33 unit
Robert Harold Millikin 4848 East Fletcher Rd Roscommon, MI 48653	.000031 of undivided $\frac{1}{2}$ interest Being .000001 of the B3-33 unit
Estate of Charles Johnson, Deceased c/o William M. Fury Bensinger, Cotant & Menkes, PC P.O. Box 1000 Gaylord, MI 49734	.001399 of undivided $\frac{1}{2}$ interest Being .000006 of the B3-33 unit
Daniel Widger 2280 Marwood Waterford, MI 48328	.0000753 of undivided $\frac{1}{2}$ interest Being .0000003 of the B3-33 unit
Ken Miller Trust c/o John Isagregg 6515 Island Rd, Ste 100 Waterford, MI 48327	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the B3-33 unit
Trustees of the Hurl N. Millikin Trust P.O. Box 1405 East Lansing, MI 48826-1405	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the B3-33 unit
Winona Marie VanSickle 2744 Briargrove Ln San Angelo, TX 76904-7406	.000473 of undivided $\frac{1}{2}$ interest Being .000002 of the B3-33 unit

John J. Devine Jr. .000339 of undivided ½ interest
304 East Broadway Being .000001 of the B3-33 unit
Mt. Pleasant, MI. 48858

Cause No. 04-2010, Lakes of the North B4-33 well

LOT OWNERS

INTEREST: Plat of Northover Hills

Danny M & Nancy K Brindamour
1461 West Peck Road
Brown City, MI 48416

Lot 337: undivided ½ interest
Being .0033 of the B4-33 unit

Jeffrey P & Roberta Ordway
1437 Harnell Court
Concord, CA 94521

Lot 365: undivided ½ interest
Being .0056 of the B4-33 unit

Sharon M. Beckley: ½ interest
Anthony P. Kalich: ½ interest
35740 Main Street
New Baltimore, MI 48047
Ramiz F. Abbo, et al
3380 Cleveland Drive
Troy, MI 48083

Lot 636: undivided ½ interest
Being .0039 of the B4-33 unit

Lot 637: undivided ½ interest
Being .004 of the B4-33 unit

LOT OWNER

INTEREST: Plat of Winterset No. 2

Richard F. Trever
5495 Winterset Drive
Elmira, MI 49730

Lot 243: undivided ½ interest
Being .0006 of the B4-33 unit

CLASS MEMBERS

INTEREST (See Footnote for lots)

Bank of Oklahoma, N.A.,
as Agent for the following Trusts:

Christina Lee Calvert;
Antoinette Calvert 2000
Revocable Trust;
Lyman John Goes, Jr. Trust;
Anna Mae McAdams Ketrings Trust;
Theodore G. Neer Trust;
Lincoln E. Smith Unitrust;
Rhea Yabrove Trust, FBO Edward Yabrove
Attn: Trent A. Baulch
Sr. Vice President & Trust Officer
P.O. Box 3499
Tulsa, OK 74104-3499

.113867 of undivided ½ interest
Being .0021 of the B4-33 unit

- and -

Barbara Ruth Syphrett
16171 Jacob Rd
Linden, MI 48451

Attachment A to Order Nos. 01-2010 through 06-2010

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Mosbacher Energy Co. Bob Williams 712 Main St, Ste 2200 Houston, TX 77002-3290	.025644 of undivided ½ interest Being .00047 of the B4-33 unit
Donna M. Feltman 107 South Delaware St St. Louis, MI 48880 - and - Legacy Royalties P.O. Box 1360 Tyler, TX 75710	.00028 of undivided ½ interest Being .000005 of the B4-33 unit
Estate of Frank Millikin, Deceased c/o Attorney Stewart W. James 7108 Hughson Ave P.O. Box 147 Hughson, CA 95326	.00028 of undivided ½ interest Being .000005 of the B4-33 unit
Penny L. Millikin 9517 South Grayling Rd Roscommon, MI 48653	.000031 of undivided ½ interest Being .0000005 of the B4-33 unit
Robert Harold Millikin 4848 East Fletcher Rd Roscommon, MI 48653	.000031 of undivided ½ interest Being .0000005 of the B4-33 unit
Estate of Charles Johnson, Deceased c/o William M. Fury Bensinger, Cotant & Menkes, PC P.O. Box 1000 Gaylord, MI 49734	.001399 of undivided interest Being .00002 of the B4-33 unit
Daniel Widger 2280 Marwood Waterford, MI 48328	.0000753 of undivided ½ interest Being .000001 of the B4-33 unit
Ken Miller Trust c/o John Isagregg 6515 Island Rd, Ste 100 Waterford, MI 48327	.000473 of undivided ½ interest Being .000008 of the B4-33 unit
Trustees of the Hurl N. Millikin Trust P.O. Box 1405 East Lansing, MI 48826-1405	.000473 of undivided ½ interest Being .000008 of the B4-33 unit
Winona Marie VanSickle 2744 Briargrove Ln San Angelo, TX 76904-7406	.000473 of undivided ½ interest Being .000008 of the B4-33 unit
John J. Devine Jr. 304 East Broadway Mt. Pleasant, MI. 48858	.000339 of undivided ½ interest Being .000006 of the B4-33 unit

Footnote: Lots 340, 352, 353, 620 and 642
Plat of Northover Hills and Lot 455 Plat of Winterset No. 2

Cause No. 05-2010, Lakes of the North C2-25 well

<u>LOT OWNERS</u>	<u>INTEREST: Plat of Winterhaven</u>
David W & Melanie Orr 10031 Island Drive Grosse Ile, MI 48138	Lot 201: full interest Being .0076 of the C2-25 unit
Brian J. Grzelakowski interest 32422 Cambridge Warren, MI. 48093	Lot 579: undivided $\frac{1}{2}$ Being .002 of the C2-25 unit
Lawrence E. & Lynnore L. James 26052 Thorpe Court Grosse Ile, MI 48138	Lot 581: full interest Being .0078 of the C2-25 unit
James R & Joyce C. Kent 41705 Broquet LEASED Northville, MI. 48167	Lot 584: full interest *NOTE - JOYCE C. REYNOLDS
AND Antrim County Treasurer P.O. Box 544 Bellaire, MI. 49615	Being .0063 of the C2-25 unit

CLASS MEMBERS

INTEREST IN LOTS
(See Footnote 1 & 2 for Lots)

Bank of Oklahoma, N.A., as
Agent for the following Trusts:

Christina Lee Calvert; Antoinette Calvert 2000 Revocable Trust; Lyman John Goes, Jr. Trust; Anna Mae McAdams Ketring Trust; Theodore G. Neer Trust; Lincoln E. Smith Unitrust; Rhea Yabrove Trust, FBO Edward Yabrove Attn: Trent A. Baulch Sr. Vice President & Trust Officer P.O. Box 3499 Tulsa, OK 74104-3499	.113867 of Footnotes 1 & 2 Being .018 of the C2-25 unit
--	--

- and -

Barbara Ruth Syphrett
16171 Jacob Road
Linden, MI 48451

Attachment A to Order Nos. 01-2010 through 06-2010

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Mosbacher Energy Co. Bob Williams 712 Main St, Ste 2200 Houston, TX 77002-3290	.025644 of Footnotes 1 & 2 Being .004 of the C2-25 unit
Donna M. Feltman 107 South Delaware St St. Louis, MI 48880 - and - Legacy Royalties P.O. Box 1360 Tyler, TX 75710	.00028 of Footnotes 1 & 2 Being .00004 of the C2-25 unit
Estate of Frank Millikin, Deceased c/o Attorney Stewart W. James 7108 Hughson Ave P.O. Box 147 Hughson, CA 95326	.00028 of Footnotes 1 & 2 Being .00004 of the C2-25 unit
Penny L. Millikin 9517 South Grayling Road Roscommon, MI 48653	.000031 of Footnotes 1 & 2 Being .000005 of the C2-25 unit
Robert Harold Millikin 4848 East Fletcher Rd Roscommon, MI 48653	.000031 of Footnotes 1 & 2 Being .000005 of the C2-25 unit
Estate of Charles Johnson, Deceased c/o William M. Fury Bensinger, Cotant & Menkes, PC P.O. Box 1000 Gaylord, MI 49734	.001399 of Footnotes 1 & 2 Being .0002 of the C2-25 unit
Daniel Widger 2280 Marwood Waterford, MI 48328	.0000753 of Footnotes 1 & 2 Being .00001 of the C2-25 unit
Ken Miller Trust c/o John Isagregg 6515 Island Rd, Ste 100 Waterford, MI 48327	.000473 of Footnotes 1 & 2 Being .00008 of the C2-25 unit
Trustees of the Hurl N. Millikin Trust P.O. Box 1405 East Lansing, MI 48826-1405 Winona Marie VanSickle 2744 Briargrove Ln San Angelo, TX 76904-7406	.000473 of Footnotes 1 & 2 Being .00008 of the C2-25 unit .000473 of Footnotes 1 & 2 Being .00008 of the C2-25 unit
John J. Devine Jr. 304 East Broadway Mt. Pleasant, MI. 48858	.000339 of Footnotes 1 & 2 Being .000054 of the C2-25 unit

Footnote 1: Covering undivided $\frac{1}{2}$ interest in Lots 64 and 65, 175 thru 177, 195 thru 197, 199 and 200, 202 thru 204, 225 thru 227, 240 and 241, 574 thru 578, 580, 582, 583, 585 thru 587, 590 thru 621, 623 thru 626, all in the Plat of Winterhaven

Footnote 2: Covering a full interest in Lots 198, 237 and 238 all in the Plat of Winterhaven

Cause No. 06-2010, Lakes of the North D3-25 well

<u>LOT OWNERS</u>	<u>INTEREST: Plat of Winterhaven</u>
Estate of Robert W. Taylor 1911 Rockcliff Court Tarrant, TX 76012	Lot 1: full interest Being .005 of the D3-25 unit
Mary C. Feindt P.O. Box 18 Charlevoix, MI 49720	Lot 2: full interest
NOTE: LARRY AND FAYE FEINDT - LEASED MARY DECEASED - or -	
Estate of Robert W. Taylor 1911 Rockcliff Court Tarrant, TX 76012	Lot 2: full interest Being .00275 of the D3-25 unit
Roy L & Kathy D Shuman 5420 Ternes Street Dearborn, MI 48126	Lot 151: full interest Being .005 of the D3-25 unit
Antrim County Treasurer P.O. Box 544 Bellaire, MI 49615	Lot 158: full interest Being .005 of the D3-25 unit
Kurt W & Denise R Pfister II 1657 West Hazelhurst Ferndale, MI 48220-1643	Lot 160: full interest Being .005 of the D3-25 unit

<u>CLASS MEMBERS</u>	<u>INTEREST IN LOTS</u> (See Footnote 1 & 2)
Bank of Oklahoma, N.A., as Agent for the following Trusts:	
Christina Lee Calvert; Antoinette Calvert 2000 Revocable Trust;	.113867 of Footnotes 1 & 2 Being .003 of the D3-25 unit
Lyman John Goes, Jr. Trust; Anna Mae McAdams Ketring Trust; Theodore G. Neer Trust; Lincoln E. Smith Unitrust; Rhea Yabrove Trust, FBO Edward Yabrove Attn: Trent A. Baulch Sr. Vice President & Trust Officer P.O. Box 3499 Tulsa, OK 74104-3499	

Attachment A to Order Nos. 01-2010 through 06-2010

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- and -

Barbara Ruth Syphrett
16171 Jacob Rd
Linden, MI 48451

Mosbacher Energy Co.
Bob Williams
712 Main St, Ste 2200
Houston, TX 77002-3290

.025644 of Footnotes 1 & 2
Being .00068 of the D3-25 unit

Donna M. Feltman
107 South Delaware St
St. Louis, MI 48880

.00028 of Footnotes 1 & 2
Being .000007 of the D3-25 unit

- and -

Legacy Royalties
P.O. Box 1360
Tyler, TX 75710

Estate of
Frank Millikin, Deceased
c/o Attorney Stewart W. James
7108 Hughson Ave
P.O. Box 147
Hughson, CA 95326

.00028 of Footnotes 1 & 2
Being .000007 of the D3-25 unit

Penny L. Millikin
9517 South Grayling Rd
Roscommon, MI 48653

.000031 of Footnotes 1 & 2
Being .0000008 of the D3-25 unit

Robert Harold Millikin
4848 East Fletcher Rd
Roscommon, MI 48653

.000031 of Footnotes 1 & 2
Being .0000008 of the D3-25 unit

Estate of Charles Johnson,
Deceased
c/o William M. Fury
Bensinger, Cotant & Menkes, PC
P.O. Box 1000
Gaylord, MI 49734

.001399 of Footnotes 1 & 2
Being .000037 of the D3-25 unit

Daniel Widger
2280 Marwood
Waterford, MI 48328

.0000753 of Footnotes 1 & 2
Being .000002 of the D3-25 unit

Ken Miller Trust
c/o John Isagregg
6515 Island Rd, Ste 100
Waterford, MI 48327

.000473 of Footnotes 1 & 2
Being .00001 of the D3-25 unit

Trustees of
the Hurl N. Millikin Trust
P.O. Box 1405
East Lansing, MI 48826-1405

.000473 of Footnotes 1 & 2
Being .00001 of the D3-25 unit

Winona Marie VanSickle
2744 Briargrove Ln
San Angelo, TX 76904-7406

.000473 of Footnotes 1 & 2
Being .00001 of the D3-25 unit

John J. Devine Jr.
304 East Broadway
Mt. Pleasant, MI. 48858

.000339 of Footnotes 1 & 2
Being .000009 of the D3-25 unit

Footnote 1: Covering **undivided** $\frac{1}{2}$ interest in Lots 173
thru 176, 561 thru 564, 623 and 624, Plat of
Winterhaven and Lot 107 Plat of Snowcrest Heights

Footnote 2: Covering **full** interest in Lot 7 Plat of Winterhaven



STATE OF MICHIGAN

DEPARTMENT OF NATURAL RESOURCES & ENVIRONMENT

LANSING

JENNIFER M. GRANHOLM
GOVERNOR

REBECCA A. HUMPHRIES
DIRECTOR

March 16, 2010

To Whom It May Concern:

The Department of Natural Resources and Environment (DNRE) received a request dated February 12, 2010, from Kennecott Eagle Minerals Company (KEMC) to amend its Eagle Project Mining Permit MP 01 2007. The request is to modify the design of the Treated Water Infiltration System. The DNRE has reviewed the request and determined it does not constitute a significant change from the conditions of the approved Mining Permit MP 01 2007.

In accordance with the requirements of Part 632, Nonferrous Metallic Mineral Mining, of the Natural Resources and Environmental Protection Act, 1994 PA 451, as amended (NREPA), Section 63207(6), the DNRE is providing the attached written notice of the determination to the township and county where the proposed mining operation is to be located and to federally recognized Indian tribes. As prescribed under Part 632, the DNRE will approve the amendment within 14 days after publication of the notice and will notify KEMC of the approval.

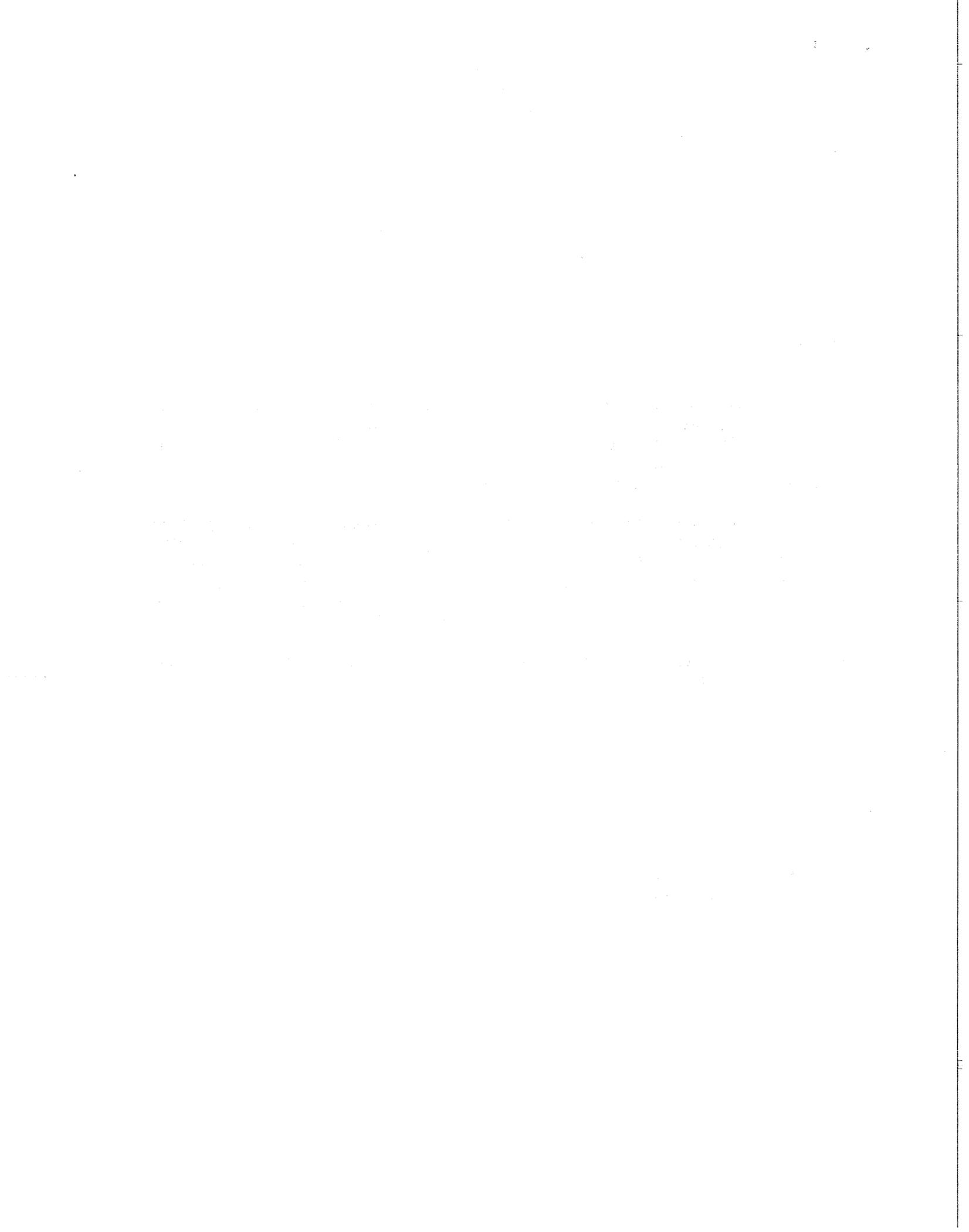
Please contact Mr. Steven E. Wilson, Supervisor of the Office of Geological Survey Minerals and Mapping Unit, at 517-241-1542, if you have any questions.

Sincerely,

A handwritten signature in cursive script, appearing to read "Harold R. Fitch".

Harold R. Fitch, Director
Office of Geological Survey
517-241-1548

cc: ✓ Mr. Steven E. Wilson, DNRE
Mr. Joe Maki, DNRE



State of Michigan
Department of Natural Resources and Environment
NOTICE OF AMENDMENT
Eagle Project Mining Permit MP 01 2007

The Department of Natural Resources and Environment (DNRE) received an application dated February 12, 2010, from Kennecott Eagle Minerals Company (KEMC) to amend its Eagle Project Mining Permit MP 01 2007. The request is to modify the design of the Treated Water Infiltration System (TWIS).

Part 632 Sec. 63207 (6) requires a permittee to request an amendment for anticipated changes in the mining operation including, if applicable, amendments to the environmental impact assessment and to the mining, reclamation, and environmental protection plan.

The proposed modification to the TWIS constitutes a change in the original mining plan. The modification consists of changing the original TWIS design from a sub-surface infiltration system to a surface-based infiltration system which includes changing the perforated pipe from PVC to HDPE and increasing the diameter of the pipe from 1.5 inches to 2 inches. The modification does not change the location, footprint, or application rates of the TWIS.

The DNRE has reviewed the amendment request and determined the request does not constitute a significant change from the conditions of the approved Mining Permit MP 01 2007.

The application for amendment of Mining Permit MP 01 2007 can be accessed on the DNRE OGS Web page:
http://www.michigan.gov/documents/deq/DNRE-OGS-Part-632-proposal-2010-12-16_313421_7.pdf.

The first part of the document discusses the importance of maintaining accurate records of all transactions. It emphasizes that every entry should be supported by a valid receipt or invoice. This ensures transparency and allows for easy verification of the data.

In the second section, the author outlines the various methods used to collect and analyze the data. This includes both primary and secondary data collection techniques. The primary data was gathered through direct observation and interviews, while secondary data was obtained from existing reports and databases.

The third section details the statistical analysis performed on the collected data. It describes the use of descriptive statistics to summarize the data and inferential statistics to test hypotheses. The results indicate a significant correlation between the variables being studied, which supports the research objectives.

Finally, the document concludes with a summary of the findings and their implications. It suggests that the results can be used to inform decision-making and to identify areas for further research. The author also acknowledges the limitations of the study and provides recommendations for future work.