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1995 ABEAB 14

Appeal No. 94-014

July 7, 1995

IN THE MATTER OF Sections 84, 86, 87, 91, 92 and 93 of the *Environmental Protection and Enhancement Act*, (S.A 1992, ch. E-13.3 as amended);

-and-

IN THE MATTER OF an appeal filed by Murray and Kathleen Williams with respect to the reclamation certificate issued by the Inspector, Land Reclamation Division, Alberta Environmental Protection to Gulf Canada Resources Ltd.

Report and Recommendations

Cite as: Murray and Kathleen Williams v. Inspector, Land Reclamation

Division, Alberta Environmental Protection.

HEARING BEFORE: David H. Marko

Max A McCann John P. Ogilvie

APPEARANCES:

Appellant Murray and Kathleen Williams

Other Parties: W.G. Fisher and R. Mattson, Inspectors for and on behalf of

Land Reclamation Division, represented by William McDonald. Gulf Canada Resources Ltd., represented by Nancy Dilts.



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I. FACTUAL BACKGROUND

On June 21, 1994, W.G. Fisher, Inspector with the Land Reclamation Division of Alberta Environmental Protection issued Reclamation Certificate No. 31843 to Gulf Canada Resources Ltd. (Gun) with respect to an abandoned well site located at SE 16-39-3-W5M.

Murray and Kathleen Williams filed a notice of objection with the Board on November 3, 1994. They appealed the issuance of the Certificate because they did not receive information on soil samples, part of the lease would not grow hay, bentonite (drilling mud) was left in an inappropriate area and they felt that the abandoned well casing should have been cut-off at least 3 metres below the surface.

On November 4, 1994, the Board wrote to the Director of Land Reclamation, Alberta Environmental Protection advising him that the appeal had been filed and requesting a copy of the Certificate as well as the application for it. William McDonald, Barrister and Solicitor, Environmental Law Section, Alberta Justice subsequently responded to the Board on behalf of the Department of Environmental Protection and provided the documentation as requested. Gulf was informed on November 29, 1994 that an appeal had been filed.

The Board wrote to the three parties on December 14, 1994 asking several questions concerning Murray and Kathleen Williams' concerns, and responses were requested by January 16, 1995. Answers to the Board's questions were provided within the deadline by all of the parties.

On March 20, 1995, the Board made the determination to proceed with a hearing on this matter and scheduled it for May 16, 1995.

A pre-hearing meeting was held by the Board on May 2, 1995, in Eckville. The public hearing was adjourned until June 9, 1995 to provide sufficient time for all parties to prepare.

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II. STATEMENT OF THE ISSUES TO BE DECIDED

The Notice of Objection states that Murray Williams is appealing the Inspector's Reclamation Certificate decision, Certificate No. 31843, (Certificate), an unconditional reclamation approval granted by W. G. Fisher, Conservation and Reclamation Inspector, dated 21 June 1994.

The Notice of Objection dated October 30, 1994, sets out a number of issues, and requests the following relief:

- 1. analysis of soil samples taken by Gulf during the reclamation process'
- 2. removal or covering up of the drilling mud at surface
- 3. an order that Gulf must cut the drill casing down to 3 metres (minimum)
- 4. an order that Gulf must indemnify him for any future cost to clear up the lease for purposes of soil contamination if he sells, subdivides or mortgages the property
- 5. an order Gulf must pay lease rent until all work is complete.

Requests three, four and five were not argued at the hearing.

Request number one was based on Mr. Williams' desire to have soil samples taken and analysed. Request number two was related to the lack of growth due to "straight drilling mud being squeezed onto the low side of lease. Both requests are related to Mr. Williams' assertion that the lease site will not grow hay'.

soil sampl	es taken.		alysis was co	

The issue to be decided by this panel is the 'no growth' issue, since it is the only issue which relates directly to the granting of the Reclamation Certificate.

III. SUMMARY OF THE EVIDENCE

(a) Evidence of Mr. and Mrs. Williams

Murray and Kathleen Williams presented evidence on their own behalf, as joint landowners of the property in question.

They testified that the wellsite and the land between the river and the wellsite is not providing adequate growth. This is as compared to either the growth experienced in the vicinity of the wellsite pre-disturbance or the growth on the adjacent property which has not been disturbed.

Mr. Williams testified that the site was used as crop land before he and Mrs. Williams purchased it. After which it was used for hay until 1988 when it was leased by Gulf. After the well was abandoned, and before the Reclamation Certificate was issued, the wellsite was used as pasture! In the spring of 1995, Mr. Williams isolated the wellsite from any grazing animals to determine its ability to grow hay. They recognized that the site had been over-grazed in the past, and were attempting to discover whether overgrazing was part of the growth problem. Mr. and Mrs. Williams testified that growth is still a problem, notwithstanding that the site was isolated for 2 months.

Mr. Williams testified that he recognized the growth problem as early as January of 1991, and that he specifically raised the growth issue with the Reclamation Inspector at the time of the reclamation inquiry. He also testified that growth continues to be a

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² The wellsite was drilled in 1988 and abandoned in early 1989, and was reclaimed by Gulf in

the summer of 1989. From 1989 to 1994, the land was used as pasture. The application for the Reclamation Certificate was dated 24 January 1994, *and* the Certificate was issued 21 June 1994.

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problem to the present. Their evidence was that some dead patches appear as though Roundup (herbicide) was applied, and other areas are hardly growing at all.

Mr. Williams also testified that there are pockets of white substance on the ground at the welisite. He also submitted the results of soil analysis of two samples taken by him, and analyzed by Norwest Labs.³ These two samples indicate a high level of calcium in the soil. It was agreed that high calcium levels are reflected by poor growth and white deposits on the soil.

Mr. and Mrs. Williams testified that the deficiencies indicated by the soil sample and continuing growth problems are demonstrable by viewing the site, and are sufficient evidence that the Reclamation Certificate was wrongly issued.

(b) Evidence Of The Inspectors

Evidence on behalf of the Inspector was presented by Mr. Fisher (the Conservation and Reclamation Inspector employed by Alberta Environmental Protection), Mr. Mattson (the Conservation and Reclamation Inspector appointed for the County of Lacombe) and Mr. Janz (a soils specialist with the Land Reclamation division of Alberta Environmental Protection).

Mr. Fisher and Mr. Mattson both signed the Reclamation Certificate being appealed.

Mr. Fisher recounted the procedures followed for determining whether land has been adequately reclaimed after drilling. First, the operator reclaims the site and completes an assessment of the reclamation. This assessment is sent in as part of the application for the Reclamation Certificate.

3	Exhibits taken off	3a and 3h site.	o. Two sam	ples were t	aken on the	lease site w	vith a probe;	no control	samples w	vere
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The application is first reviewed for completeness. The regulations require that for the land to be adequately reclaimed, it must be returned to an equivalent land capability to that prior to disturbance.' When complete, the two Inspectors hold an inquiry on site to determine if the land has adequately been reclaimed, with the operator and the landowner present. If the Inspectors are satisfied that the land has been adequately reclaimed after this inquiry, the Reclamation Certificate is issued.

Mr. Fisher testified that, at the Williams reclamation inquiry, he was satisfied that the wellsite had been reclaimed to equivalent land capability. *Mr.* Mattson testified to the same effect.

The Inspectors must follow criteria established by a panel of stakeholders, called the Reclamation Criteria for Wel!sites and Associated Facilities'. These criteria require the Inspector to assess three factors:

- topography
- soils, and
- vegetation.

The first factor (landscape and topography) deals with drainage, erosion, contour stability and rocks or debris which may be left behind. Mr. Fisher stated that, in his opinion, the criteria for this factor were met

The second factor (surface soils) involves measurement and evaluation of topsoil.

Topsoil is evaluated by a visual check of shovel-fulls of topsoil over a specified grid pattern. If an 'anomaly is found in this soil grid pattern, the criteria allows a 'step-our procedure in order to determine whether that soil is anomalous or representative of that portion of the grid. Both Mr. Fisher and Mr. Mattson stated that on at least one of the samples, the soil recovered was grey and clay-like material which was quite different

4	ALTA	REG.	115/93

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from the remainder of the soil. After carrying out the step-out procedure, the recovered soil was closer to the rest of the topsoil on the wellsite.

In response to questioning by Mr. Williams, Mr. Fisher also stated that there were no white deposits on the soil at the time of the inspection, and that he had no idea what would cause these substances.

The third factor (vegetation) requires analysis of the density, height and cover of the growth. Mr. Fisher testified that he was satisfied that on this factor the criteria were met; that is, that cover was acceptable, and density and height were acceptable. At the time of the reclamation inquiry, the wellsite was used as pasture-land, growing a Timothy/clover/alfalfa mixture. However, the wellsite and the adjacent property were all heavily grazed at the time. Mr. Mattson agreed that the wellsite and the adjacent property were both heavily grazed at that time.

Thus, while both Mr. Fisher and Mr. Mattson testified that the vegetation on the wellsite was comparable to that of the adjacent property⁵, both Inspectors also noted that both the wellsite and the adjacent pasture were over-grazed. This is important testimony, in that it suggests that the vegetation was *comparable* between the wellsite and the adjacent pasture at the time of the reclamation inquiry, but that *neither* was growing adequately due to over-grazing. Mr. Fisher stated that overgrazing makes analysis of the comparable vegetation growth more difficult, because the plant evaluation requires comparing onsite and off site plants for 'density, vigour, and cover'.

Mr. Fisher and Mr. Mattson both testified that, at the time of the reclamation inquiry, Mr.

⁵ This is one d the potential comparisons set out in ALTA REG. 115/93, 3.1(i), which defines 'equivalent land capability' as 'the ability of the land to support various land uses after conservation and reclamation is similar to the ability that existed prior to an activity being conducted on the land, but that the individual uses will not necessarily be identical'.

⁶ Mr. Fisher also testified that he 'wouldn't accept a site without vegetation on it now without

being able to evaluate the growth'.

Williams indicated a number of concerns about the well site.' Specifically, Mr. Fisher testified that Mr. Williams had substantially the same concerns as are now the subject of this appeal: no growth, and concern about the soil quality.

Mr. Fisher also testified that he did not conduct any soil analysis before issuing the Reclamation Certificate under appeal. He stated that unless the reclamation inquiry site visit—which includes a visual check of the soil in the specified grid pattern—indicates a contaminant problem or a soils problem, then no soil samples are taken for the purpose of soils analysis. If there is a problem, then the Inspector has 'the right to ask that soil samples be taken to evaluate the problems and determine what they are.'

Mr. Janz testified that the soil samples collected by Mr. Williams, and the analysis of those samples submitted to the Board, were not useful in determining whether or not land was adequately reclaimed after a wellsite disturbance. This is because the analysis is a fertility analysis which provides only an indication of the nutrient levels in the soil and the fertilizer amounts required for optimum production. In addition, the soil analysis submitted by Mr. Williams involved only onsite soils; there was no off site control sample. Mr. Janz stated that soil deficiencies are common in Alberta, especially where the farm producer has continually cropped or pastured the land.

Mr. Janz also stated that the provincial government soils survey report indicates fairly high calcium levels in the surface soils of the Rocky Mountain area, but that the generality of that soils survey makes it very difficult to say from whether the Williams soil analysis showing high calcium is natural or not.

(c) Evidence Of Gulf

Evidence on behalf of Gulf was presented by Mr. Vern Moulton (currently employed by Gulf in the Drilling Department), Mr. Ken Heemeryck (Construction Superintendent with

7	Some of these concerns were not within the mandate of the Redamaton Inspector, and were not addressed by Mr. Fisher and Mr. Mattson in their inquiry.							
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Pinnacle Resources; formerly Operations Manager at Endrill Resource Consultants Inc.), and Mrs. Sheila Leggett (Consultant with Jim Lore and Associates).

Guff completed restoration of the lease site in the summer of 1989, and made arrangements to have a site assessment done in 1993. Gulf hired Endrill Resources Consultants Inc. to do a site assessment, which was received on 26 October 1993 and forms part of Gulfs application by Gulf of January 1994, for the Reclamation Certificate under appeal.

Mr. Moulton testified that the three criteria referred to earlier by Mr. Fisher are the three criteria which Gulf requested the site assessment consultants to assess.

Mr. Moulton also testified that the drilling mud used in the Williams wellsite was a barite water gel mud which is the most common drilling mud used in Alberta drilling.

Mr. Heemeryck testified that the site assessment process involves somewhat the same process as the reclamation inquiry process: the site is marked into assessment points in a grid, and some off site assessment points are chosen. Each assessment point is analyzed for quality of vegetation and quality and depth of surface soil. The subsoil in selected points is analyzed for salinity, compactness and presence of coarse fragments (rocks). Landscape assessment is done at several points on the well site.

Control assessment sites off the wellsite are chosen so that each factor at the wellsite can be compared to the adjacent property.

Mr. Heemeryck testified that he was satisfied that the reclamation by Gulf had met the criteria in 1993. Specifically with respect to vegetation, Mr. Heemeryck's assessment was that the site was over-grazed, and therefore it was impossible to do a height and density evaluation. Mr. Heemeryck agreed that over-grazing makes assessment of vegetation more difficult because it is a visual assessment only.

Notwithstanding his concession that over-grazing makes assessment of vegetation					

more difficult, Mr. Heemeryck testified that the vegetation had 'excellent vigour', as did the control sites.

Mrs. Sheila Leggett testified that she had reviewed the report prepared by a consultant in her firm, Jim Lore. She agreed with Mr. Janz that the information in the soils analyses presented to the Board by Mr. Williams was not directly useful because there was no analysis of control samples, and because it was a fertility analysis.

Mrs. Leggett also testified that the Jim Lore Report relied upon a historical soil survey for the Rocky Mountain House area done in 1957, and also a more recent report of a different area which gave detailed information about the chemical composition of Tolman loam soils. Mrs. Leggett testified that it is possible for the site area to have Tolman loam soils, though the Rocky Mountain House soils survey is too generalized to tell with certainty.

Tolman loam is associated with low fertility and high calcium levels. Mrs. Leggett testified that if the soil on the well site is Tolman loam, the high levels of calcium could be explained as natural or indigenous to the area. This, however, could not be ascertained without analysis of control samples from the adjacent property. Additionally, Mrs. Leggett testified that both calcium and magnesium carbonate are white in appearance, and that this could explain the white deposits referred to by Mr. Williams.

In response to a question by Mrs. Williams, Mrs. Leggett testified that it was unlikely that Tolman loam soil would be localized in as small an area as the well site; that is, that one would expect the soil of the adjacent property to have a similar chemical composition as the well site samples, if the calcium was naturally occurring.

Mrs. Leggett, when asked whether Mr. Williams simply did the wrong test, replied that analyses for fertility differed from those used in assessing reclamation. Mrs.

Leggett characterized the differences between the two soil tests as 'red apples versus green apples' as opposed to 'apples versus oranges'.

IV. ARGUMENTS BY THE PARTIES

Mr. McDonald argues that any evidence beyond the date of the issuance of the Reclamation Certificate ought not to be taken into account by the Board; that the decision by the Inspector on 21 June 1994 is to be reviewed in light only of the evidence and circumstances of that date.

- that the decision of the inspector must be judged in light of information available to the inspector on the date of the decision (i.e. that subsequent growth problems are irrelevant to the Environmental Appeal Board's decision)
- that the standard of review by the Environmental Appeal Board of the decision by the Reclamation Inspector is that of an application for judicial review (i.e. whether the decision is patently unreasonable)
- that the only appropriate purpose for a site visit is to understand the topography of the wellsite, to better understand the site maps (i.e. not to look at growth or lack thereof as an indicator of the reasonableness of the Inspector's decision)

Gulf concurs with Mr. McDonald's submissions on these issues. Gulf argues that the reclamation complies with the Regulations, which require the land to be returned to 'equivalent land capability' as measured against the adjacent property. Gulf argues that the Board must compare two independent reclamation assessments (i.e. by Endrill Resource Consultants Inc. and the Department of Environmental Protection) with the Williams' assertion that reclamation was not adequately completed. Ms. Dilts argues that Endrill Resource Consultants Inc. and the Department of Environmental Protection

assessments were both carried out in a controlled environment, were conducted in accordance with established criteria, and was the only comparative analysis done. She

argues that the value of the Williams' evidence is limited because they presented no comparative soil analysis, and only indicated soil consistent to Tolman loam.

Mr. Williams argues that the presence of white deposits on the reclaimed soil but not on the adjacent property, and it continued to demonstrate growth problems after two months of isolation from grazing, is sufficient evidence to cancel the Reclamation Certificate.

V. DECISION OF THE BOARD

The Board agrees with an earlier decision that the test for interference with a Reclamation Inspector's decision is whether interference is reasonable and justifiable in the circumstances.'

This appeal requires the Board to consider its powers to receive evidence in an appeal of a Reclamation Certificate based upon facts or changes that occur *after* the issuing of the certificate, but *before* the hearing of the appeal. The Board finds that it has been granted a broad power to receive evidence, and that this includes the ability to receive new evidence up to the time of the hearing. Thus, the Board has included in its consideration, Mr. and Mrs. Williams' evidence that the land continued to demonstrate poor growth after they discontinued any productive use of the land, including grazing use.

In making this decision the Board notes that its legislation, regulations and rules allow the following:

1. The Board may consider whether to hear 'new evidence' not available to the decision-maker at the time the decision was made."

See Leonard and Elva Semack v. Director, Alberta Environmental Protection, Appeal No. 94010, issued 29 June 1995, at page 5-6.

9 S.A. 1992, c. E-13.3, s. 87(2Xd).

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- 2. The Board may conduct site visits, which—by definition—demonstrates the condition of the site on the date of the visit.")
- 3. The one year appeal period for a Reclamation Certificate logically allows for a sufficient 'discovery period' (i.e. one growing season) so that the landowner has an opportunity to know the true state of the land before making his or her decision to appeal."
- 4. The Board has the ability to extend even this one-year appear period if there are sufficient grounds to do so. This implies that subsequent evidence can be considered by the Board.'
- 5. The Board has the authority to ask for any additional information prior to the hearing of an appeal." The Notice of Objection of the appellant may be dismissed by the Board if the appellant fails to supply this additional information." It seems illogical that such additional information could be asked for but not be considered by the Board; it also seems illogical that the request for additional information must be confined to information that would have been available to the Inspector at the time of his or her decision.
- 6. The Director can amend a term or condition of a reclamation certificate if new evidence is brought before him," thus recognizing that environmental conditions do change. To expect that the Director is the only person under the Act who can use new information (as opposed to the landowner or operator) is inconsistent with the purpose of the Act and the establishment of an appeal mechanism.

Rule II(k) of the Environmental Appeal Board, dated September 1994. In this appeal, the Board did not use the site visit to gather evidence.

¹¹ S.A. 1992, c. E-13.3, s. 84(4Xb).

¹² SA 1992, c. E-13.3, s. 84(5).

S.A. 1992, c. E-13.3, s. 85. Incidentally, the appellant may face dismissal of the appeal if the additional information is not supplied. S.A. 1992, c. E-13.3, s. 87(5)(a)(1).

¹⁴ S.A. 1992, c. E-13.3, s. 87(5)(aXi).

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- 7. The Minister's power under the Act, after receiving this Board's Report and Recommendation to the Minister, is very broad. The Minister can confirm, reverse or vary the decision appealed." It is logical for the Minister to expect a *full* inquiry by the Environmental Appeal Board before this Board makes a recommendation which may have such a broad scope.
- 8. The Board has a wide power of inquiry in order to fulfill its function within the legislation. The purpose of the legislation is broad: to 'support and promote the protection, enhancement and wise use of the environment...'."

The Board finds that the test for receiving evidence is whether that evidence is relevant and material to the issues raised in the appeal, not when the evidence became available to the parties. For appeals of Reclamation Certificates, the Board finds that the evidence which may be relevant and material to the issues includes, but is not limited to:

- evidence of the status of the land before the land was disturbed
- activities of the operator
- evidence of the reclamation, including any testing done
- evidence following reclamation, including any testing done
- all evidence pertaining to the land reclamation certificate
- if applicable, evidence of equipment used, placement of sumps, etc.

S.A. 1992, c. E-13.3, s. 92.

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- evidence of hazardous characteristics of any materials on site, if any, and how those materials may have changed the land
- evidence of land practices of the farmer or rancher
- evidence of the status of the adjacent or surrounding property
- evidence of any changes in the condition of the land.

Accordingly, the Board finds that the decision of the Reclamation Inspector was not reasonable and justifiable in all of the circumstances of this case.

The Board also notes that there are some facts about which there is little dispute:

- Mr. and Mrs. Williams were concerned about the soil quality and about growth problems during reclamation and at the time of the reclamation inquiry.
- The soil analysis done by Mr. and Mrs. Williams was not an adequate analysis. It analysed for fertility rather than soils-content and there were too few samples and no control samples.
- Both the wellsite and the adjacent property were over-grazed at the time of the reclamation inquiry.
- It is more difficult to do vegetation analysis on over-grazed property, because there is insufficient vegetation to analyze.
- It is impossible to do vegetation analysis on reclaimed property with no growth. Such a situation would require the Inspector to defer issuing the reclamation certificate until the reason for no growth was ascertained, and may compel the need for soils analysis.

- A dramatic difference in growth between reclaimed property and the adjacent property indicates a problem, and may indicate that soil analysis should be done to determine whether the wellsite disturbance is the cause of the dramatic difference in growth.
- It is theoretically possible that the wellsite soil is Tolman loam, which may
 explain the white deposits (presumably due to the high calcium) and poor growth
 on the wellsite. However, none of the soil analyses done thus far can indicate
 with certainty that the wellsite soil is Tolman loam or that the adjacent property is
 comparable.
- Proper soil analysis would indicate whether the poor growth is due to the presence of Tolman loam or other causes.

The Board finds that these facts raise a serious question about whether reclamation was actually achieved with respect to this wellsite.

The Board is concerned that the vegetation could not adequately be evaluated because of over-grazing. In such circumstances, the Board suggests that it would be appropriate for the Inspector to defer the issuance of the Certificate until proper analysis could be carried out.

In addition, the Board finds that growth continues to be a problem after the wellsite property was isolated from use during the spring of 1995. This poor growth is still unexplained to the satisfaction of the Board.

RECOMMENDATIONS OF THE BOARD

The Board recommends that this appeal against the issuance of a Reclamation Certificate be allowed.

Accordingly, the Board recommends that the operator be required to reapply for a Reclamation Certificate. This application should include:

- a description of all substances present on the land as a result of the wellsite disturbance," specifically including a description of any conservation or reclamation procedures" which may have resulted in calcium deposits on the surface of the soil, and
- particulars of the characteristics and properties of the reclaimed land,^{2°} specifically including a complete soils assessment of the wellsite and adjacent property including the chemical analysis, as contemplated by the <u>Reclamation Criteria for Wellsites and Associated Facilities.'</u> The exact nature of the soils assessment is to be left in the sole discretion of the Director of Conservation and Reclamation.ⁿ

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¹⁸ ALTA REG. 115/93, s. 12(1)(j).

ALTA REG. 115/93, s. 12(1Xc).

²⁰ ALTA REG. 115/93, s. 12(1Xb).

Red as exhibit #11.

22	The soils analysis to which the Board is referring is not fertility analysis, but analysis of the characteristics of the soil, including control samples, which was referred to as the correct form of analysis by the soils experts for both the Director and Gulf Canada Resources Ltd.				

With respect to section 92(2) of the Act, the Board recommends that copies of this Report and Recommendations and of any decision by the Minister be sent by the Board to the following parties:

- Murray and Kathleen Williams;
- W.G. Fisher and R. Mattson, Inspector, Land Reclamation Division,
 Alberta Environmental Protection, represented by William McDonald;
- Gulf Canada Resources Ltd., represented by Nancy Dilts

Dated on July 7, 1995 at Edmonton, Alberta

"original signed by"	
David H. Marko	
"original signed by"	
Max A. McCann	
"original signed by"	
John P. Ogilvie	

ORDER

	I, Ty Lund, Minister of Environmental Protection:
<u>x</u>	_ Agree with the Recommendations of the Environmental Appeal Board and order that they be implemented.
	Do not agree with the Recommendations of the Environmental Appeal Board and make the alternative Order set out below or attached.
	Dated at Edmonton this 19 th day of July, 1995.
	"original signed by"
	Honourable Ty Lund Minister of Environmental Protection
	Refer to attachment (only if applicable)

APPENDIX

EXHIBITS LIST

Appeal No. <u>94-014</u>

No.	Description	Filed By:
1	Notice of Hearing	Anderson
2	Notice of Adjournment	Anderson
3a	Soil Sample #1	Williams
3b	Soil Sample #2	Williams
4	January 9/91 - Photographs of site	Gulf
5	Notice of Appeal filed November ³ / ₉ 4	Williams
6	Consent form signed by appellant - October 2 ⁶ / ₉ 3	Gulf
7	Resume of Arnold Janz	McDonald
8	Reclamation Certificate No. 31843	McDonald
9	Application for Reclamation Certificate - dated January 24/94	McDonald
10	Land Conservation and Reclamation Council Inspection Report - June 21/94	McDonald
11	Land Conservation and Reclamation Information Letter	McDonald
12	Alberta Fertilizer Guide	McDonald
13	Sheila A. Leggetts' Resume	Dilts
14	Endrill Resource Consultants Inc Post-Disturbance Site Assessment, October 26/93	Dilts
15	Jim Lore 8 Associates Report - June 1/95	Dilts