

C.L.R.A. CONFERENCE APRIL 17/85
 AN OVERVIEW ON PIPELINING
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As an overview to pipelining in Alberta, prior to 1976 there was no requirement for operators to conserve topsoil or ensure growth capability. However, with the passing of Alberta Regulation 207/76, that being the Regulated Oil and Gas P/L Surface Operation Regulation, a D & R approval is now required on major pipelines.

Smaller pipelines (less than 10 miles in length and 4 inches or less in diameter) are not regulated. However, the Reclamation Council imposes the very similar standards of reclamation as per government guidelines.

Much planning is now required by Operators with the requirement for a D & R approval.

- 1) Right-of-way widths depend upon
 - A) Topsoil conservation practices
 - That is width can vary with location of topsoil storage and total stripping widths.
 - B) Pipeline size - depth of trench
 - quality of spoil
 - size of equipment
 - C) Topography
 - Two-toning or excessive grading in rough topographic areas.
 - D) Excavation techniques
 - either backhoe or trencher
 - E) Cultivated land or natural vegetation
 - F) etc.
- 2) Soils information and depth of topsoil
 - Enables Operator and government agencies to assess depths to be stripped and special practices that may be required.
 - eg. Solonetzic soils may require 3 phase stripping.
- 3) Timing of construction
 - If construction is entirely under summer conditions, the soil handling techniques are very different than under winter conditions.
- 4) River and creek crossings
 - Crossing locations require planning to minimize impacts from steep slopes and sloughing bed and bank soils.
- 5) etc.

With the new regulations and standards, government and industry are attempting to avoid potential problems rather

than reclaiming an avoidable problem. As Doug Harrington stated, "Prevention - not remedial".

My first slides relate to a major pipeline project prior to the requirement for topsoil stripping and conservation. As a result:

- subsoil and topsoil mixing occurred
- soil sampling required to determine exact problem
- recommendations resulted in adding manure

As the slides indicated, the final product of reclamation was satisfactory but a lot of cost and aggravation was experienced by all parties (owner, operator and government agencies).

The following sequence of slides illustrate P/L construction in 1984 when a D & R approval was issued and where in most cases adequate planning has prevented potential reclamation problems.

However, even with good planning problems can be encountered.

- inadequate R/W width for procedure
- weather changes - Scheduled for summer construction but due to early winter or rain delays, new conservation practices required.
- 2 slides of mixing - Company tries this procedure but quit when didn't work.
- utilized ripper, "Step Blade" and hoe
- second procedure - Pilot trenches.
- Rock Saw

In conclusion, with the changes in legislation and the good pipeline procedures now being practiced, it is evident that many reclamation problems can be avoided. Proper planning is of utmost importance and with the cooperation now experienced between the operators and the government agencies, the returning of P/L disturbed lands to a productive capability is now much easier achieved.

The council is well pleased at the effort shown by P/L operators in devising new machinery to strip and conserve topsoil under adverse conditions.

NOVA with their Rock Saw could be considered a pioneer in the field of topsoil conservation under adverse weather conditions.

I believe that it was stated yesterday that government has its objective and industry has theirs. However, at this time, I would like to state that on pipelining I find that as a general rule, the objectives of the Environmental Inspectors from industry and government have a very common goal and that goal is reclamation which is achieved by good planning and sound field construction practices and control.

PROCEEDINGS

ALBERTA RECLAMATION CONFERENCES

1985
Planning and Certification
of Land Reclamation
April 16-17, 1985
Edmonton Inn, Edmonton

1986
Reclamation in the
Eastern Slopes of Alberta
September 25-26, 1986
Overlander Lodge, Hinton

C.B. Powter
R.J. Fessenden
D.G. Walker
Compilers



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ALBERTA RECLAMATION CONFERENCES

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Most of the work, however, was done by the speakers who prepared the papers and delivered the talks to us and we offer them a strong vote of thanks.

Last, but not least, thanks to the two hotels for excellent accommodations and facilities.

For more information on the Alberta Chapter or the Canadian Land Reclamation Association please write to CLRA, Box 682, Guelph, Ontario, Canada N1H 6L3.

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