May 12, 1998


Subject: Oil Sands Tenure Review

The Minerals Tenure Branch operates within the Mineral Operations Division of the Alberta Department of Energy.

The Branch has undertaken a review of its oil sands tenure policies and regulations, to eliminate unnecessary regulation and to simplify those considered essential. In addition, the Branch intends to examine its policies and business processes to reduce administrative complexity wherever possible.

The Branch began its review by establishing an Industry Oil Sands Tenure Advisory Committee (IOSTAC), with representatives from the Department and four industry associations: the Canadian Association of Petroleum Producers, the Canadian Association of Petroleum Landmen, the Alberta Chamber of Resources and the Canadian Heavy Oil Association. The first meeting was held September 11, 1997.

The attached proposal (Redesigning the Oil Sands Tenure Rules) has been developed by IOSTAC. However, it is only a proposal at this point in time. We require industry's feedback before presenting it to the Minister and his colleagues for their consideration.

One perceived flaw in the current regulation is that it apparently encourages industry to produce the resource within a timeframe defined by regulation, (a) without consideration for market forces and (b) with technology which is available but may not be appropriate for efficient development. The current system's philosophy is "produce it or lose it" whereas the new philosophy (Option B) is "demonstrate that it is capable of production, then produce it when the technology and the market is available."

To ensure that oil sands leases are in the hands of those who are committed to developing them, and to provide companies the opportunity to acquire oil sands rights, it is proposed that leases capable of producing will be subject to an escalating rent. The assumption behind this is that those committed to developing the resource will spend an amount on research and exploration or development each year that will more than offset the increase in rent.

The proposed escalating rent schedule is only a proposal at this point. We particularly would like to have your comments on the amounts and timing of the increases. Further work is required on the evaluation criteria for permits in respect to accepting geophysical data or some other technique of evaluation. This will be done over the summer, along with determining the criteria for accepting research that will qualify for offsetting the escalation in rents. Suggestions on what constitutes research would be welcomed.

Your comments and suggestions should be sent to:

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All comments should be received by June 15, 1998. Final proposed changes to legislation will be circulated for your review. The names of the contributors will be kept confidential. All comments will be shared with the industry associations mentioned above.
If you require further explanation or information, please call Mr. Hudson at (403) 427-9077 or myself at (403) 422-9430.

F. David Coombs  
Executive Director  
Minerals Tenure Branch

Attachment, Figure 1, Figure 2, Figure 3

cc: David Smith, Assistant Deputy Minister  
Mineral Operations Division
1. THE REVIEW PROCESS

The Department participated in an advisory committee with representatives from four industry associations (Canadian Association of Petroleum Producers, Canadian Association of Petroleum Landmen, Canadian Heavy Oil Association, Alberta Chamber of Resources), has reviewed the regulation and business rules for oil sands tenure. The review has attempted to achieve the tenure philosophies by proposing changes that offer simplifications to the current system and are more sensitive to market factors. This document describes those areas where changes are proposed, and how those proposals differ from the current system.

The advisory committee considered a number of different ways to improve the oil sands tenure system, and two options became apparent: one, maintain the current system, but make improvements in specific areas; or two, create a completely different tenure system. These two options are discussed in detail in the sections following. You are asked to review these options and advise us which one of the two you prefer. We would like to hear your comments on any specific provisions within your preferred option.

You are invited, however, to make suggestions for change to any part of the tenure system.

2. DEPARTMENT OF ENERGY MISSION

Ensure Alberta's energy and mineral resources are developed and used in an effective, orderly and environmentally responsible manner in the interests of Albertans.
3. TENURE PHILOSOPHIES

To guide mineral resource development in Alberta, the Department of Energy has adopted a number of philosophies that apply generally to mineral tenure:

3.1 Ensure that industry has the opportunity to receive appropriate rewards and recognition for the risks that it takes.
3.2 Ensure that government receives a fair share of economic rent over time in bonuses, rent and royalty.
3.3 Tenure rules should be clear, fair, predictable and consistently applied; without causing industry unnecessary work or expenditure
3.4 Definitions and practices should be aligned between government agencies.

In addition to these, there are a number of principles that are specific to oil sands:

3.5 To ensure that oil sands leases are in the hands of those who are committed to developing them, and to provide companies the opportunity to acquire oil sands rights.
3.6 To have oil sands resources more effectively evaluated and to allow lessees to retain sufficient reserves for their committed needs.
3.7 To encourage the development of oil sands and the upgrading of bitumen in Alberta.
3.8 To gain information on the nature, abundance and economic potential of other minerals within the surface mineable oil sands area.

4. TENURE UNDER THE CURRENT REGULATION

For the existing oil sands leases, many of which had first been issued in the 1950s and 60s, a somewhat different tenure regime was created. Existing leases in their first terms would be automatically renewed. Second term leases would be renewed if they were in production at the capacity prescribed in the lease agreement, or a development plan could be filed with the Minister indicating the sustained level of production that would be produced during the third term of the lease.

For the Department and industry, a number of elements of the existing regulation have presented difficulties. One of the perceived flaws in the current regulation is that it encourages production from each lease without regard for economic or technical limitations.

The regulatory provisions regarding the renewal of leases have created problems for both industry and the department. For an older second term lease, or a lease issued under the 1991 regulation, the renewal of the agreement is based on the submission of a development plan (or report) and the Minister's acceptance of that plan. It requires some amount of faith on the part of both the lessee and the Minister to agree to a plan that will be valid over the next 15 years. An additional complication is then added as the regulation specifies a formula that grants the renewed lease 40 years worth of reserves based on the sustained production level.
committed to in the plan. This requires both the lessee and the Department to calculate reserves on the lease, an exercise that is time consuming and may result in questionable estimates, given the scarcity and quality of data that exists on some leases. Critics argue that this system creates a quota system on the reserves that can be held, will encourage checkerboard leasing as only the better reserves are held, and bears no relationship to the technical or market conditions a developer may face.

5. TENURE PROPOSALS

A. Proposals to Improve the Current System

The proposals in this section present suggestions for improvements to the existing oil sands tenure system. Please comment on these proposals and, where options are presented, indicate which is your preferred choice.

The current oil sands tenure system is shown in Figure 1.

i) Permits

Proposal: (1) Allow permits to be evaluated with a combination of drilling and other geoscience techniques, both direct and indirect.

(2) The amount and types of geoscience that will be accepted will be established through a consultative process with industry, using a technical subcommittee. Once standards are established, they will be set out in a future information letter.

(3) A certain amount of drilling and coring will continue to be required, and this will be established through consultation with industry. This too will be specified in the future information letter.

Question: Permits are currently evaluated by drilling and that information becomes public after one year. If other geoscience techniques become acceptable for permit evaluation, should that data be placed in the public domain?

Background: Under the current system, a permit is granted for oil sands which, in the opinion of the Minister, less than a minimum level of evaluation has occurred. The minimum level of evaluation that the regulation specifies for permits is:

(a) the drilling of one well in each section or part section within the permit,

(b) coring of the oil sands zone in not less than 25% of those wells.

The proposal would allow some amount of geophysics and other indirect techniques to be used to evaluate a permit, replacing some amount of drilling. The amount of drilling and coring that would still be necessary, and the kinds of other techniques that would be acceptable, would be established through consultation among the Department, the EUB and industry. This consultation is planned for later in 1998. Once standards are set, these would be set out in an information letter.
ii) Development Leases

Proposal:  
(1) Change the term of these agreements to 15 years from 10.
(2) Change the renewal provision for these leases to clarify that renewal will be based on the filing of a development plan.

Background: Development leases are currently issued for terms of 10 years. The proposal would change the term length to 15 years to make all lease terms consistent. All existing oil sands development leases would have 5 years added to their terms.

The existing regulation calls for the renewal of development leases and leases issued out of permits based on the submission of a report to the Minister. This report is to indicate:

(a) the sustained level of production that has been achieved from the lease during the term, and
(b) the level of production that the lessee believes is sustainable during the subsequent terms of the lease.

The details of the required report are not specified in the regulation, but the department interprets the report to be very similar in content to a development plan. To simplify and make this point clear, it is proposed that the regulation specify that a development plan is to be submitted for these renewals.

iii) Lease Renewal via Prescribed Capacities

Proposal: The regulation will retain the provision that existing second-term leases will be renewed into a third term if the lease is producing oil sands at the capacity prescribed in the lease. When a lease is divided, the prescribed capacity will be prorated on the basis of the area in the new leases. Leases that were previously divided without prorating the prescribed capacity will be revised following this new procedure.

Background: Most leases issued prior to 1984 contain a clause that prescribes a minimum production capacity for oil sands from that lease. These capacities were established through discussions between the department and the original lessee, and when first established they were thought to be reasonable production levels from those leases. The 1991 regulation provides that second-term leases meeting their prescribed capacities are renewed into a third term, and the department will continue to honour this. The practice of prescribing capacities to leases is no longer followed.

Leases with prescribed capacities are sometimes divided so a part of the lease may be transferred. There is no established policy or rule regarding the prescribed capacity in these instances, so the revised regulation would state that the capacity will be prorated on an area basis. Leases that were divided prior to the establishment of this provision will be revised to this new standard.
iv) Lease Renewal via Development Plans

Proposal:  (1) Retain the provision that leases may be renewed on the basis of the submission of a development plan that satisfies the Minister that the oil sands in the location will be developed during the third term.

(2) Provide greater clarification in the regulation of what is required in a development plan.

(3) Include a provision to allow development plans to be amended.

Options:  (a) Leases continue to be renewable using the development plan option in the existing regulation. This method allows 40 years of reserves to be held on the lease, based on an approved maximum sustainable bitumen production rate.

or

(b) Leases be renewed in their entirety if the plan satisfies the Minister that the oil sands on the lease will be developed. The Minister may negotiate a lease size reduction if he is not satisfied that the oil sands on the lease will be adequately developed with the plan submitted.

Background: There is general agreement in government and industry that development plans have been a reasonable mechanism to use when considering lease renewal. The proposal will retain the development plan concept from the existing regulation, but puts forward 2 options for consideration.

> The first option would continue the renewal provisions of the existing regulation. This option requires that reserves be calculated and the lease be renewed with sufficient oil sands reserves to provide for 40 years of production at an approved production rate. This method requires both the company and the Department to make detailed reserve calculations, and there is the potential that a lease could be reduced in size if it contained more than 40 years supply.

The second option is to renew the entire lease without directly considering what bitumen reserves are present. This would require that the Minister be satisfied that the plan will adequately develop the lease. This option would be simpler for both the Department and industry, but raises some questions about what should be done if the plan were considered inadequate to develop the entire lease. In such a situation the Minister may want to renew only a portion of the lease, so there would need to be a mechanism for determining what lands would be included. This could be done through negotiations with the lessee, or the bitumen reserves could again be considered.

v) Upgrading

Proposal: The Oil Sands Regulation will continue to offer an incentive to lessees that are upgrading their bitumen in Alberta. The incentive will be the ability to hold additional bitumen reserves, and will be based on the amount of upgrading the bitumen receives. The formula for this would be similar to that in Part 2 of the existing regulation, where an additional amount of bitumen reserves, up to 40 years worth, may be held in leases that are contracted to supply an upgrader.

Background: Upgrading in Alberta is encouraged by the Province, and has been recognized in the 1991 Oil
Sands Regulation by allowing lessees to retain additional bitumen reserves.

The existing method to reward upgrading involves a formula that considers the degree of upgrading (improving the API gravity), the contractual commitment of the lease to the upgrader, and the maximum daily bitumen production rate from the lease. Leases that are providing bitumen to an upgrader can hold up to 40 years of additional bitumen reserves. This reward method requires a calculation of all the reserves on a lease, because the formula limits the lease to a maximum number of years of reserves.

If the lease renewal policy changed so leases were renewed in their entirety, with no consideration of reserves, then the existing upgrading reward mechanism becomes impossible to use. In this case, we propose that the reward for upgrading should be the ability to hold more land under a grouping. This reward would be calculated based on a new formula that relates degree of upgrading with additional hectares.

vi) Groupings

Proposal: The regulation will specifically state that two or more leases may be committed to a development project, and these leases may be grouped under a development plan.

Background: The existing regulation does not provide for the grouping of leases when filing a development plan. Background documents from the early 1990s show that groupings were contemplated by the tenure policy, but no specific provision was made for them in the regulation. The Department has been accepting, by policy, groupings of leases in development plans. To formalize the policy, the regulation will be amended to specifically provide for groupings.

vii) Merits of These Proposals

This section lists some of the pros and cons of the proposed changes for the existing tenure system. These are subjective and are not meant to be definitive.

Pros

- Allows leases to be grouped under a development plan.
- Continues to provide incentives for upgrading.
- Provides improvements to a familiar system.
- Provides more flexibility in evaluating permits.
- Provides greater clarity of requirements under a development plan.

Cons

- System still requires lease development, with no link to market forces.
- Development plans are still required.
- Detailed reserve estimates are still required for lease renewals and may be based on sparse data.
- System still imposes a quota on reserves held.
- Multitudes of agreement types are retained.
- The administrative burden remains the same.
- There is no recognition for any research or work done on the lease.
B. A New Tenure System

(See Figure 2)

Preamble: Through the discussions at the advisory committee, a new tenure concept was developed that would present a significant change in oil sands tenure. This concept would see only 3 types of oil sands agreements: permits, primary term leases and continued leases.

The advisory committee saw merit in this approach since it incorporated a number of principles that both industry and the department view as desirable: simple and consistent administration, oil sands leases being held by companies that are committed to development, and development decisions made by companies based on market factors rather than regulatory deadlines.

This New Tenure option allows industry to respond to technology and market forces. Lessees who are actively developing a lease or group of leases can retain those leases indefinitely at the current rental rates. Lessees with technological or economic challenges to overcome prior to developing a lease can retain their leases through the payment of an escalating rent. These escalating rents can be reduced to $3.50 per hectare through the conduct of research and development work. The escalating rent on non-producing leases introduces a market force that encourages lessees to conduct appropriate research and development work to overcome lease production limitations. Inactive or reserve-banking lease holders will eventually be discouraged by the escalating rent and surrender their leases.

This New Tenure option represents a significant change in approach to oil sands tenure. As such, a number of provisions of the existing tenure system would also be affected:

**Lease extensions** – The five-year extension option created by the 1996 regulation amendment is not necessary under this proposal, and would be eliminated.

**Upgrading** – Alberta encourages the upgrading of bitumen within the province. The 1991 regulation offered an incentive for the upgrading of bitumen by allowing up to 40 additional years of reserves to be retained. Since this proposal allows companies keep leases indefinite, no additional tenure incentive for upgrading is considered necessary.

**Development Plans** – There is no requirement for development plans under this proposal, and consequently there would be no requirement for them, reducing the administrative work.

**Reserve Quotas** – The existing regulation based lease renewals on the retention of a certain amount of reserves to sustain a 40-year oil sands operation. Since this proposal allows retention of entire leases, the calculation of oil sands reserves and the formulas relating to that would be removed from the regulation; again streamlining the administrative process. Industry and government will continue to perform reserve calculations, but renewals will not be based on the holding of a certain amount of reserves.

The proposed oil sands tenure process is shown as a flow diagram in Figures 2 and 3.

i) Permits

Permits would continue to be issued under the new system. These types of agreements are seen as useful in oil sands areas that have not been evaluated, or are poorly evaluated, since resource information is generated. Permits also return lands to the available lands inventory more quickly than leases.
The proposals listed for permits under section 6.A i) would also apply here.

ii) Leases

(see Figure 3)

Proposal: The tenure system be changed to have only two types of leases: primary term and continued. All existing leases and any new leases would be placed in one of these 2 categories. Primary term leases would be issued for 15 years, while continued leases would be for indefinite terms.

Primary term leases would include any new leases issued; all leases issued under the 1991 regulation; and any second term leases. The expiries of these latter lease types will be honoured so they will not have to be continued until their current terms expire. Existing 10-year development leases would be converted immediately to 15-year primary leases, giving those leases an additional 5 years in their terms. Existing 21-year first term leases will be renewed into primary leases. At the end of the primary term, leases may be continued if they are producing or have been evaluated to the same level as that required for permits.

Continued leases would include any current agreement renewed through a development plan or in production, and existing third term leases. There would be two categories of continued leases: producing and capable of producing.

Producing leases will be those that the Minister considers to be producing oil sands in commercial quantities. For those leases that have a prescribed capacity, commercial production will be considered met if the lease is producing at that prescribed capacity.

Leases capable of producing will be those that have no commercial production, but which have been evaluated and the Minister considers capable of production.

Leases that have not been evaluated, or that the Minister considers not capable of production, will be cancelled.

To ensure that oil sands leases are in the hands of those committed to developing them, and to provide companies the opportunity to acquire oil sands rights, it is proposed that leases capable of producing will be subject to an escalating rent. The escalating rent has two purposes. One is to encourage development or the conduct of research necessary to bring the leases into production. The second purpose is to speed the return of rights that are not being seriously pursued, making them available for public offering.

The rental option that the department is considering would see the annual rental for leases that are capable of production start at double the rental for primary leases and then double at regular increments thereafter, over a certain number of years.

<table>
<thead>
<tr>
<th>Years</th>
<th>Rental Increase</th>
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<tbody>
<tr>
<td>1 to 5 (3, 4, 5 years?)</td>
<td>annual rental x 2</td>
</tr>
<tr>
<td>Next period</td>
<td>annual rental x 4</td>
</tr>
<tr>
<td>Next period</td>
<td>annual rental x 8</td>
</tr>
<tr>
<td>Next period</td>
<td>annual rental x 16</td>
</tr>
<tr>
<td>Next period</td>
<td>annual rental x 32</td>
</tr>
<tr>
<td>Next period</td>
<td>annual rental x 64</td>
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</tbody>
</table>

Question: Over what regular interval should rentals be increased? Every 3 years? Every 5 years? Other?

Rentals on leases may be reduced to basic rental of $3.50 per hectare if the lessee is actively conducting research, exploration or development work to bring the lease into commercial production. The rental reduction will be based on research, exploration and development expenditures.
Leases that have been producing, but are shut in for economic or technical reasons, will revert to the 'capable of production' status and will be subject to escalating rentals. These leases will continue to be entitled to reduced rentals for a period of time, but this period needs to be defined.

Question: What length of time should a producing lease be allowed to be out of production before the lease is subject to the escalating rent? One year? Two years? Other?

Background: By consolidating all current leases types into two new types: primary and continued, one of the goals of the tenure review, to simplify the administration for both industry and government, would be met. The existing regulation has a number of lease types of various terms and classifications (second term, existing, development leases, etc.).

Industry has also asked that some consideration for the technical and market limitations that exist be incorporated into the regulation. The Department has tried to achieve this by allowing leases to be continued indefinitely, but we also have to achieve our goal of keeping leases in the hands of companies that want to develop oil sands. We are therefore proposing that rentals on potentially productive leases double at regular intervals in order to encourage companies to make decisions about lease development. Two different rental proposals are therefore presented.

If a lessee is involved in substantial research in oil sands development or exploration on the lease, the expenditures incurred in these activities can be used to reduce the rent to $3.50 per hectare. The details of applicable expenditures and the amounts of rental reduction will be established by subcommittee once the concept is adopted.

iii) Groupings

Proposal: Leases that are committed to a commercial oil sands project may be grouped if approved by the Minister

Background: Recognizing that commercial oil sands operations often require the commitment of reserves from a number of leases, the department will continue to allow grouping of leases under the new tenure option. For leases to be grouped, the proponent will have to submit a request to the department, substantiating the need for the grouping.

Questions: Should there be some maximum size limit placed on groupings? Should grouped leases be subject to escalating rents?

iii) Merits of this Proposal

This section lists some of the pros and cons of this new tenure proposal, although the list is not definitive:

Pros

- Agreement administration is simplified with clear business rules.
- Market factors receive consideration.
- Ensures leases are evaluated and in the hands of companies that are committed to developing oil sands.
- Recognizes research and development work done on leases.
- Leases may be retained in their entirety and for an indefinite period.
• Development timing is decided by the lessee.

Cons

• The proposal for continued leases may favour companies with large research budgets.
• Some second term leases will continue to be held under this proposal, making those lands unavailable for posting.
• This system offers no specific reward or incentive for upgrading.

6. MINERAL RIGHTS

Proposal: The definitions of oil sands and other minerals will be reviewed and clarified as necessary, either through regulatory amendments or an information letter. (Note: the question of gas in association with bitumen will be dealt with as a separate issue and does not form part of this proposal. An information letter on that subject should be mailed this summer.) The Department will also clarify that intrusive rocks (such as kimberlites) are part of the metallic and industrial minerals rights, not the oil sands rights.

Recommend to government that one agency, the Energy and Utilities Board, should have responsibility for issuing all mining approvals.

Background: Both industry and the Department have identified concerns with the mineral rights granted under different agreements. In the surface-mineable area there is a need to clarify what rights are controlled by the oil sands agreement holder versus the metallic and industrial minerals agreement holder, in particular at the lower contact of the oil sands. The Department also wants to clarify that intrusive rocks are not part of the rights granted with an oil sands agreement.

The surface-mineable area has the potential for the development of both oil sands and other minerals such as metallic or industrial minerals. Mining approvals for these different minerals are currently issued by two agencies, and this has the potential to create problems for mining proponents. This may be the appropriate time for the government to consider giving one agency responsibility for all mining approvals. The EUB would seem to be the obvious choice.
Figure 1
EXISTING OIL SANDS AGREEMENT PROCESS
Current Tenure System

- Revert to Crown
  - Not Producing
    - Public Offering
      - Not Producing
      - Development Leases 10 years
        - Producing
          - Not Producing
          - Existing Lease 3rd Term 15 years
            - Producing
              - Not Producing
              - Existing Lease 2nd Term 21 years
                - Not Producing
                  - Automatic Renewal
                - Producing
                  - Development Plan
                    - Existing Lease 1st Term 21 years
                      - Not Producing
                        - Not producing or missed milestones

- Not Evaluated
  - Evaluated
    - Oil Sands Lease 15 years
      - Producing
      - Subsequent Oil Sands Lease 15 years (with milestones)
        - Producing
**Primary Leases**

i) New leases issued through the 1991 Regulations *

ii) 2nd term existing leases,

iii) Leases issued out of Permits, and

iv) New Leases issued from 21yr 1st Term Existing Leases

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**Continued Leases**

i) Leases approved as having met evaluation requirements or producing at time of renewal, and

ii) Any agreement already renewed based on production or a development plan.

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*Note: Development Leases*

10 year converted to 15 year
PROPOSED OIL SANDS AGREEMENT PROCESS
New Tenure Proposal - Current Leases

Current Agreements as PRIMARY LEASES

Agreements

Development Lease

Effect on Expiry Date

Term Converted from 10 yr. to 15 yr.

expiry date extended by 5 years

2nd Term Existing Leases

expiry date remains the same

Oil Sands Leases
-issued out of a Permit
-issued from a provision of the 1991 Regulations

expiry date remains the same

Current Agreements as CONTINUED LEASES

Agreements

3rd Term Existing Leases

expiry date becomes indefinite

Oil Sands Leases
(were renewed by an approved Development Plan or by Production)

expiry date becomes indefinite