



INFORMATIONAL LETTER IL 94-19

19 October 1994

TO: All Coal and Oil Sands Mine Operators

DAM SAFETY ACCORD

As a result of changes in legislation and review of regulatory procedures, the Energy Resources Conservation Board (ERCB) and Alberta Environmental Protection (AEP) have revised the Dam Safety Accord of April 1989. The revised Dam Safety Accord between the Coal and Oil Sands Departments of the ERCB and the Dam Safety Branch, Water Resources Division, AEP describes the roles and responsibilities of each organization and the administrative procedures for the submission, referral and review, and approval of applications for impoundment and diversion structures at coal and oil sands mining projects. The Accord also addresses the coordination of monitoring and inspection responsibilities.

The Accord was developed to ensure consistent and coordinated service while optimizing use of the organizations' resources and provide an expeditious "one-window" process for applications and reports handling.

Key points of the Accord include the following:

1. Applications for new project approvals (e.g. oils sands mine approvals and coal mine site permits) and any amendments of these approvals will continue to be submitted to the respective department of the ERCB as the "one-window" between the regulatory agencies and the applicant. Dam Safety Branch and government department involvement will be coordinated by the Environmental Impact Assessment Division of AEP. ERCB will be responsible for issuing the project approval addressing the conceptual planning and preliminary engineering design of any containment or diversion structures.
2. Applications and the detailed geotechnical design for construction of oil sands tailings ponds, sediment settling ponds, water storage reservoirs, and stream diversion structures will be submitted to the Controller of Water Resources. Dam Safety Branch will be the lead agency responsible for coordinating the application review and issuing the approval.
3. Applications and the detailed design for coal tailings ponds requires approvals from the ERCB and AEP. Joint guidelines will be available for this purpose. Coal Department, ERCB will be the one-window for applications. ERCB review and approval will be coordinated with Dam Safety Branch and the Conservation and Reclamation Review Committee through the Director of Land Reclamation Branch, AEP.

Any questions regarding this Accord can be directed to: Dam Safety Branch, Alberta Environmental Protection 422-1358, Coal Department, ERCB 297-7249 and Oil Sands Department, ERCB 297-5329.

signed by

Alberta Environmental Protection

Peter G. Melnychuk
Deputy Minister

and

Energy Resources Conservation Board

Frank J. Mink
Chairman

DAM SAFETY ACCORD

**JOINTLY PREPARED BY:
THE COAL DEPARTMENT
AND
THE OIL SANDS DEPARTMENT OF THE
ENERGY RESOURCES CONSERVATION BOARD
AND
THE DAM SAFETY BRANCH
OF
ALBERTA ENVIRONMENTAL PROTECTION**

19 October 1994

ERCB/AEP DAM SAFETY ACCORD

1.0 INTRODUCTION

Regulation of the location, construction, and operation of impoundment facilities (e.g. tailings, sediment settling, water storage ponds), and drainage diversion structures in coal and oil sands mining projects in Alberta is the joint responsibility of Alberta Environmental Protection (AEP) under the Water Resources Act and the Environmental Protection and Enhancement Act and the Energy Resources Conservation Board (ERCB) pursuant to the Coal Conservation and Oil Sands Conservation Acts.

As a result there is a shared responsibility of the ERCB's Coal and Oil Sands Departments and AEP's Dam Safety Branch, AEP, requiring that each agency's mandate is fulfilled and activities are coordinated to eliminate duplication of services.

The ERCB and AEP agree to the following procedures for the review and approval of impoundment facilities and diversion structures in coal and oil sands mining projects.

2.0 PURPOSE OF THE AGREEMENT

This accord defines roles and responsibilities of the two agencies. It describes a procedure for the review and approval of impoundment and diversion facilities in coal and oil sands mining projects. The issues addressed include, but are not limited to, resource conservation, environmental protection, safety of workers and the public, integrity of the project, and the orderly, efficient and economic development of the resource.

The accord is designed to meet the following objectives:

- provide an appropriate "one window" application, approval and reporting procedure,
- optimize the efficient use of resources available to both organizations,
- ensure compliance with regulatory standards,
- assure communication and coordination between organizations.

3.0 DEFINITION OF ROLES

3.1 ERCB

All aspects of oil sands and coal operations are part of the ERCB approved project. This includes site preparation, overburden removal, mining, processing, discard disposal and related impoundment facilities, related infrastructure along with reclamation and abandonment. The ERCB's prime role is to foster economic, orderly, and efficient development of coal and oil sands resources to ensure optimum resource conservation, environmental protection, and general safety in the public interest. The ERCB's functions can be grouped into three main categories:

- evaluating and approval of applications for new and expanding energy projects,
- regulating existing energy facilities to ensure they are operating safely, efficiently and in ways that avoid waste and control pollution,
- assessing energy resources and markets, and
- providing advice, information and statistics to the public, to government and to the energy industry, on Alberta's energy resources.

Due to the long term nature of coal and oil sands projects, the ERCB review of new projects deals mainly with conceptual planning and preliminary engineering design issues. The project implementation, detailed design, and operational issues are regulated by the ERCB in coordination with the appropriate government authorities.

The role of the ERCB is to assure that:

- structures are located such that resource sterilization is minimized,
- the facilities are needed and sized to adequately service the proposed project,
- the site is appropriate considering logistics, as well as environmental acceptability,
- The proposed design meets requirements for worker and public safety, and integrity of the project,

In the context of coal and oil sands projects, the ERCB will be responsible for:

- reviewing the need for and location of impoundment and diversion facilities at the application stage for new or amended projects
- reviewing changes in impoundment and diversion facilities that significantly impact mine operations or lease development.

3.2 Dam Safety Branch

The Dam Safety Branch has primary responsibility for the approval of safe design and construction practices, and field monitoring and inspections of dams in the province of Alberta. The roles of the dam safety program are:

- to produce and maintain an inventory of impoundment and diversion structures,
- to determine the hazard potential of such structures,
- to review and approve plans for proposed dams, modifications to existing dams and abandonment of dams,
- to advise the Controller of Water Resources on appropriate terms and conditions for interim licences or amendments to interim licences,
- to inspect dams and diversion facilities and make recommendations for repairs,
- to ensure that Safety Reports are prepared for significant projects,
- to ensure that Emergency Preparedness Plans are written for high hazard dams and diversion structures.

In the context of impoundment and diversion facilities for coal and oil sands projects, the Dam Safety Branch will be responsible for:

- reviewing the geotechnical engineering design and construction methods of new and existing impoundment and diversion structures as applications are made under the Water Rights Act,
- inspecting these structures to ensure compliance with design recommendations,
- reviewing performance monitoring and dam safety reports,
- reviewing Emergency Preparedness Plans.

4.0 COORDINATION OF SERVICES

4.1 General provisions

- Any concerns of either or both agencies related to these structures will be jointly communicated to the operator.
- Dam Safety Branch and ERCB staff will discuss and resolve any concerns with the design, construction methods and monitoring programs of these structures, as required, before recommending any formal approvals under their respective Acts.
- If either Dam Safety Branch or ERCB staff believe that changes to the design, construction methods, or monitoring programs are necessary in order to improve the safety of these structures, then these items will be discussed prior to these concerns being resolved with the company.
- Each agency will provide a copy of any approval or order to its counterpart.
- The ERCB and the Dam Safety Branch will coordinate their abandonment approvals for an energy project. The standard of reclamation of impoundment and diversion facilities associated with energy projects will be included with the overall reclamation plan to the project and will

continue to be regulated pursuant to the Environmental Protection and Enhancement Act and administered by Alberta Environmental Protection.

4.2 Applications for ERCB project approvals

Industry will submit a project application (e.g. oil sands mine approval, coal mine site permit) to the ERCB that addresses the need for, and location of all impoundment and diversion structures associated with the project.

The ERCB will forward the application to AEP as part of the normal referral process. The Environmental Impact Assessment Division or other responsible AEP Division will coordinate the review by involved AEP divisions and other government departments and transmit any concerns with the application to the respective ERCB Department. These and other concerns identified during the ERCB application review process will be referred to applicants for response.

Following a response from the applicant and a decision to approve, the ERCB will issue a project approval that includes approval of the proposed impoundment/diversion facility. The approval to construct is subject to industry satisfying the Dam Safety Branch's detailed design review.

4.3 Applications to construct impoundment or diversion structures

Applications and detailed geotechnical engineering design information for the construction of oil sands tailings ponds, sediment settling ponds, water storage reservoirs and stream diversion structures will be submitted to the Controller of Water Resources who will forward it to the Dam Safety Branch for review.

The Dam Safety Branch will coordinate the review and will refer the application to the respective ERCB department. The ERCB will review the application to confirm statements and commitments made in the project application or approval requirements regarding need, location, schedule, and mitigation of issues raised in the initial project application and forward concerns to the Dam Safety Branch for resolution. Following consultation with the respective ERCB Department and consensus on the suitability of the proposal, AEP will issue approval for the facility.

The two stage coal approval process under the Coal Conservation Act requires the proponent to submit a detailed design for any liquid discard site (i.e. tailings pond) for approval by the ERCB and AEP. This detailed design application should be prepared according to the joint guidelines developed by the ERCB and AEP. The applications are submitted to the Coal Department, ERCB who will refer copies to the Director, Land Reclamation Branch, AEP. Government review including Dam Safety Branch concerns will be coordinated by the Chairman, Conservation and Reclamation Review Committee. On agreement that the application is complete and satisfactory, AEP and ERCB will consult on approval conditions and issue their respective approvals.

4.4 Monitoring and performance reports

The ERCB and Dam Safety Branch will consult and coordinate monitoring and performance report requirements for each project.

Monitoring and performance reports will be submitted by the licensee to the Dam Safety Branch and referred to the respective ERCB Department for review.

In the event that a facility's performance is below acceptable standards and requires remedial measures that can impact mine operations, the ERCB will be involved in the review process, by an AEP referral.

4.5 Inspections

The ERCB and Dam Safety Branch will conduct inspections at appropriate intervals in respect to their regulatory responsibilities. When considered necessary or more efficient for regulatory control, joint inspections will be conducted. The inspecting agency shall forward any inspection report that notes unsafe conditions, non-compliance with approvals, or the need for action to the other agency.

5.0 This agreement supersedes the agreement of April 1989.

6.0 REVIEW OF AGREEMENT

This agreement shall be reviewed by ERCB and AEP within five years from the effective date of the agreement.

<signed by>

P.G. Melnychuk
Deputy Minister
Alberta Environmental Protection
31 October 1994

and

F.J. Mink
Vice Chairman
Energy Resources Conservation Board
18 October 1994