Title:	Borrow Activities on Public Land
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1.0 Authority

This policy directive provides operational and administrative guidance derived under the authority of section 20 of the *Public Lands Act* and sections 106(1), 110(1) and 115 (1) of the Public Lands Administration Regulation.

This directive will be used by regulatory bodies that are designated decision-makers for borrow dispositions authorized under the *Public Lands Act*.

2.0 Introduction and Purpose

2.1 Introduction

The purpose of this directive is to provide a consistent approach for authorizing the extraction of fill material and the reclamation requirements for borrow activities on public land, commonly referred to as "borrow pits".

2.2 Background

The use of borrow for construction activities approved under formal dispositions (particularly wellsite's, facilities and roads) is commonplace in many areas of the province where topography, terrain, soils and construction techniques necessitate the use of fill material to build these structures. Borrow pits can take the form of a dugout or a landscape excavation¹.

Traditionally, the majority of borrow activities have been authorized through Temporary Field Authorizations (TFAs). However, the growing requirement for construction fill material from borrow pits to build industrial developments, and the adoption of the Public Lands Administration Regulation (PLAR) in 2011, requires revision and clarification on how borrow activities are authorized and managed to address footprint, tenure, end of land use and reclamation liabilities, and considerations to minimize the amount of borrow required.

¹ Types are defined in Alberta Transportation, Post-Disturbance Assessment Guide for Borrow Excavations – 2013 Edition

Previous legislation contained provisions allowing for the use of royalty-free surface materials for the construction of dispositions. While these provisions no longer exist, this policy continues the intent of those provisions. As outlined in this Directive, areas of borrow may be secured with no surface material royalty, provided the size of the disturbance falls within identified limits and the borrow material is used exclusively for the disposition(s) construction to which it relates.

3.0 Definitions

Many definitions can be found in the Alberta Public Lands Glossary of Terms. For the purposes of this Directive², the following definitions also apply:

- a) "Borrow" means surface material consisting of earth or rock fill material acquired from an excavation source outside of an existing approved right-of-way or other development site for use at another location.
- b) "Borrow activity" collectively means any portion of the land use disturbance life cycle where borrow is removed from public land, including its reclamation.
- c) "Borrow excavation" means an excavation in the surface made solely for the purpose of removing, opening up or proving borrow material for the construction of the sub-base for a specific roadway project (public highway or public road), and includes any associated infrastructure connected with the borrow excavation³.
- d) "Decision-maker" means the appropriate regulatory body or Director defined under the Specified Enactments (Jurisdiction) Regulation of the Responsible Energy Development Act, or the delegated authority for the PLA and PLAR defined in Ministerial Order 48/2016 "Delegation of Authority under the Public Lands Act, Public Lands Administration Regulation and Recreational Access Regulation" and Ministerial Order 47/2016 "Designation of Directors under the Public Lands Act, Forest Land Use and Management Regulations and Public Lands Administration Regulation".
- e) "Landscape borrow" means a type of borrow excavation that is typically constructed on uplands well above the water table. They usually involve the removal of a portion of a hill or slope.
- f) "Regulatory body" means the government department or delegated authority, which is an authorized decision-maker under the *Public Lands Act*. The term "Regulatory Body" applies to Alberta Environment and Parks (AEP) and the Alberta Energy Regulator (AER). Both of these organizations may issue certain borrow dispositions subject to the direction contained within this and other policy documents.

4.0 Policy Direction

4.1 Scope

This directive applies to all borrow extraction activities on public land, including landscape borrow removal, for both energy and non-energy activities.

² Definitions in this document that are not in the Public Lands Glossary of terms may differ from similar or same terms in other policy documents.

³ Definition from C&R info letter 00-3

This directive does NOT apply to:

- Borrow pits/excavations on private lands. See the Code of Practice for Pits and supplemental Guide to the Code of Practice for Pits for further information regarding private land pits.
- Borrow excavations, such as for municipal and transportation roadways, are covered by the Conservation and Reclamation Information Letter (C&R/IL/ 00-3) and are outside the scope of this directive. See Guidelines for Acquiring Surface Material Dispositions on Public Land (2008) for further information on the process for applying for dispositions on public lands.

4.2 Jurisdiction and Scope of Authority for Regulators

The AER through the Specified Enactments (Jurisdiction) Regulation (SEJR) of the *Responsible Energy Development Act*, has been delegated to authorize borrow pits for the specific removal of borrow materials from public land to facilitate the development of energy projects and associated infrastructure. The AER regulator body's scope is limited by SEJR to the following:

- The material being extracted is clay, silt or sand;
- The material can only be used for an energy resource activity;
- The material cannot be sold;
- The area of disturbance must be less than 0.8 hectares (2 acres) in size;
- The borrow pit must be separated from another borrow pit by 800 metres (0.5 miles) or more;
- The borrow pit must be in use for less than one year.

The 800-metre rule does not apply to reclaimed pits for which a reclamation certificate has been issued.

Proposed borrow pits that exceed the above landscape criteria for energy resource activities require authorization by the AEP regulator.

The AEP may authorize borrow pits for use of borrow material to support a much wider range of activities.

4.3 Disposition Options

This section clarifies the requirements and criteria for making an application for borrow activities. The regulatory body has two approval mechanisms for the issuance of borrow, these being:

- Authorizations: These are dispositions that allow the non-exclusive, temporary use and
 occupation of public land.for a specific purpose. Applies to temporary activities that may have
 fewer impacts to the land and adjacent stakeholders. For borrow these dispositions are typically
 Surface Material Licences (SMCs) and Temporary Field Authorizations (TFAs).
- Formal Dispositions: These are dispositions for activities that require longer term issuance.
 These are disturbances of greater size and duration that have greater impacts to land and
 adjacent stakeholders. For borrow these dispositions are typically Surface Material Leases
 (SMLs).

Note: Both MCs and SMEs have greater detailed application requirements and planning expectations for borrow than TFAs.

Public lands dispositions for borrow pits may be issued as follows (see also Table 1):

 Authorizations apply to short-term activities with fewer impacts to the land and adjacent stakeholders.

- Formal dispositions apply to long-tenure requests, and where impacts to the land and stakeholders are greater.
- Borrow fill material required for an activity, which is associated to a Right of Entry (ROE) as authorized through the Surface Rights Board.
- In situations where borrow is being authorized through the issuance of a Temporary Field
 Authority (TFA), depending on the disposition type associated with the borrow, these inquiries or
 applications will be directed to the appropriate regulatory body and issued under an
 authorization energy dispositions directed to the AER and non-energy dispositions directed to
 AEP.
- For borrow being authorized through the issuance of an SMC or SML, those decisions will remain with AEP.
- Borrow activities incidental to formal disposition that fall within the sizing criteria described in the PLAR Approvals and Authorizations Administrative Procedures, may be approved as part of the formal disposition (no further approval required) provided that all requirements are met at time of the initial formal disposition application.
- Borrow activities incidental to an existing formal disposition, which were not approved under the
 initial formal disposition approval, may be applied for and authorized subject to meeting
 requirements identified within the PLAR Approvals and Authorizations Administrative
 Procedures.
- Borrow material which:
 - is not directly incidental to a public lands disposition or public roadway/water management project, or
 - exceeds the size and/or timing criteria as defined within this directive (Table 1), or
 - will be sold as commercial fill material

Will require the application and issuance of a formal disposition.

Table 1: Borrow disposition options and identified criteria

Activity	Incidental Borrow as part of a Formal Disposition ⁴	Authorization	Surface Material Licence (SMC)	Surface Material Lease (SML)
Material	Clay, Silt, Sand ⁵	Clay, Silt, Sand	Any	Any
Use	Only on same disposition	Only on same disposition or to support another disposition	To support another disposition(s)	To support another disposition(s)

⁴ Incidental activities that are identified on the application plan of an industrial formal disposition and meet the criteria identified above, are available for use by the disposition holder for the construction of only that disposition for an initial four year term from formal disposition issuance.

⁵ Gravel is different from borrow and different regulatory mechanisms are in place for gravel.

Activity	Incidental Borrow as part of a Formal Disposition ⁴	Authorization	Surface Material Licence (SMC)	Surface Material Lease (SML)
Maximum Size ⁶	< 0.40 hectares (1 acre)	≥ 0.40 < 0.80 hectares (2 acres)	Less than or equal to 2.02 ⁷ hectares (5 acres)	Less than or equal to 32.40 hectares (80 acres)
Minimum Distance Between Sites	≥ 800 metres	≥ 800 metres	N/A	N/A
Term ⁸	4 years	1 year	1 year	10 years
Renewable	No	No	No	Yes
Review Period	As per related disposition type.	5 days, on average	PLAR establishes 30 - 120 days to make a completeness decision to accept or reject application; 90 days to issue or refuse approval	PLAR establishes 30 – 120 days to make a completeness decision accept or reject application; 365 days to issue or refuse approval
Royalties Required	No	No	Yes	Yes
Regulatory Body	AER or AEP	AER or AEP	AEP only	AEP only

5.0 Allocation Criteria

Prior to determining whether or not to approve an application, or to ensure that borrow activates on public land are properly allocated, managed, and approved with similar conditions as other surface materials, the decision-maker is to consider the following factors:

- Size of the proposed activity
- Whether the borrow activity is associated with a formal disposition
- Whether the applicant intends on selling the borrow material

⁶ In addition to approvals under the *Public Lands Act*, if the pit collects water and exceeds 2500m³, approvals under the *Water Act* are also required. See See publication "Water Act: Dugouts, Borrow Pits and Other Pits/Excavations" for additional information.

⁷ Larger pits may be considered in exceptional circumstances, such as when a single pit is less detrimental to the environment than multiple smaller pits.

⁸ When a disposition expires before reclamation is complete, a duty to reclaim by the holder remains.

- Composition of the borrow material
- Duration of use of public land where the borrow activity is located
- Proximity to other existing or previously utilized borrow activities
- Impacts to resource values (for example, water or wildlife)
- Whether the proposed activity invokes a requirement for First Nations Consultation
- Proximity to existing groundwater users
- Proximity to existing wetlands
- Depth of the proposed activity in relation to the water table
- Impacts to resource values (for example, groundwater, surface water or wildlife)
- Scope and conditions of approved Environmental Impact Assessment

Depending on the proposed borrow activity and its relationship with the above factors; discussions between both AEP and AER may be required to ensure proper issuance is occurring as per this directive.

Other approvals, such as *Water Act* approval, may be required depending on the proposed activity. Applicants must ensure they have secured all appropriate regulatory approvals. Appendix 1 provides additional details on the process.

5.1 Sizing Criteria

Sizing criteria ensure that borrow needs are properly considered in relation to the associated activity being developed and the risk to the landscape and other resources. The impacts of borrow activity increase with larger footprints and include: proximity to stakeholders, reclamation liability, hydrology concerns, hydrogeological concerns, end of land use. The sizing criteria in Table 1 allow the regulatory body to manage those risks using the appropriate application process.

5.2 Siting Criteria

Locating borrow involves ensuring the borrow deposit is not in conflict with any *Alberta Land Stewardship Act* regional or sub-regional plans, is close to the associated activity, proper setbacks are being considered, adjacent stakeholders are not impacted, wildlife zones are respected and construction timing is appropriate for the conditions of the land. Applicants should refer to existing Wildlife Management Plans in the area that may guide extraction activities. Prior to application for borrow materials, the applicant should scope the area to ensure these factors are considered and borrow is actually present. At times, equipment is required for testing for borrow. The applicant needs to ensure that they have proper authority for any disturbances to land for the purpose of identifying acceptable borrow locations and therefore needs to engage with the appropriate regulatory body.

Siting of borrow locations must be consistent with the <u>Master Schedule of Standards and Conditions</u>. Setbacks from disposition boundaries will need to accommodate reclamation back sloping requirements. When required, discussions are to occur with the appropriate regulatory body.

6.0 Reclamation

Under the Public Land Administration Regulation (PLAR) it is the duty of a holder of a formal disposition or an authorization to reclaim activities on public land to an Equivalent Land Capability (ELC). The Regulation requires that the land must be restored to "a condition in which the ecosystem processes on the land are capable of producing goods and services of a quality and in a quantity that is at least equivalent to that which existed before the disposition was issued to the holder.

In addition, the *Environmental Protection and Enhancement Act* (EPEA) Conservation and Reclamation Regulation (C&R Regulation) lists borrow pits (defined as pits) under the definition of "Specified lands". All borrow activities subject to this Directive require a reclamation certificate under the C&R Regulation. This includes borrow activities under SMLs, SMCs, TFAs and borrow activities issued as authorizations subject to an ROE decision. Reclamation certificate applications for borrow activities regulated by AEP, are submitted to AEP. Applications for reclamation certification are made to the AER for borrow approved by the AER.

The intent of equivalent land capability (ELC), legislated in the C&R Regulation, means that 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 land uses will not necessarily be identical.

Approval must be received for any reclamation outcomes that are not the pre-disturbance land use⁹ on public lands. This approval is typically referred to as a "change in land use" or "alternate end land use". A request for a change in end land use should reflect an ecological community found in the natural sub region of the site. An alternate end land use may be requested that does not reflect the offsite community or a native community found in the natural sub region of the disturbance. Examples where this may be acceptable is when the land will be used for municipal infrastructure, recreational areas, or subsequent industrial uses. The rationale for changes in land use or an alternate end land use must be provided with the request for regulatory approval. The request should occur prior to commencing the activity, recognizing that the land use may later change.

Reclamation requirements are contained within three main approval mechanisms based on disposition :

- For SMLs these requirements appear in the approved Conservation, Operation, and Reclamation Plan (CORP) and in the formal disposition standards and conditions specific to the borrow activity. Any approved changes in land use or alternate end land use are documented in the CORP. See the Guidelines for Acquiring Surface Material Dispositions on Public Lands for the base requirements for CORP content. If additional information is required to make the decision on approval of the CORP, a Supplemental Information Request (SIR) is sent to the applicant. To expedite a CORP approval, note the key aspects of reclamation requirements for borrow activities listed below.
- For SMCs and TFAs, the reclamation requirements are contained in the authorization or in the
 parent disposition's standards and conditions (and policy, such as Wellsite Reclamation
 Criteria). If reclamation does not occur prior to expiration, a TFA or a Reclamation Approval
 must be requested to access the land.

Reclamation requirements for borrow activities on public lands include:

- Borrow pits authorized to be open water bodies must be adequately sloped to be safe for animals and the public.
- Base requirements for pre-disturbance data collection are outlined in Guidelines for Acquiring Surface Material Dispositions on Public Lands.
- Conservation of topsoil (LFH and A horizons) and upper subsoil. Topsoil and subsoil cannot be
 mixed and must be stockpiled separately. Coarse woody debris can be stored long term where it
 is mixed with topsoil as outlined in Master Schedule of Standards and Conditions.
 Documentation of stockpile locations/management is required for all borrow activities. For

⁹ As defined in the Public Lands Glossary, this may be forested, native grassland, peatland or mineral wetland, or open water bodies.

- activities that fall within existing reporting processes such as the C&R Annual reporting, these mechanisms must be used.
- Interim or temporary reclamation requirements include site clean-up, spreading of coarse woody
 material/management of excess woody material, slope stabilization, establishment of approved
 interim/temporary vegetation on stockpiles and weed control. Typically, it is expected that
 interim reclamation will occur within one growing season of the activity being completed and
 before the authorization expires.
- Progressive reclamation requirements including sequential re-contouring and replacement of
 topsoil, subsoil, coarse woody debris and the permanent approved vegetation community for
 reclamation certification prior to the completion of the activity and/or parent activity. Where the
 borrow activity is associated with a parent activity, while the final reclamation requirements are
 managed under the parent dispositions' CORP (or former CBRP), interim reclamation of the
 TFA area is required within the term of the TFA. Where the borrow activity is not associated with
 a parent activity, full reclamation is required before the expiry of the authorization.
- Final reclamation and monitoring must include the replacement of all salvaged reclamation
 materials (for example, LFH, topsoil, subsoil and coarse woody debris) and establishment of the
 approved plant community or approved alternate end land use. Monitoring to ensure desired
 reclamation trajectories are achieved is part of final reclamation. All specified land activities with
 a requirement for a reclamation certificate must provide a reclamation application and, at
 minimum, the application must include what is outlined in the C&R Regulation, section 12
 Application for Reclamation Certification.

For authorizations incidental to associated dispositions, it is expected that the final reclamation is completed by the time the term of the disposition ends. Under the PLAR, if the term expires, disposition holders will not have authority to be on or access the land. The conservation and reclamation requirements still apply; therefore, it is necessary to obtain authority to enter the lands to complete further reclamation.

Note: Further or more detailed reclamation requirements are contained within the appropriate approval mechanism as listed above

8.0 Royalties and Security

Royalties and security are requirements of specific authorizations depending on the desired use of the borrow material, the amount of material being accessed, the impacts of the borrow activity and directly in relation to disposition issuance.

Borrow issued under TFAs and approvals associated with formal dispositions have minimal application and issuance requirements and therefore royalties or security is not required to be paid by the holder.

Borrow issued under a SMC or SML requires that royalties be paid based on the amount of material used. Refer to <u>Ministerial Order 28/2015 Public Lands Rents and Other Amounts Payable Order</u> for more information.

Also, due to the size and impact of borrow activities issued under a SMC or SML, security is required to ensure the province is not left with a reclamation liability. Security is assessed based on the amount of land impacted and cost factors to bring the land back to an equivalent land use.

9.0 References

For additional definitions, refer to Public Lands Glossary of Terms.

The following documents are referenced within this directive:

- PLAR Approvals and Authorizations Administrative Procedures: ESRD, Public Land Management, 2014, No.6
- Table C: PLAR TFAs and DOAs
- General TFA/DOA Application Form

Approval	
Karen Wronko	Date:
Executive Director Land Policy Branch Environment and Parks	
Coott Millings	Date:
Scott Milligan Executive Director Provincial Programs Environment and Parks	

Appendix 1 Procedure

This section will provide clarity to clients on the processes for coordinating regulatory approvals in order to proceed with borrow activity.

1.0 Jurisdiction

The Specified Enactments (Jurisdiction) Regulation dictates when the AER may grant approvals for borrow pits.

All other borrow activity is authorized by the AEP.

2.0 Planning

The proper planning of borrow activities in relation to formal disposition applications for industrial and commercial complexes is essential for users as it is an important component for the development of those complexes or dispositions. Applicants who know of a requirement for borrow activity must ensure that borrow needs are considered prior to these applications and make every effort to submit these applications in unison to the appropriate regulatory body. Through a coordinated application approach for these activities, the appropriate regulatory bodies can converse and align their review and approval processes.

If a larger pit or multiple pits are being considered, it is recommended the appropriate regulatory body be contacted to discuss the proposed activity or borrow needs so that concerns of growing industrial footprints and reclamation liabilities can be addressed. By ensuring these factors have been discussed and properly considered prior to application, applicable processes will be understood that will prevent review delays that could have occurred if these factors were not addressed prior to or at the time of application.

As an option, a proponent may submit a Predisturbance Assessment (PDA) or PDA information as part of an SML application. The baseline data collected as part of the PDA can be utilized for the CORP as long as the information provided in both the SML supplement and PDA, is specific to the borrow and includes all of the requirements from the "Guidelines for Acquiring Surface Material Dispositions on Public Land (2008)". Otherwise, a CORP is required.

Review Timelines

Depending on the type of application being submitted, the quality of the information and the complexity of the file, review timelines may vary. Applicants should be aware of the following timelines so that they can consider this within their planning and application schedules.

Temporary Field Authorization Applications

An application for a Temporary Field Authorization has a review target of 5 business days. Should concerns be noted with the application (if any), these will be communicated to the applicant within that timeline, potentially resulting in extended issuance timelines.

SMC Applications

In alignment with legislated timelines, an application for a SMC authorization considered complete by the regulatory body would have a review timeline of 90 days for a decision to be granted, should no errors or additional information be required from the applicant.

SML Application

In alignment with legislated timelines an application for a SML formal disposition considered complete by the regulatory body will have a review timeline target of 365 days for a decision to be granted. The regulatory body may request additional information or clarity about an application during the merit review. The following information is required for all CORPs and is commonly missed and requested in SIRs and/or deficiency letters. SMLs would normally be processed within 6 months to a year, should no errors or additional information be required from the applicant.

Typical Supplemental Information Requests (SIRs) for CORPs

The regulatory body may request additional information or clarity about an application during the merit review. Common SIR requests involve:

- Providing the material balance for the topsoil's and subsoil salvaged.
- For end land uses that incorporate open water, provide:
 - o the proportion of uplands, wetlands (organic and/or mineral) to open water
 - o hydrological rationale for proposed waterbody type

Preference is typically given to plans that minimize the proportion of open water.

- How and when progressive reclamation will be implemented, including estimated timelines. This
 is typically for larger borrow (>0.8 ha) activities.
- Plans for direct placement of reclamation materials.
- How and when reclamation monitoring will occur.

Note: If the borrow pit has collected water, a *Water Act* approval is required to drain the pit prior to reclamation activity. Applicants are encouraged to read <u>Water Act</u>: <u>Dugouts, Borrow Pits and Other Pits/ Excavations</u> to ensure they are compliant with all requirements of the *Water Act* and associated regulations.

Coordinated Application Processes

If the borrow pit activity is to support another separate energy development application and requires a separate application for a formal disposition from AEP, it is expected that both applications will be submitted at the same time. This will allow for a coordinated and efficient review of applications.

The information required at the time of application for a formal disposition includes requirements for survey plans, First Nations' consultation, application supplements, Landscape Analysis Tool report and other association operational documents.

Where excavations (borrow pits/dugouts or other excavations that are created for resource extraction) may collect and hold water, or where this impounded water is used, an authorization under the *Water Act* is also required unless the activity or diversion of water is exempted by the legislation. For pits that require a disposition under the *Public Lands Act* and approval under the *Water Act*, a joint application is required to be submitted through the Electronic Disposition System in order to obtain authorization under both the *Water Act* and the *Public Lands Act*. AEP has established a one-window approach to the submission and review of proposals and applications for approving activities in a water body or watercourse. This includes the development of a single, joint application form suitable for use in seeking approvals under both the *Public Lands Act* and *Water Act*. For further information, please visit: Electronic Disposition Service.

3.0 Application Forms

The application for a Temporary Field Authorization can be found at the appropriate regulatory body's website: <u>AER's Authorization</u>, or at AEP's <u>Temporary Field Authorization</u>. For a Surface Material License, see form <u>Application for Surface Materials License</u>, and the <u>Electronic Disposition System</u> for a Surface Material Lease.

4.0 References

For additional definitions, refer to Public Lands Glossary of Terms for definitions.

The <u>PLAR Approvals and Authorizations Manual</u> outlines regulatory processes for TFAs, and the Electronic Disposition will walk applicants through the process of applying for an SML or SMC.

To learn more about the legislation that applies to this procedure, visit the Government of Alberta Queen's Printer website and search for the following:

- Public Lands Act
 - Public Lands Administration Regulation
- Responsible Energy Development Act
 - Specified Enactments (Jurisdiction) Regulation
 - General Amendment Regulation
- Environmental Protection and Enhancement Act
 - Conservation and Reclamation Regulation
 - Activities Designation Regulation
 - Code of Practice for Pits and Guide to the Code of Practice for Pits
- Water Act

You may also be interested in reading supporting documents:

- Guidelines for Acquiring Surface Material Dispositions (2008)
- A guide to the Code of Practice For Pits (2004)
- Conservation and Reclamation Information Letter: Borrow Excavations (00-3)
- PLAR Formal Disposition Directive: ESRD, Public Land Management, 2014, No.1
- PLAR Authorizations Directive: ESRD, Public Land Management, 2014, No.2
- PLAR Approvals Directive: ESRD, Public Land Management, 2014, No.3
- Water Act Dugouts, Borrow Pits, and Other Pits/Excavations, 2016
- Reclamation Criteria for Wellsites and Associated Facilities for Cultivated Lands
- Reclamation Criteria for Wellsites and Associated Facilities for Forested Lands
- Reclamation Criteria for Wellsites and Associated Facilities for Native Grasslands
- Reclamation Criteria for Wellsites and Associated Facilities for Peatlands