



Bow River Basin Council
P.O. Box 2100 Station M
Calgary, AB, Canada T2P 2M5

March 30, 2021

RE: Gravel Pit Impacts on Watershed Resilience Workshop - Approval Processes

The Alberta Sand & Gravel Association (ASGA) would like to thank you again for the invitation to present during Part 1 of this online event which we understand was meant as a learning forum in order to improve understanding of watershed resilience and the regulatory framework with regard to gravel pits. As part of this event, a number of questions were asked. However, ASGA is a volunteer-driven association and there is limited capacity for responses. Nevertheless, the ASGA is committed to providing follow-up on questions raised during the session, and while not able to comment on every question, we are happy to provide the following information.

Groundwater:

This is a common area of concern and this is why Alberta Environment and Parks (AEP) closely regulates both groundwater as well as surface water. Groundwater is largely a site-specific item and levels and historic ranges must be determined through onsite measurement. Industry understands water levels fluctuate throughout the seasons. In some instances, operations are planned around seasonal highs and lows. Reclamation plans that include waterbodies are often designed to consider seasonal fluctuations typically one meter above and below the observed average groundwater level. Historically, AEP has requested that groundwater levels be provided only if known, however, there has been **increasing pressure** for industry to provide groundwater level data as part of any application.

When it comes to adjacent groundwater users, it should be noted that most wells drilled for the purpose of water supply are bedrock wells. Most gravel pits do not interact with these bedrock aquifers, but only with surficial aquifers which are encountered in sand and gravel deposits. These types of pits are quite common, and a significant portion of gravel pits excavate gravel from within these surficial groundwater aquifers. Typically, onsite handling of groundwater does not require *Water Act* authorization if the water is staying within the same system, it is not used in any onsite process (ie. washing) and there are no impacts to adjacent users or the aquatic environment. Operators determine their operations and possible impacts to adjacent users or the aquatic environment, if no to limited impact is anticipated operators are required to develop mitigation plans on how to move water, including considerations on hazardous materials handling and storage to avoid contamination. For operations with a higher potential of risk, these activities still require mitigation plans, but typically include an authorization under the *Water Act* through an approval or licence. As described in our presentation, licenses are typically associated with a use of water (ground or surface), while an approval is associated with an impact to drainage (end pit lakes, off-site diversions).

Finally, any neighbor who feels that their well is being impacted (either water quality or water quantity) should be notifying AEP to the environmental hotline. There are robust procedures in place to determine if a well is being impacted and to force operators to act if this is the case.

Monitoring & Reporting Requirements:

Operators and/or authorization holders must abide by the requirements of any approvals or licenses related to water use or release. Licences for the consumption of water typically have monthly and/or annual reporting requirements which can include usage, water chemistry, and water table levels depending on the site. Often approvals for off-site discharge are required to meet Section 4.2.2 of *Code of Practice for Pits* as a minimum, however, AEP often applies more rigorous conditions than the requirements in Section 4.2.2. Monitoring and reporting data is provided to AEP based on the terms and conditions of their approvals and/or licenses, while notification of submission is not provided to adjacent landowners, this information would be considered routine information and should be made available from AEP upon request.

Data provided to AEP through monitoring and reporting is used by AEP to review regional usage and can also be used should there be an issue with a neighboring property. Remedial action is typically required from an operator when a harm/damage has been suffered by a neighbor and is confirmed by AEP to reasonably be caused by the operator.

Reclamation:

Operators are required to provide reclamation plans to AEP for all pits in Alberta under the *Environmental Protection and Enhancement Act* apart from Class 2 Pits on private land. However, if a water feature is proposed as part of the end landscape, an authorization would be required under the *Water Act* regardless of size of the pit.

AEP does not typically require set timeframes for operation and completion of a pit due to operations being extremely market driven. However, operators tend to provide rough timelines and plans to meet operation and reclamation objectives. Progressive reclamation is encouraged by AEP and municipalities through the approval process. As part of the application process, reclamation (financial) security must be provided to AEP prior to issuance of an authorization (sometimes to a municipality for Class 2 Pits). Reclamation security for the reclamation liability is held by the province (or the municipality) until an operator reclaims a pit and a reclamation certificate is issued by AEP. It should be noted that all pits in Alberta regardless of size are required to obtain a reclamation certificate under the *Conservation Reclamation Regulation*.

Surface Water Body Aggregate Policy:

The Surface Water Body Aggregate Policy has been in place since 2010. AEP is currently working to provide an additional “guide” to this policy. It is understood that this will clarify the elements to be reviewed under the policy which could include:

- River Structure
- Activity Location
- Water (hydrology and water quality)
- Infrastructure
- Fisheries and Aquatic Communities

ASGA applauds this effort and would strongly agree that any potential negative impacts related to a gravel pit operation in the 1:100 year flood plain should be reviewed and mitigated and/or prevented. Release of the ‘guide’ should provide assurance to both the sand and gravel industry and the public that submissions for activities are being reviewed and assessed on the same metrics. Unfortunately, not all gravel sources remain equal, and a significant amount of Alberta’s gravel supply is found in the flood

plains. That said, there are many areas where a gravel pit is the highest and best use of floodway lands and where the extraction of gravel would have limited impact on surrounding properties and the environment or their future enjoyment. In these areas, the ASGA believes that responsible development should continue to be supported in the flood plain. In fact, some jurisdictions have recognized the water management role that such extraction could provide where extraction can occur in combination with river restoration and nature conservation, such as the Grensmaas/Border Meuse Project (<https://afterminerals.com/case-study/grensmaas-border-meuse/>).

Post Approval Variances:

All gravel pits must abide by their *Water Act* authorization *and* activities plan (on private land) or their conservation operation and reclamation plan/lease conditions (on public land). Changes and updates are normal and are to be expected on an activity that may last 30 years. In both instances, changes and updates must be approved by AEP. Any changes under the *Water Act* must follow the same notice provisions as for new licenses or approvals.

Municipal Process to Approve Pits:

Under the Law of Property Act, private landowners “own” the sand and gravel on their lands. These resources are not owned by the crown and landowners do not have to pay a royalty to the crown for their removal. That said, in all instances in the province of Alberta, a gravel pit must obtain both provincial and municipal permits in order to operate (except for Class 2 Pits under the *Code of Practice of Practice for Pits*). Operating conditions are not always aligned, but as an operator must comply with both, the stricter of the two would always apply.

Depreciating Land Value of Adjacent Residents:

The municipal process for sand and gravel sites varies widely across the province of Alberta. In many areas, the impact on surrounding properties is a consideration. The ASGA does not advocate for direct compensation related to gravel pit development, but reasonable steps should be taken to mitigate impacts as much as is possible.

AEP Approval Process for Pits:

In addition to municipal permits, all pits must secure authorizations where and when required through the:

- *Water Act*
- *Environmental Protection and Enhancement Act (EPEA)*
- *Public Lands Act*

Public consultation and input are primarily completed as part of the municipal process. Through the AEP process, stakeholders have an opportunity to provide a statement of concern following a Notice of Application. AEP provides the operator with the timeframes and where to post the notice, typically a local newspaper, in addition to AEP’s website.

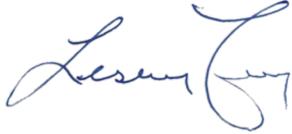
HADD:

Instream activities continue to require Department of Fisheries and Oceans authorization. The ASGA believes in a clear regulatory framework and does not believe that Federal oversight of activities outside of the active stream is needed. Such application would blur the lines jurisdiction and lead to development confusion. The ASGA also notes that federal review of large-scale projects is currently a requirement of the Canadian Environmental Assessment Act.

Thank you again for the opportunity to present at the Gravel and Watershed Resilience Workshop. We trust the above responses provide some insight to some of the questions raised during the workshop.

If you have any questions or concerns, please do not hesitate to contact the undersigned at lfoy@aspenlandgroup.com.

Sincerely,

A handwritten signature in blue ink, appearing to read "Lesley Foy". The signature is fluid and cursive, with the first name "Lesley" written in a larger, more prominent script than the last name "Foy".

Lesley Foy, P.Ag.
ASGA Land and Environment Committee Chair

cc: Joe Hustler, ASGA President
John Ashton, ASGA Executive Director